



The Forgotten Encyclopedia

The Maurists' Dictionary of Arts, Crafts, and Sciences,
the Unrealized Rival of the *Encyclopédie* of Diderot and d'Alembert

Linn Holmberg



Department of Historical, Philosophical and Religious Studies
Umeå University 2014

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Doctoral Dissertation
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Umeå 2014

Historiska studier: skrifter från Umeå universitet 7

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ISBN: 978-91-7601-030-3

Front page: Paris 1734–1736, *Plan de Turgot* (Wikimedia Commons)

Layout: Ida Holmgren, Print & Media

Electronic version available at <http://umu.diva-portal.org/>

Printed by Print & Media, Umeå University

Umeå, Sweden 2014

ABSTRACT

In mid-eighteenth century Paris, two Benedictine monks from the Congregation of Saint-Maur – also known as the Maurists – started compiling a universal dictionary of arts, crafts, and sciences. The project was initiated simultaneously with what would become one of the most famous literary enterprises in Western intellectual history: the *Encyclopédie* of Diderot and d'Alembert. The latter started as an augmented translation of Ephraim Chambers's *Cyclopaedia*, but it was constructed with another French dictionary as its ideological counterpart: the Jesuits' *Dictionnaire de Trévoux*. While the *Encyclopédie* eventually turned into a controversial but successful best-seller, considered as the most important medium of Enlightenment thought, the Benedictines never finished or published their work. After a decade, the manuscripts were put aside in the monastery library, and were soon forgotten. For about two hundred and sixty years, the Maurists' dictionary material has largely escaped the attention of researchers, and its history of production has been unknown.

This dissertation examines the history and characteristics of the Maurists' enterprise. The manuscripts are compared to the *Encyclopédie* and the *Dictionnaire de Trévoux*, and the project situated within its monastic environment of production, the history of the encyclopedic dictionary, and the Enlightenment culture. The study has an interdisciplinary character and combines perspectives of History of Science and Ideas, History of Monasticism, History of Encyclopedism, and History of the Book. The research procedure is distinguished by a microhistorical approach, where the studied materials are analyzed in a detailed manner and the research process included in the narrative.

The dissertation shows that the Maurists early found themselves in a rival situation with the embryonic *Encyclopédie*, and that the two projects had several common denominators that distinguished them from the predecessors within the genre. At the same time, the Maurists were making a dictionary unique in the eighteenth century, which assumed a third position in relation to the works of the *encyclopédistes* and the Jesuits. The study provides new perspectives on the *Encyclopédie* of Diderot and d'Alembert, the intellectual activities of the Congregation of Saint-Maur, as well as the editor in charge of the Maurist dictionary: Dom Antoine-Joseph Pernety, otherwise known for his alchemical writings.

Keywords: The Congregation of Saint-Maur, the Maurists, Dom Antoine-Joseph Pernety, the *Encyclopédie* of Diderot and d'Alembert, the *Dictionnaire de Trévoux*, History of Science and Ideas, History of Encyclopedism, History of Monasticism, History of the Book, the French Enlightenment, Classification and Organization of Knowledge, Eighteenth-Century Sciences and Arts, Microhistory.

ACKNOWLEDGEMENTS

Writing this dissertation has been one of the greatest, most challenging and fantastic experiences of my life. When I became a PhD student at Umeå University in September 2009, I had no idea that I would spend a whole year in Paris, or that I would get used to reading French manuscripts under chandeliers, next to golden murals. I could not imagine that I each Sunday would be drinking coffee at the Café Procope – the old hangout of the *philosophes* – or that I would attend classic concerts at the Church of Saint-Germain-des-Prés, the remains of the once great abbey of the Maurists. These years truly have been an amazing journey – personally as well as professionally. And I have not done it alone.

I am deeply grateful to my three supervisors: Mohammad Fazlhashemi, who always has believed in me and my project, and given me free reins to follow my ideas and instinct, whatever they have been; Caroline Boucher, who has been the most important, indefatigable and meticulous reader and commentator on contents as well as the French language. Words do not suffice to express my gratitude for everything that you have done, or the respect I hold for your learning and eye for details; Daniel-Odon Hurel, who not only introduced me to the academic world in France and welcomed me to LEM (CNRS) and CERCOR, but who also supplied me with an abundance of useful material on the Maurists, shared his expertise, patiently answered all my questions, and put me in contact with other researchers. I could not have written this dissertation without the three of you.

For their generous grants that allowed me to spend extra time in Paris, I thank STINT (The Swedish Foundation for International Cooperation in Research and Higher Education), Svensk-franska Stiftelsen (the Swedish-French Foundation), and Stiftelsen J C Kempes Minnes Stipendiefond (The Kempe Foundations). Without these additional stays, my dissertation would not be half of what it is today.

During these years, I have met many great scholars who have made an impact on my work. Above all, I wish to thank the *Encyclopédie*-specialists Marie Leca-Tsiomis and Martine Groult for their advice and encouragement and for inviting me to present and discuss my research at the Université Pierre et Marie Curie (UPMC) and the Université Paris-Sorbonne. Moreover, I thank Greta Kaucher for her invaluable remarks on my accounts on the French book trade and for letting me read extracts from her forthcoming book; Dena Goodman for commenting on my paper, asking all the right questions, and encouraging me to be bolder; Tatsuo Hemmi for kind support and literature; Madeleine Pinault-Sorensen for her input on the *Encyclopédie* plates; Dom Lucien-Jean Bord for bringing me unpublished material from the abbey of Ligugé; David Eick for sharing his unpublished thesis with me; Colin Jones for literature advice and images; and Jeff Loveland and Richard Yeo for the correspondence that early pointed me in the right direction. I also wish to thank

the personnel of the Manuscripts Department of the *Bibliothèque nationale de France*, and notably the conservators Marie-Françoise Damongeot and Marie-Pierre Laffitte for examining the Maurists' manuscripts with me. I am especially grateful to Damongeot who read and commented on my technical studies of the material. I also thank Véronique Églin and Daher Hani at LIRIS for their efforts to make a computer-based handwriting analysis of the manuscripts; Valentin Wendebourg for help with German translations; My Hellsing for last-minute verification of sources in Paris, Anders Berglund for assistance with the jurisdiction regarding images; and Pelle Isaksson and Lisa Eriksson for letting me rent their wonderful apartment in Paris (the bathtub was truly a blessing after the long days at the Manuscripts Department).

Most of all, I thank my colleagues at Umeå University and all who have read and commented on my manuscript at the higher seminar of the Department of Historical, Philosophical and Religious Studies. Thanks in particular to Christer Nordlund, Kjell Jonsson, Svante Norrhem, Björn Olsson, Jakob Christensson, Elise Dermineur, Virginia Langum, Anna Foka, Fredrick Backman, Beatrice Sjöström, Martin Almbjär, Valgerður Pálmadóttir, and Daniel Nyström for all your suggestions for improvement. I am especially indebted to Janina Priebe for her help with German translations and transcriptions. Kerstin Thörn, Björn Andersson, and Per Wisselgren – thank you so much for reading and commenting, but more importantly for being such an inspiration to me during different phases of my educational years.

I also wish to thank all my PhD colleagues and friends at Umeå University for sharing the toil and joy of thesis-writing, for enthusiastic and challenging theoretical and methodological discussions, for late-night coffee, and for all the times we blow off steam at *Rött*. You know who you are. Thanks in particular to those of you who are very close to me, and who made these years truly wonderful: Tomas Karlsson, AnnaSara Hammar, Beatrice Sjöström, and Elisabeth Hallgren Sjöberg.

Finally, my dear friends Charlott Sandén, Helena Strand, and Anne-Li Grefve, my father Leif Holmberg, my sister Annelie Holmberg, and my mother Synnöve Dellqvist – what would I have done without you? When I felt like a Benedictine monk, isolated in my Parisian cell (my sweet and trying solitude), you were always only a Skype-call away with your support and unconditional love. This book is dedicated to you.

Linn Holmberg
Umeå, Mars 2014

ABBREVIATIONS AND FORMALITIES

BnF	Bibliothèque nationale de France
AN	Archives nationales
fol.	folio (manuscript sheet)
r	recto (front side)
v	verso (back side)
col.	column
par.	paragraph
liv.	livre (subdivision within certain books)
ch.	chapter
pl.	plate
fig.	figure
mod. Fr.	modern usage in French (in contrast to eighteenth-century spelling)
mod. Ger	modern usage in German (in contrast to eighteenth-century spelling)
<i>Dictionnaire de Trévoux</i>	
alt. <i>Trévoux</i>	<i>Dictionnaire universel françois et latin</i> (originally printed in Trévoux)

I have followed the *MHRA Style Guide: A Handbook for Authors and Editors*, 3 edn (London: Modern Humanities Research Association, 2013).

Terms defined in lexicographic works (whether in print or manuscript) are written in small capitals. All translations are my own if nothing else is stated. In case of shorter translations, the original text has been placed in the footnote. Longer transcriptions are found in the appendices. The transcriptions reproduce the orthography of the sources, but punctuation, capitalization, and accents have been modernized.

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PART I. ORIENTATIONS

1. INTRODUCTION

History is a story about power, a story about those who won.¹

The early-modern history of sciences and ideas is full of grand books and famous authors. They constitute landmarks in the conception of our intellectual heritage – a chain of contributions of varying importance, endlessly revisited, studied, and commented upon. Concurrently with all these publications, countless manuscripts never left their authors' desks or drawers. Due to various reasons, learned projects were abruptly abandoned or simply never finished. Since these texts never became official contributions to the Republic of Letters, they rarely became of importance to anyone besides the persons involved in their production. In hindsight they may appear as dead ends, 'losers' or non-events, as never fully or officially 'coming into being' as they failed to join the historical stream of publications. However, these works were every bit as much a response and an intended contribution to contemporary conversations as the ones that were published – no one just ever read them. Sometimes these 'losers' can change the perspective on the works that succeeded, because even if they never were published, they inform us of the ideas in motion. This dissertation is devoted to such a case.

In mid-eighteenth-century Paris, two Benedictine monks from the Congregation of Saint-Maur – also known as the Maurists – started working on a universal dictionary of arts, crafts, and sciences. The project was initiated simultaneously with what would become one of the most famous literary enterprises in Western intellectual history: the *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers* (28 vols, 1751–1772), directed by Denis Diderot (1713–1784) and Jean le Rond d'Alembert (1717–1783). However, while the dictionary of the *philosophes* turned into a controversial but successful best-seller, considered as the most important medium of Enlightenment thought, the Benedictines never finished or published their dictionary. Eventually, the manuscripts were put aside in the

¹ Michel-Rolph Trouillot, *Silencing the Past: Power and the Production of History* (Boston: Beacon Press, 1995), p. 5.

monastery library and were soon forgotten. For about two hundred and sixty years, the Maurists' dictionary material has largely escaped the attention of researchers, and its history of production has been completely unknown.

The Maurists' unrealized enterprise is a relevant object of study for three reasons, or against three backgrounds: the battle of the universal dictionaries in the eighteenth century; the fact that this work coincided with the *Encyclopédie*; and that it was executed by members of the institutionalized Church. Before specifying the purpose of the dissertation, these backgrounds will be briefly described.

THE SCIENTIFIC DICTIONARY IN THE EIGHTEENTH CENTURY

The eighteenth century has been given many labels, but most notably the age of Enlightenment. In many ways, it also was the age of the Dictionaries.² From the end of the seventeenth century onwards, the European book market was practically flooded by lexicographic works. They appeared in all sizes and treated all kinds of subjects, in more or less elaborate ways. In France their number reached a peak between 1740 and 1780.³ In 1746, the monthly periodical *Mercur de France* remarked that it soon would be necessary to make a dictionary of all the dictionaries, since their number never seemed to decrease.⁴

The explosion of lexicographic works in the eighteenth century has often been explained by the social, intellectual and institutional changes occurring in the early-modern period. In the aftermath of the success of the printed book, the literate population increased and the vulgar languages started to replace Latin.⁵ At the same time, new learned environments in form of academies and savant societies began to challenge the monopoly of the universities, especially regarding information on the natural sciences and

² Richard Yeo, *Encyclopaedic Visions: Scientific Dictionaries and Enlightenment Culture* (Cambridge: Cambridge University Press, 2001), p. 11; Pierre Rétat, 'L'âge des dictionnaires', in *Histoire de l'édition française*, vol. II: *Le livre triomphant 1660–1830*, ed. by Roger Chartier and Henri-Jean Martin, 2nd edn (Paris: Fayard/Promodis, 1990), pp. 232–246 (p. 232).

³ Rétat, p. 232.

⁴ *Mercur de France* (November 1746), 101–102.

⁵ Marie Leca-Tsiomis, 'Dictionnaires en Europe: Présentation', in *Dictionnaires en Europe*, ed. by Marie Leca-Tsiomis, *Dix-huitième siècle*, 38 (2006), 5–16 (pp. 5–7); Richard Yeo, 'Classifying the Sciences', in *The Cambridge History of Science: Eighteenth-Century Sciences*, ed. by Roy Porter (Cambridge: Cambridge University Press, 2003), pp. 241–266 (pp. 241, 247).

technical arts.⁶ The advances within the latter areas were straining the old scholastic schemes of knowledge and made it necessary to come up with new ways of organizing information.⁷ Since Latin had served as the learned language of Europe for over a thousand years, there also was a general need to translate the old scientific terms into the vulgar languages, as well as defining the many new ones deriving from the young experimental sciences.⁸ The alphabetical order offered an easy access to these terms, while it simultaneously made it possible to avoid scholastic categorizations. The alphabet therefore emerged as an alternative principle for organizing and presenting knowledge.⁹

From the end of the seventeenth century onwards, the so-called universal dictionaries of arts and sciences constituted a particular lexicographic and semi-encyclopedic genre. In contrast to linguistic dictionaries (devoted to the common words), these works focused on the terminology applied within various fields of knowledge. They also aspired to provide information about the arts and sciences themselves, instead of merely defining their words. In this respect they were the predecessors of the modern encyclopedias. However, the early works consisted of no more than one or two volumes, which consequently only allowed concise definitions of the terms under examination. The genre therefore started out as rather language oriented, but in the course of the eighteenth century the bulk of information increased as the works expanded with every new edition.¹⁰

In this period, *science* was not yet denoting the natural sciences, but rather a formalized body of theoretical knowledge. *Art* generally meant method or practice, but could also (in plural) signify philosophy and literature. Furthermore, the scholastic *liberal arts* traditionally referred to grammar, logic, rhetoric, arithmetic, music, geometry, and astronomy (thus overlapping *science*), while the juxtaposing *mechanical arts* embraced a

⁶ Peter Burke, *A Social History of Knowledge: From Gutenberg to Diderot*, 4th edn (Cambridge: Polity, 2008), pp. 39–44.

⁷ Yeo, 'Classifying the Sciences', p. 242.

⁸ Leca-Tsiomis, 'Dictionnaires en Europe', pp. 5–7.

⁹ Cynthia J. Koeppe, 'The Alphabetical Order: Work in Diderot's *Encyclopédie*', in *Work in France: Representations, Meaning, Organization, and Practice*, ed. by Laurence Kaplan and Cynthia J. Koeppe (Ithaca/London: Cornell University Press, 1986), pp. 229–257 (pp. 232–233); Yeo, *Encyclopaedic Visions*, pp. 25–27.

¹⁰ Bernard Quemada, *Les dictionnaires du français moderne 1539–1863: étude sur leur histoire, leurs types et leurs méthodes* (Paris: Didier, 1967), pp. 20–22, 75–78, 157–166, 172–173; Yeo, *Encyclopaedic Visions*, pp. 12–22; Yeo, 'Classifying the Sciences', p. 252.

wide variety of practical skills and manual labor.¹¹ In the universal dictionaries the formulation ‘arts and sciences’ therefore came to designate a vast array of theoretical and practical knowledge, such as theology, ethics, jurisprudence, politics, mathematics, physics, natural history, medicine, military arts, architecture, hunting, painting, and poetry. Biography, history, and geography were commonly excluded, since they were treated in a separate lexicographic genre: the historical dictionaries.¹²

Compared to the innumerable specialized dictionaries circulating on the book market, the dictionaries of arts and sciences were much fewer in number. Compiling a work of this kind was an expensive and time-consuming enterprise. Due to the presence of theology and ethics, it also was a highly delicate matter. This was particularly visible in France.

THE BATTLE OF THE FRENCH UNIVERSAL DICTIONARIES

The history of the French universal dictionaries has often been described in terms of war.¹³ The literary scholar David Eick points out that the dictionaries became ‘a privileged front for ideological skirmishes waged in alphabetical order’, and that lexicographers ‘came to view their products as playing key roles in linguistic, religious and political conflict’.¹⁴ Not only were the universal dictionaries compiled by writers of various institutional belongings – conveying different religious apologetics – but they also built on and revised each other, which caused endless quarrels on plagiarism.

The very first *Dictionnaire universel* (2 vols) appeared in 1690. The compiler was Antoine Furetière (1619–1688) – a novelist, lawyer and member of the French Academy in Paris. Furetière began assembling his work while assisting in the compilation of the Academy’s dictionary of the French language. The latter was supposed to provide precise definitions and spelling of all the common words, using the fine language of the court as norm. The contents were arranged according to the roots of the words and

¹¹ ARTFL *Dictionnaires d’autrefois*. See for instance ART and SCIENCE in the *Dictionnaire de l’Académie française* (Paris: Coignard, 1694): <http://artfl-project.uchicago.edu/content/dictionnaires-dautrefois> [accessed 2014-03-19].

¹² Yeo, ‘Classifying the Sciences’, pp. 242, 251.

¹³ Marie Leca-Tsiomis, *Écrire l’‘Encyclopédie’: Diderot, de l’usage des dictionnaires à la grammaire philosophique*, 2nd edn (Oxford: Voltaire Foundation, 2007), p. 17.

¹⁴ David Eick, ‘Defining the Old Regime: Dictionary Wars in Pre-Revolutionary France’ (unpublished doctoral thesis, University of Iowa, 2003), ‘Introduction’ (unpaginated, first and second page).

scientific and technical terms were omitted. Furetière found this arrangement unnecessarily complicated and the focus on everyday language meaningless. Therefore he secretly started making an alphabetically organized dictionary of the terms of the arts and sciences. When the project of Furetière was discovered by his colleagues, he was accused of stealing material from the Academy and was expelled under dramatic forms. His dictionary appeared posthumously in Holland.¹⁵

Four years later, the academician Thomas Corneille (1625–1709) published the *Dictionnaire des arts et sciences* (2 vols, 1694), intended as a supplement to the dictionary of the Academy in order to compete with the work of Furetière. The booksellers in Holland responded by publishing a revised and augmented edition of the *Dictionnaire universel* in 1701. The editor in charge was the Huguenot lawyer Henri Basnage de Beauval (1657–1710), who besides augmenting the content also seized the opportunity to exclude all remarks regarding the supremacy of the Catholic Church.¹⁶

The revision of Basnage de Beauval immediately enraged the Parisian Jesuits. The Jesuit periodical *Journal de Trévoux* quickly announced the coming publication of a new universal dictionary, purged from everything contrary to the Catholic religion. In 1704, the *Dictionnaire universel françois et latin* (3 vols) appeared from the printing house in the town of Trévoux. Due to the location, the work became known as the *Dictionnaire de Trévoux*. The compilers were anonymous but the Jesuits' association with the enterprise was widely known. It was later revealed that the Oratorian priest and Bible exegete Richard Simon (1638–1712) had been the editor in charge. Despite the fact that Simon basically had made a Catholicized version of the Protestant edition of Basnage de Beauval, the indebtedness to the latter was never acknowledged. Instead the dictionary was presented as a new work. As a result, the contemporary periodicals were filled with accusations of plagiarism.¹⁷

The last Protestant edition of the *Dictionnaire universel* was published in 1727 (4 vols), and the last *Dictionnaire des arts et des sciences* of Corneille

¹⁵ Walter W. Ross, 'Antoine Furetière's *Dictionnaire universel*', in *Notable Encyclopedias of the Seventeenth and Eighteenth Centuries: Nine Predecessors of the Encyclopédie*, ed. by Frank. A. Kafker (Oxford: Voltaire Foundation, 1981), pp. 53–67 (pp. 55–57).

¹⁶ Walter W. Ross, 'Thomas Corneille's *Dictionnaire des arts et des sciences*', in *Notable Encyclopedias*, ed. by Kafker, pp. 69–81; Ross, 'Antoine Furetière's *Dictionnaire universel*', p. 64; Leca-Tsiomis, *Écrire l'Encyclopédie*, pp. 31–51.

¹⁷ Leca-Tsiomis, *Écrire l'Encyclopédie*, pp. 52–63, 67–102.

in 1732 (2 vols).¹⁸ The *Dictionnaire de Trévoux* would outlast and outgrow them both. Under the direction of the Jesuit scholar and librarian Etienne Souciet (1671–1744), the second edition (1721) was expanded with two additional volumes, and by the time of the fourth edition (1743), the dictionary consisted of six volumes in-folio. Published by thirteen associated booksellers, it had become a major editorial and commercial enterprise.¹⁹ The fifth edition (1752) amounted to seven volumes in-folio, and the last (1771) to eight.²⁰ Thus, from the 1740s onwards, the *Dictionnaire de Trévoux* emerged as *the* universal dictionary of arts and sciences in the French language.

According to the literary scholar Marie Leca-Tsiomis, ‘the *Encyclopédie* was both the offspring and negation of the *Dictionnaire universel* of Trévoux’.²¹ It was elaborated with the Jesuit dictionary as ideological counterpart. In the second half of the eighteenth century, the battle of the French dictionaries would first and foremost stand between these two rivaling enterprises. While the *Dictionnaire de Trévoux* conducted an explicit Catholic apologetic with the ambition of refuting heresy, immorality and irreligiosity, the *encyclopédistes* constructed a philosophical *machine de guerre* towards the superstition and authority of the Church. However, this was not the only difference between the two enterprises.

Despite the increasing bulk of information, the *Dictionnaire de Trévoux* continued to be rather language oriented, following the lexicographic tradition of Furetière. The *Encyclopédie* started as an augmented translation of a foreign work: Ephraim Chambers’s *Cyclopaedia, or, an Universal Dictionary of Arts and Sciences* (1728). Inspired by the English lexicographers, the *encyclopédistes* placed greater emphasis on the physico-mathematical and new experimental sciences, as well as the many crafts and mechanical arts. They also included a multitude of illustrations, which was unprecedented among the French universal dictionaries (all non-pictorial). Furthermore, while the earlier works fundamentally had been compiled by one, two or three persons, the *Encyclopédie* contained contributions from some one hundred and thirty writers, of whom many were specialists in their

¹⁸ Ross, ‘Antoine Furetière’s *Dictionnaire universel*’, p. 66; Ross, ‘Thomas Corneille’s *Dictionnaire des arts et des sciences*’, p. 81.

¹⁹ Leca-Tsiomis, *Écrire l’Encyclopédie*, pp. 116–117, 132.

²⁰ *Quand le ‘Dictionnaire de Trévoux’ rayonne sur l’Europe des Lumières*, ed. by Isabelle Turcan (Paris: Harmattan, 2009), p. 74.

²¹ Leca-Tsiomis, *Écrire l’Encyclopédie*, p. 241: ‘l’*Encyclopédie* fut à la fois descendance et négation du *Dictionnaire universel* de Trévoux’.

fields. Finally, the *Encyclopédie* was not presented as a universal dictionary, but a reasoned or systematic dictionary. It contained a detailed chart of knowledge, and the relation between subjects was highlighted through an elaborate system of cross-references. The *Encyclopédie* thereby provided the reader with an order of things besides the alphabetical order of words – and aspects of this order would in itself be offensive to the Church.²²

The historian John Pappas once remarked that the opposition between the *Dictionnaire de Trévoux* and the *Encyclopédie* embodied ‘the whole drama of the struggle of ideas in the eighteenth century’.²³ Indeed, for a long time, the French Enlightenment was largely perceived as a battle between secular and religious forces. This conception has been revised and nuanced during the past fifty years. Nevertheless, the image of this struggle has remained most easily recognizable in the controversy surrounding the *Encyclopédie*, with the reciprocal attacks between Jesuits and *philosophes*, and the binary opposition assumed by their respective dictionaries. But what happens to this image if a third, hitherto unknown dictionary of arts and sciences is thrown into the mix? What happens if we consider also the unrealized enterprise of the Maurists?

THE MAURIST ENTERPRISE

The name of the Benedictine Congregation of Saint-Maur (1618–1790) was renowned in early-modern Europe. During one hundred and seventy years, the savants of this monastic community produced numerous critical editions of the Church Fathers, compiled multivolume works on history, and wrote influential methodological treatises related to archival studies. Many of their projects ran over several decades and involved a great number of collaborators, dispersed in nearly two hundred monasteries across France. The writers also collaborated with a wide network of publishers, artists, printers, learned societies, as well as secular scholars.²⁴

²² Marie Leca-Tsiomis, ‘L’*Encyclopédie* ou *Dictionnaire raisonné des sciences, des arts et des métiers*’, in *Célébrations nationales 2001* (Ministère de la Culture, 2001). Published online: http://dalembert.obspm.fr/SerieII_presentation/Encyclopedie/Marie_Leca-Tsiomis.php [accessed 2013–10–31].

²³ Cited in Leca-Tsiomis, *Écrire l’‘Encyclopédie’*, p. 237.

²⁴ Madeleine Laurain, ‘Les travaux d’érudition des Mauristes: origine et évolution’, in *Mémorial du XIV^e centenaire de l’abbaye de Saint-Germain-des-Prés* (Paris: Vrin, 1959), pp. 231–271; Daniel-Odon Hurel, ‘Les Bénédictins de la Congrégation de Saint-Maur et les sociétés savantes en France au XVIII^e siècle’, in *Académies et sociétés savantes en Europe*

The Maurists' achievements once compelled the historian Pierre Chaunu to make the flattering comparison that the Benedictines of Saint-Maur 'are to the historical science what Viète is to algebra, Newton to mechanics and Lavoisier to chemistry'.²⁵ Similarly, the monastic historian David Knowles asserted that 'the work of the Maurists remains, and may well remain for centuries to come, the most impressive achievement of cooperative, or at least coordinated scholarship in the modern world'.²⁶ Thus, if yet another community of savants in Paris was to undertake the immense project of describing all the contemporary arts, crafts, and sciences, the Maurists certainly had the practical capacity.

The dictionary project was executed in the Congregation's intellectual, religious and political center: the Parisian abbey of Saint-Germain-des-Prés, located in the middle of the urban environment on the Left Bank of the River Seine. At all times, this abbey housed about forty or fifty monks, including the Superiors of the Congregation and some of the most prominent Maurist scholars, such as Dom Jean Mabillon (1632–1707) and Dom Bernard de Montfaucon (1655–1741). The abbey also possessed one of the largest libraries in France. A contemporary writer asserted that it was 'one of the greatest in Europe, next to the ones of the King and the Vatican, both in numbers of books [...] and ancient manuscripts'.²⁷ The library of Saint-Germain-des-Prés was open to the learned public several days a week, and therefore constituted a frequent meeting place for local and international scholars interested in history.²⁸

Sometime in late 1747, Dom Jacques Fortet (c. 1697–1770) noted in the annual reports on the activities of the Congregation that two monks in the abbey of Saint-Germain-des-Prés currently were working on 'a universal dictionary of the liberal and mechanical arts, the crafts and all the sciences

1650–1800, ed. by Daniel-Odon Hurel and Gérard Laudin (Paris: Honoré Champion, 2000), pp. 463–490.

²⁵ Cited in Blandine Barret-Kriegel, *Les historiens et la monarchie*, vol. III: *Académies de l'histoire* (Paris: Presses universitaires de France, 1988), p. 21: 'sont à la science historique ce que Viète est à l'algèbre, Newton à la mécanique et Lavoisier à la chimie'.

²⁶ David Knowles, *Great Historical Enterprises* (New York: Nelson, 1963), pp. 61–62.

²⁷ Jacques-Bernard Durey de Noinville, *Dissertation sur les bibliothèques* (Paris: Chaubert & Herissant, 1758) p. 47: 'l'une des plus considérables de l'Europe, après celles du Roi et du Vatican, tant pour le nombre des livres [...] que par les anciens manuscrits'.

²⁸ Burke, p. 43; Emmanuel de Broglie, *Mabillon et la société de l'abbaye de Saint-Germain-des-Prés à la fin du XVII^e siècle*, 2 vols (Paris: Plon & Nourrit, 1888), I, 52–127; de Broglie, *Bernard de Montfaucon et les Bernardins 1715–1750*, 2 vols (Paris: Plon & Nourrit, 1891), I, 79–204.

with any relation to them’.²⁹ The writers were Dom Antoine-Joseph Pernety (1716–1796) and Dom François de Brézillac (1709–1780) – two scholar-monks at the beginning of their intellectual careers. The same year in October, Diderot and d’Alembert were appointed editors of the embryonic *Encyclopédie*.³⁰

Curiously enough, the two enterprises took form only a few hundred meters from each other. One of the most common meeting places of the *encyclopédistes*, the Café Procope, was located only a street away from the abbey of Saint-Germain-des-Prés (see Figure 1). In 1973, the art historian Jules Leroy remarked that the *Encyclopédie*, as a collaborative enterprise, might have been a way for the secular compilers ‘to imitate the team-work of the Benedictines across the street’.³¹ With this statement Leroy only wished to call attention to the fact that the collective work of the Maurists was well-known at the time. He was not aware that monks in the abbey of Saint-Germain-des-Prés also had been working on a dictionary of arts, crafts, and sciences.

Since the Maurist dictionary and the *Encyclopédie* were compiled at the same time in the same town, the writers would have had access to the same published works, articles and memoirs. The simultaneity of the two projects further implied that the Benedictines started compiling their dictionary without any direct influence from the dictionary of the *philosophes*. By 1747, nobody yet knew what the *Encyclopédie* eventually would become. Likewise, the Maurists did not know that the fruits of their efforts never would reach the public. Since both dictionaries were written in French, they needed to be distinguished from the same predecessor and contemporary rival: the *Dictionnaire de Trévoux*. We know very well how the enterprise of the *encyclopédistes* would differ from the Jesuit dictionary – but we know nothing about the plans of the Maurists.

²⁹ Edmond Martène, *Histoire de la Congrégation de Saint-Maur*, ed. by Gaston Charvin, 10 vols (Paris: Picard, 1928–1954), IX (1943), p. 342: ‘un dictionnaire universel des arts mécaniques et libéraux, des métiers et de toutes les sciences qui y ont quelque rapport’.

³⁰ John Lough, *The ‘Encyclopédie’* (London: Longman, 1971), pp. 15–16.

³¹ Jules Leroy, *Saint-Germain-des-Prés: capitale des lettres* (Paris: Latines, 1973), p. 162: ‘d’imiter le travail d’équipe des Bénédictins d’en face’.

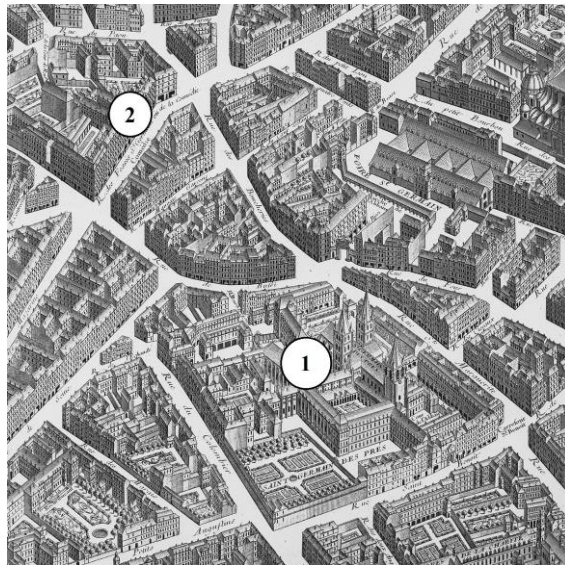
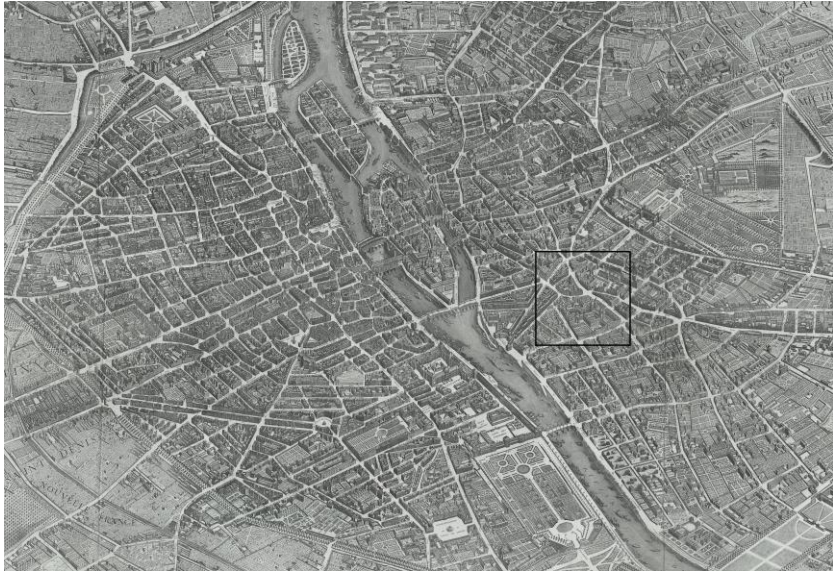


Figure 1: Map of Paris 1734–1736 (*Plan de Turgot*), oriented towards the south-east.
The Left Bank of Seine (the southern side) is seen to the right.
(1) The abbey of Saint-Germain-des-Prés, (2) the Café Procope.
(Wikimedia commons)³²

³² http://en.wikipedia.org/wiki/File:Plan_de_Turgot.jpg [accessed 2013–11–28],
https://upload.wikimedia.org/wikipedia/commons/2/26/Turgot_map_Paris_KU_11.jpg
[accessed 2013–03–06]. The square and numbers have been added by the author.

The Maurists' dictionary material amount to six volumes in-folio, but indications of missing pieces suggest that it originally was even larger. The preserved manuscripts contain about seven thousand articles, near two hundred illustrations, and a multitude of 'working lists' revealing the unrealized plans and ambitions of the writers. The content concerns areas such as the physico-mathematical sciences, medicine, natural history and the fine arts, as well as the many contemporary practical crafts, professions and industries. Everything suggests that articles were still being added to every part of the alphabet at the time for the project's interruption. Consequently, it was abandoned as a dictionary in the making, and not as a finished product.

PURPOSE AND DESCRIPTION OF THESIS

As the first study of the Maurists' unrealized dictionary of arts, crafts, and sciences, this dissertation aspires to provide a broad understanding of the characteristics and history of the enterprise. The purpose is to examine what kind of dictionary the Maurists were making and envisioning compared to the *Dictionnaire de Trévoux* and the *Encyclopédie*; to explore the project's origins, development, and abandonment; and to situate the enterprise within its environment of production (the Congregation of Saint-Maur), the history of the genre (the dictionaries of arts and sciences), and the Enlightenment culture. In doing so, I will also discuss how this project can provide new perspectives on the intellectual activities of the Maurists, the emergence of the encyclopedic dictionary in France, and the *Encyclopédie* of Diderot and d'Alembert.

Studying an unfinished manuscript requires other strategies than studying a published work. The Maurists' dictionary material is not a fixed product. Rather, it constitutes the remains of a project once developing over time and abandoned while still in progress. Unlike the *Encyclopédie* or the *Dictionnaire de Trévoux*, the Maurists' manuscripts do not have a history of publication, diffusion and reception. However, they do have a two hundred and sixty year-old history of storage and alteration, which fundamentally has affected their appearance. In order to meet the challenges posed by these particularities, I have chosen a microhistorical research method.

DISPOSITION AND SYNOPSIS

The dissertation is divided in five parts. Together they contain fifteen numbered chapters, subdivided in smaller sections.

Part I: ‘Orientations’ contains three chapters: ‘Introduction’, ‘Earlier Research’, and ‘Theory and Method’. Chapter 2 presents four categories of research relevant for exploring the history and contents of the Maurists’ dictionary manuscripts. Here I will also mention two scholars who previously have noticed the manuscripts’ existence, and explain how I came across the material. Chapter 3 treats microhistory as theory and method, and presents definitions and typologies useful in the study of eighteenth-century dictionaries.

Part II: ‘The Manuscripts under the Loupe’ is devoted to material aspects of the Maurists’ manuscripts. Chapter 4 gives a general presentation of their organization and characteristics. Chapter 5 examines how the material received its current organization at the *Bibliothèque nationale de France* (BnF) in the nineteenth century. Based on these insights, I will reconstruct its original form. Chapter 6 uses handwriting analysis to estimate the number of the writers and distinguish the magnitude and nature of their contributions. These observations suggest that the dictionary project was not the isolated occupation of one or two monks, but involved several writers.

Part III: ‘The History of a Dictionary in the Making’ examines the enterprise’s origin, development and abandonment. Here I establish a timeline for the project, explore the context in which it was produced, and identify some of the persons involved. Chapter 7 starts with the environment of production: the Congregation of Saint-Maur. After a general overview of its organization and intellectual activities, Dom Brézillac and Dom Pernety are presented. Chapters 8–10 argue that the project’s history can be divided in two phases: one early (c. 1743–1747) and one late (c. 1747–1754/55). I will show that the enterprise started as an augmented translation of a foreign lexicon in collaboration with a Parisian bookseller specialized in sciences and arts. A letter written by the same bookseller suggests that the project in 1746 found itself in a rival situation with the embryonic *Encyclopédie*, which resulted in a transformation of the enterprise from 1747 onwards.

In Part IV: ‘The Maurists’ Manuscripts Compared’, the dictionary material deriving from the second and principal phase of the project is compared with the *Dictionnaire de Trévoux* (editions 1743 and 1752) and

the *Encyclopédie*. The characteristic of the Maurist enterprise is distinguished through the examination of the coverage and organization of knowledge (Chapter 11), and the use of sources, selected articles and illustrations (Chapters 12–13). I will show that the monks started making a dictionary unique in the eighteenth century, while it at the same time had several common denominators with the *Encyclopédie*.

Part V: ‘A Monastic Reflection of the French Enlightenment’ contains concluding remarks on the project as a whole, situated in the larger context of the Enlightenment culture. Chapter 14 discusses the enterprise as a reflection of a monastic community in transformation. I will also argue that the manuscripts can be seen as a medium of Enlightenment thought, and that the Maurist work assumed a third position, or a middle way, in relation to the *Encyclopédie* and the *Dictionnaire de Trévoux*. Chapter 15 summarizes the conclusions of the dissertation.

The six appendices contain overviews of the Maurists’ manuscripts (nomenclature, working lists, illustrations, fields of knowledge), and transcriptions of articles and other documents.

2. EARLIER RESEARCH

The Swedish discipline *idéhistoria* or *idé- och lärdomshistoria* (the History of Science and Ideas) has a long tradition of interdisciplinary approaches. Due to the emphasis on a broad contextualization for understanding a certain text, phenomenon or intellectual practice, it has sometimes been described as a ‘border science’, combining perspectives from different historical disciplines.³³ The interdisciplinary approach is particularly visible in this dissertation.

In order to determine what kind of dictionary the Maurists were making and under what circumstances it was produced and abandoned, I have relied on four broad categories of research: studies devoted to the Congregation of Saint-Maur (the project’s environment of production), the dictionaries of arts and sciences (the genre), the production of books in eighteenth-century France (the conditions of work), and the Enlightenment (the wider intellectual context). In the following subchapters I will situate my own research within these fields and present the works that have been of particular use and inspiration. However, I will start with an account of how I first came across the Maurists’ dictionary manuscripts and present the two scholars who previously have mentioned their existence.

PREVIOUS MENTIONS OF THE DICTIONARY MATERIAL

In 2008 I was writing my master’s thesis in History of Science and Ideas, treating the Maurists’ intellectual activities in relation to the French Enlightenment.³⁴ I was particularly interested in the Congregation’s lesser-known publications on technology and natural sciences. In order to get an idea of the number and character of these works, I scrutinized the bibliographical catalogues of the Maurists’ publications. I also made an inventory of all the projects mentioned in the *Histoire de la Congrégation de*

³³ Gunnar Aspelin and Sten Lindroth, ‘Om idé- (och lärdoms)historiens ställning (1965)’, in *Vad är idéhistoria? Perspektiv på ämnets identitet under sextio år*, ed. by Nils Andersson and Henrik Björck, 2nd edn (Stockholm/Stehag: Symposium, 1999), pp. 108–116 (p. 110).

³⁴ Linn Holmberg, ‘Maurinerna i skuggan av upplysningsfilosofer, akademier och Encyklopedin: Om att problematisera idéhistorisk kanon (The Maurists in the Shadow of the *Philosophes*, the Academies and the *Encyclopédie*: Problematising the Canon of History of Science and Ideas)’ (unpublished master’s thesis, Umeå University, 2008).

Saint-Maur. The latter was originally compiled by Dom Edmond Martène (1654–1739) and his successor Dom Fortet between 1727 and 1747, but was not published until in the early twentieth century. The work consists of annual reports, describing general events and intellectual activities between 1618 and 1747.³⁵ When I reached the last report, I stumbled over the announcement that Dom Pernety and Dom Brézillac were working on a universal dictionary of arts, crafts, and sciences. Well aware that Diderot and d’Alembert became editors of the *Encyclopédie* the same year, I found the simultaneousness intriguing. I mentioned the report in my master’s thesis but I did not have the time to investigate further the fate of the dictionary project.³⁶ Since it was absent in all bibliographical catalogues mentioning Pernety and Brézillac, I simply concluded that it never was published.³⁷ For all I knew at this point in time, it might never even have left the planning stage. The fact that I had not found a single reference to the enterprise in earlier research on the Congregation also seemed to point in that direction.

When I became a PhD student in September 2009 I first intended to expand the study on the Maurists’ publications on sciences and arts. However, unable to let go of the thought of the dictionary of Pernety and Brézillac, I contacted the Manuscripts Department of the BnF and asked if they had any material corresponding to the description of Fortet. A couple of weeks later I received a response. The Department had six volumes registered as ‘Material for a Dictionary of arts and sciences, by Dom Antoine-Joseph Pernety’.³⁸ A month later, I arrived to Paris. After having examined the manuscripts I decided to devote my dissertation to their contents and history of production.

To the best of my knowledge, only two scholars have previously mentioned the manuscripts’ existence. Each came across the material while investigating other subjects. Consequently, neither of them described it more than superficially or had time to investigate its history of production. The first was the *Encyclopédie*-specialist Jacques Proust who mentioned the

³⁵ Martène, *Histoire de la Congrégation de Saint-Maur*, ed. by Charvin, 10 vols (1928–1954).

³⁶ Holmberg, pp. 36–37.

³⁷ René Tassin, *Histoire littéraire de la Congrégation de Saint-Maur* (Paris: Humblot, 1770; repr. New Jersey: Gregg Press, 1965), pp. 690–691; Charles de Lama, *Bibliothèque des écrivains de la Congrégation de Saint-Maur, Ordre de Saint-Benoît en France* (Munich: Lama, 1882; repr. Geneva: Slatkine, 1971), pp. 199, 215–216; *Nouveau supplément à l’Histoire littéraire de la Congrégation de Saint-Maur*, ed. by Ursmer Berlière and others, 3 vols (Paris: Picard, 1908, 1931, 1932), I (1908), pp. 74–75, II (1931), pp. 62, 66, 72, 141–144, III (1932), pp. 19, 22, 104.

³⁸ Paris, Bibliothèque nationale de France (BnF), MS fonds français 16979–16984, ‘Matériaux pour un Dictionnaire des arts et sciences, par dom Antoine-Joseph Pernety’.

material in his classic study of the dictionary of Diderot and d'Alembert (1965). In a chapter devoted to the origins of the encyclopedic spirit he remarked that not even the monasteries seemed to have escaped the 'contagion' of Enlightenment thought. He then briefly described a 'strange' document at the Manuscripts Department in Paris:

The Manuscripts Department of the National Library of France possesses a strange document, undated but seemingly not posterior to the publication of the first volumes of the *Encyclopédie*. It consists of rather short articles on arts and crafts, written on loose slips of papers, pasted on bound sheets. These articles are based on the best sources: Réaumur, the memoirs of the Academy of Sciences, the *Journal de Trévoux*, the clockmaker Le Roy. The technical terms are generally accompanied by definitions and illustrated by some sort of 'plates'. These plates are cut-out engravings or drawings made by plume, rather clumsy and sometimes shaded by lead pen. Articles and drawings obviously have the same author. This man is otherwise known by the 'encyclopedic' works he published between 1758 and 1790: Dom Antoine-Joseph Pernetty [sic], Benedictine.³⁹

After this account, Proust never returned to the subject.

The second person to mention the manuscripts was the historian Micheline Meillassoux-Le Cerf who in 1988 defended her dissertation on Dom Pernety. Even though she concentrated on the last twenty years of his life, she seized the opportunity to make an inventory of the material preserved in his name. On one page, she briefly described the dictionary manuscripts, and just like Proust she chose to present them as 'strange'. At the end, she posed the question whether Pernety might have been working on a collective work, 'something like the *Encyclopédie*', but then dropped the subject:

One should here mention a strange collection of documents stored at the Manuscripts Department of the National Library. Unsigned and undated, these documents have been attributed to Pernety [...]. It is too bad that this 'draft' never was published. Had

³⁹ Jacques Proust, *L'Encyclopédie* (Paris: Colin, 1965), pp. 45–46: 'Le département des Manuscrits de la Bibliothèque nationale conserve un étrange document non daté mais qui ne semble pas postérieur à la publication des premiers volumes de l'*Encyclopédie*. Ce sont, sur des feuillets volants collés ensuite sur des feuilles brochées, des articles assez courts sur les arts et métiers. Ces articles sont documentés aux meilleures sources: Réaumur, les mémoires de l'Académie des sciences, le *Journal de Trévoux*, l'horloger Le Roy. Les termes techniques utilisés sont généralement assortis de leur définition, et des espèces de 'planches' en donnent l'illustration. Ces planches sont des gravures découpées ou des dessins originaux à la plume, assez maladroits, parfois ombrés au crayon. Articles et dessins ont visiblement le même auteur. L'homme est connu d'ailleurs par les travaux 'encyclopédiques', qu'il publia de 1758 à 1790: c'est dom Antoine Joseph Pernetty, bénédictin'. The alternative spellings 'Pernetty' and 'Pernety' were each employed in the eighteenth century, even by Pernety himself. Today, the latter version is commonly used.

Pernety started to compile a new dictionary, or had he been asked to compile some articles for a collective work, something like the *Encyclopédie*?⁴⁰

Judging by the accounts and bibliographies of Proust and Meillassoux-Le Cerf, they had not read the annual report of Dom Fortet and only came across the manuscripts through the catalogue of the BnF. Since the collection is registered in the name of Pernety, they assumed that he was the only author, although Meillassoux-Le Cerf remarked that the manuscripts lacked signatures and contained traces of additional handwritings.

Proust estimated that the documents had been compiled sometime before or around the first volumes of the *Encyclopédie* while Meillassoux-Le Cerf placed their creation around 1757. The interpretations by these two scholars will be further discussed in Chapters 5 and 6.

THE CONGREGATION OF SAINT-MAUR: THE ENVIRONMENT OF PRODUCTION

The Congregation of Saint-Maur has fascinated members of the Benedictine Order and historians of monasticism and historiography for almost two hundred years. The textual production about the Congregation, its most renowned scholars and their learned works is immense – and fragmentary.⁴¹ Since the Congregation of Saint-Maur was a French phenomenon, the largest part of the scholarly research has been carried out in France, although there are also some Anglo-American studies.⁴²

⁴⁰ Micheline Meillassoux-Le Cerf, 'Dom Pernety et son milieu (1716–1796): contribution à l'histoire de la sensibilité et des idées à la seconde moitié du XVIII^{ème} siècle' (unpublished doctoral thesis, University of Paris-IV Sorbonne, 1988), pp. 45–46: 'Il faut signaler ici l'existence d'un curieux ensemble de documents conservé au département des Manuscrits de la Bibliothèque Nationale. Non signés, non datés, ces documents ont été attribués à Pernety [...]. Il est dommage que ce 'brouillon' n'ait pas donné le jour à un ouvrage imprimé. Pernety avait-il entrepris de composer un nouveau dictionnaire, ou lui avait-on commandé quelques articles pour un ouvrage collectif, quelque chose comme l'*Encyclopédie*?'.

⁴¹ Daniel-Odon Hurel, 'L'historiographie de la Congrégation de Saint-Maur aux XIX^e–XX^e siècles: bilan et perspectives de recherche', *Revue Mabillon*, n.s., 13 (2002), 7–23; Hurel, 'L'historiographie du monachisme de l'époque moderne, en France et en Belgique, au XX^e siècle', *Revue d'histoire de l'Église de France*, 86:217 (2000), 589–606.

⁴² For monographies, see Mary Kathryn Robinson, *Regulars and the Secular Realm: The Benedictines of the Congregation of Saint-Maur during the Eighteenth Century and the French Revolution* (Scranton/London: University of Scranton Press, 2008); Marteen Ultee, *The Abbey of Saint-Germain-des-Prés in the Seventeenth Century* (New Haven/London: Yale University Press, 1981); Knowles, pp. 33–61; Joseph Urban Bergkamp, *Dom Jean Mabillon and the Benedictine Historical School of Saint-Maur* (Washington: Catholic University of America, 1928).

During one hundred and seventy years, the Maurists published more than seven hundred works, and nearly as many were left unfinished after the Revolution and the dissolution of the Congregation. As a result, the historians specialized on the Maurists' intellectual activities have had an extensive material to study. Their interests have first and foremost been directed towards the Congregation's most famous scholars and influential works within patristics and history.⁴³ Due to the importance of the Maurists' achievements within these two fields, only limited attention has been devoted to the writers working on other subjects, such as the natural sciences and technical arts. Even though these categories of works were in minority, the catalogues of the Congregation's publications show that they increased in number in the course of the eighteenth century.⁴⁴ There are minor essays and articles devoted to individual monks writing about sciences and arts, but they have only rarely been situated in the larger context of the Maurists' erudition.⁴⁵ The monastic historian Pierre Gasnault has remarked that some fifteen Maurists in the abbey of Saint-Germain-des-Prés were occupied with the exact and natural sciences, but besides a few examples in a footnote, he did not elaborate on who they were or what they wrote about. The dictionary of Pernety and Brézillac was never mentioned.⁴⁶

As stated, I first learned about the dictionary project's existence through the annual report of Dom Fortet, written in 1747. This document has often been cited by monastic historians, but the information about the dictionary has repeatedly been ignored. The perhaps most striking example is the two-volume work *Les Bénédictins de Saint-Maur* by the monastic historian Dom Yves Chaussy. At present date, it is the only comprehensive survey of the

⁴³ See Laurain, pp. 231–271; Barret-Kriegel, pp. 21–22, 53–101; Pierre Gasnault, *L'érudition mauriste à Saint-Germain-des-Prés* (Institut d'études augustiniennes: Paris, 1999); Daniel-Odon Hurel, 'Les Mauristes, éditeurs des Pères de l'Église au XVII^e siècle', in *Les Pères de l'Église au XVII^e siècle: actes du colloque de Lyon 2–5 octobre*, ed. by E. Bury and B. Meunier (Paris: IRHT-CNRS, 1993), pp. 117–136; Hurel, 'The Benedictines of the Congregation of Saint-Maur and the Church Fathers', in *The Reception of the Church Fathers in the West: From the Carolingians to the Maurists*, ed. by Irena Backus, 2nd edn, vol. II (Boston/Leiden: Brill, 2001), pp. 1009–1038.

⁴⁴ See Tassin, Lama, Berlière, and Martène.

⁴⁵ Robert Lemoine, 'L'enseignement scientifique dans les collèges bénédictins', in *Enseignement et diffusion des sciences en France au XVIII^e siècle*, ed. by René Taton (Paris: Hermann, 1964), pp. 101–123. Regarding works on sciences and arts within the sibling Congregation of Saint-Vanne, see Gérard Michaux, 'La vie intellectuelle de la Congrégation de Saint-Vanne dans la seconde moitié du XVIII^e siècle', in *Sous la règle de Saint-Benoît: structures monastiques et sociétés en France, du Moyen Âge à l'époque moderne*, ed. by Jacques Dubois (Geneva: Droz, 1982), pp. 325–344 (pp. 343–344).

⁴⁶ Gasnault, pp. 15, 33.

political, organizational and intellectual history of the Congregation from its foundation in 1618 to the post-revolutionary years.⁴⁷ In the chapter regarding the intellectual activities in the mid-eighteenth century, Chaussy has transcribed the entire report of Dom Fortet from 1747 – except for the initial part mentioning the dictionary project of Pernety and Brézillac. Chaussy asserts that the report ‘enumerates the literary works in progress at this time’, and then concludes: ‘by this simple overview one sees the considerable, not to say *exclusive place* [my emphasis] given in the list to historical works, and among them, the histories of the provinces, of which many would never see the day’.⁴⁸ Chaussy’s omission of the information regarding a large-scale project on sciences and arts thus illustrates the previous lack of interest in works diverging from the Maurists’ mainstream and most successful activities.

Dom Pernety

Against this background it is necessary to remark that Dom Pernety has been largely excluded from earlier research on the Congregation of Saint-Maur. Instead he has predominantly been studied by historians of freemasonry and esotericism. In 1758 Pernety namely published two works on hermetic philosophy and alchemy. A decade later he left the Congregation for a post as royal librarian for the King Frederick II of Prussia. While in Berlin, he started frequenting esoteric circles and devoted himself to the mystical writings of Emanuel Swedenborg (1688–1772). He later returned to France where he founded a secret society in Avignon, the *Illuminés d’Avignon*, which got some one hundred followers. The society has been described in terms of heterodox Catholicism, where the members aspired to live like the first Christians but also practiced alchemy and communicated with spirits.⁴⁹

The literature devoted to Pernety’s later life and esoteric interests is abundant. The majority has been written by persons themselves engaged in esoteric movements or historians primarily interested in freemasonry. Characteristic for these studies is that Pernety’s period as Benedictine has

⁴⁷ Yves Chaussy, *Les Bénédictins de Saint-Maur*, 2 vols (Paris: Institut d’études augustiniennes, 1989, 1991); Hurel, ‘L’histoire de la Congrégation de Saint-Maur: quelques réflexions à propos d’un ouvrage récent’, *Studia monastica*, 35:2 (1993), 449–462.

⁴⁸ Chaussy, *Les Bénédictins de Saint-Maur*, I, 192: ‘qui énumère les travaux littéraires en cours à cette date’; p. 193: ‘On voit par ce simple aperçu la place considérable, pour ne pas dire exclusive, tenue dans la liste par les ouvrages historiques et, parmi ceux-ci, par les histoires des provinces, dont beaucoup ne devaient d’ailleurs pas voir le jour’.

⁴⁹ Daniel Ligou, ‘Illuminés d’Avignon’, in *Dictionnaire de la franc-maçonnerie*, ed. by Daniel Ligou, 6th rev. edn (Paris: Presses universitaires, 2006), p. 606.

been treated as a parenthesis or prelude to what he would do later in his life – even though he was a monk for thirty-four years. The writers’ superficial interest in this period is visible through recurrent confusions of dates, reproductions of unverified stories, and a general lack of references to first-hand sources. This tendency is detectable from the nineteenth century right up to the most recent publications.⁵⁰ The perhaps most illustrative example is the study of the Neo-Gnostic Joanny Bricaud.⁵¹ This work contains several tales about the young monk’s everyday life of which none is supported with first-hand sources. The majority of the claims are directly copied from an older study by Marc de Vissac, which also lacks references.⁵² Some tales can be traced back to the nineteenth-century *Biographie universelle* (1823), where barely any references are given either.⁵³ Pernety is portrayed by Bricaud (and Vissac) as someone who never really was meant to become a monk. His early publications are described as a ‘veritable diversion before finding his vocation’, and his personality as an ‘adventurous nature hard to reconcile with the monastic spirit’.⁵⁴ Bricaud’s work has been a standard reference in studies produced on Pernety since 1927. Even the latest edition of the *Dictionnaire de la franc-maçonnerie* (2006) refers to Bricaud as the main source regarding Pernety’s life, even though it is added that ‘this astounding life awaits a veritable historiographer’.⁵⁵

The most comprehensive study on Pernety derives from the earlier mentioned Micheline Meillassoux-Le Cerf. Like her predecessors she has mainly been interested in the later part of his life. Her dissertation (1988) as well as the published version (1992) has many deficiencies regarding the treatment of the Benedictine years. Unverified tales are recurrently

⁵⁰ Serge Caillet, *Dom Antoine-Joseph Pernety: théosophe et alchimiste* (Montélimar: Signatura, 2009), pp. 7–17; Chantal de Saint-Priest d’Urgel, ‘Pernety, l’homme des paradoxes, ou de la lumière à l’Illuminisme’, *Bulletin de la Diana*, 72:1 (2013), 11–32.

⁵¹ Joanny Bricaud, *Les Illuminés d’Avignon: étude sur Dom Pernety et son groupe* (Paris: Nourry, 1927; repr. Paris: SEPP, 1995), pp. 5–28.

⁵² Marc de Vissac, ‘Dom Pernety et les Illuminés d’Avignon’, in *Mémoires de l’Académie du Vaucluse*, vol. VI (Avignon: Seguin, 1906), pp. 219–238.

⁵³ ‘Pernety (Dom Antoine-Joseph)’, in *Biographie universelle, ancienne et moderne*, ed. by Louis-Gabriel Michaud, vol. XXXIII (Paris: Michaud, 1823), pp. 388–391.

⁵⁴ Bricaud, p. 7: ‘C’était une véritable dispersion en attendant d’avoir trouvé sa voie’, p. 24, ‘la nature aventureuse cadrait mal avec l’esprit monastique’; Vissac, p. 223: ‘une nature aussi aventureuse, aussi en dehors, cadrait mal avec l’esprit monastique’.

⁵⁵ Robert Amadou, ‘Pernety (Antoine-Joseph)’, in *Dictionnaire de la franc-maçonnerie*, ed. by Ligou, pp. 919–924 (p. 920): ‘Cette vie étonnante attend un véritable historiographe’. Besides evaluating the works discussed in my overview, Amadou also gives a summary of Michèle Mora, ‘Dom Antoine Joseph Pernety (1716-1796): Aspects de sa pensée’ (unpublished master’s thesis, University of Provence, 1973), regarding Pernety’s thoughts on alchemy, mythology, physiognomy and religion.

reproduced as facts and dates are confused. She sometimes refers to Bricaud but mostly uses an unpublished biography from 1969, written by a certain Dom Gazeau – a Benedictine monk in the abbey of Ligugé.⁵⁶ I was able to get hold of the same text, and it turned out that Dom Gazeau had based his account on the *Biographie universelle*, which, as stated, contains very few references.⁵⁷

Meillassoux-Le Cerf reproduces the view of Pernety's Benedictine period as a prelude. She considers the lack of congregational documentation on his activities to be proof of his insignificance. She writes:

There is very little information on Pernety the Benedictine. Only his works are there as landmarks and his activity is only mentioned at the moment of the Order's crisis. However, this discretion, this silence, has a fully reasonable explanation: he was an ordinary monk, not standing out from the rest. [...] After all, the twenty years of *illuminisme* are really what constituted the central point, the originality of this life.⁵⁸

In the research produced by the monastic historians specialized on the Maurists, Pernety is practically invisible. The fact that he later left his Congregation, in combination with the strong retrospective interest in his esoteric writings, seems to have placed him under a certain taboo, as if he would taint the serious profile of the Maurists. This might be another reason for why Dom Fortet's report on the dictionary project has been hitherto ignored, and why Chaussy never bothered to mention it.

In this dissertation, the image of Pernety the Benedictine as either insignificant or controversial will be questioned. I will present material that rather suggests that he was well-respected in the Maurist community. I will also argue that his scholarly achievements – including the unrealized dictionary – can provide new and valuable insights into the origins of his later interests, but also into the intellectual history of the Congregation of Saint-Maur.

⁵⁶ Meillassoux-Le Cerf, *Dom Pernety et les Illuminés d'Avignon, suivi de la transcription intégrale de la 'Sainte Parole'* (Milano: Archè, 1992), p. 23, footnote 2.

⁵⁷ Dom Gazeau, 'Antoine Pernety' (15 typewritten pages, unpaginated). I thank Dom Lucien-Jean Bord, the librarian of the abbey of Ligugé, for supplying me with a copy.

⁵⁸ Meillassoux-Le Cerf, *Dom Pernety et les Illuminés d'Avignon*, p. 13: 'on dispose de très peu de renseignements sur Pernety bénédictin. Seuls ses ouvrages sont là comme des jalons; seule aussi est mentionnée son activité au moment de la crise de l'Ordre. Cette discrétion, ce silence, sont tout à fait explicables d'ailleurs: c'était un moine ordinaire, coulé dans le moule. [...] Malgré tout, ce sont les 20 ans d'Illuminisme qui ont véritablement constitué le point central, l'originalité de cette vie'.

New Approaches to the Maurists' Intellectual Activities

The last two decades have seen an increasing number of studies devoted to the transformation of the monastic orders in the eighteenth century and their responses to Enlightenment thought.⁵⁹ Daniel-Odon Hurel, monastic historian and specialist on the Congregation of Saint-Maur, has stressed the importance of situating the Maurists' changing activities in the larger intellectual climate of the period – to approach the monastic life from multidisciplinary angles, to look beyond the images presented by the official documentation, and to explore the margins of the Congregation's literary activities. Hurel has shown that the Maurists' eighteenth-century erudition was characterized by increased individualization, secularization and interaction with academies and learned societies. Furthermore, as responsible for public libraries and institutions of education, the Maurists came to occupy important cultural functions across France. As both producers and consumers of books, academic memoirs and journal articles, the Congregation's scholars were also active participants in the intellectual discussions of their time.⁶⁰

My entrance to the Maurists' dictionary enterprise is greatly indebted to the research of Hurel. Even though marginalized publications or unrealized projects may not have contributed to the fame of the Congregation, they are just as informative when it comes to understanding the range of possibilities, attitudes and practices existing in this monastic environment. I therefore hope that this dissertation will be a valuable contribution to the

⁵⁹ For instance, Ulrich L. Lehner, *Enlightened Monks: The German Benedictines 1740–1803* (Oxford: Oxford University Press, 2011); Derek Beales, *Prosperity and Plunder: European Catholic Monasteries in the Age of Revolution, 1650–1815* (Cambridge: Cambridge University Press, 2003); *Religions en transition dans la seconde moitié du dix-huitième siècle*, ed. by Louis Châtellier (Oxford: Voltaire Foundation, 2000); John McManners, *Church and Society in Eighteenth-Century France*, 2 vols, pbk edn (Oxford/New York: Oxford University Press, 1999).

⁶⁰ Hurel, in *Académies*, pp. 463–490; Hurel, 'Les Mauristes de Bonne-Nouvelle d'Orléans et leur bibliothèque au XVIII^e siècle', *Revue d'histoire de l'Église de France*, 83:210 (1997), 179–201; Hurel, 'Les Mauristes et les Lumières: un plan général d'instruction publique fondé sur les 'débris des ordres de Saint Benoît et de Saint-Bernard'', *Revue bénédictine*, 114:2 (2004), 382–394; Hurel, 'La vie monastique dans la Congrégation de Saint-Maur: uniformité constitutionnelle et diversité de la réalité (apport de la correspondance)', in *La vie quotidienne des moines et chanoines réguliers au Moyen Âge et temps modernes*, ed. by Marek Derwich, vol. I (Wrocław: Institut d'histoire de l'Université de Wrocław, 1995), pp. 367–386; Hurel, 'Les Mauristes, consommateurs et producteurs de livres aux XVII^e et XVIII^e siècles', in *Les Religieux et leurs livres à l'époque moderne*, ed. by Bernard de Dompnier and Marie-Hélène Froeschlé-Chopard (Clermont-Ferrand: Presses universitaires Blaise-Pascal, 2000), pp. 177–194.

understanding of the Maurists' intellectual history and responses to Enlightenment thought.

I have had great use of studies on the practical and intellectual life in the abbey of Saint-Germain-des-Prés. Besides the works of Hurel and Chaussy I should mention Gasnault's collection of articles in *L'érudition mauriste à Saint-Germain-des-Prés*. I have also drawn information from studies of literary enterprises contemporary to the Maurists' dictionary project, such as the *Histoire littéraire de la France* (13 vols, 1733–1763).⁶¹

THE DICTIONARIES OF ARTS AND SCIENCES: THE GENRE

In order to understand what kind of dictionary the Maurists were making and why, the project needs to be situated in the lexicographic tradition during the first half of the eighteenth century. The dissertation of the literary scholar Bernard Quemada has served as a general guide to this field. For information on individual dictionaries I have predominantly relied on the anthology edited by the historian Frank A. Kafker. The historian of science Richard Yeo's treatment of scientific dictionaries and Enlightenment culture has also been of great use and inspiration.⁶²

However, the most important input comes from the literary scholars and historians who have investigated the rivalry and intertextuality of the universal dictionaries. Already in 1972 Jacques Proust remarked that practically all the articles of the *Encyclopédie* were based on borrowed materials.⁶³ In 1978 Robert Morin pointed out similarities in some sixty articles of the *Encyclopédie* and the *Dictionnaire de Trévoux*.⁶⁴ Julia C. Hayes later underlined that the practice of imitating and plagiarizing was central in the intellectual tradition in which the *encyclopédistes* were working.⁶⁵ Since then, aspects of intertextuality have been examined in several studies of the *Encyclopédie*, as well as of other contemporary

⁶¹ Ulysse Robert, *Documents inédits concernant l'Histoire littéraire de la France* (Paris: Palmé, 1875).

⁶² *Notable Encyclopedias*, ed. by Kafker; Yeo, *Encyclopaedic Visions*.

⁶³ Jacques Proust, 'Questions sur l'*Encyclopédie*', in *Revue d'histoire littéraire de la France*, 72 (1972), 36–52 (p. 40).

⁶⁴ Robert Morin, 'Diderot, l'*Encyclopédie*, et le *Dictionnaire de Trévoux*', *Recherches sur Diderot et sur l'Encyclopédie*, 7 (1989), 71–122.

⁶⁵ Julie C. Hayes, 'Plagiarism and Legitimation in Eighteenth-Century France', in *The Eighteenth-Century*, 34:2 (1993), 115–131.

dictionaries.⁶⁶ The digitization of seventeenth- and eighteenth-century dictionaries, including the *Encyclopédie*, has provided new opportunities for identifying the interrelationship of texts, although some of the results have been criticized for misleading and ahistorical interpretations.⁶⁷

The notion of ‘the battle of the dictionaries’ was coined by the lexicographer Alain Rey in 1978, in the preface to a new edition of the *Dictionnaire universel* of Furetière.⁶⁸ However, this ideological and commercial battle only received its first exhaustive treatment in Marie Leca-Tsiomis’s *Écrire l’‘Encyclopédie’* (1999). In this work, aspects of rivalry and intertextuality are examined in detail. Leca-Tsiomis emphasizes that close to all dictionaries started as revised editions or translations of existing works, which is why none of them – not even the *Encyclopédie* – can be considered as an isolated lexicographic or philosophical endeavor. Leca-Tsiomis shows that the *encyclopédistes* used the *Dictionnaire de Trévoux* far more than they admitted – both for constructing the list of terms and as a source. She also underlines that the polemic nature of the *Encyclopédie* can be better understood if considered in relation to the equally polemic nature of the *Dictionnaire de Trévoux*.⁶⁹ In 2003, David Eick defended a dissertation on a similar topic.⁷⁰

Together the above studies have contributed to situating the *Encyclopédie* in a larger context of lexicographic writing and ideological rivalry. My dissertation can be inscribed in this line of inquiry. By examining the history of the Maurist project, and by comparing the manuscripts to the *Dictionnaire de Trévoux* and the *Encyclopédie*, I hope that this dissertation will be a valuable contribution to the research on eighteenth-century encyclopedism. After all, the Maurists’ manuscripts provide an opportunity to study not yet another predecessor or successor of the *Encyclopédie*, but a parallel project.

⁶⁶ See for instance Tatsuo Hemmi, ‘Les références implicites dans le supplément éditorial de l’article AME de Diderot’, *Recueil d’études sur l’Encyclopédie et les Lumières*, 1 (Mars 2012), 41–61; Martine Groult, ‘Comment commencer une construction? Exemple avec Chambers et Panckoucke dans leur rapport à l’*Encyclopédie*’, in *Les encyclopédies: construction et circulation du savoir de l’Antiquité à Wikipedia*, ed. by Martine Groult (Paris: Harmattan, 2011), pp. 139–152; Jeff Loveland, *An Alternative Encyclopedia? Dennis de Coetlogon’s ‘Universal History’ (1745)* (Oxford: Voltaire Foundation, 2010), pp. 82–110.

⁶⁷ For instance, Timothy Allen and others, ‘Plundering Philosophers: Identifying Sources of the *Encyclopédie*’, *Journal of the Association for History and Computing*, 13:1 (2010). Published online: <http://hdl.handle.net/2027/spo.3310410.0013.107> [accessed 2013–10–03]; Marie Leca-Tsiomis, ‘The Use and Abuse of Digital Humanities in the History of Ideas: How to Study the *Encyclopédie*’, *History of European Ideas*, 39:4 (2012), 467–476.

⁶⁸ Cited in Leca-Tsiomis, *Écrire l’‘Encyclopédie’*, p. 17, footnote 3.

⁶⁹ Leca-Tsiomis, *Écrire l’‘Encyclopédie’*, pp. 241, 237.

⁷⁰ Eick, ‘Defining the Old Regime: Dictionary Wars in Pre-Revolutionary France’.

Regarding the history of the *Encyclopédie*, I have predominantly relied on the works of the *Encyclopédie*-specialists John Lough and Jacques Proust.⁷¹ Regarding the plates, the coverage and organization of knowledge, I have consulted a number of thematic studies published in diverse journals and anthologies, which will be further presented in Part IV.

HISTORY OF THE BOOK: THE CONDITIONS OF WORK

Even if the Maurists' dictionary material never resulted in a finished book, it was intended to one day become one. To realize this goal the monks needed to proceed as any other writer wanting to be published in eighteenth-century Paris. In order to contextualize the production and abandonment of the Maurists' dictionary I have therefore turned to the History of the Book, *l'histoire du livre*.

According to the historian Robert Darnton, the History of the Book is concerned with the social and cultural history of communication by print, with the purpose 'to understand how ideas were transmitted through print and how exposure to the printed word affected human thought and behavior during the last 500 years'.⁷² Still, this research field is not only concerned with the publication and distribution of books, but also their production: the working conditions and interaction among writers, publishers, printers, artists, engravers, censors, journalists and subscribers *prior* to publication.⁷³ In this respect, the History of the Book has much to offer the scholar studying stranded literary projects. Reversely, unfinished projects also give insights to the practical circumstances preceding the realization, printing and distribution of texts – that is, the preconditions for the diffusion of knowledge. The historian Elisabeth Eisenstein has explicitly called for a closer relationship between Intellectual History and History of the Book in

⁷¹ Lough, *The 'Encyclopédie'*; Lough, 'Le Breton, Mills et Sellius', *Dix-huitième siècle*, 1 (1969), 267–287; Proust, *L'Encyclopédie*; Proust, *Diderot et l'Encyclopédie*, pbk edn (Paris: Michel, 1995).

⁷² Robert Darnton, 'What is the History of Books?', in *Books and Society in History: Papers of the Association of College and Research Libraries Rare Books and Manuscripts Preconference, 24–28 June, 1980*, ed. by Kenneth E. Carpenter (New York: Bowker, 1983), pp. 3–26 (p. 3).

⁷³ Henri-Jean Martin, 'Publishing Conditions and Strategies in Ancien Régime France', in *Books and Society in History*, ed. by Carpenter, pp. 43–67 (pp. 44, 48–53); Raymond Birn, 'Book Production and Censorship in France, 1700–1715', in *Books and Society in History*, ed. by Carpenter, pp. 145–171 (pp. 154–155).

order to understand these conditions enabling – or preventing – the publication of texts.⁷⁴

The *Histoire de l'édition française: le livre triomphant 1660–1830*, edited by the book historians Roger Chartier and Henri-Jean Martin, has been very helpful for my investigation of the Maurists' project. This anthology contains contributions from some forty scholars regarding the world of book-making in eighteenth-century France. The chapters are concerned with subjects such as the regulations of the book trade, the relations and contracts between publishers and writers, censorship and plagiarism.⁷⁵ To this category of research I can add works on the Parisian booksellers, and the printing of illustrations.⁷⁶ Furthermore, I have had great use of Henri-Jean Martin's specialized study on the funding of the Maurists' literary activities, and their relationship to printers and booksellers.⁷⁷

ENLIGHTENMENT STUDIES: THE WIDER INTELLECTUAL CONTEXT

The question of the nature of 'enlightenment' has been discussed since the late eighteenth century,⁷⁸ but the expression 'the Enlightenment' (*les Lumières*, *die Aufklärung*) only first appeared in the mid-nineteenth century.⁷⁹ Some fifty years later, this notion had come to designate a principally unitary intellectual phenomenon, composed of the ideas of great secular thinkers. These were especially the French *philosophes*, starting with the founding fathers Montesquieu (1689–1755) and Voltaire (1694–1778), followed by the friends and colleagues involved in the compilation of the *Encyclopédie*. In their thinking – however diverse it was – historians

⁷⁴ Cited in Yeo, *Encyclopaedic Visions*, p. xiii.

⁷⁵ *Histoire de l'édition française*, vol. II: *Le livre triomphant 1660–1830*, ed. by Roger Chartier and Henri-Jean Martin, 2nd edn (Paris: Fayard/Promodis, 1990).

⁷⁶ *Dictionnaire des imprimeurs, libraires et gens du livre à Paris: A–C*, ed. by Frédéric Barbier and others (Paris: Droz, 2007); Anthony Griffiths, *Prints and Printmaking: An Introduction to the History and Techniques*, rev. edn (London: The British Museum Press, 2010); Griffiths, *Prints for Books: Book Illustration in France 1760–1800* (London: The British Library, 2004).

⁷⁷ Henri-Jean Martin, 'Les Bénédictins, leurs libraires et le pouvoir: notes sur le financement de la recherche au temps de Mabillon et de Montfaucon', in *Mémorial du XIV^e centenaire de l'abbaye de Saint-Germain-des-Prés* (Paris: Vrin, 1959), pp. 273–287.

⁷⁸ James Schmidt, 'What Enlightenment Was: How Moses Mendelssohn and Immanuel Kant answered the *Berlinische Monatsschrift*', *Journal of the History of Philosophy*, 30:1 (1992), 77–101.

⁷⁹ Dan Edelstein, *The Enlightenment: A Genealogy* (Chicago: University of Chicago Press, 2010), p. 7; Tore Frängsmyr, *Sökandet efter Upplysningen: Perspektiv på Svenskt 1700-tal*, rev. edn (Stockholm: Natur och Kultur, 2006), p. 83.

identified a common core: the idea that all human affairs should be guided by reason instead of faith or superstition, and that this would liberate the individual from arbitrary authority and transform the society. In this master narrative, the Enlightenment (as well as modernity) was understood as connected to an on-going process of secularization. The secular minds of the eighteenth century were regarded as the forces of progress, while the Church and the monastic orders were seen as medieval remains opposing freedom, science and reason.⁸⁰

In 1967, the historian Peter Gay famously distinguished between a narrower and a wider form of Enlightenment: the family of the *philosophes* and the larger ‘spirit of the age’. Gay himself focused on the first and largely reproduced the idea of a conflict between religion, science and modernity.⁸¹ After Gay, the interest in the meaning of ‘the spirit of the age’ increased, as Enlightenment studies became influenced by the new orientations within social and cultural history. The historian Daniel Roche explored the attitudes flourishing in the provincial academies across France. Robert Darnton turned to the literary underground and examined Enlightenment thought among the lower layers of the French population. Roy Porter and other historians started looking at expressions of Enlightenment thought outside France.⁸² Following the same trajectory, the historian Dorinda Outram came to define the Enlightenment as a series of debates that took different shapes in various national and cultural contexts.⁸³ Researchers increasingly came to talk about Enlightenments in plural: as hard and soft, moderate and radical, secular and religious, or even more precisely as Protestant, Catholic and Judaic, or as Counter-Enlightenment and anti-*philosophe* movement.⁸⁴

⁸⁰ Dorinda Outram, *The Enlightenment*, 10th edn (Cambridge: Cambridge University Press, 2004), p. 3; John Robertson, *The Case for the Enlightenment: Scotland and Naples 1680–1760* (New York: Cambridge University Press, 2005), pp. 11–12.

⁸¹ Peter Gay, *The Enlightenment: An Interpretation*, vol. II: *The Science of Freedom* (London: Weidenfeld & Nicolson, 1969), pp. x–xi.

⁸² Daniel Roche, *Le siècle des Lumières en province: académies et académiciens provinciaux, 1680–1789*, 2 vols (Paris: EHESS, 1978); Robert Darnton, *The Literary Underground of the Old Regime* (Cambridge, Mass: Harvard University Press, 1982); *The Enlightenment in National Context*, ed. by Roy Porter and Mikuláš Teich (Cambridge: Cambridge University Press, 1981); *Upplysningen i periferin*, ed. Ronny Ambjörnsson and others (Umeå: Umeå University, 1998); *Peripheries of the Enlightenment*, ed. by Richard Butterwick, Simon Davies & Gabriel Sánchez Espinosa (Oxford: Voltaire Foundation, 2008).

⁸³ Outram, p. 3.

⁸⁴ E.g. Sven-Eric Liedman, *I skuggan av framtiden: modernitetens idéhistoria* (Stockholm: Bonnier Alba, 1997); Jonathan Israel, *Radical Enlightenment: Philosophy and the Making of Modernity 1650–1750* (New York: Oxford University Press, 2001); Margaret C. Jacob, *The Radical Enlightenment: Pantheists, Freemasons and Republicans*, 2nd rev. edn (Louisiana:

In the two last decades, the plurality of enlightenments as well as the broadening of *the* Enlightenment has been increasingly criticized for depriving the notion of its meaning. It has come to signify everything, and thus nothing in particular.⁸⁵ The literary historian Dan Edelstein has pointed out that irrespectively of how many ‘enlightenments’ we discern, we will still find diversity within these groupings, as well as similarities in between.⁸⁶ The historian of ideas Tore Frängsmyr has argued for a return to the definition of the Enlightenment as the political struggle of the French philosophes,⁸⁷ while the historian John Robertson has remarked that the body of research compiled since the 1970s has made a return to a simple, traditional account impossible.⁸⁸

In the search for the most proper definition, ‘the Enlightenment’ has thus been restricted, expanded, and divided according to diverse geographical, chronological, intellectual and social limits. It has variously been defined as a historical process – a set of philosophical principles, debates and problems, changing over time and in various social and national contexts (which allows a categorization of several enlightenments); as largely synonymous with the eighteenth century in Western Europe, and especially France; or as limited to the ideological struggle of the French *philosophes*.

The multiplication of enlightenments and broadening of *the* Enlightenment from the 1970s onwards can each be seen as efforts to nuance the conception that ‘Enlightenment thought’ should have been monopolized by the *philosophes*, but also as efforts to understand how ideas are diffused and transformed. Nevertheless, establishing the boundaries for *the* Enlightenment has remained a sensitive matter due to its role in the narrative about the rise of the modern, democratic society. Fundamentally, the Enlightenment is about understanding ourselves – about defining the origins

Cornerstone, 2006); John McManners, ‘Enlightenment: Secular and Christian’, in *The Oxford Illustrated History of Christianity*, ed. by John McManners (Oxford/New York: Oxford University Press, 1990), pp. 267–299; Samuel J. Miller, *Portugal and Rome c. 1748–1830: An Aspect of the Catholic Enlightenment* (Rome: University of Gregoriana, 1978); David Sorkin, *The Religious Enlightenment: Protestants, Jews, and Catholics from London to Vienna* ((Oxford/Princeton: Princeton University Press, 2008); Didier Masseau, *Les ennemis des philosophes: l’antiphilosophie au temps des Lumières* (Paris: Albin Michel, 2000); Darrin M McMahon, *Enemies of the Enlightenment: The French Counter-Enlightenment and the Making of Modernity* (New York: Oxford University Press, 2001).

⁸⁵ Jeffrey D. Burson, ‘Reflections on the Pluralization of Enlightenment and the Notion of the Theological Enlightenment as Process’, *French History*, 26:4 (2012), 524–537.

⁸⁶ Edelstein, pp. 13–14.

⁸⁷ Frängsmyr, *Sökandet efter Upplysningen*, pp. 45–48.

⁸⁸ Robertson, p. 28.

of our values. In this process, the tension between the religious and secular has long been central.⁸⁹

If researchers disagree about the limits, center and nature of the Enlightenment in time and place, they are more in agreement regarding what counts as Enlightenment thoughts and values: the appetite for knowledge and education; the taste for inventory and systematization; the necessity of religious tolerance and freedom of thought; the conviction that knowledge should be based on rational inquiry and empirical observations instead of prejudice, superstition and unverifiable sources (such as religious revelation); the appreciation of the utile and productive, etc. In this dissertation I will examine expressions of these ideas and values, and worry less about defining the nature of the Enlightenment as a whole. However, for the purpose of this study, the most natural way of speaking about at least the French Enlightenment is as an intellectual process or conversation, situated in a historical, geographic and social context – as various eighteenth-century configurations of the above ideas, whether written or practiced.

⁸⁹ S. J. Barnett, *The Enlightenment and Religion: The Myths of Modernity* (Manchester/New York: Manchester University Press, 2003), pp. 1–7.

3. THEORY AND METHOD

How do you study a text which is neither finished nor intact, and whose circumstances of production are unknown? Furthermore, how do you study the intellectual contents of a dictionary, whose very nature is to be a compilation of other texts – the voices of others?⁹⁰ These were some of the first questions I asked myself when faced with the Maurists' manuscripts. In this chapter I will present my view on microhistory as theory and method and describe my research procedure. I will also discuss definitions, typology and analytical notions useful for the study of eighteenth-century dictionaries.

MICROHISTORY AS THEORY AND METHOD

The first time I examined the Maurists' manuscripts I knew nothing more about their history of production than what was stated in the short report of Dom Fortet. In exploring this *terra incognita* I therefore came to use whatever strategy that seemed helpful in making sense of the manuscripts' contents and history. I approached the material like a detective, regarding everything as a potential clue. Even though I did not know it then, I proceeded like a microhistorian. Over time, this procedure was refined and made a deliberate characteristic of the dissertation.

The historian Giovanni Levi defines microhistory as an experimental, rather eclectic historiographical method, which can be combined with different theoretical perspectives and applied on a wide range of subjects. The prefix 'micro' first and foremost refers to the practice of reducing the analysis of the documentary material to a detailed or 'microscopic' level. In the reading, the historian focuses on clues, signs or symptoms that may be perceived as strange, dissonant or simply trivial. The meanings of these clues are then interpreted in the light of their larger contexts.⁹¹ The historian Walter Woodward has pointed out that the microhistorical method can be especially useful 'for gaining insight into the experiences of the under-

⁹⁰ This subject is treated further in Chapter 12.

⁹¹ Giovanni Levi, 'On Microhistory', in *New Perspectives on Historical Writing*, ed. by Peter Burke, 2nd edn (Cambridge: Polity, 2001), pp. 97–119 (pp. 99–100).

recorded subjects of our history, those who have left little traces from which much, perhaps, can be gleaned'.⁹²

The historian Carlo Ginzburg has spoken of the microhistorical approach in terms of the *clue paradigm*. The latter is characterized by a 'minute examination of the real, however trivial, to uncover the traces of events which the observer cannot directly experience'.⁹³ Ginzburg exemplifies with the investigative methods of the art historian, the detective, the paleographer, the psychoanalyst, the doctor and the hunter. In their different ways, they all interpret and combine details as revealing clues about what they cannot directly observe. To the hunter the footprint represents a real animal which has passed by; to the doctor the symptoms represent a disease; to the psychoanalyst a trauma, and so on. Similarly, our knowledge about the distant past is always, to a varying extent, conjectural or semiotic to its nature. It is indirect, based on signs and scraps of evidence.⁹⁴

The microhistorical approach emerged as one of many reactions to the positivistic tradition in the 1970s.⁹⁵ According to Levi, the advocates of the microhistorical method wanted to emphasize that knowledge and reason had their limits, yet 'at the same time [construct] a historiography capable of organizing and explaining the world of the past'.⁹⁶ A social constructivist outlook combined with a rejection of absolute relativism gave the microhistorical method its two distinct characteristics: the detailed analysis and demonstration of facts or clues; and the incorporation of the research procedure into the main body of the historical narrative. Levi writes:

This method clearly breaks with the traditional assertive, authoritarian form of discourse adopted by historians who present reality as objective. In microhistory, in contrast, the researcher's point of view becomes an intrinsic part of the account. The research process is explicitly described and the limitations of documentary evidence, the formulations of hypotheses and the lines of thought followed are no longer hidden away from the eyes of the uninitiated.⁹⁷

⁹² Walt Woodward, 'Historians to Debate Value of the New Historical Approach', *Advance* (11 October 1999). Published online:

<http://advance.uconn.edu/1999/991011/10119912.htm> [accessed 2012-08-21].

⁹³ Carlo Ginzburg, 'Morelli, Freud and Sherlock Holmes: Clues and Scientific Method', in *History Workshop*, 9 (1980), 5-36 (p. 13).

⁹⁴ *Ibid.*, pp. 7-14.

⁹⁵ Georg G. Iggers, *Historiography in the Twentieth Century: From Scientific Objectivity to the Postmodern Challenge* (London: Wesleyan University Press, 1997), pp. 31, 101

⁹⁶ Levi, pp. 98-99.

⁹⁷ *Ibid.*, pp. 109-110.

Since the Maurists' dictionary material never has been subjected to research, I early found it necessary to be detailed in my examination and demonstration of its characteristics. At the same time, since the project's history was unknown and the sources fragmentary, a microscopic examination of the material at hand seemed to be the best option.

Working with Clues

This dissertation is characterized by a detailed analysis and demonstration of clues in the studied materials. Separately these clues may appear as insignificant, but when combined and contextualized they become informative. Aspects of the research process – my interpretation of the clues – have also been included in the historical narrative. The chapters are designed to illustrate the movement from the starting point when I knew almost nothing about the Maurist enterprise, to how I reached my conclusions.

In 1983, the book historian Thomas Tanselle pointed out that intellectual historians and literary scholars commonly are trained to think of texts simply in terms of intellectual content. In contrast, the book historians also consider them as artifacts produced in specific moments in time and in certain social, technological and commercial contexts. Every text, whether an unfinished manuscript or book, is a physical remain of successful or unsuccessful circumstances of production.⁹⁸ Concurrently with the mass-digitization of texts in the last two decades, this awareness of (and interest in) the materiality of books and manuscripts has increased.

In this dissertation, I am not only interpreting a text, but also studying a historical event which is no longer directly observable: the origins, development, and abandonment of a learned project. Consequently, I have approached the Maurists' dictionary material partly as a text mediating an intellectual content, partly as an artefact containing clues to its history of manufacture. This has implied an alternation between different readings, or 'scannings' for various types of information. Depending on the specific object of study, I have actually used several more precise methods, including codicology,⁹⁹ handwriting analysis, comparative studies of intertextuality and the tracing of sources. In one way or another, these research procedures

⁹⁸ Thomas Tanselle, 'Introduction', in *Books and Society in History*, ed. by Carpenter, pp. xvii–xxiii (pp. xx–xxi).

⁹⁹ Codicology is the study of books and manuscripts as physical objects. It involves examination of material aspects, e.g. parchment, paper, ink, binding, marginal notes, writing techniques, etc. It is sometimes referred to as 'the archaeology of the book'.

are all guided by what Ginzburg calls the clue paradigm. They are concerned with the analysis, demonstration and contextualization of details. The specific procedures will be explained in a more detailed manner in each part of the dissertation, but I will here give a brief overview of my various ways of working with clues.

In Part II: ‘The Manuscripts under the Loupe’, Chapter 4 explores how the manuscripts achieved their current form at the BnF, and how their original shape can be reconstructed. During the work with this chapter, my reading of the manuscripts was focused on material aspects. Inspired by codicological practices I spent weeks examining the arrangement of the folios, the distribution of stamps and the differing characteristics of altered and unaltered parts of the manuscripts. These details were then contextualized through the historical documentation of the library, and with assistance from two conservators at the Manuscripts Department of the BnF. In Chapter 5, the focus is transferred to the handwritings of the manuscripts. Inspired by the methods of paleographers and forensic analysts, I devoted months to studying details in the graphical appearances of the handwritings, differences in their writing habits, their interaction and division of labor. Combined, these clues allowed me to draw certain conclusions about the number of the writers and their areas of responsibility.

When writing Part III: ‘The History of a Dictionary in the Making’, my scanning of the manuscripts was expanded to include all kinds of clues that could inform me about the history of the project. Here I combined the handwriting analysis with an examination of the distribution of dates (statements of the current year, publication dates, etc.). I also noticed that patterns of corresponding/differing shades of ink could reveal whether texts had been written concurrently or at different points in time. This enabled me to determine the order in which the individual documents had been written, which in turn made it possible to examine how the project had changed over time. Simultaneously, I searched for clues in external documents deriving from the Congregation, the book trade and the contemporary press. Individually these fragments of information told me rather little, but combined, the history of a dictionary in the making took form.

During the compilation of Part IV: ‘The Maurists’ Manuscripts Compared’, my focus was transferred to the intellectual contents. By scrutinizing the monks’ inventories of nomenclature – side by side with the works they concerned – I could examine the writers’ process of establishing the boundaries and rationale of the dictionary under construction. By

searching out the original sources for articles and illustrations, I could also compare the Maurists' building blocks to the *Dictionnaire de Trévoux* and the *Encyclopédie*, and thereby detect similarities and differences in preferences and approaches to knowledge. In this work, it was once again the details that mattered.

Perspectives from the Periphery

When it comes to research subjects, the microhistorians have often focused on marginalized phenomena or aspects of everyday life. By studying small communities, lesser-known persons or other specific cases in a detailed, microscopic way, they have approached greater themes or questions from a grass root level.¹⁰⁰ Certainly, the interest in the peripheral or the ordinary is not unique to the microhistorians. During the last fifty years, scholars within different disciplines have challenged the tradition of retrospectively writing the history of winners by studying previously ignored or lesser-known writers, texts and environments. In doing so, they have nuanced the view on master narratives, canonized works, great thinkers, geniuses and founding fathers. One could here take the example of Alfred Russell Wallace (1823–1913), the lesser-known rival of Charles Darwin (1809–1882). Simultaneously with the latter, Wallace elaborated a similar theory of natural selection and even sent Darwin a manuscript outlining his ideas. Darwin, who saw twenty years of work threatened, took action to publish his work. *On the Origin of Species* (1859) appeared a year later. Since Darwin's ideas were the first to reach the public, he made it to the history books, while the name of Wallace has remained anonymous to the broader mass. The point in studying Wallace's work has not been to reduce the value of Darwin's efforts and impact. Rather, it has been to nuance the image of the lone genius, to reevaluate how new ideas and practices arise, and why only some of them are noticed, valued and canonized. As the writer Richard Coniff phrases it:

Great ideas seldom arise in the romantic way we like to imagine – the bolt from the blue, the lone genius running through the streets crying, 'Eureka!' Like evolution itself, science more often advances by small steps, with different lines converging on the same solution.¹⁰¹

¹⁰⁰ Ginzburg, 'Microhistory: Two or Three Things That I Know about It', *Critical Inquiry*, 20:1 (1993), 10–35 (pp. 32–33).

¹⁰¹ Richard Coniff, 'The Origin of a Theory', in *Smithsonian Magazine* (June 2008). Published online: <http://www.smithsonianmag.com/science-nature/presence-darwin.html#ixzz1y835ZmZp> [accessed 2012–08–20].

Ultimately, the same idea applies to all the works that never were finished or published. Even if these never made an impact on the Republic of Letters, they provide an insight to the ideas in motion. When it comes to studies of the Enlightenment, the centrality of the *philosophes* and the *Encyclopédie* has gradually been nuanced by the emphasis on general changes in attitudes in the eighteenth-century society. Studies of the predecessors of the *Encyclopédie* have also contributed to situating the latter in a larger context of lexicographic and encyclopedic writing. In this respect, the Maurists' parallel enterprise may constitute yet another piece of the puzzle. As a marginalized project within a community otherwise occupied with patristics and history, it may also provide new perspectives on the intellectual activities of the Maurists in the age of Enlightenment.

HOW TO STUDY EIGHTEENTH-CENTURY DICTIONARIES

As summaries of contemporary knowledge, dictionaries provide a fascinating entry to the language and intellectual landscape of a given time and place. They give insights into how concepts and natural phenomena were understood, and how arts, crafts, and sciences were practiced. As summaries of 'the best books and authors', they also give an idea of contemporary constructions of scientific canons. They show which theories were considered good and established, and which were not. Even if dictionaries largely mediate the voices of others, the values of the compilers are constantly present through their choices: the selection of literature, the decisions of what to exclude and include, and how to organize the content. Still, the originality of a dictionary cannot be distinguished without comparison to other works within the contemporary genre.

The Changing Meaning of the Term 'Encyclopedia'

The title of this dissertation refers to the Maurists' unfinished manuscripts as an *encyclopedia*. The monks' themselves never used this term. They always referred to the manuscripts as a dictionary. My application of the term serves to situate the Maurists' project in the same genre as the *Encyclopédie* – the dictionaries of arts and sciences. However, the notion also has (and has had) many more precise meanings.

The term 'encyclopedia' derives from the Greek *enkyklios paideia* and has commonly been translated as 'the circle of knowledge' or 'general

education'. What this notion concretely referred to during Antiquity is still contested, but we can be sure that it was not an alphabetically organized dictionary.¹⁰² The term was not used at all during the Middle Ages, but then reappeared in humanist circles sometime around the end of the fifteenth century.¹⁰³ From Antiquity onwards there were still plenty of compendia aspiring to gather and organize what was perceived as most worthwhile knowing at the time. These works had titles such as *summa*, *collectio*, *historia*, *speculum*, *thesaurus*, *glossa*, *bibliothèque*, *common-place book*, *lexicon*, and have only retrospectively been distinguished as 'encyclopedias'.¹⁰⁴

The first edition of the *Dictionnaire de Trévoux* (1704) classified ENCYCLOPÉDIE as an obsolete term, only still at use in burlesque plays. The term was defined as 'universal knowledge, the collection or interconnection [*enchaînement*] of the totality of all the sciences'.¹⁰⁵ Thus, the word did not yet refer to a literary genre, but rather to the idea of the whole of knowledge. The desire to possess the encyclopedia – i.e. wanting to know everything there was to know – was spoken of in negative terms. Those taking on the encyclopedic project were described as people contenting themselves 'to know a little about everything, and rather superficially', while 'it is better to concentrate on one thing and master it well'.¹⁰⁶ This statement might seem curious coming from a dictionary of arts and sciences, which provided information about practically everything, and rather superficially. Simultaneously, the preface declared that 'there is no work of a wider or more universal utility than a dictionary'.¹⁰⁷ At this point, the compilers

¹⁰² Aude Doody, *Pliny's Encyclopedia: The Reception of the 'Natural History'* (Cambridge/New York: Cambridge University Press, 2010), pp. 45–47; Robert L. Fowler, 'Encyclopaedias: Definitions and Theoretical Problems', in *Pre-Modern Encyclopaedic Texts*, ed. by Peter Binkley (Leiden: Brill, 1997), pp. 3–29 (pp. 6–7).

¹⁰³ Jacques Le Goff, 'Pourquoi le XIII^e siècle a-t-il été plus particulièrement un siècle d'encyclopédisme', in *L'encyclopédisme medieval*, ed. by Michelangelo Picone (Ravenna: Longo, 1994), pp. 23–40 (p. 24); Fowler, p. 27.

¹⁰⁴ See for instance Alain Rey, *Miroirs du monde: une histoire de l'encyclopédisme* (Paris: Fayard, 2007) and Robert Collinson, *Encyclopaedias: Their History Throughout the Ages* (London: Hafner, 1964).

¹⁰⁵ *Dictionnaire de Trévoux* [*Dictionnaire universel françois et latin*], 3 vols (Trévoux: Ganeau, 1704), I, ENCYCLOPÉDIE: 'Science universelle, recueil, ou enchaînement de toutes les sciences ensemble'.

¹⁰⁶ *Ibid.*, ENCYCLOPÉDIE: 'de sçavoir un peu de tout, & assés superficiellement. Il vau mieux s'en tenir à une seule chose & tâcher de la bien posséder'.

¹⁰⁷ *Dictionnaire de Trévoux* (1704), I, 'Préface', first page: 'il n'y a point d'ouvrage qui soit d'une utilité plus étendue & plus universelle qu'un dictionnaire'.

clearly saw no connection between their own positively perceived activity and their negative understanding of the notion encyclopedia.

Twenty years later, a variant of the term was for the first time used in the title of a dictionary: Ephraim Chambers's *Cyclopaedia, or an Universal Dictionary of Arts and Sciences* (1728). As Chambers work was translated into French and eventually became the *Encyclopédie* of Diderot and d'Alembert, 'encyclopedia' turned into a fashionable term. It was reinterpreted in a positive way and became intimately associated with the progress of the sciences and human reason.¹⁰⁸ Encyclopedias became a lexicographic genre.

When the Maurists began compiling their dictionary, 'encyclopedia' had not yet become à la mode in France. Therefore, in order to determine what kind of dictionary the Maurists were making in comparison to the *Dictionnaire de Trévoux* and the *Encyclopédie*, it is necessary to look beyond their use of titles. The terms *encyclopedic* and *encyclopedism* can then be used analytically to describe the characteristics of the Maurist enterprise.

Typology and Definitions

In the *Encyclopédie*, d'Alembert distinguished between three sorts of dictionaries: those on language, those on history (including geography and biography), and those on sciences and arts. He added that one also could speak of dictionaries of words, facts, and things, although this distinction was more diffuse. Even a dictionary on language should be a dictionary of things if it was well made, just as a dictionary on history could end up a mere vocabulary if poorly made.¹⁰⁹ The difference between dictionaries of words and things was thus considered a question of quality and the impetus towards a more total form of knowledge. D'Alembert noted that the dictionaries of arts and sciences were the most 'encyclopedic' in nature, since they were occupied with fields of knowledge and not only language.¹¹⁰ The *encyclopedic* thus implied a documentary ambition.

Diderot defined the purpose of an *encyclopedia* as 'to gather all the fields of knowledge dispersed on the face of the earth and to expose their general

¹⁰⁸ Collinson, p. 80.

¹⁰⁹ *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers, par une société de gens de lettres*, ed. by Denis Diderot and Jean le Rond d'Alembert, 17 vols (Paris: Le Breton and others, 1751–1765), IV (1754), 958, DICTIONNAIRE.

¹¹⁰ *Ibid.*, p. 968.

system'.¹¹¹ In other words, for a dictionary of arts and sciences to be not only encyclopedic in nature but also an encyclopedia, it should present the order and interconnection (*enchaînement*) of the different fields and subjects. This was reflected in the title of the enterprise of the *philosophes*: Encyclopedia, or *reasoned* dictionary of sciences, arts and crafts.

Based on the definitions of d'Alembert and Diderot, Bernard Quemada has distinguished between linguistic dictionaries, encyclopedic dictionaries, and encyclopedias.¹¹² The first is characterized by its focus on defining words, and the second by its ambition to describe things and facts. The third shares the documentary ambition of the second, but also aspires to provide a reasoned organization of the presented knowledge. In order to further pinpoint the rationale of an encyclopedia, Marie Leca-Tsiomis has distinguished between *encyclopedism* and *lexicographic universalism*. The latter is characterized by 'a voracious collecting' where every term suffice to augment the bulk of the dictionary, while the former 'selects [...], cuts, classifies, orders, includes or excludes'.¹¹³ According to this definition, she argues that the *Dictionnaire de Trévoux* is best described in terms of lexicographic universalism. The Jesuit compilers were operating according to the logic of pure accumulation. The logic of encyclopedism, on the other hand, can be detected in the more selective, systematic choices of the *encyclopédistes*.¹¹⁴

In line with d'Alembert's remark that an encyclopedic tendency was a matter of degree, Quemada has emphasized that the dividing lines between linguistic and encyclopedic dictionaries only slowly developed over time. He therefore recommends that when categorizing a dictionary one must consider the different possibilities available at that point in time, and then describe it in terms of expansion or reduction in relation to existing works.¹¹⁵ Following this recommendation, I have compared the Maurists' manuscripts with preceding and contemporary works, in regard to linguistic and encyclopedic content (the focus on words or things); lexicographic universalism (pure accumulation) and encyclopedism (selection, classification, exclusions etc.).

¹¹¹ *Encyclopédie*, V (1755), 635, ENCYCLOPÉDIE: 'rassembler les connoissances éparses sur la surface de la terre; d'en exposer le système général'.

¹¹² Quemada, p. 76.

¹¹³ Leca-Tsiomis, *Écrire l'Encyclopédie*, p. 152: 'la collection vorace', 'choisit [...], découpe, classe, trie, retient ou expulse'.

¹¹⁴ *Ibid.*, p. 153.

¹¹⁵ Quemada, p. 158.

PART. II
THE MANUSCRIPTS
UNDER THE LOUPE

4. THE MAURISTS' DICTIONARY MATERIAL: OVERVIEW

The Maurists' dictionary manuscripts are arranged in six volumes of different sizes.¹¹⁶ Together they contain more than one thousand four hundred folios,¹¹⁷ close to seven thousand text units,¹¹⁸ and about two hundred figures. The collection is registered at the BnF as 'Material for a Dictionary of arts and sciences, by Antoine-Joseph Pernety'.

ORGANIZATION AND CHARACTERISTICS

The manuscripts are both thematically and alphabetically ordered. As seen in Table 1, every volume start from A but the alphabetical range varies: some go all the way to Z, while others end at an earlier stage. The first volume, labeled 'Agriculture', is the smallest. The fifth, labeled 'Medicine', is the largest.

In published dictionaries, thematic entrances to an individual term are arranged in sequence, together forming an article. Due to the thematic division of the Maurists' manuscripts, treatments of the same individual term can be found in several volumes.¹¹⁹ In this respect, they appear as independent text units rather than as entries together forming a larger article. In the rest of the dissertation, I will generally refer to these units as articles. I

¹¹⁶ BnF, MSS f. fr. 16979–16984, Matériaux pour un Dictionnaire des arts et sciences, par dom Antoine-Joseph Pernety.

16979, I: Agriculture.

16980, II: Histoire naturelle, arts mécaniques, métiers divers.

16981, III: Histoire naturelle.

16982, IV: Début d'un 'Dictionnaire de mathématique et physique', d'arts et métiers, etc.

16983, V: Médecine.

16984, VI: Tables.

¹¹⁷ The sheets of the volumes I–V are all in folio format (c. 40 cm tall). In the beginning of volume six, there is a small section of sheets in-quarto (c. 20 cm tall). The rest are in-folio.

¹¹⁸ All terms followed by some kind of definition – no matter how short – have been counted as a text unit. References to synonyms or orthographic variations, e.g. 'CHIMIE, voir CHYMIE', have been excluded.

¹¹⁹ For instance, BnF, MS f. fr. 16983, fol. 226, FOURNEAU, fol. 234, GERME; fr. 16979, fol. 22, GERME, fol. 54, SÈVE; fr. 16980, fols. 138–142, FOURNEAU, fol. 248, SÈVE. Regarding the reasons for this thematic division, see 'Other Aspects of Order' in Chapter 11.

will only speak of entries when specifically discussing multiple treatments of the same term.

The largest part of the dictionary material (seventy percent) consists of intact, original folios. However, there are also cases where articles have been cut out from the original papers, re-arranged and pasted on new ones. I refer to these as collages. They are mainly located in the second and third volume.

The manuscripts consist of article drafts (dictionary text), illustrations, and working lists. The article drafts are found in volumes one to five. Some of them contain a great amount of margin notes, scribble and crossed-over sections, which make them appear as early drafts. Others are neatly rewritten. The articles themselves vary in size. Some are just a few lines, others occupy several folios. Generally, text is only written on the front side (recto) of the folio, thus leaving the backside (verso) empty. In volume four, text is written on both sides, and these folios are also paginated on both the recto and verso. The other volumes are only paginated on the recto, and only occasionally contain text on the verso. For this reason, references to numbered folios without further specification always designate the recto. Verso is marked ^v.

Illustrations in form of drawings or printed clippings are predominantly found in a separate section at the end of the second volume.¹²⁰ The working lists are placed in volume six, labeled 'Index' (or 'Lists'). This material can be divided in four categories: lists of finished and planned illustrations, inventories of nomenclature in other works, thematic lists of terms, and a bibliography.¹²¹ These documents were compiled concurrently with the article drafts, as tools in the working process.

Indications of missing pieces can be found in volumes two, four, five and six, and are most distinctly discernable when the last article of a folio ends abruptly in the middle of a sentence.¹²² In one case, a new draft starts with what seems to be the end of an article, whose beginning thus is missing.¹²³ Some working lists also contain omissions of certain parts of the alphabet.¹²⁴

¹²⁰ BnF, MS f. fr. 16980, fols. 283–304.

¹²¹ For a complete overview, see Appendix 2: Working Lists, and Appendix 3: Illustrations.

¹²² BnF, MS f. fr. 16980, fol. 2^v; fr. 16983, fol. 396.

¹²³ BnF, MS f. fr. 16982, fol. 166. At the top of the folio references are given to alchemical works. The next article, ALCHYMISTE, refers to the article ALCHYMIE, 'which we just spoke of' ('dont nous parlons ci-devant'). It is thus likely that this is the article missing.

¹²⁴ For instance, BnF, MS f. fr. 16984, fols. 53–54 (the section B–E is missing).

Volume	Alphabetical Range	Number of Folios	Number of Text Units	State of Folios	Contents
I: Agriculture	ABB–TER	56	432	Originals	Article drafts
II: Natural history, mechanical arts and diverse crafts	A–ZUR	304	1968	Collages 89 % (269 fols)	Article drafts ----- Illustrations
III: Natural history	ABA–ZYG	251	889	Collages 62 % (155 fols)	Article drafts
IV: Beginning of a ‘Dictionary of mathematics and physics’ arts and crafts, etc.	A–ALLER	134	431	Originals	Article drafts
V: Medicine	A–PER	396	3262	Originals	Article drafts
VI: Index	–	267	–	Originals	Working lists
		1408	6982		

Table 1: Overview of the Maurists’ dictionary volumes.

The manuscripts contain no preface or chart of knowledge. There are no signatures revealing the identities of the writers, and there is no explicit information about the project's history. Still, the material contains a multitude of clues to its history of production. The working lists are particularly valuable. Had the dictionary ever been finished and published, the majority of these documents would likely have been excluded. Considering that the manuscripts of most published dictionaries are gone,¹²⁵ this material provides a unique insight into encyclopedic and lexicographic manufacture in the mid-eighteenth century. For instance, due to the detailed information provided in the lists of illustrations (indicating what figures to copy from other works) it is possible to identify many of the publications consulted first-hand. The inventories of nomenclature of other dictionaries also reveal the process of establishing the limits and rationale of the enterprise.

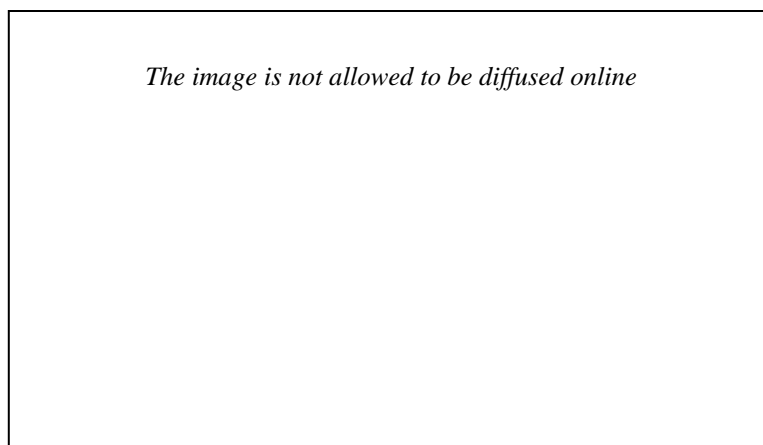


Figure 2: One of the volumes of the Maurists' dictionary manuscripts (BnF, MS f. fr. 16980)
(The author's photo, BnF)

¹²⁵ Proust, 'Questions sur l'*Encyclopédie*', p. 38; Proust, *Diderot et l'Encyclopédie*, p. 193. An important exception is the manuscripts of Samuel Johnson's *Dictionary of the English Language* (1755). See Allen Reddick, *The Making of Johnson's Dictionary 1746–1773*, rev. pbk edn (Cambridge: Cambridge University Press, 1996).

5. THE HISTORY OF THE PHYSICAL DOCUMENTS

Since the Maurists' dictionary material never was secured by the fixation and multiplication of print, the manuscripts have a two hundred and sixty year-old history of their own. When the project was interrupted, the material was left in one or several piles of loose folios. Today it is bound in six thematic volumes, registered in an internal order. As stated, a large part of the material consists of collages where articles have been cut out from the original folios and pasted on new ones. A closer examination of these sections reveals library stamps cut in half together with the articles. This means that the collages were made *after* the stamping, and consequently at the library. Furthermore, the collection has been attributed to Pernety alone, despite the fact that the manuscripts contain no signatures or information about the authors.

In order to study the work of the Maurists, it is necessary to distinguish the information and arrangements deriving of the conservators. Before investigating the history of the project, we must look at the history of the physical documents. How exactly did a pile of paper end up in six volumes, and how much was changed in the process? Did the conservators follow an order already existing in the material, or did they create a new one? And how did the manuscripts become attributed to Pernety?

These questions will be answered by following the transfer of the manuscripts from the abbey of Saint-Germain-des-Prés to the French national library, and by reconstructing their fate in the succeeding decades. By studying clues in the manuscripts and the historical documentation of the BnF, I will examine how and why this material was altered, and thereby estimate its original form. I will then discuss the consequences of these alterations by returning to the interpretations of Jacques Proust and Micheline Meillassoux-Le Cerf – the two researchers who earlier have described the dictionary material.

FROM THE ABBEY OF SAINT-GERMAIN-DES-PRÉS TO THE NATIONAL LIBRARY

After the French Revolution, all the religious congregations and orders were dissolved and their buildings and goods confiscated. According to a post-revolutionary inventory of the ecclesiastical libraries, the abbey of Saint-

Germain-des-Prés possessed almost fifty thousand printed volumes and about seven thousand manuscripts, which made it one of the largest libraries in France.¹²⁶ However, in August 1794 a saltpeter storage situated under the building took fire and destroyed practically the entire printed collection. The manuscripts had been stored in a separate hall and therefore largely escaped the flames. The surviving material was packed and transported to the newly founded National library during the winter 1795–1796.¹²⁷

According to the archivist Léopold Delisle, the remains of the Maurists' unpublished works, notes, and correspondence left the abbey of Saint-Germain-des-Prés in 170 numbered packages, subdivided in smaller *portefeuilles*.¹²⁸ When the parcel arrived, the librarian Georges-Jean Mouchet made an inventory of the content. He chose to name the collection the *Résidu de Saint-Germain* (the Remains of Saint-Germain).¹²⁹ His catalogue contains the first description of the dictionary material. It reads:

Dom Pernety: Material for a dictionary of arts & sciences. 2 folders in-fol., numbered 457–455.¹³⁰

On the front page Mouchet has noted that the catalogue was 'written according to the separate sheets enclosed with the parcel'.¹³¹ He thereby indicated that some sort of index, made at the abbey of Saint-Germain-des-Prés, had accompanied the packages when they arrived.¹³² This suggests that the dictionary manuscripts had been attributed to Pernety and defined as a dictionary of arts and sciences already by someone in Saint-Germain-des-

¹²⁶ *Les Bénédictins de Saint-Maur à Saint-Germain-des-Prés, 1630–1792: nécrologe des religieux de la Congrégation de Saint-Maur décédés à l'Abbaye de Saint-Germain-des-Prés*, ed. by Jean-Baptiste Vanel (Paris: Honoré Champion, 1869), p. 384.

¹²⁷ Alfred Franklin, *Les anciennes bibliothèques de Paris: églises, monastères, collèges*, vol. I (Paris: Imprimerie impériale, 1867), p. 124.

¹²⁸ Léopold Delisle, *Le Cabinet des Manuscrits de la Bibliothèque nationale*, vol. II (Paris: Imprimerie nationale, 1874), p. 51.

¹²⁹ Marie-Françoise Damongeot, 'D'un catalogue à l'autre: les Mauristes, de la Bibliothèque du roi à la Bibliothèque nationale', in *Érudition et commerce épistolaire: Jean Mabillon et la tradition monastique*, ed. by Daniel-Odon Hurel (Paris: Vrin, 2003), pp. 205–213 (p. 210).

¹³⁰ BnF, MS Nouvelles acquisitions françaises (n.a.fr.), 5788, fol. 48: 'Paquet 153. Dom Pernetti: Matériaux pour un Dictionnaire des arts & sciences. 2 portefeuilles in-fol., cotés 457–455'.

¹³¹ BnF, MS n.a.fr. 5788, front page: 'Rédigé d'après les feuilles détachées qui en ont accompagné l'envoi'.

¹³² This is a likely scenario according to Marie-Françoise Damongeot, conservator at the Manuscripts Department of the BnF (now retired). Damongeot, who has studied the transition of the manuscripts from Saint-Germain-des-Prés to the BnF, was kind to examine the volumes with me in November 2010.

Prés. Since none of the library catalogues survived the fire it is impossible to know by whom and when – that is, if the description, arrangement and numbering were made shortly after the project’s interruption, decades later, or just before the transfer to the library.

The inventory of Mouchet clearly states that the dictionary manuscripts arrived in two folders and that these were numbered 457 and 455. This immediately raises at least two questions: what had happened to number 456 and why were the folders indicated in reverse order? Reasonably, the lacking of 456 could either be the result of a mislabeling or the indication of a missing third piece. Considering that the manuscripts contain indications of missing folios, the latter is a probable scenario. However, since there are no markings of an internal order in the manuscripts, the numbers of the folders were likely the result of a storage decision on behalf of the Maurist archivists, rather than a reflection of the authors’ intentions.

FROM TWO PILES TO SIX VOLUMES: STAMPING, EDITING, AND BINDING

Between the years 1830–1848, all the material composing the *Résidu* was reorganized and renumbered, which resulted in new catalogues.¹³³ The description of the dictionary manuscripts remained the same, with one exception: the two folders were now renumbered as 257 and 258.¹³⁴ An alternative catalogue numbered them as 6 and 7.¹³⁵ By this alteration, the indication of a missing third piece disappeared.

Next, all the manuscripts of the *Résidu* were stamped as the property of the library.¹³⁶ The main stamp occurring in the dictionary manuscripts was in use exclusively between 1848 and 1852, the period of the Second Republic.¹³⁷ An insight to the stamping procedures provides information which later allows determining how the material was altered.

¹³³ Damongeot, p. 210.

¹³⁴ BnF, MS n.a.fr. 5782, fol. 366.

¹³⁵ BnF, MS Archives modernes (arch. mod.), 668², fol. 105.

¹³⁶ Damongeot, p. 210.

¹³⁷ The stamp can be identified in ‘Estampilles’, in *Catalogue général des manuscrits latins n^{os} 8823 à 8921*, ed. by Marie-Pierre Laffitte and Jacqueline Sclafer (Paris: Bibliothèque nationale de France, 1997), p. xxi. There are a couple of occurrences of another stamp marked ‘Bibliothèque Impériale’ which was in use between 1852 and 1870 (the Second Empire). According to Damongeot, it was common during this period to place a stamp on the first or last folio of the manuscript volumes, even though they were already bound and stamped since before. When the stamp occurs in the dictionary volumes it follows this pattern, i.e. only at the first or last folios of the volumes. It was thus added after the manuscripts had been bound.

According to the conservator Marie-Françoise Damongeot, the stamp was normally placed either at the top or the bottom corner of a paper unit, and each piece was only stamped once. As a consequence, single folios were stamped individually, while bi-folios (large sheets folded in two) and booklets (consisting of several folded sheets) were only stamped once at the front page. This implied that sheets within these entities were left unmarked. For instance, a booklet consisting of three bi-folios, thus making six leaves, would have one stamp on the front sheet and five without.¹³⁸

From the beginning of the 1850s onwards, the majority of the material of the *Résidu* was portioned out to the Parisian book-binders. When binding the manuscripts in hard-cover volumes they marked the backs with a *train de reliure*, containing their names and the year of the binding.¹³⁹ None of the six dictionary volumes have such a marking, which suggests that they were bound at the library's internal atelier.¹⁴⁰

While the documentation of the consignments to external book-binders is quite exhaustive, the documentation of the activities of the internal atelier before 1856 is more defective. There is no record explicitly mentioning the dictionary manuscripts, but there are occasional registrations of unspecified material from the *Résidu* being subjected to book-binding.¹⁴¹ It is therefore likely that the dictionary manuscripts were included in such a group. In other words, it was in the hands of the conservators of the library that the two folders of the Maurists' dictionary manuscripts were edited and divided into six volumes.

Of the six volumes, number two and three contain exhaustive editing while the other four show none or only minor interferences. The differences between the original and altered parts are highly informative regarding how and why the latter was modified. These will therefore now be examined more closely.

¹³⁸ This information was communicated by Damongeot during our examination of the dictionary volumes in November, 2010.

¹³⁹ Damongeot, p. 210.

¹⁴⁰ In December 2010, Damongeot and Marie-Pierre Laffitte, also conservator at the Manuscripts Department of the BnF, were kind to examine the dictionary volumes with me a second time. Damongeot and Laffitte each arrived to the conclusion that the binding must have been made at the internal atelier.

¹⁴¹ BnF. MS arch. mod. 622 and 625¹.

Intact paper is the most obvious sign of an original folio, just as a coherent text extending over a number of subsequent folios indicates an unaltered, original section. Volumes one, four and five almost exclusively consist of intact, original papers.¹⁴² The texts are coherent without any interruptions and seemingly written in subsequent order. The only discernable change is when a handwriting (using a certain quill and tint of ink) is replaced by another after a larger number of folios. The combination of intact paper, consistent handwriting sections, and a coherent content shows that there already were clear divisions for the conservators to follow when binding these folios in hardcover volumes. They did not need to be divided and sorted – they already constituted somewhat natural units. The same can be said about the Index volume. The fact that it is composed of working lists instead of articles made it a natural entity as well. Consequently, the material that the conservators altered must have had some other characteristics – for why otherwise change it?

The altered sections are mainly located in volumes two and three. These volumes also contain intact, original sections, but they are in minority.¹⁴³ In most cases, text units of varying sizes have been cut out from their original papers and pasted on new ones – in alphabetical order. The articles are often written with differing tints of ink, with quills of various sizes and sometimes also on paper with different shades of color. Some clippings have darker edges, which suggest that they originally were located in the top or outer margin of a sheet (thus discolored due to oxidation).¹⁴⁴

In the intact sections, there is commonly not more than one stamp per folio. In accordance with the library's stamping procedures, it is always placed in the top or bottom of the sheet (see Figure 3). However, the collage-folios often contain several stamps, both complete and partial ones, and they can appear anywhere on the surface of the sheet (see Figure 4).¹⁴⁵ This means that the pasted articles originally occurred on different folios.

¹⁴² There are a few minor exceptions: BnF, MS f. fr. 16979, fol. 3; fr. 16982, fol. 114; fr. 16983, fols. 7–8, 150–151, 191.

¹⁴³ BnF, MS f. fr. 16980, fols. 1–5, 7–9, 13, 80, 85, 96, 136, 139–141; fr. 16981, fols. 12–13, 35–41, 46–49, 50–52, 61–62, 78–81, 85–87, 109–114, 118–124, 138–140.

¹⁴⁴ BnF, MS f. fr. 16980, fols. 26, 52, 149, 181, 199, 204, 226, 264, 265, 281; fr. 16981, fols. 1, 26, 31, 63, 177, 179, 188, 206, 224, 230.

¹⁴⁵ For instance, BnF, MS f. fr. 16980, fols. 22 (three partial stamps), 45 (three), 59 (four), 64 (three), 109 (four), 149 (four), 185 (three), 204 (five), 253 (six), 264 (four); fr. 16981, fols. 2 (three), 6 (two), 117 (two), 228 (two).

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Figure 3: An intact, original folio with one intact stamp at the left top corner.
The articles have been written by the same handwriting in the same shade of ink,
which suggest that they were compiled in sequence.
(The author's photo, BnF)¹⁴⁶

¹⁴⁶ BnF, MS f. fr. 16983, fol. 264.

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Figure 4: A collage-folio containing five stamps of which three are cut in half with the articles. The texts have been written by the same handwriting but with differing tints of ink and on papers of various shades. This suggests that they were compiled at different points in time, and were originally located on different folios.
(The author's photo, BnF)¹⁴⁷

¹⁴⁷ BnF, MS f. fr. 16980, fol. 93.

A closer examination of the content of the collages reveals sudden interruptions and indications of missing pieces, such as references to a preceding article or subject which is no longer there. For instance, the article DAUPHIN (Dolphin) begins: ‘the name of *another* [my italics] fish that is found in the Indian sea’, as if the preceding article should have been treating sea animals as well. Instead the surrounding pasted clippings concern trees and carpentry.¹⁴⁸ In these cases, the conservators did *not* stay close to the original form of the material. They re-arranged it dramatically. But how – and why?

Everything suggests that the re-arranged material originally consisted of a large number of smaller thematic drafts, compiled at different points in time as the writer systematically worked his way through various books. Dispersed in the collages one namely finds a multitude of articles written with a certain shade of ink, treating a certain category of subjects and always referring to the same source (when stated). For instance, in volume two there are several dispersed articles on jewelry, referring to the work of the English jeweler David Jeffries.¹⁴⁹ Since all have been written with a certain shade of brownish ink, they were likely compiled in sequence. Judging by their number and size (commonly only a few lines), they may originally have constituted a single sheet or two. A look at the intact parts of the volume reveals thematic articles gathered at one place. They are concerned with one subject alone – such as printing or hunting – and they are written in the same shade of ink.¹⁵⁰ The same pattern can also be seen in volume three. Here we have, for example, dispersed articles where the writer consistently refers to the *Histoire générale des Antilles* of Jean-Baptiste du Tertre. All articles have been written with brownish ink and with a slightly larger spacing between the lines than elsewhere.¹⁵¹

¹⁴⁸ BnF, MS f. fr. 16980, fol. 105, DAUPHIN: ‘le nom d’un autre poisson que l’on trouve dans la mer des Indes’. For similar expressions and circumstances, see fol. 53, CABIMA, fol. 56, CANNA FISTULA, fol. 79, CHOUX, fol. 110, DORMANT, fol. 111, DURION.

¹⁴⁹ BnF, MS f. fr. 16980, fol. 39, BASE, fol. 45, BIZAUX, fol. 59, CEINTURE, fol. 92, COTES, fol. 101, CULACE, fol. 124, ETENDUE, fol. 125, FABRIQUER, fol. 171, LANGUISSANT, fol. 214, PAVILLONS, fol. 226, POIDS DE TROYE and POIDS DE KARATE, fol. 237, RÉPANDRE, fol. 239, ROSE, fol. 248, SERTIR, fol. 254, TABLE.

¹⁵⁰ BnF, MS f. fr. 16980, fols. 11, 13–14.

¹⁵¹ BnF, MS f. fr. 16981, fol. 1, AIGUILLE, fol. 25 ARMADILE, fol. 52^v, BALAOÛ, fol. 67, BEUNE, fol. 69, CRABE, fols. 101–103, COCHON and CARET, fols. 117, CARANGUE and CAPITAINE, fols. 163–165, COULEUVRE, fol. 167, CONGE, fols. 171–172, COULEUVRE, fol. 178, DORADE, fol. 180, EMERILLON, fol. 182, FÉTU, fols. 183–184, FRÉGATE, fols. 186–187, GRAND-GOSIER, fol. 201, KAOÛANNE, fols. 209–210,

Thus, in contrast to the manuscripts arranged in volume one, four and five, the material subjected to rearrangement had not yet been written together in one big alphabetical order. This means that articles were still being added to every part of the alphabet at the time for the project's interruption.

What did the conservators wish to do with these arrangements? Both the original and altered parts contain repeated occurrences of scribble, crossed-over texts and random calculations with no apparent connection to the content.¹⁵² Their preservation suggests that the conservators did not have the ambition to clean up the content. The fact that they did not re-arrange the entire material in one large alphabetical order further indicates that they had no ambition of 'finishing' or completing the work. If one considers that the altered parts originally consisted of a large amount of minor thematic drafts – possibly not even making use of the entire surface of the folios – it is likely that the conservators simply wanted to economize the space. By cutting out the articles and pasting them on new folios, the number of individual sheets was reduced. In this process, they could just as well place the articles in the same alphabetical row to make the totality more readable and easily accessible. However, in doing so, they created a new order.

CONSEQUENCES OF THE CONSERVATORS' ORDERING

Irrespective of how well-meaning the intentions of the conservators may have been, their actions have serious consequences for the reader's perception of the dictionary manuscripts. By arranging the most heterogeneous material in two collages with complete and closed alphabetical spans, fragmentary drafts now appear as composing finished products. In reality, it is impossible to know how many more articles the writers intended to add, or how far they were from realizing their goal when the work was interrupted. Furthermore, due to the library's changing catalogization in the course of the nineteenth century, important information about the material's original form – such as the indication that a third piece could be lost – was silenced along the way. By dividing unfinished and incomplete manuscripts in six, thematically labeled and internally ordered

MOUCHES LUISANTES and MOUCHES CORNUES, fol. 243, SANGLIER and SCIE, fol. 247, TASSART, fol. 249, TROMPETTE.

¹⁵² BnF, MS f. fr. 16980, fols. 7, 12, 19, 25, 28, 40, 45, 49, 57, 59, 129, 146, 162, 201, 251, 262; fr. 16981, fols. 4, 7, 8, 10, 12, 16, 19, 24, 35, 39, 48, 67, 86, 96, 106, 166, 197.

volumes, the conservators created an order which inevitably and misleadingly will influence the reader's perception and interpretation – especially if the material is only studied briefly.

As stated in Chapter 2, the dictionary manuscripts have previously been mentioned by two scholars: Jacques Proust and Micheline Meillassoux-Le Cerf. Since each of them came across the material while studying other subjects, they only examined it briefly. Judging by their descriptions, they were unknowingly influenced by the ordering of the conservators. Meillassoux-Le Cerf clearly mistook the collages for being made by Pernety. In the dissertation she asserts that 'it is completely certain that it is he who has written and pasted these article-fragments in alphabetical order on the bound sheets'.¹⁵³ On the next page she specifies that 'almost all articles have been written directly on the sheets of the book', but in two volumes 'the author has alternated between articles written directly and others edited separately and then pasted'.¹⁵⁴ Meillassoux-Le Cerf seems to have imagined that the texts had been written directly in bound volumes, as if Pernety had either purchased six large notebooks or bound the manuscripts himself. Such an idea entails the assumption that the author himself was responsible for the material's organization – that it reflected his intentions. Nothing could be more misleading. By ordering an unordered material, the conservators unintentionally concealed the fact that these manuscripts were left as a work in progress. As a result, the totality can indeed be perceived as somewhat peculiar. Proust did not explicitly draw the conclusion that Pernety was responsible for the collages. He simply noted that the material consisted of articles on 'loose slips of papers, pasted on bound sheets'.¹⁵⁵ Still, his average impression was clear: it was a 'strange' material.

Against this background, the current arrangement of the manuscripts may be yet another reason for why the Maurist enterprise has been hitherto ignored.

¹⁵³ Meillassoux-Le Cerf, 'Dom Pernety et son milieu', p. 45: 'il est tout à fait certain que c'est lui qui a écrit à la main et collé sur les feuilles brochées [...], ces fragments d'articles classés en ordre alphabétique'.

¹⁵⁴ *Ibid.*, p. 46: 'Presque tous les articles ont été écrits à la main directement sur les feuilles du livre', 'l'auteur a alterné les articles écrits directement avec d'autres rédigés à part puis collés'.

¹⁵⁵ Proust, *L'Encyclopédie*, pp. 45–46.

6. THE NUMBER, IDENTITY AND CHARACTERISTICS OF THE WRITERS

The article drafts contain no signatures or explicit information about the number or identity of the writers. In 1747, Dom Fortet stated that the project was carried out by Dom Pernety and Dom Brézillac. When the preserved manuscripts were transferred to the National library in 1795–1796, they had been attributed to Pernety alone. Today they are registered in his name.

When Meillassoux-Le Cerf examined the manuscripts she remarked that they contained ‘fragments written by another hand, as if Pernety had turned to someone else more competent’.¹⁵⁶ She also briefly noted that there seemed to be qualitative differences between various texts. Proust never explicitly commented on the handwritings but stated that ‘the articles and drawings visibly have the same author’ – Dom Pernety.¹⁵⁷

The first time I opened the dictionary volumes, the sheets struck me as a jungle of different handwritings. As I spent six months examining the content, I gradually distinguished a certain number of graphical expressions. I detected interplay between several handwritings, noticed differences in their writing practices, their use of sources and the average tone of their articles. All this made me suspect that the material had been compiled by more than both one and two writers. Since estimating the number of the writers was a crucial piece in reconstructing the history of the project, I decided to study the handwritings more systematically.

The first of the following subchapters discusses handwriting analysis as a tool for the historian and presents the terminology, methodological procedure and theoretical assumptions that constitute its foundation. The second subchapter presents the handwriting variations in the dictionary manuscripts, describes their distribution and graphical characteristics. The third identifies the contributions of Pernety and Brézillac by means of comparative samples, while the fourth and fifth try to estimate the number of the remaining contributors by examining differences in writing practices and interaction.

¹⁵⁶ Meillassoux-Le Cerf, ‘Dom Pernety et son milieu’, p. 46: ‘fragments d’une autre écriture, comme si Pernety s’était adressé à une tierce personne plus compétente’.

¹⁵⁷ Proust, *L’Encyclopédie*, p. 46.

Handwriting analysis is based on the idea that we, while writing, reproduce a learned pattern of behavior. Due to the physiology of the hand and the skills acquired, this pattern is unique to each individual. At the same time, every act of writing is a compromise between this individual habit, the techniques and materials we use as well as circumstantial factors. The design of the pen or the quill, the surface of the table (plane or leaning) and the lighting conditions all affect our writing. The handwriting may also differ due to cold, illness, stress, or conscious efforts to write neatly, or perhaps practice a different style. Furthermore, the greater the skill a person develops, the faster he or she can move the pen, which over time produces a smoother and more fluent script. The basic premise is that the writer in spite of these factors tends to produce a writing that is idiographic (characteristic for the individual) and that this unique pattern is detectable by means of detailed examination.¹⁵⁸

According to the handwriting expert Tom Davis, within the domains of paleography and forensic document analysis, writer identification is commonly made by establishing a chart of *graphs*, that is, samples of the actual realizations of each abstract letter (the *grapheme*). In order to form an opinion of whether two samples are significantly the same or significantly different, the analyst makes graph-by-graph comparisons and examines the movement of the pen (the *ductus*) and the regularity, smoothness and speed of the written text (the line quality).¹⁵⁹ However, both paleographers and forensic document analysts commonly work with a rather limited material. In this case, where the material consists of more than one thousand folios, it has not been possible to perform such a detailed analysis.¹⁶⁰ The descriptions and comparisons here presented are therefore of a general character, accompanied by photo samples. To quote Davis, in the end it is ‘impossible for words adequately to describe the details of handwriting that experts find significant’. The recognition of what constitutes the idiographic pattern is

¹⁵⁸ Tom Davis, ‘The Practice of Handwriting Identification’, *The Library: The Transactions of the Bibliographical Society*, 8:3 (2007), 251–276 (pp. 260–261).

¹⁵⁹ *Ibid.*, pp. 254–257.

¹⁶⁰ Computer-based handwriting analysis could be helpful in the study of such lengthy material, but requires photos of higher resolution. I thank Véronique Églin and Daher Hani at LIRIS (Laboratoire d’InfoRmatique en Images et Systèmes d’information, UMR-CNRS/INSA) for their help to test my photos of the Maurist manuscripts.

something ‘the analyst will have internalized from examining a great deal of handwriting on a daily basis’.¹⁶¹

THE HANDWRITINGS OF THE DICTIONARY MANUSCRIPTS

In the article drafts preserved in their original state, the handwritings are divided in sections, where their characteristics remain internally consistent for a large number of folios. Such divisions suggest that the drafts either where written at different points in time (and under differing circumstances), or by different individuals. Whenever handwriting sections like these have been detected within a volume, I have named them with an abbreviation followed by a number corresponding to their order of appearance, as seen in Table 2.

Volume	Handwriting Variation	Range of Folios
I: Agriculture	AGR-1 AGR-2	1–8* 9–56
II: Natural history, mechanical arts and diverse crafts.	NH-1 NH-2 NH-3	Predominant 1–3 Minor occurrences
III: Natural history	NH-3	1–251
IV: Beginning of a ‘Dictionary of mathematics and physics’, arts and crafts, etc.	MP-1	1–134
V: Medicine	MED-1 MED-2 MED-3	1–229 230–376 377–396
VI: Index	INDEX-1 (and seven of the above)	See Appendix 2: Working Lists

Table 2: The handwriting variations in the six dictionary volumes.¹⁶²

¹⁶¹ Davis, p. 265.

¹⁶² *The conservators have inserted two columns written by NH-3 in the middle of the section of AGR-1. See BnF, MS f. fr. 16979, fol. 3.

Volume one begins with a quick, fluent handwriting, using a thin quill and black ink (AGR-1). The graphs are recurrently tied together and the words often finished with a stretched-out curl or line. After only eight folios it is replaced by a more sprawling, irregular handwriting with a tendency to dissolve the letters into vertical lines (AGR-2). It is written with a thicker quill, using brownish ink. AGR-2 proceeds for forty-six pages, without any larger deviations in its characteristics, and without changing into the characteristics of AGR-1 (see Figure 5).

NH-1 is responsible for the majority of the content of volume two. It is characterized by simple, rotund shapes and a general inclination towards right. The most distinct trait is the capital /P/ which is adorned with a curly detail at the bottom of the shaft (see Figure 4 and 6). NH-2, responsible for a small section in the same volume, differs radically from NH-1. It has a distinct erected inclination, regular curly strokes, and shafts stretching over both to the left and the right (see Figure 6). Articles written by NH-3 have sometimes been pasted next to NH-1 but are otherwise located in volume three. Its strokes appear as fast and sweeping, the graphs are tied together in compact cursive writing, and the words are often finished with stretched-out curls or lines. This handwriting shares some of the characteristics of AGR-1. The lower shaft of /c/ is occasionally drawn down into the space below, and the /s/ written with an increased inclination towards right. Otherwise, the graphs of NH-3 are smaller and the text more compact. The ink is often blurred and the writer sometimes uses a thicker quill. This draft seems thus to have been compiled under other circumstances than the draft of AGR-1. The headlines are occasionally written in a more rotund style, but the cursive writing demonstrates a distinct kinship to AGR-1 (see Figure 6 and 5).

Volume four contains only one handwriting: MP-1. Like NH-1, it is characterized by simple, rotund shapes, a general inclination towards right and the idiographic capital /P/. This handwriting is a perfect match with NH-1 (see Figures 4, 6 and 7).

Volume five starts with a sprawling, irregular handwriting in brownish ink (MED-1), which continues with distinct internal consistency for about two hundred and thirty folios. At first sight, this handwriting seems to resemble NH-1/MP-1, but MED-1 has a specific idiographic behavior which never occurs in another handwriting section: it repeatedly writes /l/ as a capital /L/, even in the middle of sentences. The /r/, /f/ and /d/ also clearly diverge from NH-1/MP-1. MED-1 is then replaced by a regular, sweeping, florid handwriting (MED-2), which is characterized by stretched-out curls

and lines. It has some resemblances to AGR-1 and NH-3, such as the left-oriented curls of the shaft of /d/, but it is far more regular in line quality. Furthermore, MED-2 never displays the idiographic /c/ and /s/ of AGR-1 and NH-3. After one-hundred and forty-six folios, it is replaced by MED-3 for the last nineteenth folios (see Figure 8, and Figure 3 for a whole folio written by MED-2).

The Index volume contains contributions from all handwritings except AGR-2 and NH-2. It also contains one new addition: INDEX-1. This handwriting is characterized by an erected inclination, simple, straight strokes without any curls or adornments (see Figure 11).

When all six volumes are considered together, only two of eleven handwritings are a perfect match: NH-1 and MP-1. This is the main writer of volume two, ‘Natural history, mechanical arts and diverse crafts’, and volume four, ‘Beginning of a ‘Dictionary of mathematics and physics’, arts and crafts’. The same writer has also written thematic lists on natural history, crafts and arts, located in the Index volume. Furthermore, he is responsible for the bibliography and two catalogues enumerating illustrations (planned and finished). In the latter documents he repeatedly refers to the finished drawings as his, e.g. ‘See the illustrations I have made on *papier de serpent*’.¹⁶³ The preserved drawings, made on *papier de serpent* (a thin fine paper often used for copying illustrations), have labels written by the same writer.¹⁶⁴

Next to NH-1/MP-1, also AGR-1 and NH-3 might be a possible match.

¹⁶³ BnF, MS f. fr. 16984, fols. 4^v, 12^v: ‘Voyez dans les figures que j’ai faites en papier de serpent’.

¹⁶⁴ BnF, MS f. fr. 16981, fols. 283–304.

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Figure 5: AGR-1 and AGR-2.
(The author's photos, BnF)¹⁶⁵

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Figure 6: NH-1, NH-2, and NH-3.
(The author's photos, BnF)¹⁶⁶

¹⁶⁵ BnF, MS f. fr. 16979, fols. 6, 9.

¹⁶⁶ BnF, MS f. fr. 16980, fols. 181, 2; fr. 16981, fol. 224.

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Figure 7: MP-1.
(The author's photos, BnF)¹⁶⁷

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Figure 8: MED-1, MED-2, MED-3.
(The author's photos, BnF)¹⁶⁸

¹⁶⁷ BnF, MS f. fr. 16982, fol. 86, 12.

¹⁶⁸ BnF, MS f. fr. 16983, fols. 1, 240, 383.

In order to make an author-identification, the material under examination needs to be compared with already identified sample writings. According to Tom Davis, ‘sample writing should be representative and contemporary, exemplifying as far as possibly the whole range of natural variation in the hand under examination at the time when the questioned writing was produced’.¹⁶⁹

The preserved manuscripts of Pernety mostly derive from the 1760 onwards.¹⁷⁰ However, the Index volume contains a testimony note written and signed by Pernety, dated in 1748. The content has no apparent relation to the dictionary and seems to have accidentally ended up on the backside of a working list. Still, this means that there is a contemporary sample that can serve as comparison.¹⁷¹

NH-1/MP-1 corresponds perfectly with the testimony written by Pernety. The most illustrative example is perhaps the /D/ and /P/ in the signature ‘Dom Pernetty’ and the title of volume four: ‘Dictionary of mathematics and physics, arts and crafts’. Also /t/, /y/ and /n/ correspond perfectly (see Figure 6, 7, and 9). Consequently, of one thousand four hundred folios, Pernety is responsible for about five hundred, that is, a third. He mainly treats arts and crafts, natural history, mathematics and physics, but has at some point treated all the subjects occurring in the manuscripts written by the other handwritings. He also is responsible for the drawings, some of the illustration lists, and the bibliography. His handwriting can furthermore be seen editing articles made by other handwritings, making additions in the margins or intervening in the structure of the text, which makes him appear as the editor in charge.¹⁷²

¹⁶⁹ Davis, p. 256.

¹⁷⁰ BnF, MS f. fr. 19033; fr. 15787, fols. 46–50^v, 90–124^v, 176–180; Meillassoux-Le Cerf, *Dom Pernety et les Illuminés d’Avignon*, pp. 450–454.

¹⁷¹ BnF, MS f. fr. 16984, fol. 23^v.

¹⁷² BnF, MS f. fr. 16981, fol. 2, ACARAIA (lines 8, 20, 22–23, 36–37), ACARAPITAMBA (lines 18–19), ACACHOATLI (lines 18, 21, 23), fol. 3, AGONIS (line 16), fol. 4, ALBETTE (line 9), ALBULUS AQUATIQUE (lines 2, 10), fol. 6 (margin addition), fol. 7 (margin additions), fol. 8, AMPELIDES (margin addition), fol. 9, ANTHIAS (margin addition), fol. 14 (margin addition), fol. 18, (col. 2, addition at the end), fol. 20, AIGLE NOIR (lines 14–15), fol. 24, ALCYON (line 4); fr 16979, fol. 5, BOTTE (addition just above BOTTELAGE).

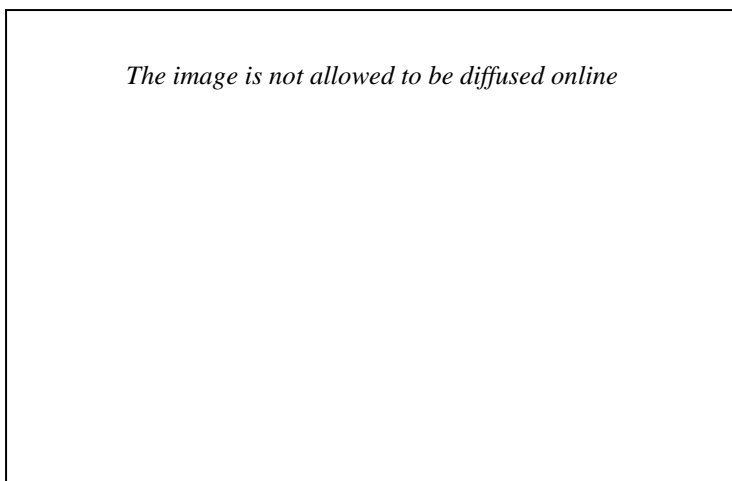


Figure 9: The headline of the front page of the fourth volume and the signature of Pernety from the testimony note (dated 1748).
(The author's photos, BnF)¹⁷³

In some of Pernety's articles there are explicit references to the current year. At one point it is stated to be 1747, at another 1748.¹⁷⁴ There are also occasions where he refers to works published in 1750 and 1751.¹⁷⁵ This means that his handwriting is present over a long period, and it looks the same in 1747, 1748 and in 1751. The manuscripts written and signed by Pernety up to two decades later still display the same characteristics (see Figure 10), although they appear more fluent and regular in line quality.¹⁷⁶ This excludes an evolutionary handwriting scenario – that the other handwritings could be his in different periods in time. Nevertheless, it cannot be excluded that Pernety at some point might have been writing under exceptional circumstances, for instance while being sick. If so, some of the other handwritings could still be his, but it is highly unlikely that they all are.

¹⁷³ BnF, MS f. fr. 16982, front page; fr. 16984, fol. 23^v.

¹⁷⁴ BnF, MS f. fr. 16982, fol. 61, AGE DU MONDE; fr. 16980, fol. 40, BATAILLON.

¹⁷⁵ BnF, MS f. fr. 16984, fol. 263; fr. 16980, fol. 197, MUMIE.

¹⁷⁶ BnF, MS f. fr. 15787, fols. 46–50^v. Pernety's signature is found at the end of the document.

The image is not allowed to be diffused online

Figure 10: The handwriting of Pernety in 1747 (MP-1), sometime after January 1751 (NH-1), and documents written and signed by Pernety in 1763 and c. 1766.
(The author's photos, BnF)¹⁷⁷

The great number of preserved texts written and signed by Brézillac from the late 1740s onwards gives a good idea of the natural varieties of his handwriting at the time of the dictionary project.¹⁷⁸ The texts all display a neat, simple, straight, legible writing with few variations. Somewhat surprisingly, none of the handwritings in the five article volumes resemble this comparative material – but INDEX-1 corresponds perfectly.

The image is not allowed to be diffused online

Figure 11: INDEX-1 (left) and two documents written and signed by Brézillac (1748, 1752).
(The author's photos, BnF)¹⁷⁹

¹⁷⁷ BnF, MS f. fr. 16982, fols. 61, 197; fr. 19033, fol. 38^v; fr. 15787, fol. 46.

¹⁷⁸ BnF, MS f. fr. 12762, fol. 269; fr. 19670, fol. 221; fr. 17504, fols. 329, 337^{r-v}, 341–342.

¹⁷⁹ BnF, MS f. fr. 16984, fol. 54^v; fr. 17506, fols. 337^v, 341^v.

The fact that Brézillac only is responsible for a working list could suggest that he left the project in an early phase. Perhaps this list was his only (written) contribution; perhaps he had produced also other texts that later were rewritten by other hands. Nevertheless, due to the preservation of this working list, his involvement in the project can be confirmed.

What conclusions can then be drawn regarding the remaining handwriting variations? Did they derive from separate individuals or could some of them be versions of the same hand? Furthermore, were they active collaborators (producers of texts) or simply copyists tasked to rewrite the drafts of Pernety? In order to answer these questions, the analysis will be transferred to writing practices and interaction.

WRITING PRACTICES AND INTERACTION

The handwritings are occupied with different areas of knowledge, and thereby employ a thematic division of labor. There are distinct and consistent variations in their uses of abbreviations and accentuations, in the disposition of their texts, in the amount of details in their references, their use of classifications and how they emerge as independent authors. There are also cases where handwritings interact – where comments are left in the articles of others, or where two handwritings take turns in completing a working list.

The Article Volumes

The articles written by Pernety (MP-1/NH-1) stand out from the rest in several aspects. He is the one that most distinctly comes forward as an author, becomes an ‘I’ and sometimes even includes personal narratives.¹⁸⁰ He evaluates the consulted literature and draws his own conclusions based on the authors’ descriptions.¹⁸¹ His references often contain details on both volume and page.¹⁸²

The majority of the handwritings organize their articles in columns. NH-2 is the only exception: he writes over the entire page. Instead of separating the articles by line spacing, he places the first letters of each heading a bit

¹⁸⁰ BnF, MS f. fr. 16980, fol. 252, SPHINX.

¹⁸¹ BnF, MS f. fr. 16980, fol. 27, ANONA, fol. 196, MOUSTIQUE, fol. 69, CHENILLE-CRABE.

¹⁸² See for instance BnF, MS f. fr. 16982, fol. 67, AFFÛT DE BORD, fol. 73, AIGUILLE AIMANTÉE, fols. 88–92, AIR.

further out in the margin. Furthermore, NH-2 consistently includes grammatical categories after each heading, that is, ‘v. act’ for *verbe*, *active*, etc. This is otherwise only seen in the articles of MED-1. In all other drafts, grammatical categories are omitted. Moreover, in contrast to Pernety, NH-2 never indicates any sources. Considering how the graphical appearance of NH-2 radically differs from all other handwritings, this contribution clearly derives from an additional individual. Even Meillassoux-Le Cerf acknowledged this handwriting as essentially different in her brief description of the volume.¹⁸³ NH-2’s diverging writing practice further suggests that he was an independent producer of text, and not someone simply rewriting the accounts of Pernety or someone else.

The third and last folio by NH-2 ends abruptly in the middle of a sentence. The first words of the succeeding (but absent) folio have been noted in the bottom margin.¹⁸⁴ This type of indication, known as *custode*, was a common strategy for marking the internal order among folios instead of pagination, and is employed by all writers of the dictionary manuscripts. This means that the contribution of NH-2 originally was larger, but it is impossible to say how much.

Similar to Pernety, the writer NH-3 often provides detailed references to his sources, but there are distinct differences in other practices. When Pernety indicates that there is an illustration to consult he inserts the abbreviation ‘pl.__ fig.__’ for *planche*, *figure*. This formulation is employed hundreds of times, without deviations.¹⁸⁵ NH-3, on the other hand, uses ‘f.__ no.__’ for *figure*, *nombre* or ‘p.__ tab.__’ for *page*, *tableau*.¹⁸⁶ In theory, this could be a reproduction of the abbreviations used in his sources. If so, it is important to note that Pernety never changes his abbreviation – irrespectively of what is indicated in the sources – while NH-3 proceeds differently. At one point Pernety has written an instruction next to an article of NH-3, where he tells him how to mark the occurrence of an illustration (see Figure 12). He writes:

The figures must be indicated after each description, of the first, the second, &c., that is, pl.__ fig.__, and then continue to the description of the next.¹⁸⁷

¹⁸³ Meillassoux-Le Cerf, ‘Dom Pernety et son milieu’, p. 46.

¹⁸⁴ BnF, MS f. fr. 16983, fol. 2^v.

¹⁸⁵ BnF, MS f. fr. 16980.

¹⁸⁶ See for instance BnF, MS f. fr. 16981, fols. 23, 35–37, 68.

¹⁸⁷ BnF, MS f. fr. 16981, fol. 9: ‘Il faut marquer les figures après chaque description du premier, du second, &c., ainsi pl.__ fig.__ et continuer la description du suivant’.

In theory, these words could be a personal reminder, but since they are written next to another handwriting that uses other abbreviations, they seem more of an exhortation to a colleague. Besides, Pernety repeatedly inserts his abbreviations in the manuscripts of NH-3, while the opposite never is seen.¹⁸⁸

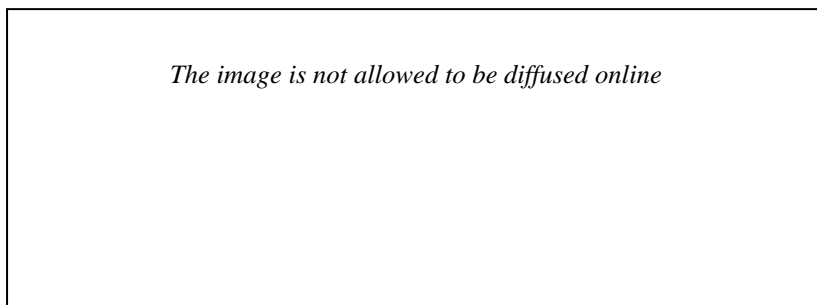


Figure 12: Pernety has inserted instructions how to refer to illustrations, next to an article of NH-3.
(The author's photo, BnF)¹⁸⁹

Turning to the Agriculture volume, also AGR-2 uses his own abbreviations for illustrations: 'plan.__ fig.__' or 'planc.__ fig.__'.¹⁹⁰ Just like in the section of NH-3, Pernety sometimes inserts his own abbreviation next to the articles of AGR-2.¹⁹¹ Furthermore, AGR-2 consistently inserts an abbreviation for the consulted sources at the beginning of each article. This is conspicuous since all the other handwritings commonly place the references at the end of the articles or in the current text. Considering how the graphical appearance of AGR-2 differs from every other handwriting of the manuscripts, combined with the fact that this writer uses his own abbreviations and system of references, this draft seems to represent a unique but limited contribution, just like NH-2.

The first writer of the Agriculture volume, AGR-1, does not share the writing practices of AGR-2. While the former categorizes every term as agriculture, the latter distinguishes between agriculture, gardening, viniculture and householding. As stated, there are graphical similarities between AGR-1 and NH-3, but also their writing practices differ. Like Pernety (and in contrast to NH-3), AGR-1 uses the abbreviation 'pl.__

¹⁸⁸ See for instance the end of the articles in BnF, MS f. fr. 16981, fols. 1–9, 14–24.

¹⁸⁹ BnF, MS f. fr. 16981, fol. 9.

¹⁹⁰ BnF, MS f. fr. 16979, fols. 39, 40, 44, 53, 55.

¹⁹¹ BnF, MS f. fr. 16979, fol. 48, PLANTOIR.

fig. __' for marking an illustration.¹⁹² Moreover, while NH-3 provides almost every article with detailed references, AGR-1 barely states any sources at all. However, considering the limited contribution of AGR-1 (eight folios), it is possible that agriculture was not the main domain of the writer.

The habits of the handwritings of the Medicine volume also differ from each other. While MED-1 almost never writes out accents, MED-2 employs them strictly. When MED-1 states his references he seldom gives any more information than the last name of the author. MED-2 is much more detailed and often specifies the title, or if the information has been drawn from an article, a book, a memoir, etc.¹⁹³ Furthermore, just like NH-2, MED-1 inserts grammatical information, while this is never seen in the articles of MED-2. Since they each refer to the same works, these divergent practices are not imported from the sources but clearly represent the individual habits of two different writers. Furthermore, MED-2 can sometimes be seen inserting cross-references to his own articles in the section of MED-1, while the opposite never occurs.¹⁹⁴ The last handwriting, MED-3, seldom states references or uses grammatical categories. Generally, his articles are shorter than the ones of MED-1 and MED-3 and appear to have been written in haste. Due to the scribbled appearance, it is hard to determine whether it could derive from one of the other two writers.

Just as in the case of NH-2, the contribution of MED-3 is more limited than the others. The last page ends abruptly in the middle of a sentence and the first words of the succeeding (but absent) folio is indicated in the bottom margin. This means that also this section originally was larger. It is thus possible that the rest of the contributions of NH-2 and MED-3 were included in the missing third piece.¹⁹⁵

The Medicine volume contains three small contributions by Pernety, inserted by the conservators in the section of MED-1. Two of these articles are titled FIÈVRE (Fever). The fact that MED-1 also has composed an article on the subject provides a good opportunity for comparison.¹⁹⁶ Besides referring to different sources, the tone of the two articles is remarkably different. MED-1 consistently employs unspecific expressions such as 'some

¹⁹² BnF, MS f. fr. 16979, fols. 2, 4, 6, 7.

¹⁹³ BnF, MS f. fr. 16983, fol. 250, HERMAPHRODITE, fol. 261, HUILE.

¹⁹⁴ BnF, MS f. fr. 16983, fol. 43 (col. 1, line 11), fol. 177 (end of col. 3).

¹⁹⁵ See Chapter 5.

¹⁹⁶ BnF, MS f. fr. 16983, fol. 8 (Pernety), fols. 217–218 (MED-1), fol. 219 (Pernety).

authors', 'the ancients' 'those who think' and 'the supporters of'.¹⁹⁷ Pernety emphasizes the divergent opinions of a great number of specific authors, ranging from the classical works of Hippocrates to a recent memoir published in 1749.¹⁹⁸ Pernety's handwriting can also be seen making small additions in MED-1's article, which once again makes him appear as the editor in charge.¹⁹⁹

The Working Lists

As stated, the working lists contain contributions from all handwritings except NH-2 and AGR-2. The presence of MED-2, MED-3 and NH-3 are limited.²⁰⁰ The others have been more productive. Pernety is responsible for seventy-eight folios, AGR-1 about sixty, MED-1 about fifty-six and Brézillac twenty-six (in all cases recto-verso). Pernety, AGR-1 and MED-1 have also made some lists together. The latter material is of particular interest for determining the numbers of individual hands.

In two lists, AGR-1 and MED-1 are seen replacing each other sometimes as often as once or twice per page and often in the middle of a column (see Figure 13).²⁰¹ AGR-1 is once again characterized by sweeping, fast strokes, flourish details and a rather regular gradient. MED-1 is more rotund and straggly, and repeatedly employs the ideographic /l/, written as a capital /L/ even within words and sentences. The frequent shifts between these two handwritings cannot easily be explained by a one-writer scenario. The fact that they take turns eliminates a scenario where they could be expressions of the same hand at different points in time, in various stages of evolution. Thus, everything suggests that MED-1 and AGR-1 are the handwritings from two different persons.

¹⁹⁷ BnF, MS f. fr. 16983, fol. 217. The article largely copies Élie Col de Vilars, *Dictionnaire françois-latin des termes de médecine et de chirurgie* (Paris: Coignard, 1741), pp. 200–205.

¹⁹⁸ BnF, MS f. fr. 16983, fol. 219.

¹⁹⁹ BnF, MS f. fr. 16983, fol. 218 (col. 2, line 26). He adds: 'Hippocrate la nommoit Phricodes' (note the ideographic /P/ of Pernety).

²⁰⁰ See Appendix 2: Working Lists. NH-3 has written a list on 36 folios, but most of the pages are empty and only contain letters as headlines.

²⁰¹ BnF, MS f. fr. 16984, fols. 71–85^v.

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Figure 13: AGR-1 and MED-1 taking turns in one of the working lists.
Observe in particular the differing graphs in ‘t. de fleuriste’ (‘term of the florist’).
(The author’s photo, BnF)²⁰²

Also Pernety and AGR-1 have collaborated in making thematic lists, where they employ a clear division of labor: they split the alphabet between them. AGR-1 always treats A–M and leaves a lonely ‘N’ as a heading when finishing. Pernety then continues from ‘N’, but he always starts on a new folio and often modifies the title. When AGR-1 writes ‘architecture’, Pernety adds ‘architecture and masonry’.²⁰³ Where AGR-1 lines up natural historical terms under ‘[natural] history’, Pernety simply calls it ‘animals’, and so on.²⁰⁴ This systematic behavior also seems hard to explain by a one-writer scenario.

Pernety’s handwriting sometimes becomes smoother, faster and more regular in its strokes, but it does not display the flourish characteristics of AGR-1. This is neither seen in his writings from the 1760s. The same goes for the idiographic /l/ of MED-1. Considering their differing writing practices and interaction in the working lists, everything therefore points at three different writers.

CONCLUSIONS: A COLLABORATIVE PROJECT

Based on the above observations, some handwritings clearly derive from individual writers. NH-2 and AGR-2 are the most evident examples. Not only do they differ graphically from all the others in distinct ways, but they also have unique writing habits. Due to the interaction between Pernety and

²⁰² BnF, MS f. fr. 16984, fol. 125.

²⁰³ BnF, MS f. fr. 16984, fols. 223–225^v: ‘Architecture’ (A–M written by AGR-1), fols. 226–227^v: ‘Architecture et maçonnerie’ (N–P by Pernety).

²⁰⁴ BnF, MS f. fr. 16984, fols. 252–253^v: ‘Histoire [naturelle]’ (C–M by AGR-1), fols. 254–255^v: ‘Animaux’ (N–Z by Pernety).

AGR-1 in the Index volume, also this handwriting seems to derive from an independent writer. AGR-1 share distinct graphical features with NH-3, but while the latter is detailed in his references, the same cannot be said about the former. Nevertheless, due to the graphical similarities I consider them a probable match.

With its cursive writing, MED-2 resembles AGR-1 and NH-3, and NH-3 and MED-2 are equally detailed in their references and use of accents. Still, MED-2 differs from both of them with its smoother, rounder and more regular strokes and line quality. Furthermore, it never demonstrates the idiographic /c/ of AGR-1/NH-3. Against this background, I find it probable that MED-2 constitutes a separate individual.

Due to MED-1's idiographic /l/, its interaction with AGR-1, and its differing writing practices compared to Pernety and MED-2, this handwriting also seems to derive from a separate individual. MED-3, on the other hand, remains a question mark. Due to the scribbled appearance of the draft, it is hard to say if it could derive from some of the writers stated above, perhaps MED-1, or be an isolated contribution. The analysis of the handwritings, their habits and interactions thus results in the estimation of seven or eight writers (see Table 3).

These findings constitute an important foundation for the study of the history of the Maurists' dictionary project. The presence of the handwritings of Pernety and Brézillac supports that the dictionary project initially was executed by both monks, in accordance with the statement of Fortet. However, the manuscripts reveal that also other writers joined the project.

The fact that Pernety most distinctly comes forward as an author, that his articles overlap the areas treated by the additional writers and that he intervenes in their texts, all suggests that he was the editor in charge. From what one can tell of the preserved manuscripts, he also seems to have been the most active writer. This could explain why the material was attributed to him alone by the archivists in the abbey of Saint-Germain-des-Prés. Since Dom Fortet said nothing about additional collaborators in 1747, there is no obvious comparative material for making further positive identifications.²⁰⁵ The abbey of Saint-Germain-des-Prés was the largest community of the Congregation of Saint-Maur and housed some forty or fifty monks at all times. The information about their lives and intellectual interest varies

²⁰⁵ I have examined (and largely excluded) the handwritings of Dom Samson Patert, Dom Germain Poirer, Dom Jacques Martin, Dom Nicolas Jamin, and Dom Nicolas Noël, who either had a close relationship to Pernety or Brézillac, or were known to take an interest in subjects treated in the manuscripts.

greatly, and few have left manuscripts which allow comparisons of handwritings. At this point, one can only hope that future findings will shed some light over their identities. Still, the involvement of several hands shows that this project was not the private activity of one monk – Pernety – executed in seclusion. Even more importantly, the differing habits of the additional writers suggest that they were collaborators – i.e. producers of texts – and not copyists. Had they simply been rewriting the drafts of Pernety, the texts should reasonably have displayed greater consistency in the practice of stating sources, the use of abbreviations and accents, etc. However, it is possible that some of them simply functioned as assistants, and that they were making excerpts for the main author(s) to later refine and rewrite.

This analysis has provided certain clues to the history of the project, but without knowledge about the wider context, it is hard to know what to make of these fragments. I will therefore now turn to the next part of the investigation.

	Identity of the Writer	Handwriting	Number of Folios (Approximate)	Responsibilities
1	Pernety	NH-1 / MP-1	512	Articles, drawings, working lists, <i>Editor in charge</i>
2		AGR-1 / NH-3	355	Articles, working lists
3		MED-1	285	Articles, working lists
4		MED-2	149	Articles, working lists
5		AGR-2	47	Articles
6	Brézillac	INDEX-1	26	Working list
7		NH-2	3 (incomplete)	Articles
(8)		MED-3	19 (incomplete)	Articles, working list

Table 3: The writers of the Maurists' dictionary manuscripts, ordered in degree of approximate activity in the preserved manuscripts (due to the occurrences of half-empty folios, the numbers do not quite add up to 1408).

PART III.
THE HISTORY OF A DICTIONARY
IN THE MAKING

7. PICKING UP THE TRAIL

In order to trace the origins of the Maurists' dictionary project, we must begin in the monastic environment in which the manuscripts were produced. It is therefore necessary to know a bit more about the organization of the Congregation of Saint-Maur and the development of the Maurists' intellectual activities from the seventeenth century onwards, to the point when Pernety and Brézillac formed a team in the abbey of Saint-Germain-des-Prés.

THE CONGREGATION OF SAINT-MAUR: ORGANIZATION AND ERUDITION

The Benedictine Congregation of Saint-Maur was founded in 1618 as a part of the early-modern Catholic reform-movement. Half a century earlier, the Church Council of Trent (1545–1563) had pointed out the necessity of reforming the organization of the clergy and the monastic orders. In order to counteract spiritual and material degeneration, monasteries were encouraged to unite in centrally governed congregations.²⁰⁶ In 1604, a Benedictine reform was officially initiated in the duchy of Lorraine, centered on the abbey of Saint-Vanne. When the reform reached the monasteries in France, a separate French Congregation was created. It was named after Saint Maurus – the disciple of Benedict believed to have been the first to introduce the monastic rule in Gaul. The reform included renovation of the monastic buildings, restoration and reorganization of the libraries, but also the return to a stricter way of life in accordance with the Benedictine Rule. By 1630, forty monasteries had joined the Congregation; by 1650, one hundred and ten. At the turn of the century the expansion reached its peak with about two hundred houses and two thousand two hundred monks.²⁰⁷ Nunneries were normally not accepted, but one exception was made in 1637 on the demand of the Cardinal Richelieu. Still, the liaison was simply administrative and the nuns did not take part of the activities of the Congregation.²⁰⁸

²⁰⁶ Guy Bedouelle, 'Trent, Council of, 1545–1563', in *Encyclopedia of Christian Theology*, ed. by Jean-Yves Lacoste, vol. III (New York: Routledge, 2005), pp. 1601–1606 (pp. 1601–1602).

²⁰⁷ Hurel, in *The Reception*, p. 1010.

²⁰⁸ Hurel, 'La vie monastique', pp. 374–375.

The Maurist houses were divided in six provinces across France. They were all centrally controlled by a General Chapter which assembled every three years. The meetings were attended by the Superior General (elected for three years with the possibility of re-election), his two assistants, six provincial visitors (also elected for three years) and four representatives from each province (elected by provincial assemblies). Together they constituted the Regime of the Congregation – the Superiors – and the ultimate authority regarding all kind of decision-making and legislation, including the election of the Priors in all the individual monasteries. In 1630, the Parisian abbey of Saint-Germain-des-Prés was chosen as the political, intellectual and religious headquarters and became the home of the Superior General and his two assistants. The traditional Benedictine vow of stability was expanded to apply to the Congregation as a whole, which enabled mobility between the houses. This mobility in combination with the centralized, hierarchical organization would constitute the foundation for the intellectual activities.²⁰⁹

The Maurists early developed a learned profile. In the elaboration of the first constitution, the Superior General Dom Gregoire Tarris (1575–1648) and his assistant Dom Luc d’Achery (1609–1685) argued that education and intellectual work should constitute the heart of the Congregation.²¹⁰ In order to evoke the spirituality of the young monks and simultaneously defend the Catholic faith, Tarris and d’Achery made it the Congregation’s official task to create new, critical editions of the Church Fathers and to compile the history of the Order and the Church.²¹¹

By the early seventeenth century, the French Benedictine monasteries constituted veritable treasuries of ancient manuscripts. When previously isolated houses were gathered under one central authority, all their textual assets became one body. On the order of the Superiors, coordinated inventories were initiated across the country, regulated by instructive, circulating letters. The Priors of the individual monasteries were tasked to select the most diligent monks to search the monastic libraries for certain manuscripts, which then were sent to the abbey of Saint-Germain-des-Prés. The Parisian headquarters slowly turned into a convergence point of ancient texts and intellectual capacity, as the most talented scholars and students

²⁰⁹ Hurel, in *The Reception*, pp. 1009–1012.

²¹⁰ Jeannine Fohlen, ‘Dom Luc d’Achery (1609–1685) et les débuts de l’érudition mauriste’, *Revue Mabillon*, 55 (1965), 149–175; 56 (1966), 1–30, 73–98; 57 (1967), 17–41, 56–156.

²¹¹ Hurel, ‘Les Mauristes, éditeurs des Pères’, pp. 382–394.

from the different provinces were transferred to the capital.²¹² According to Pierre Gasnault, the places were few and precious, and ‘some did not succeed in obtaining one until after several years and due to recommendations’.²¹³

Next to the academies and the Royal *Cabinet des Chartres*, the Congregation of Saint-Maur would become one of the greatest institutions for critical historical research of the *Ancien régime*. Through lengthy professional training in languages and the handling of ancient manuscripts, the Maurists’ experiences resulted in methodological works on diplomatics (the evaluation of the authenticity of old documents, carts and diplomas), paleography (the study of ancient handwritings), and methods for dating sources.²¹⁴

In 1691, the Maurist scholar Dom Jean Mabillon published a normative treatise on monastic studies which would exert great influence on the intellectual activities of the Congregation. The treatise examined what subjects were appropriate for monks to study and how the studies should be conducted. Mabillon described the desire to know as something natural to man and essential for human happiness. Curiosity, on the other hand, was considered as one of the most dangerous pitfalls. This passion provoked a restless, flickering search for amusing facts, which could never lead to true, solid and well-founded knowledge. Mabillon argued that study and research should be conducted with a disciplined body and mind.²¹⁵ For this reason he found some areas of knowledge highly unsuitable for monks, because they more than others risked to excite curiosity. These areas were mathematics, experimental physics, and advanced studies in medicine. Regarding mathematics, he remarked:

such study takes them too far and leaves the mind no freedom for things more in conformity with the monastic state. All the time remaining after community exercises will not be enough to satisfy a keenness to penetrate ever farther into those fields, and

²¹² Hurel, in *The Reception*, pp. 1009–1012.

²¹³ Gasnault, p. 17: ‘Certains ne parvinrent à en obtenir une qu’après plusieurs années et grâce à des recommandations’.

²¹⁴ Laurain, pp. 231–271; Fohlen, ‘Dom Luc d’Achery’, *Revue Mabillon*, 57 (1967), 17–41; Daniel Roche, *France in the Enlightenment*, trans. by Arthur Goldhammer (London: Harvard University Press, 2000), pp. 102–103.

²¹⁵ Jean Mabillon, *Traité des études monastiques*, in *Le moine et l’historien Dom Mabillon: oeuvres choisies*, ed. by Daniel-Odon Hurel (Paris: Laffont, 2007), pp. 381–625 (pp. 616–617).

whatever the cost a lot of instruments are needed and experiments must be done, all of which is too distracting and not suited for our state.²¹⁶

Mabillon did not deny that mathematics, physics, and medicine were of great use to society, but they should not be studied by monks, he argued.

In the course of the eighteenth century, other attitudes and values started to permeate the Congregation. In the same period, *philosophes* such as Voltaire, Helvétius, Marmontel, La Mettrie, and Diderot were increasingly criticizing the monastic orders for their wealth, intolerance, and uselessness. According to Voltaire, the monks were part of a medieval institution whose contributions to the progress of the sciences belonged to the past. Very few monastic communities could be described as useful, and mostly, their very existence was shameful.²¹⁷

The historian Gérard Michaux points out that the new generation of monks was well-aware of these critical voices, and some of them tried to adapt the monastic life to a society in transformation. Since many of the new monastic postulants came from families of merchants and master artisans, the values of the bourgeoisie were gradually introduced into the monasteries. More open to worldly culture, the eighteenth-century scholar-monks were reshaping religious practice. They worked for a more democratic monastic life, and emphasized their desire to be of use to the public and the nation.²¹⁸

In the eighteenth century, the Maurist scholars enjoyed greater individual freedom and increasingly interacted with secular learned institutions. Forty-one Maurists became members of learned societies, and many more sent their treatises to the academies in search for recognition.²¹⁹ From the 1770s onwards, some would even join masonic lodges.²²⁰ While the seventeenth-century scholars mainly had been occupied with ecclesiastic history and the texts of the Church Fathers, the eighteenth-century writers compiled large-scale works on the history of learned literature, the origins and succession of the royal dynasty, the history of the French dioceses, and the local history of

²¹⁶ Jean Mabillon, *Treatise on Monastic Studies*, trans. by John Paul McDonald (Oxford: University Press of America, 2004), p. 162; Mabillon, *Traité des études monastiques*, pp. 535–536.

²¹⁷ John McManners, ‘Voltaire and the Monks’, in *Monks, Hermits and the Ascetic Tradition*, ed. by W. J. Sheils (Oxford: Blackwell, 1985), pp. 319–342 (pp. 325–326, 332).

²¹⁸ Gérard Michaux, ‘Une nouvelle conception de la vie monastique en France dans la seconde moitié du dix-huitième siècle’ in *Religions en transition dans la seconde moitié du dix-huitième siècle* (Oxford: Oxford University Press, 2000), pp. 59–72 (pp. 59, 70).

²¹⁹ Hurel, in *Académies*, pp. 466–467, 470, 473, 475.

²²⁰ Chaussy, *Les Bénédictins de Saint-Maur*, I, 222–226; Bernard Plongeron, *La vie quotidienne du clergé français au XVIII^e siècle* (Paris: Hachette, 1974), p. 165.

the provinces.²²¹ However, there were also monks who came to devote themselves to all those subjects that Mabillon had found inappropriate for the monastic state.

In 1710, Dom François Quenet submitted a treatise to the Parisian Academy of Sciences regarding the effects of the echo. Shortly after, Dom Nicolas Alexandre published a work on medicine and surgery for the poor (1714), followed by a pharmaceutical and botanical dictionary in 1716. In 1726, Dom Jacques Alexandre won a prize from the Academy of Bordeaux for his treatise on the mechanics of the tide. Some years later, he published a book on the manufacture of clock-works (1734).²²² In 1749, Dom Louis-Emmanuel Renier submitted an article to the Academy of Leyden regarding the mathematical conundrum of the quadrature of the circle.²²³ The year after, Dom Nicolas Noël was permitted to set up an atelier in a separate wing of the abbey of Saint-Germain-de-Prés for observations and experiments on optics and physics. Isolated from the other monks – and surrounded by artisans, microscopes and telescopes – he worked on designing instruments for several years. He later became the official demonstrator of the Royal Cabinet of Physics and Optics.²²⁴ During the three decades before the Revolution, Dom Jean-François Bedos de Celles wrote about the manufacture of organs, while Dom Jacques-Antoine de Mauray studied musical and navigational instruments, the construction of chimneys, and ways of perfecting the mechanical arts. About the same time, Dom Antoine-Alexis Bernard de Saint-Julien compiled works on vegetal acids, the mechanics of the thermal waters, and new electrical machines.²²⁵ The most industrious of them all, Dom Philippe Gourdin, wrote academic memoirs on the faculty of the memory, the twinkling of the stars, nerve fluids, magnetism, the construction of lightening conductors, and even outlined the idea of a maneuverable air machine.²²⁶ These writers were all devoting their time to areas that Mabillon had found unsuitable for monks, and the Superiors allowed them to do so. The times certainly had changed.

²²¹ Laurain, pp. 231–271; Gasnault, p. 33; Barret-Kriegel, pp. 19–167; Knowles, pp. 33–62.

²²² Hurel, in *Académies*, p. 484.

²²³ Marie Jacob, *La quadrature du cercle: un problème à la mesure des Lumières* (Paris: Fayard, 2006), pp. 207–208, 535, 543.

²²⁴ *Réponse aux objections pour le Sieur [Nicolas]Noël contre les Supérieurs généraux de la Congrégation de Saint-Maur, et encore contre les prieur et communauté [sic] de l'abbaye de Saint-Germain-des-Prés* (Paris: Simon, 1775), pp. 18–19; Françoise Launay, 'Les instruments d'optique du Père Noël', *L'Astronomie*, 22 (December 2009), pp. 22–27.

²²⁵ Hurel, in *Académies*, p. 484.

²²⁶ Charles de Robillard de Beaurepaire, *Extraits d'un manuscrit de Dom Gourdin* (Paris: Boissel, 1867), p. 7.

Unlike the Jesuits, the Maurists never had their own printing houses and therefore always collaborated with commercial booksellers. Henri-Jean Martin has argued that this made it necessary for the Maurist scholars to adapt to the changing demands of the public in a more distinct way. He takes the example of Dom Antoine Rivet (1683–1749) who in the first half of the eighteenth century sent an extract of a Benedictine dictionary to the printer Jean-Baptiste Coignard. Rivet received the advice to adjust a bit more to the tastes of the time, since the audience no longer found religious subjects that appealing. Consequently, Rivet began working on the *Histoire littéraire de la France*, and exhaustive inventory of all the savants and learned works appearing in France/Gaul since late Antiquity.²²⁷ Martin concludes:

one understands thus how the Benedictines, even though continuing their patristic works, were brought to devote themselves to profane erudition during the eighteenth century, more than during the seventeenth. In this domain, they did not hesitate to undertake enormous publications.²²⁸

Already in 1691, Mabillon had distinguished between three types of monastic studies. The first was undertaken simply for self-education. All literature needed to be approved by the Superiors, but except for works on alchemy and astrology, practically everything that could improve the understanding of the sacred texts was allowed. The second type of study was executed on the order of the Superiors, such as the large-scale collective works on patristics and history. Depending on their individual capacity and competence, the monks were assigned different tasks, ranging from collecting material and making excerpts to be the editor in charge. Finally, the third type consisted of individual works, where the writers were allowed to withdraw from the communal life for long-term research. In the eighteenth century, the third category increased considerably, which was reflected in the more diverse publications – including those on the natural sciences and technology. Still, publishing was reserved for a small group. At all times, the professional scholars composed about two percent of all monks of the Congregation. Despite the writers' relative independence, no work could be published without approval from the Superiors, if not done in secrecy. Therefore, all publications carrying the name of the Congregation

²²⁷ Martin, 'Les Bénédictins, leurs libraires et le pouvoir', pp. 278–286.

²²⁸ *Ibid.*, p. 284: 'On comprend donc comment, tout en continuant leurs travaux de patristique, les Bénédictins furent amenés au XVIII^e siècle, plus encore qu'au XVII^e, à s'occuper d'érudition profane. Dans ce domaine, ils n'hésitèrent pas à entreprendre des publications gigantesques'.

had been approved by the top of the hierarchy. The writers also needed permission to initiate and execute large-scale enterprises, but in the end, even approved projects could be denied publication. Daniel-Odon Hurel remarks that some eight hundred works were left unfinished or unpublished. Nevertheless, in accordance with the regulations, all manuscripts were conserved and stored away, either to later be confided to another writer, or in order to prevent diffusion.²²⁹

This is the organizational, institutional and intellectual background against which one must consider the initiation of a universal dictionary of arts, crafts, and sciences in the Congregation's motherhouse. As stated in Chapter 6, the handwriting analysis suggests that the manuscripts were not the product of one or two men. Even though Pernety apparently was the editor in charge, it was a collective work. This implies that the project, at least initially, had been approved by the Superiors.

PERNETY AND BRÉZILLAC

The life of Jean-François de Brézillac is largely shrouded in obscurity. According to the Congregation's registers, he was born in Fanjeaux, a small town in upper Languedoc, but there is no information about his family. In 1727, at the age of eighteen, he took his vows in the Maurist monastery La Daurade in Toulouse.²³⁰ Two decades later, Brézillac's name can be found on a list of monks living in the Parisian headquarters, dated December 1745.²³¹ Unfortunately, there are no lists for the preceding years that allow specifying the exact time of his arrival to the capital. However, another document signed by Brézillac himself shows that he at least was present in the abbey of Saint-Germain-des-Prés in 1740.²³²

In 1770, Dom René Prosper Tassin (1697–1777) published a historical and bibliographical overview of all the Maurist scholars: the *Histoire littéraire de la Congrégation de Saint-Maur*. Dom Tassin was stationed in

²²⁹ Hurel, 'Les Mauristes, consommateurs et producteurs de livres', pp. 188–189; Hurel, in *The Reception*, p. 1015.

²³⁰ *Matricula monachorum professorum congregationis S. Mauri in Gallia: ordinis sancti patris Benedicti: ab initio eiusdem congregationis, usque ad annum 1789*, ed. and trans. by Yves Chaussy (Paris: Perrée, 1959), p. 125.

²³¹ *Les Bénédictins de Saint-Maur*, ed. by Vanel, p. 358.

²³² BnF, MS f. fr. 12762, fol. 269. In this document Brézillac declares that he has returned a couple of books to the King's library. At the end he states the date (1740) and his name, followed by the specification 'religieux de l'abbaye de St. Germain des Prés'.

Blancs-Manteaux – the second Maurist monastery in Paris. Some of his bibliographical accounts amount to whole chapters, while others barely cover a page. Unfortunately, the notes on Brézillac and Pernety belong to the latter category. Tassin principally describes Brézillac as the research assistant of his twenty-five years older uncle, Dom Jacques Martin (1684–1751). Dom Martin – also a Maurist scholar – had obtained a place in the abbey of Saint-Germain-des-Prés in 1724. In the latter half of the 1740s he began working on the history of the Gauls, but died in 1751 before having finished the first volume. According to Tassin, the Superiors then charged Brézillac to continue his uncle’s work.²³³ The first volume of the *Histoire des Gaules* appeared in 1752 and the second in 1754. In the preface, Brézillac portrayed himself as an editor simply following the plan made by his uncle, who he repeatedly referred to as the author.²³⁴ A third volume was never published but Brézillac seems to have continued working on the project for several years. In 1767, one of his brothers in Saint-Germain-des-Prés noted that he still was occupied with the history of the Gauls: ‘He published the work of his uncle D. J. Martin in 1754. We have not seen anything since’.²³⁵

Antoine-Joseph Pernety was born in Roanne, outside Lyon, and came from a large family of merchants, traders and master artisans. In the eighteenth century, the sons of the Pernety family became either priests or financiers, of which many would assume important positions within the Church or the State. Pernety’s brother Antoine later became the financial advisor of the King of Prussia. Similarly, Pernety’s older cousin, Abbé Jacques Pernety (1696–1777), made a name of himself as the Canon of the Cathedral of Lyon, a distinguished member of the town’s academy, and an author of diverse works on history, mythology and physiognomy.²³⁶ Bricaud has suggested that this cousin was in charge of Pernety’s early education; that he introduced him to mathematics, the natural sciences and fine arts, and

²³³ Tassin, pp. 683–690.

²³⁴ Jacques Martin and Jean-François de Brézillac, *Histoire des Gaules et des conquêtes des Gaulois, depuis leur origine jusqu’à la fondation de la monarchie française*, 2 vols (Paris: Le Breton, 1752, 1754), II (1754), p. iv.

²³⁵ Paris, Archives nationales (AN), G9 31, fol. 64: ‘C’est en 1754 qu’il publia l’ouvrage de D. J. Martin, son oncle. On ne voit rien depuis’.

²³⁶ Germaine Peyron-Montagnon, ‘La famille Pernety’, *Bulletin de la société d’archéologie et de statistique de la Drôme*, 365 (September 1967), 86–92; 366 (December 1967), 97–103; Octave De Viry, ‘Le Bénédictin A.-J. Pernetty est-il lyonnais ou forézien?’, *L’Ancien Forez* (December 1882), 307–310, 345–349 (p. 308).

then guided him towards the Congregation of Saint-Maur.²³⁷ These claims are not supported with first-hand sources, but considering that the cousin lived nearby and that he was the only scholar in the family, it is a probable scenario. According to Daniel Roche, the children of affluent merchants early received education in reading, writing and mathematics in order to assist in the family business. Knowledge in foreign languages was also desirable, as well as practical skills such as drawing.²³⁸

According to the registers of the Congregation, Pernety became a Maurist in 1732. Only sixteen years old, he took his vows in the monastery of Saint-Allyre in Clermont (today Clermont-Ferrand), not far from his home town.²³⁹ Generally, the monastic postulant pronounced his vows after a year as a novice. The young monks then spent two years in another monastery studying languages, the foundations of the Christian principles, the monastic obligations, and the humanities. This was followed by a year of concentrated studies in philosophy and then another year of studies in theology – again in different monasteries.²⁴⁰ As a consequence, those who entered the Congregation of Saint-Maur not only received an elaborate education but also got to travel across the country, which was a rare opportunity in rural France.²⁴¹ After this basic program, the monks continued their studies in diverse manners. The regulations explicitly stated that it was the responsibility of the Superiors ‘to fully sound the inclinations and talents of their monks, so as then to apply them according to their liking and nature’.²⁴² In 1740 and 1743 the name of Pernety appears in monasteries in the West of France, where he at two different seminars was appointed *zélateur*.²⁴³ In the eighteenth-century monastic context, this was an honorary distinction for passionate interest, strong belief or apologetic achievement, which commonly entailed guiding the younger monks in their studies.²⁴⁴

²³⁷ Bricaud, pp. 5–6.

²³⁸ Roche, *France in the Enlightenment*, pp. 144–145, 161–1651.

²³⁹ *Matricula monachorum*, ed. by Chaussy, pp. 125, 131.

²⁴⁰ Daniel-Odon Hurel, ‘Jansénisme et génération dans la Congrégation de Saint-Maur dans les années 1710–1740’, *Chroniques de Port-Royal*, 52 (2003), 137–157 (pp. 142–143).

²⁴¹ Roche, *France in the Enlightenment*, pp. 55–56, 59–74.

²⁴² Hurel, in *The Reception*, p. 1015.

²⁴³ AN, LL 922, fols. 284^v, 301. According to Meillassoux-Le Cerf, *Dom Pernety et les Illuminés d’Avignon*, p. 21, Pernety was nominated *zélateur* in 1740, 1743 and 1746. She refers to Gazeau, who does not state a source. I have gone through the protocols of the annual meetings held in Saint-Germain-des-Prés in 1740, 1743, 1744, (1745 is missing), 1746 and 1747. Pernety is only registered as *zélateur* in 1740 and 1743. These two dates are also stated in Chaussy, *Les Bénédictins de Saint-Maur*, II, 139.

²⁴⁴ Hurel, ‘Jansénisme et génération’, p. 142.

The biographical notes by Dom Tassin specify that Pernety was handpicked by the Superiors to join the Parisian headquarters, which implies that he was considered a promising scholar. Unfortunately, Tassin does not state the year of his transfer.²⁴⁵ Modern biographical accounts on Pernety contain many suggestions of when he should have arrived to Paris. Meillassoux-Le Cerf claims that was transferred in 1746 with reference to Dom Gazeau, who in his turn suggests that Pernety arrived around 1754, but states no source.²⁴⁶ The historian of esotericism Serge Caillet also mentions the year 1754, but again, without reference to a source.²⁴⁷

In contrast to Brézillac, Pernety is absent on the list of monks living in Saint-Germain-des-Prés in December 1745.²⁴⁸ However, it is uncertain if this document can be trusted as accurate. Many congregational sources contain omissions of names and should be interpreted with caution. The records from the annual meetings in the Parisian headquarters occasionally contain information about the monks transferred to the Capital, but Pernety is never mentioned. The record from the meeting on 16 May 1743 declares that Pernety earlier the same year had been nominated *zélateur* in the abbey of Saint-Savin, but the document does not reveal his current location.²⁴⁹ Fortunately, there are other clues.

According to the biographical accounts of *La France littéraire* (1769),²⁵⁰ Pernety had assisted in the compilation of the eight volume of the *Gallia Christiana*.²⁵¹ This work – treating the history of all the dioceses and abbeys in France – was one of the largest historical enterprises of the Congregation in the eighteenth century. It appeared in thirteen volumes between 1715 and 1785. The seventh and eight volumes concerned the areas around Paris and were compiled in the abbey of Saint-Germain-des-Prés. Both were published

²⁴⁵ Tassin, p. 690: ‘Les supérieurs l’ayant fait venir à S. Germain’.

²⁴⁶ Meillassoux-Le Cerf, *Dom Pernety et les Illuminés d’Avignon*, p. 24; Gazeau, first page.

²⁴⁷ Serge Caillet, ‘Des Illuminés d’Avignon à la fraternité polaire: deux oracles numériques aux XVIII^e et XX^e siècles’, *Politica Hermetica: la tentation du secret: groupes et sociétés initiatiques entre ésotérisme et politique du XVIII^e au XX^e siècle*, 21 (2007), 26–47 (p. 27).

²⁴⁸ *Les Bénédictins de Saint-Maur*, ed. by Vanel, p. 358.

²⁴⁹ AN, LL 922, fol. 301.

²⁵⁰ *La France littéraire* was a continuation and considerable augmentation of the *Almanach des Beaux-Arts* (1752, 1753). The subtitles of the volumes of 1754–1758 announced that *La France littéraire* contained ‘the names and the works of all the men of letters, scholars and famous artists currently living in France’. The description was modified in 1759 and then again in 1769 to enumerate also academies and the works of deceased authors. See the *Dictionnaire des journaux 1600–1789*, ed. by Jean Sgard (Paris: Universitas, 1991), available online: <http://c18.net/dp/dp.php?no=78> [accessed 2014–03–11].

²⁵¹ *La France littéraire* (1769), p. 360.

in 1744.²⁵² Since the compilation phase took place during the immediately preceding years, it is probable that Pernety was transferred to Paris sometime in 1743 – after the completion of the seminar in Saint-Savin, and after the annual meeting held at Saint-Germain-des-Prés in May. He was then twenty-seven years old.

As described in Chapter 2, previous researchers have predominantly focused on the last twenty years of Pernety's life, while the Benedictine period (1732–1767) has been regarded as a prelude of lesser interest. Meillassoux-Le Cerf claimed that Pernety was an 'ordinary monk, not standing out from the rest', and that it was his years as *illuminé* that constituted the central point and originality of this life.²⁵³ Pernety the Benedictine has recurrently been considered in the light of his old self as *illuminé* – as if this was who he was all along. The monastic historians have barely mentioned his name, thus presuming him irrelevant for the Maurists' intellectual history. These interpretations require reconsideration. Pernety had many more achievements on his plate than just hermetic philosophy. Furthermore, he would be at the centre of some of the most important events of Congregation in the second half of the eighteenth century. In order to get a better idea of the main editor of the dictionary project, we need to take a closer look at Pernety the Benedictine scholar.

Pernety Revisited: Projects and Interests

During the two decades following the arrival to Paris, Pernety would pursue scholarly projects on a wide range of topics. In 1754 he published a revised edition of the *Manuel bénédictin* by Dom Claude Martin (1619–1696) – a spiritual guide addressed to the monks of the Congregation, first published at the end of the seventeenth century.²⁵⁴ His first own work appeared in 1757: a dictionary of painting, sculpture and engraving. In the preface Pernety declared that it was his desire to be useful to the Public combined with a natural inclination for the arts that had brought him to instruct himself in the principles of painting, sculpture and engraving, and then to communicate what he had learned.²⁵⁵ The monk underlined that painting was not only a

²⁵² Martène, IX, 334; Victor Fouque, *Du 'Gallia Christiana' et de ses auteurs: étude bibliographique* (Paris: Tross, 1857), p. 67

²⁵³ Meillassoux Le-Cerf, *Dom Pernety et les Illuminés d'Avignon*, p. 13.

²⁵⁴ *Manuel bénédictin, contenant l'Imitation de Jésus-Christ; la Règle de Saint Benoist; les Exercices tirés de cette règle; et la Conduite pour la retraite du mois* (Paris: Vincent, 1755). Edition attributed to Pernety by Tassin, p. 691.

²⁵⁵ Antoine-Joseph Pernety, *Dictionnaire portatif de peinture, de sculpture et de gravure* (Paris: Bauche, 1757), p. v.

matter of decoration and aesthetics, but a tool indispensable for any deeper knowledge about the practical arts and natural sciences:

What great assistance does not painting offer to the other arts and sciences? She provides the plans for the architects, the doctors, the surgeons, and those who wish to educate themselves in anatomy without suffering from the disgust and loathe inevitably enclosed with the sight of real corpses. [...] From painting geometry derives its plates, geography its maps, the manufacturers their plans. A painting is not only a pleasant piece of furniture; it is useful, it is instructive. It reveals and excites great ideas; noble and elevated impressions and edifying reflections.²⁵⁶

In the preface, Pernety remarked that he had consulted with several connoisseurs and artists during the compilation of the work. The dictionary even contained a transcription of his correspondence with Louis de Silvestre (1675–1760), the director of the Parisian Academy of Painting.²⁵⁷

The year after, Pernety published the two works on hermetic philosophy for which he today is principally known: *Les fables égyptiennes et grecques* and the *Dictionnaire mytho-hermétique*. In the first he argued that the Greek and Egyptian myths could be seen as metaphors for hermetic philosophy and alchemical principles. The accompanying dictionary aspired to clarify these principles by stripping them from their mystical language.²⁵⁸ Both books bore the name of the Congregation, which means that they had been approved by the Superiors. As stated, hermetic philosophy and alchemy had long been regarded with suspicion by the Benedictines. The fact that Pernety was allowed to undertake studies in these areas suggests that the Superiors had confidence in his intentions. In fact, also other Maurist scholars had treated the history of ancient religions, mythology and astrology, including Jacques Martin – the uncle of Brézillac.²⁵⁹ The publications were to attract some critical reactions, to which Pernety responded in the periodical *Année*

²⁵⁶ Pernety, *Dictionnaire portatif*, p. xxi: ‘Quel secours la peinture ne prête-t-elle pas aux autres arts & aux sciences? C’est elle qui fournit les plans aux architectes; les médecins, les chirurgiens & ceux qui veulent s’instruire de l’anatomie sans la répugnance & le dégoût qui accompagnent inséparablement la vue des cadavres réels [...]. La géométrie y puise ses plans, la géographie ses cartes, les manufactures leurs desseins. Le tableau n’est donc pas seulement un meuble agréable, il est utile, il est instructif; il réveille, il excite de grandes idées, des sentimens nobles, élevés, des réflexions édifiantes’.

²⁵⁷ *Ibid.*, pp. iii–iv, liii.

²⁵⁸ Antoine-Joseph Pernety, *Les fables égyptiennes et grecques, dévoilées & réduites au même principe, avec une explication des hiéroglyphes et de la guerre de Troye*, 2 vols (Paris: Bauche, 1758); Pernety, *Dictionnaire mytho-hermétique, dans lequel on trouve les allégories fabuleuses des poètes, les métaphores, les énigmes et les termes barbares des philosophes hermétiques expliqués* (Paris: Bauche, 1758).

²⁵⁹ Tassin, pp. 684–687.

littéraire. One question regarded Nicolas Flamel and whether or not he had been a real alchemist, as claimed by Pernety.²⁶⁰

Parallel to the preparation of the above books, the *La France littéraire* (1756–1759) declared that Pernety was collaborating with Dom René Tassin in the compilation of the *Nouveau traité de diplomatique* (New treatise on diplomatics).²⁶¹ This work was published in six volumes between 1750 and 1765 and was a continuation of Dom Mabillon's *De re diplomatica* (1681). The latter was one of the most famous methodological works deriving from the Congregation. Concerned with the critical interpretation of the authenticity and dating of ancient texts, it constituted the foundation for the Maurists' historical research in the eighteenth century. This means that Pernety, while pursuing his own somewhat unorthodox interests, also assisted in one of the most prestigious enterprises of the Congregation, cultivating the heritage of the great Mabillon. However, Tassin never said a word about this collaboration in his brief bibliography on Pernety. Consequently, this information has been absent in most studies on the Benedictine. Furthermore, Bricaud, Vissac and other modern biographers have mostly relied on the *Biographie universelle* (1823), which only considered the information provided in *La France littéraire* in 1769.²⁶²

There are documents attributing also other works to Pernety. Dom Martin Gerbert, a German Benedictine who visited the abbey of Saint-Germain-des-Prés in 1759, later mentioned Pernety in his travel account. He remarked that the monk in 1759 had been occupied with the history of the noble family of Noailles.²⁶³ In 1763, the *Ambassades de messieurs de Noailles en Angleterre* appeared in 5 volumes. The work predominantly consisted of historical documents, accompanied by an introduction written by the deceased historian Abbé de Vertot (1655–1735). The final editor(s) was anonymous, but the work was attributed to Pernety in *La France littéraire* in 1769.²⁶⁴

²⁶⁰ 'Pernety' in *Index de l'Année littéraire 1754–1790*, ed. by Dante Lénardon (Geneva: Slatkine, 1979); Meillassoux-Le Cerf, *Dom Pernety et les Illuminés d'Avignon*, pp. 27–30.

²⁶¹ *La France littéraire* (1756), p. 171 (Pernety): 'Il travaille à un ouvrage sur la philosophie hermétique et à la diplomatique, avec D. Tassin'. The information is repeated in the volumes of 1757 (p. 258), 1758 (p. 110) and 1759 (p. 110). The article on Tassin makes the same statement (1756, p. 212): 'Nouveau traité de la diplomatique, 1750 et suiv. 5 vol. in-4. Dom Pernety et Dom Bossonet travaillent à cet ouvrage, le second volume a paru en 1755'.

²⁶² 'Pernety', in *Biographie universelle*, ed. by Michaud, XXXIII, 388–391.

²⁶³ Martin Gerbert, *Iter alemannicum, accedit italicum et gallicum*, 2nd edn (Paris: Jeune, 1773), p. 522: 'D. Bernetti [sic] [...] Nunc Genealogiae Noalliorum insudat'.

²⁶⁴ *La France littéraire* (1769), p. 360: 'Il a mis en ordre les ambassades de la Maison de Noailles, commencées par l'Abbé Vertot'.

Two congregational documents dated in the 1760s also attested that Pernety had been translating the works of the ancient agrarian Columella.²⁶⁵ No such translation was ever published, but here I should mention that Columella is one of the most frequently cited authors on agriculture in the dictionary draft written by AGR-1 and AGR-2.²⁶⁶ It is thus possible that the translation project was a later result of the use of Columella's writings in the work with the dictionary.

Extracurricular Activities: Salons and Travels

In 1763, the Superiors granted Pernety permission to leave the monastery for over a year, while he accompanied the explorer Louis-Antoine de Bougainville (1729–1811) to the Falkland Island (*îles Malouines*) – a French colony outside the southern tip of South America. The origins of this arrangement are obscure, but intriguing. The historian Jean-Étienne Martin-Allanic claims in his dissertation that the explorer wanted a naturalist to accompany him on the trip. Since he did not know anyone, he asked the Duke de Choiseul for assistance. Choiseul (1719–1785) was the former Foreign Minister of France and an influential military officer and statesman. His wife was a close friend to Madame du Deffand (1697–1780), the hostess of one of the most fashionable salons in Paris, frequently visited by the intellectual, artistic and political elite. According to Martin-Allanic, Madame du Deffand was the one that recommended Pernety. He was presented as her 'friend'. Unfortunately, due to inconsistencies in Martin-Allanic's footnotes, this statement cannot be verified on first-hand sources.²⁶⁷

²⁶⁵ BnF, MS f. fr. 18825, fols. 290, 292: 'Traduction de Columelle, &c.'; *La France littéraire* (1769), p. 360: 'Il travaille à une traduction avec des notes du traité de Columelle sur la culture & le ménage des champs'.

²⁶⁶ BnF, MS f. fr. 16979, fols. 1, 9–19, 23, 25, 28, 31–32, 34, 37–40, 44, 46–47, 49–55. See in particular, fol. 37, METAYER: 'voici comment Columelle veut qu'on choisisse'.

²⁶⁷ Jean-Étienne Martin-Allanic, *Bougainville, navigateur et les découvertes de son temps*, 2 vols (Paris: Presses universitaires, 1964), I, 97. Next to the name of Mme du Deffand (footnote 87), Martin-Allanic refers to 'Correspondance II, p. 394'. In his bibliography (II, 1570) he specifies: 'DU DEFFAND (Mme), *Correspondance inédite*, éd. Lévy. P[aris], 1867, 3 vol., 8°.' As far as I can tell, there is no edition corresponding to this exact description. It seems to be a confusion of two collections: *Correspondance inédite de Mme du Deffand*, 2 vols (Paris: Lévy, 1859) and *Correspondance complète de la Mme du Deffand*, 3 vols (Paris: Lévy, 1866). None of these contain any references to Pernety on a page 394. The second volume of each collection consists of letters dated in the 1770s. The same goes for the collections by other publishers: *Correspondance inédite de Mme du Deffand*, 2 vols (Paris: Collin, 1809) and *Correspondance complète de la Marquise du Deffand*, 2 vols (Paris: Plon, 1865). Thus, to what collection Martin-Allanic actually referred when claiming that Pernety in 1763 was a friend of Mme du Deffand's is unclear.

One of the earliest accounts that an ‘Abbé Pernety’ should have frequented the salon of Mme du Deffand can be found in Hugo P. Thieme’s *Women of Modern France* (1907).²⁶⁸ Later scholars have interpreted this mentioning as a reference to Dom Pernety.²⁶⁹ However, it is probable that Thieme actually referred to the older cousin, Abbé Jacques Pernety, with whom the Benedictine often has been confused. From the 1750s onwards, Abbé Jacques Pernety had confirmed relations with several persons acquainted with Mme du Deffand, such as Voltaire and Jean-Jacques Rousseau (1712–1778). In the correspondence of Voltaire, the Abbé is addressed as a dear friend whom the *philosophe* seems to have known through the Academy of Lyon.²⁷⁰ Similarly, in the correspondence of Rousseau there is a letter dated in 1761 where the Abbé (on the behalf of another friend) thanks Rousseau for a copy of the *Nouvelle Héloïse*.²⁷¹

In a letter written in May 1772, Mme du Deffand specifies that Abbé Pernety ‘is a new acquaintance of mine’.²⁷² If she at this point was referring to Pernety the Benedictine, then it is not likely that she had recommended him to Choiseul in 1763. On the other hand, if she was referring to the older cousin, then it is quite possible she already knew the younger one – that the two frequented the same social circles.

Dom Pernety’s dealings with the famous *salonnière* thus remain a question mark. However, would this relation prove to be historically correct, then this Benedictine scholar was not only moving outside the monastery but also in the same environment as several leading politicians, militaries, *philosophes* and *encyclopédistes* – including d’Alembert, Turgot, Voltaire and Montesquieu. The dictionary manuscripts actually contain expressions

²⁶⁸ Hugo P. Thieme, *Women of Modern France: Women in all Ages and in All Countries* (Philadelphia: Rittenhouse Press, 1907), p. 236. Thieme states no source.

²⁶⁹ John Dunmore, *Storms and Dreams: Louis de Bougainville: Soldier, Explorer, Statesman* (Gloucestershire: Nonsuch, 2005), p. 98.

²⁷⁰ *Oeuvres complètes de Voltaire: correspondance générale, tome XXI*, vol. CX (Bruxelles: Ode & Wodon, 1829), pp. 41–42 (22 August 1760); *Oeuvres complètes de Voltaire: correspondance générale, tome VI*, vol. LI (Paris: Renouard, 1821), p. 229 (21 September 1761); *Oeuvres complètes de Voltaire: correspondance générale, tome V*, vol. LIV (Paris: Lequien, 1823), pp. 138–139 (April 1756).

²⁷¹ *Table de la correspondance générale de J.-J. Rousseau*, ed. by Bernard Gagnebin (Geneva: Droz, 1953), p. 194.

²⁷² *The Yale Edition of Horrace Walpole’s Correspondance*, online edition: ‘L’Abbé Pernety (qui est une nouvelle connaissance que j’ai faite)’. The editors have added in a footnote that she likely speaks of Abbé Jacques Pernety (thus, the cousin). However, they claim that he long had been a Jesuit, which is erroneous.

<http://images.library.yale.edu/hwcorrespondence/page.asp?vol=5&seq=258&br=ff> [accessed 2014–01–14].

suggesting that the monk's circle of acquaintances extended beyond the monastic community already by the late 1740s or early 1750s. In one article Pernety describes a plant allegedly used during battle by the inhabitants of the Philippine Islands. The plant is said to contain a sap which makes the blood coagulate extraordinarily fast, which makes it possible for the warriors to keep going even if seriously wounded. Pernety refers to the travel account of Gemelli Careri (1719), but he underlines that the explorer only had heard about the plant from the local missionaries. The Benedictine then adds a personal remark:

I believe that this could be possible, because I know a German who claims having the secret of immediately stopping the blood from wounds, even if the artery has been cut, and he assures that if one drinks and rubs a fluid on the wound, the blood that would be extravasating in the body will turn to balm instead of being corrupted. I told this to another person who asserted that the secretary of the famous Baron de Newoff [Neuhoff (1694–1756)], the so-called King of Corsica, knew the same secret. Perhaps this plant [now referring to the sort mentioned by Gemelli Careri] is similar to the one in Europe, and its virtues ignored. Rich people, such as the ones I am talking about, should not be keeping secrets like this to themselves.²⁷³

Judging by this small but personal addition, it seems like Pernety attended social settings including both militaries and 'rich people', which certainly would fit the description of the salon of Mme du Deffand.

According to Martin-Allanic, Bougainville found Pernety perfect for the job since he could fill the double function of chaplain and naturalist. The monk was described as a painter who was 'strongly interested in natural history and botany, but devoted to all the sciences'.²⁷⁴ During the expedition, Pernety kept a journal where he carefully described the life on board, the encounters with the natives and the natural life of the islands and South America.²⁷⁵ Based on these notes, he later published two books where he included his own illustrations of landscapes, animals and plants, recipes for local remedies, and a small dictionary of specialized terms. In the

²⁷³ BnF, MS f. fr. 16980, fol. 218, PLANTE: 'Je croirois assez la chose possible, parce que je sçai un allemand qui prétend avoir le secret d'arrêter sur le champ le sang d'une playe, quand même l'artère seroit coupée, et il assure qu'au moyen de la liqueur bue et mise sur la playe, le sang qui pourroit s'extravaser dans le corps se tournera en beaume et non en corruption. Une personne à qui je disois cela me dit que le secrétaire du fameux Baron de Newof, prétendu Roi de Corse, avoit le même secret. Peut-être cette plante est-elle comme dans l'Europe et ses vertus ignorées. Des gens riches, comme ceux dont je parle, ne devroient pas ensevelir avec eux un secret comme celui-là'.

²⁷⁴ Martin-Allanic, I, 98: 'fort versé en histoire naturelle et en botanique, mais il s'adonne à toutes les sciences'.

²⁷⁵ BnF, MS f. fr. 19033.

introduction to the first work (1769), Pernety stated that it was Bougainville who first had asked if he would like to join the expedition, and that he then received permission from the King, via a letter from the Duke de Choiseul.²⁷⁶ In the second work (1770) he only mentioned that the request came from the King, again via a letter of the Duke.²⁷⁷ Irrespectively of the exact course of events – who first asked who, and whether or not Mme du Deffand was involved – these accounts confirm that Pernety was well-known outside the walls of Saint-Germain-des-Prés.

Pernety and the Request of Mitigation

A year after his return to France, Pernety would be involved in a crisis shaking the Congregation to its core. During the course of the eighteenth century, complaints about the hierarchical organization and the many rules restricting the work of the writers had multiplied, concurrently with a declining number of monastic postulants. On 15 June 1765, twenty-eight scholars in the abbey of Saint-Germain-des-Prés – including Brézillac and Pernety – signed a request addressed to the King for mitigating the monastic rule. Among other things, the signers demanded for greater democratization in the election of the Priors. They also asked to be allowed to omit the morning and midnight prayers in order to better focus on their research, and thereby be of more use to society. Furthermore, they wanted to modernize the monastic robe, which they described as strange and ridicule in the eyes of the public. The whole thing might have passed rather smoothly if not someone had decided to publish the document. This resulted in an outcry from the monks in the second Maurist monastery in Paris, Blancs-Manteaux, and the Superiors rapidly condemned the Request.²⁷⁸

²⁷⁶ Antoine-Joseph Pernety, *Journal historique d'un voyage fait aux Îles Malouines en 1763 & 1764*, 2 vols (Berlin: Bourdeaux, 1769), I, 4: 'mais voulant rendre utile l'exécution de son projet, & ayant pensé que je pouvois y contribuer, il me proposa, sur le point de son départ de Paris, d'entreprendre ce voyage avec lui. Peu de jours après je reçus les ordres du Roy, par une lettre de Mr. Le Duc de Choiseul, Ministre de la Marine, pour m'embarquer avec Mr. de Bougainville'.

²⁷⁷ Antoine-Joseph Pernety, *Histoire d'un voyage aux Isles Malouines*, 2 vols (Paris: Saillant & Nyon, 1770), I, 76: 'quand il [Bougainville] fut sur le point de partir, je reçus les ordres du Roi, par une lettre de M. le Duc de Choiseul, Ministre de la Marine, pour m'embarquer avec lui; un tel choix ne pouvoit que me flatter, & je saisis avec empressement cette occasion de me rendre utile à ma patrie. Je partis de Paris le 17 Août 1763'.

²⁷⁸ BnF, MS f. fr. 18825, fols. 33–35; Pierre Anger, 'Les mitigations demandées par les moines de Saint-Germain-des-Prés en 1765', *Revue Mabillon*, 4 (1908/1909), 196–230 (pp. 196–199); Chaussy, *Les Bénédictins de Saint-Maur*, I, 206–207; Barret-Kriegel, pp. 127–132.

The Benedictine controversy was soon commented upon by everyone, and the monks' proposals were interpreted as a desire to be liberated from their monastic vows. On 1 July, the anonymous chronicles *Mémoires secrets pour servir à l'histoire de la République des Lettres en France* (Secret Memoirs for the History of the Republic of Letters in France), summarized the Request in the following way:

[The Benedictines] complain about being constrained by meticulous practices and childish formulas; an inconvenient rule which is of no utility for the State. They demand to no longer have close-cropped hair, to be allowed to eat meat, to wear a shorter robe, to omit the morning and midnight prayers, &c. – in other words, to be like seculars. [...] This request has caused great uproar.²⁷⁹

Two weeks later, the same memoirs pointed out Dom Pernety and Dom Lemaire as the two key figures in the compilation of the Request – and as a consequence – now each 'in exile'.²⁸⁰ This information on the alleged central role of Pernety has been absent in previous research on the Request. Chaussy, for instance, only mentions the involvement of Dom Lemaire.²⁸¹ Indeed, everything suggests that Pernety temporarily left Paris during the controversy following the Request. A letter dated 16 August, written by Dom Nicolas Jamin (1711–1782) – the Prior of Saint-Germain-des-Prés – places him in the abbey of Sainte-Croix de Savigneux, close to his home town Roanne.²⁸² A letter by Bougainville, dated 26 August, also remarks upon Pernety's absence in Paris. The explorer writes:

I am finally back, my dear travel companion. As I arrived and understood I could not see you, I was devastated. You must know that nobody is more compassionate than me about everything that is happening to you.²⁸³

²⁷⁹ *Mémoires secrets pour servir à l'histoire de la République des Lettres en France depuis 1762 jusqu'à nos jours, ou Journal d'un observateur*, vol. II (London: Adamson, 1777), p. 236 (1 Juillet 1765): 'Ils se plaignent sommairement d'être astreints à des pratiques minutieuses, à des formules puériles, à une règle gênante & qui n'est d'aucune utilité à l'État. Ils demandent à n'être plus tondus, à faire gras, à porter l'habit court, à ne plus aller à matines, à minuit, &c., en un mot, à être comme séculiers. [...] Cette requête fait grand bruit'.

²⁸⁰ *Ibid.*, 240–241 (13 Juillet 1765): 'Dom Perneti, dom Le Maire, qui avaient la plus grande part à cet ouvrage, très-bien fait, sont exilés'.

²⁸¹ Chaussy, *Les Bénédictins de Saint-Maur*, I, 207.

²⁸² BnF, MS f. fr. 15787, fols. 140–142. In the letter, Jamin informs Pernety that Bougainville has returned to France and wishes to see him. He also forwards all the news about Bougainville's latest trip.

²⁸³ Transcribed in Pernety, *Histoire d'un voyage*, II, 102: 'J'apprends en y arrivant que je ne sçaurois vous voir, & j'en suis désespéré. Soyez bien convaincu que personne n'est plus sensible que moi à tout ce qui vous arrive'.

It is uncertain what Bougainville referred to by ‘everything that is happening to you’, but the Benedictine Request was on the lips of everyone. The *Correspondance littéraire* of Friedrich Melchior Grimm (1723–1807) described the Benedictine Request as the most extraordinary event since the expulsion of the Jesuits from France in 1762. Along with his contemporaries, he interpreted the Request as a desire for the monks to leave the monastic state, and thus as an expression of reason and enlightenment gaining ground in France.²⁸⁴

The Request was also parodied in satirical pamphlets, where musketeers were asking for royal permission to change their clothes, and Capuchin friars offered their beards to make wigs for the Benedictine scholars.²⁸⁵ Even the monks in the abbey of Blancs-Manteaux taunted their brothers in Saint-Germain-des-Prés with poems, urging the modern reformers – who think they know everything – to return to their monastic duties.²⁸⁶ A contemporary *Livre de caricature* depicted a Maurist scholar sitting on chair, next to a globe pending from a cord (Figure 14). The monk is portrayed with hair instead of a shaved tonsure. He lifts the robe towards his knee and reaches for the cord with a pair of scissors. The text below the image reads: ‘What does it matter! I need some thread. The Benedictine Request for secularization’. The image implies that the scholar-monk, in his desire to be part of the secular society, is willing to sacrifice his monastic duties – including caring for the sins of the world (plausibly with reference to the omission of the morning and midnight prayers). By cutting the cord holding the globe, the monk gets a thread for shortening his monastic robe (‘strange and ridicule in the eyes of the Public’). The monk also seems to be wearing modern shoes and stockings, thus accentuating his wish to be like a secular.

Considering Pernety’s profane interests and travels with Bougainville, one can only imagine that satires like this struck a nerve. If this painting ever had been made with someone particular in mind, it is not unlikely that it would have been Pernety.

²⁸⁴ Friedrich Melchior Grimm, *Correspondance littéraire, philosophique et critique, adressée à un souverain d’Allemagne, depuis 1753 jusqu’en 1769*, vol. IV (Paris: Longchamps & Bruissson, 1813), part 1, p. 541 (August 1765).

²⁸⁵ *Ibid.*, p. 541.

²⁸⁶ Anger, pp. 226–227: ‘Réformateurs modernes, qui croyez tout savoir, rentrez dans le devoir’.

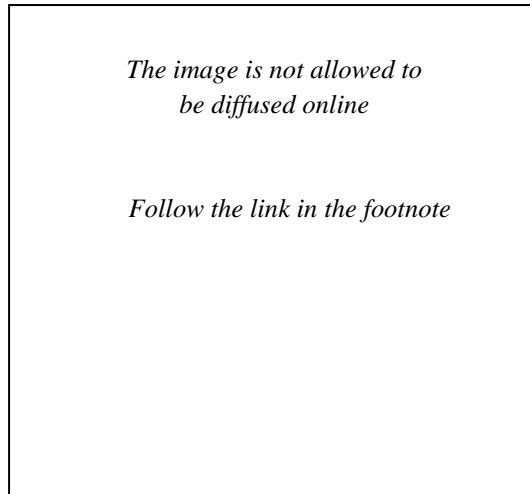


Figure 14: From the *Livre de caricatures* of Saint-Aubin.
(Waddesdon, the Rothschild Collection, the National Trust)²⁸⁷

The Request had several consequences. On the order of the King, a *Commission des réguliers* was installed for investigating the state of all the ecclesiastic institutions. At the same time, the Congregation of Saint-Maur summoned an extra General Chapter in April 1766, followed by a second in the late autumn. The Chapter decided to assign a group of representatives to revise the constitution of the Congregation. Four Maurist scholars were handpicked to execute the task: two from the abbey of Blanc-Manteaux (opposing the Request), and two from the abbey of Saint-Germain-des-Prés (friendly to reform). Of the latter two, one was Dom Jamin, the Grand-Prior. The other was Pernety.²⁸⁸

This assignment suggests that Pernety – despite of his unusual publications, travels, and call for modernization – was respected within the Maurist community. The General Chapter would not have appointed such an important and delicate task to someone considered as either insignificant, controversial or anything but a devout *religieux*, trusted to be competent enough to lead the Congregation in the right direction. Pernety's involvement in this work has so far only been mentioned in passing, even

²⁸⁷ Charles-Germain de Saint-Aubin, *Livre de caricatures tant bonnes que mauvaises* (c. 1740–1775), fol. 299: 'Qu'importe ! J'ay besoin d'un bout de fil. Requête des Bénédictins pour se faire séculariser'.

<http://collection.waddesdon.org.uk/search.do?id=41799&db=object&page=1&view=detail> [accessed 2014–103–13]. I thank Colin Jones for initially supplying me with the image.

²⁸⁸ Chaussy, *Les Bénédictins de Saint-Maur*, I, 208–210.

though the preserved manuscripts contain several outlines written by his hand.²⁸⁹ In one of these texts – concerned with the revision of the Congregation’s educational system – Pernety suggests that the young monks during their second and third year should be studying rational and experimental physics, followed by mathematics.²⁹⁰ Mabillon would have turned in his grave. Pernety certainly was a scholar-monk of his time.

Leaving the Congregation

Sometime in 1767, the Superiors granted Pernety permission to leave the Congregation and head to Berlin.²⁹¹ He was then fifty-one years old. The exact reasons for his departure are unknown. It is possible that the work with the constitution did not progress in the direction he had desired, or that he simply received an offer he could not refuse. His brother Antoine had namely recently become one of the financial advisors of Frederick II. The King – initially mistaking Dom Pernety for his cousin the Abbé – proposed to Antoine to invite his brother to Berlin and to offer him a position as royal librarian and membership of the Prussian Academy of Sciences. Pernety took the bait. However, even though he left Paris and the abbey of Saint-Germain-des-Prés, he did not break with the Order. In April 1768 he was appointed Abbot of the Benedictine abbey of Bürgel in the West of Prussia. According to the papal act of nomination, the abbey had been taken over by ‘heretics’ shortly after the decease of the former abbot, and it was necessary to find a suitable successor who could restore the order. Pernety was presented as a Benedictine monk who

has been especially recommended to us by the Superior General of this Order, and who has the intention of making every effort to restore the goods of the said monastery from the heretics, for which one assures us that he possesses the virtues of religious zeal and pious life, an honest conduct and prudence regarding worldly things.²⁹²

In other words, Pernety’s departure did not seem to have aggravated the Superiors. Quite the contrary, he was cordially recommended for assuming

²⁸⁹ Chaussy, *Les Bénédictins de Saint-Maur*, I, 212.

²⁹⁰ BnF, MS f. fr. 15787, fol. 50^v.

²⁹¹ Chaussy, *Les Bénédictins de Saint-Maur*, I, 212.

²⁹² Meillassoux-Le Cerf, *Dom Pernety et les Illuminés d’Avignon*, p. 289, ‘Acte de nomination de Pernety comme abbé de Burgeln’: ‘A.J. Pernety [...] moine de l’O.S.B et nous est recommandé spécialement par le supérieur général de cet Ordre, et qui a l’intention de récupérer de toutes ses forces les biens du dit monastère sur les hérétiques, chose pour laquelle on nous dit qu’il a les vertus de zèle religieux et pureté de vie, mœurs honnêtes et circonspect dans les choses temporelles’.

the position as abbot of his own monastery. The same year in June, Dom Pierre François Boudier (1704–1787) – the Superior General of the Congregation – sent him a letter from the abbey of Saint-Germain-des-Prés, congratulating him for his promotion.²⁹³

Since Pernety's later doings have been treated extensively in other studies, this is as far as I will follow him in this dissertation. Together the above fragments form a complex picture of a devout *zélateur*, handpicked to join the intellectual center of the Congregation, and a versatile scholar, participating in traditional Maurist enterprises (such as the *Gallia Christiana* and Tassin's treatise on diplomatics) as well as pursuing his predilection for lexicographic works, the natural sciences and fine arts, history and mythology, travels and translations. We see a monk wishing to be useful to the public, corresponding and participating in open debate with other scholars, perhaps even frequenting the salons. We see a reformer open to the tastes of the time, yet enough respected to be elected spokesman for his Congregation and for rewriting its constitution – and who even after leaving became recommended by the Superiors, who described him as a virtuous *religieux*, even prudent regarding worldly things. However curious the latter may seem, it says something about the complexity of the character of Pernety.

It is important to point out that the only Maurist biography on Pernety – which consequently has constituted an important foundation for the interpretations of the posterity – was written by a member of the community opposing the Request of the scholars in Saint-Germain-des-Prés: Dom Tassin. Considering that Pernety seems to have been one of the key figures in the Request, this could explain why Dom Tassin was so laconic when describing the monk's scholarly achievements. He mentioned Pernety's publications, travels, and current location in Berlin, but not a word on his assistance in other projects (including Tassin's own), and nothing on the work with the new constitution. Consequently, through the lens of Tassin, Pernety certainly appeared as rather insignificant.

However, Pernety can hardly be described as either insignificant or as someone only occupied with the marginalized areas of alchemy and hermetic philosophy. He might not have been the 'typical' Maurist scholar in the sense of some statistical mean or median, but on the other hand, neither were

²⁹³ Berlière, II, 141; Gaston Charvin, 'Contribution à l'étude du personnel dans la Congrégation de Saint-Maur 1612–1789: IV. Liste des Supérieurs Généraux', *Revue Mabillon*, 48 (1958), 221–230 (p. 222).

Mabillon or Montfaucon in their times. Pernety is perhaps best understood as someone who tried to adapt the monastic life to a new time; someone who belonged to that new generation of scholar-monks described by Michaux.²⁹⁴ Raised in a family of merchants and master artisans, he was open to worldly culture, worked for a more democratic monastic community, and emphasized his desire to be of use to society. Pernety was a monk fully participating in Enlightenment culture, while he also gradually devoted himself to the esoteric trends gaining ground towards the end of the century.

With this alternative interpretation in mind, we shall go back to 1743 and the events taking place before Pernety's publications on hermetic philosophy, travels and modernizing attempts. We shall return to the twenty-seven-year-old *zélateur*, who shortly after his arrival to Paris formed a team with the seven years older Brézillac. Together these two monks would embark on a project different from everything else in the abbey of Saint-Germain-des-Prés.

SILENCE AND CLUES IN THE CONGREGATIONAL SOURCES

The congregational documentation is strikingly silent regarding the efforts of Pernety and Brézillac to make a dictionary of arts, crafts, and sciences. The annual report of Dom Fortet is actually the only one acknowledging its existence. If one had not seen the six manuscript volumes one could easily assume that the work had been too short-lived to engender any comments. Since many other Maurist enterprises are well-documented, this absence of information could thus spontaneously be taken as a sign of the project's insignificance. After all, it was executed in a community otherwise predominantly occupied with history and patristics. However, there are other explanations.

The annual report of 1747 was the last ever written by Fortet. Tassin remarks that Martène (the predecessor of Fortet) several times had asked the Superiors for permission to publish the work, 'but the perversity of our century and its indifference to the monastic state prevented the approval of the author's wishes'.²⁹⁵ Tassin seems to suggest that the project was interrupted because the Superiors estimated that the public would have been uninterested in the history of a monastic congregation. Considering the study

²⁹⁴ Michaux, 'Une nouvelle conception de la vie monastique', pp. 59, 70.

²⁹⁵ Tassin, pp. 569–570: 'mais des raisons tirées de la perversité de notre siècle & son indifférence pour l'état monastique, ont empêché de condescendre aux désirs de l'auteur'.

of Henri-Jean Martin, this was not the first time that a work on a religious subject (of little interest to the public, and consequently, to the booksellers) was abandoned.²⁹⁶ Due to this decision, there is a general lack of information on the Maurists' intellectual activities in the second half of the eighteenth century.²⁹⁷ For unknown reasons, also other protocols regarding the abbey of Saint-Germain-des-Prés contain omissions from the late 1740s to the 1760s. For instance, the two manuscript volumes 'Annales de l'abbaye de Saint-Germain-des-Prés' only cover the years until 1743. If the following decades were documented, the manuscripts have been lost.²⁹⁸ Other documents mostly concern practical matters. The records from the meetings held in Saint-Germain-des-Prés are largely complete during the years 1740–1766, but they contain little information on literary projects – and no mentioning of the dictionary.²⁹⁹ The remaining manuscripts basically concern the Request of Mitigation, the succeeding General Chapters and the work with the new constitution.³⁰⁰ Consequently, we know far less about the Maurists' scholarly works in the mid-eighteenth century than in the seventeenth. The dictionary enterprise is not the only literary endeavor surrounded by silence.

Correspondence has constituted another important source for the history of some of the most famous works of the Maurists. Tens of thousands of letters written by the Congregation's scholars are today dispersed in various collections at the Manuscripts Department in Paris, as well as in provincial and foreign archives. This material often reveals practical circumstances around the literary activities, such as the writers' relationships to the printers and booksellers, other scholars and journalists.³⁰¹ Unfortunately, BnF has no correspondence registered in the name of Pernety. There are a few letters in the name of Brézillac but none of them regard the dictionary.³⁰² Nor does the large collection of unclassified correspondence of the Maurists contain anything by the two monks in question.³⁰³ A couple of letters written by

²⁹⁶ Martin, 'Les Bénédictins, leurs libraires et le pouvoir', pp. 278–286.

²⁹⁷ Gaston Charvin, 'Avant-propos de l'éditeur', in Martène, *Histoire de la Congrégation de Saint-Maur*, IX, pp. i–iv (pp. iii–iv).

²⁹⁸ BnF, MSS f. fr. 18816–18817.

²⁹⁹ AN, LL 922; AN, L 810–828; AN, G9 32.

³⁰⁰ BnF, MSS f. fr. 18823–18825; fr. 15785–15787; BnF, MSS fonds latin (lat.), 13863–13864; AN, G9 30.1; AN, G9 31.1; AN, G9 30.2.

³⁰¹ Gasnault, pp. 45–46.

³⁰² BnF, MSS f. fr. 17503–17510 (regarding the *Histoire des Gaules*); fr. 16874 (a letter addressed to Brézillac on the last unpaginated folio of the volume).

³⁰³ Marius Sepet, 'Dépouillement de correspondance des Bénédictins'. Handwritten inventory, stored at the conservators' desk at the Salle de lecture, Département des Manuscrits, rue Richelieu, BnF, Paris.

Pernety from 1758 onwards have been printed in different works and journals, but they all concern other topics.³⁰⁴

Compared to the enormous corpus of correspondence deriving from other Maurist works, this absence might seem peculiar. However, there are several essential differences between the dictionary project and the more traditional Maurist enterprises that can explain this absence.

As stated, the research of the Congregation was predominantly devoted to history and patristics, which involved collecting manuscripts, charts and diplomas from the entire kingdom and even abroad.³⁰⁵ This preparatory work commonly demanded collaboration with other houses as well as external libraries and archives. Even if the authors in charge resided in the abbey of Saint-Germain-des-Prés, correspondence was the only way to coordinate the work with the dispersed assistants. In the case of the *Histoire littéraire de la France* (13 vols, 1733–1763), the monk officially in charge, Dom Antoine Rivet, was mostly stationed in the abbey of Saint-Vincent in Mans. Correspondence was therefore his only way of communicating with other collaborators and the Parisian publishers, as well as for obtaining the books he needed from the abbey of Saint-Germain-des-Prés.³⁰⁶

Since Pernety and Brézillac lived in the same monastery, they obviously had no reason to write to each other. Unlike the majority of the Maurists' scholarly projects, their work required modern, printed books, and the abbey of Saint-Germain-des-Prés was in possession of one of the largest libraries in Europe. As a consequence, there was no need for having others sending them books or manuscripts.

Concerning contacts with the book trade, the Maurists increasingly met with their publishers in person in the eighteenth century. The correspondence concerning the *Histoire littéraire de la France* is informative regarding this matter. Dom Rivet namely had an assistant in Saint-Germain-des-Prés who managed the negotiations with the Parisian publishers. The letters from the assistant indicates that he met with them in person. For instance, in 1732 he wrote to Dom Rivet, clearly annoyed over the wavering behavior of the two booksellers Coignard and Vincent:

³⁰⁴ *Index de l'Année littéraire*, ed. by Lénardon; Meillassoux-Le Cerf, *Dom Pernety et les Illuminés d'Avignon*, pp. 289–294; Thierry Réjalot, 'Inventaire des lettres publiées par les Bénédictins de la Congrégation de Saint-Maur', *Revue Mabillon*, 23 (1933), i–xlvi; 26 (1936), 169–184; 27 (1937), 221–228; 28 (1938), 245–276; 29 (1939), 277–284; 33 (1943), 293–344.

³⁰⁵ Laurain, pp. 231–271; Fohlen, 'Dom Luc d'Achery', *Revue Mabillon*, 57 (1967), 17–41.

³⁰⁶ Gasnault, p. 39; Bruno Neveu, 'L'*Histoire littéraire de la France* et l'érudition bénédictine au siècle des Lumières', *Journal des savants*, 2 (1979), 73–114 (p. 73).

If these gentlemen have considered the propositions you presented to them in your last letter, which Sir Vincent received last Tuesday, why did not one of them come to speak with me last Wednesday?³⁰⁷

Ulysse Robert's *Documents inédits* contains a multitude of preserved letters between the assistant and Rivet, between Rivet and the publishers, but none between the assistant and the publishers. This particularity supports the scenario of a personal interaction on a general basis. Since Pernety and Brézillac lived in Paris and their project coincided with the publishing of the *Histoire littéraire de la France*, their relationships with the local booksellers probably followed the same pattern: either the publishers came to them or the Maurists visited their stores. Monks walking the streets of Paris was not an uncommon sight in the eighteenth century. A contemporary proverb even declared that 'you can never cross the Pont Neuf without seeing a monk, a white horse and a whore'.³⁰⁸

The absence of sources mentioning the dictionary can thus be explained by several factors: the general lacuna in the official documents between 1747 and the 1760s; the differing nature and requirements of the project; and the writers' location in Paris. In other words, there is no reason to assume that silence in this case equals insignificance. However, it does mean that information needs to be sought elsewhere. Let us therefore return to the report of Fortet.

Since Fortet, Pernety and Brézillac all lived in the abbey of Saint-Germain-des-Prés, the report is based on a first-hand observation, perhaps even mediating the writers' own title of the project. The report itself is divided in two parts. The first is entirely devoted to the activities of Pernety and Brézillac. The second section, simply called 'other works', enumerates the many historical projects currently in progress in the monasteries of the Congregation. Fortet begins by announcing that Pernety and Brézillac in the year of 1747 have published a translation of the German philosopher Christian Wolff's 'Course in Mathematics'. Fortet emphasizes that the two monks have added such a number of treatises and clarifications that it practically constitutes a new course in mathematics, 'the most complete we have in the genre'. At the end he declares that the same authors are currently occupied with a universal dictionary. The whole paragraph reads:

³⁰⁷ Robert, p. 23: 'Si ces messieurs avaient goûté les propositions que vous leur faisiez dans votre dernière lettre que le sieur Vincent reçut mardi dernier, pourquoi quelqu'un d'eux ne vint-il pas me parler le mercredi suivant?'.

³⁰⁸ McManners, 'Voltaire and the Monks', p. 319.

This year, Dom Antoine-Joseph Pernety and Dom Jean-François de Brézillac have given in three volumes in-8 a French translation of the *Course in mathematics* published in German by Mr. Christian Wolff, professor in mathematics at the University of Halle. This work is not a simple translation as the authors modestly announce. A single volume had sufficed for that. It contains additional treatises with a number of observations and clarifications that makes it a new course in mathematics: the most complete we have in the genre. *The same authors are currently working on a universal dictionary of the mechanical and liberal arts, the crafts and all the sciences with any relation to them* [my emphasis].

OTHER WORKS
[...].³⁰⁹

The fact that the activities of Pernety and Brézillac have been singled out and placed before the section ‘Other works’ – enumerating all the historical enterprises – could be a simple result of its differing nature, but also a sign of appreciation. Indeed, the monks’ achievement in translating and augmenting the work of one of the most prominent mathematicians of the century is described with a sense of pride.

If Pernety and Brézillac ever had the intention of publishing the described universal dictionary of arts, crafts, and sciences – which there is no reason to doubt – collaboration with a bookseller would have been necessary. In order to publish a work in mid-eighteenth-century France, one needed permission from the Chancellor in charge of the book trade, and the license was granted to the bookseller, not the author.³¹⁰ According to Tassin, the translation of Wolff’s course in mathematics was the first official scholarly achievement of Pernety and Brézillac.³¹¹ As their first publication, it necessarily implied establishment of a professional relationship with a publisher – and the Maurists often continued successful collaborations. In fact, as we shall see, it

³⁰⁹ Martène, IX, 342: ‘1747 | TRADUCTION DU COURS DE MATHÉMATIQUES DE M. WOLF | L’année suivante, Dom Antoine-Joseph Pernety et Dom Jean-François de Brézillac ont donné en trois volumes in-8 une traduction française du *Cours de mathématiques*, publié en allemand par M. Chrétien Wolf, professeur de mathématiques dans l’Université de Halle. Cet ouvrage n’est pas une simple traduction comme les auteurs l’annoncent par modestie, un seul volume auroit suffi pour cette traduction. On y trouve des traités entiers qui y sont ajoutés avec quantité d’observations et d’éclaircissements qui font un nouveau cours de mathématiques, le plus complet que nous aions dans ce genre. Les mêmes auteurs travaillent actuellement à un dictionnaire universel des arts mécaniques et libéraux, des métiers et de toutes les sciences qui y ont quelque rapport’.

³¹⁰ Wallace Kirsop, ‘Les mécanismes éditoriaux’, in *Histoire de l’édition française*, ed. by Chartier and Martin, pp. 15–34 (pp. 21–22).

³¹¹ Tassin, pp. 689–690.

is in the documents of the book trade that we will find the first real clues regarding the origins of the dictionary project.

FIRST CONTACTS WITHIN THE BOOK TRADE: CHARLES-ANTOINE JOMBERT

Wolff's *Cours de mathématique* was published in the spring of 1747 by the bookseller Charles-Antoine Jombert (1712–1784).³¹² Jombert was the owner of a bookstore specialized in illustrated works on sciences and arts for engineers and the military. His store was located on the corner of the *Quai des Augustins*, a couple of hundred meters from the abbey of Saint-Germain-des-Prés, next to the River Seine. His book collection primarily focused on the mathematical sciences and the mechanical arts, but also included titles on the humanities. A contemporary writer described his store as ‘the capital of the book trade in sciences and arts’.³¹³

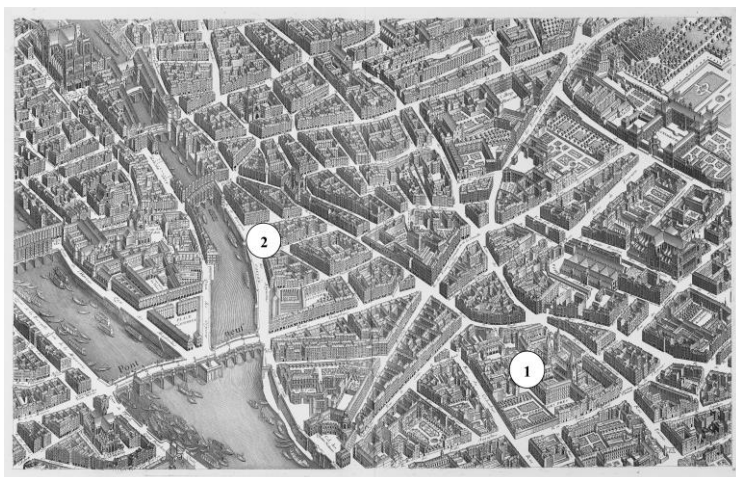


Figure 15: (1) The abbey of Saint-Germain-des-Prés, (2) the bookstore of Jombert.
(Wikimedia commons)³¹⁴

³¹² Christian Wolff, *Cours de mathématique qui contient toutes les parties de cette science, mises à la portée des commençans*, trans. from Latin by Antoine-Joseph Pernety and Jean-François de Brézillac, 3 vols (Paris: Jombert, 1747); *Mercure de France* (February 1747), 100.

³¹³ Catherine Bousquet-Bressolier, ‘Charles-Antoine Jombert (1712–1784): un libraire entre sciences et arts’, *Bulletin du bibliophile*, 2 (1997), 299–333 (p. 310): ‘le chef lieu de la librairie des sciences et des arts’.

³¹⁴ http://en.wikipedia.org/wiki/File:Plan_de_Turgot.jpg [accessed 2013–11–28]. The numbers have been added by the author.

Jombert was an active publisher and editor. During his professional career he worked with several of the leading mathematicians, architects and engineers in Paris, and new works frequently appeared at his store. He associated himself with different local printers until 1754 when he bought his own printing atelier.³¹⁵ In the second half of the eighteenth-century he would be one of the three Parisian booksellers most actively engaged in international trade.³¹⁶

Via his business, Jombert daily met with engineers, artisans, architects and mathematicians, but he also moved in a fashionable circle of *philosophes*, aristocrats, statesmen and artists. Since his childhood he had a close relationship to Charles-Nicolas Cochin (1715–1790), who by the mid-eighteenth century had become one of the most famous book illustrators and engravers in France. To posterity he is particularly known as the designer of the classic frontispiece of the *Encyclopédie*.³¹⁷ Through Cochin, Jombert had a standing invitation to the salons of Madame de Pompadour (1721–1764) and Madame de Geoffrin (1699–1777), each frequently attended by several of the leading *philosophes*. This heterogeneous group of engineers, artists, mathematicians, *philosophes*, and aristocrats also met at the house of Jombert. Among the regular visitors one would later find several of the contributors to the *Encyclopédie*, such as the architect Jacques-François Blondel (1705–1774), the mathematician and writer on the military arts, Guillaume Le Blond (1704–1781), the materialistic philosophers Paul-Henri Thiry d’Holbach (1723–1789) and Claude Adrien H elvetius (1715–1771), not to mention the editors themselves: Diderot and d’Alembert.³¹⁸ As translators of Wolff’s course in mathematics, Pernety and Br ezillac had thus entered in collaboration with one of the most prominent Parisian booksellers specialized in sciences and arts, with a large and important circle of customers and contacts.

Very few manuscripts concerning Jombert’s professional activities have been preserved and there is no document explicitly mentioning the collaboration with Pernety and Br ezillac. Generally, the contract between

³¹⁵ Bousquet-Bressolier, pp. 299, 301, 333; *Catalogue chronologique des libraires et des libraires-imprimeurs de Paris*, ed. by Augustin-Martin Lottin (Paris: Lottin, 1789; repr. Amsterdam: Gr uner, 1969), p. 93.

³¹⁶ Christine Berkvens-Stevelinck, ‘L’ dition et le commerce du livre fran ais en Europe’, in *Histoire de l’ dition fran aise*, ed. by Chartier and Martin, pp. 388–402 (p. 397).

³¹⁷ Christian Michel, *Charles-Nicolas Cochin et le livre illustr  au XVIII e si cle: avec un catalogue raisonn  des livres illustr s par Cochin 1735–1790* (Paris: Droz, 1987), p. 1.

³¹⁸ Bousquet-Bressolier, pp. 309–311; Alain-Marie Bassy, ‘Le texte et l’image’, in *Histoire de l’ dition fran aise*, ed. by Chartier and Martin, pp. 173–200 (p. 179).

publisher and writer was regarded as a private matter: it did not have the official or legal status as the license for printing and selling a book, which was granted by the State. Many of the written agreements concluded between publishers and writers were therefore simply thrown away once the collaboration was over (or interrupted), while the licenses always were printed in the books.³¹⁹ Jombert published hundreds of works during his career, but only a few contracts with authors have survived. None of them concern his most successful publications, which suggest that their preservation was random.³²⁰ Consequently, there is no information on how Pernety and Brézillac came to work with Jombert – who first approach who, or who came up with the idea of translating Wolff’s work. The license printed in the *Cours de mathématique* only reveals that the project had been approved on 28 May 1743.³²¹ However, according to the book historian Wallace Kirsop, the community of writers and booksellers of eighteenth-century Paris was small enough for everybody to know each other, at least by reputation.³²²

THE PUBLICATION OF WOLFF’S COURSE IN MATHEMATICS

As the opening moment of the scholarly careers of Pernety and Brézillac, the translation of Wolff’s course in mathematics can provide important information about the interests and abilities of the two monks about to make a universal dictionary of arts, crafts, and sciences. It is therefore relevant to examine this work further.

To posterity, Christian Wolff (1679–1754) is known as one of the most prominent spokesmen of the German Enlightenment. To his contemporaries he also was an appraised mathematician. Nevertheless, Wolff was not primarily an original thinker. His main achievement consisted in popularizing and systematizing the ideas of his teacher, Gottfried Wilhelm Leibniz (1646–1716).³²³ Tore Frängsmyr has argued that this could be one of the reasons for why so little research has been devoted to Wolff’s writings,

³¹⁹ Kirsop, pp. 21–24.

³²⁰ See ‘Jombert (Charles-Antoine)’, in *Inventaire de la collection Anisson sur l’histoire de l’imprimerie et la librairie, principalement à Paris (manuscrits français 22061–22193)*, ed. by Ernest Coyecque, vol. II (Paris: Leroux, 1900).

³²¹ *Cours de mathématique*, II, end of the volume.

³²² Kirsop, pp. 19–20.

³²³ Tore Frängsmyr, ‘The Mathematical Philosophy’, in *The Quantifying Spirit in the Eighteenth Century*, ed. by Tore Frängsmyr, J. L. Heilbron and Robert E. Rider (Oxford: University of California Press, 1990), pp. 27–44 (pp. 29–30).

despite their recognized importance. Wolff was appointed professor in mathematics at the University of Halle in 1707. From that time onwards he published numerous works in German and Latin on mathematics, physics, philosophy and theology. Many of his textbooks were used in the German universities for decades. His course or elements in mathematics, the *Elementa matheseos universae* (1713–1715), originally consisted of five volumes but later appeared in an abridged version in two volumes.³²⁴

The Leibnizian-Wolffian philosophy was based on a mechanical world view where all processes could be given an exact mathematical expression. Wolff's writing procedure was characterized by a rationalistic deductive method, which he applied on all fields of knowledge – even moral and religion. In the Leibnizian tradition he also placed great emphasis on the exact definition of words in order to create a standardized philosophical vocabulary.³²⁵ Wolff's works enjoyed great success throughout Europe and were translated into many languages. France was actually the last country to know these works in translated form. Madame du Châtelet (1706–1749) gave a first summary of Wolff's ideas in her *Institutions physiques*, published in 1740. The book was presented as a review of new philosophical and scientific theories, seeking to reconcile the systems of the leading thinkers of the time. Besides Wolff she also treated Leibniz and Isaac Newton (1642–1727). The book was thus a popularized interpretation and not a translation. About the same time, Johann Heinrich Formey (1717–1797) published *La Belle Wolfienne* (6 vols, 1741–1753), in which he presented the philosophy of Wolff in novel form, 'explained for women'.³²⁶ Pernety's and Brézillac's publication of the course in mathematics was thus the first French translation of a larger work of Wolff.

All the major periodicals in France, such as the *Mercure de France*, *Journal des savants* and *Journal de Trévoux*, commented upon the translation of Wolff's *Elementa*.³²⁷ The first and most detailed account was

³²⁴ Tore Frängsmyr, 'Christian Wolff's Mathematical Method and its Impact on the Eighteenth Century', *Journal of the History of Ideas*, 36: 4 (1975), 653–668 (p. 653).

³²⁵ Frängsmyr, 'The Mathematical Philosophy', p. 29.

³²⁶ Marcel Thomann, 'Influence du philosophe allemand Christian Wolff (1679–1754) sur l'*Encyclopédie* et la pensée politique et juridique du XVIII^e siècle français', *Archives de philosophie du droit*, 13 (1968), 233–248 (pp. 236–237); Martine Groult, *Savoir et matières: pensée scientifique et théorie de la connaissance de l'Encyclopédie à l'Encyclopédie méthodique* (Paris: CNRS, 2011), p. 37.

³²⁷ *Mercure de France* (February 1747), 100–103, (December, II, 1747), 110; *Journal de Trévoux* (September 1747), 1915–1916; *Journal des savants* (December 1747), 752. There are no mentionings in *Acta Eruditorum* (1747–1750).

given by the *Mercure de France* already in February 1747, where the journalist emphasized the importance of the coming publication:

All geometricians recognize the quality of this work. The name of the famous Wolfius suffices for giving an advantageous idea. There are few authors who have followed a method as exact as his, and who have treated such a great number of topics. His *Cours de mathématique* [*Elementa matheseos universae*] is appreciated primarily for the precision, the order and simplicity of its principles, and a distinct erudition that pervades the whole work. It is composed of, as we all know, five volumes in-quarto, but since few people have the time and perseverance to study such a considerable work to the end or to teach it to those wishing to instruct themselves in this science, M. Wolfius himself decided to make an abridgement of his book, and it is this abridgement that we today announce to the public, translated to French and augmented considerably.³²⁸

Pernety and Brézillac were initially anonymous as translators. The title page only announced that the work had been translated by ‘Dom *** of the Congregation of Saint-Maur’. The fact that the name of the Congregation was specified revealed that the publication had been approved by the Superiors. Considering that the translation had been considerably augmented, it is possible that Pernety and Brézillac chose to be anonymous while attending the verdict of the audience. The work was officially attributed to both monks in *La France littéraire* a decade later.³²⁹

The three volumes of the *Cours de mathématique* contain thematic treatises devoted to the branches of pure and applied mathematics. The first category comprises arithmetics, algebra, geometry and trigonometry, and the second mechanics, hydrostatics, hydraulics, aerometry, optics, dioptrics and catoptrics, architecture, astronomy, navigation, gnomonics, perspective, geography, chronology, fortification, and the attack and defense of places. The treatises are accompanied by sixty-nine plates, realized by four Parisian engravers.

³²⁸ *Mercure de France* (February 1747), 100–101: ‘Tous les géomètres connoissent le mérite de cet ouvrage, le nom du célèbre Wolfius suffit pour en donner une idée avantageuse. Il y a peu d’auteurs qui ayent suivi une méthode aussi exacte que la sienne, et qui ayent traité d’un si grand nombre de parties. Son *Cours de mathématique* est estimé surtout pour la précision, l’ordre et la netteté de ses principes, et une certaine érudition qui règne dans tout l’ouvrage. Il se compose, comme l’on sait, de cinq volumes in-quarto, mais comme il y a peu de personnes qui ayent assez de loisir et de constance pour étudier jusqu’au bout un ouvrage aussi considérable, ou pouvoir l’enseigner aux personnes qui désirent s’instruire dans cette science, M. Wolfius s’est déterminé à faire lui même un abrégé de son livre et c’est cet abrégé qui nous donnons aujourd’hui au public traduit en français et augmenté considérablement’.

³²⁹ *La France littéraire* (1756), p. 35 (Brézillac), p. 171 (Pernety).

The image is not allowed to be diffused online

Figure 16: The front page of the first volume and its plate on hydraulics.
(Google Books)

The translator's preface is written in first person singular. This particularity could suggest that one of the monks had been officially in charge and the other one assisting. Furthermore, the preface emphasizes that the additions are so extensive that it is 'a whole new work, or at least so different from what Mr. Wolff has said on these matters that he would not recognise it himself'.³³⁰ The translator specifies:

I have changed a number of things that do not seem congenial to the French taste. I have often extended the discourse much more than it appeared in the original. I have inserted remarks in several places without distinguishing them from the text where I found it to be necessary. I have added a number of definitions of terms and things, supplements to certain treatises and even whole treatises in order to render the work more complete, such as the palpable arithmetic in the first volume, the navigation in the second and the fireworks in the third, in which I have followed M. Wolf only in method, so to speak.³³¹

³³⁰ *Cours de mathématique*, I, p. iv: 'c'est un ouvrage tout nouveau, ou du moins si différent de ce que M. Wolf avoit dit sur ces matières, qu'il ne s'y reconnoîtroit pas lui-même'.

³³¹ *Ibid.*, pp. iii–iv: 'j'ai changé quantité de choses qui ne me paroissent pas du goût françois: j'ai souvent étendu le discours beaucoup plus qu'il ne l'étoit dans l'original, j'ai inséré des remarques, sans les distinguer du texte, dans bien des endroits où je les ai cru nécessaires. J'ai ajouté quantité de définitions des termes & des choses; des supplémens à certains traités, des traités même entiers, pour rendre l'ouvrage complet; tels sont l'arithmétique palpable dans le premier volume, la navigation dans le second, & les feux d'artifice dans le troisième, dans lesquels je n'ai suivi M. Wolf, pour ainsi dire, que dans la méthode'.

A closer look at the three volumes proves the above description to be just. Throughout the work, the translators occasionally emerge as an ‘I’ or a ‘we’ who comment upon Wolff’s work and add references to more recently published works. The first of the additional treatises, ‘Palpable arithmetic’, is a translation of the work of the blind English mathematician Nicolas Saunderson, published posthumously in 1741.³³² The very same Saunderson would later play a central role in Diderot’s *Lettres sur les aveugles* (1749), where the blind professor became a metaphor for radical empiricism.³³³ According to the journalist and historian Philipp Blom, Saunderson had not yet been translated to French at the time for Diderot’s *Lettres*. Considering the work of Pernety and Brézillac, this is an erroneous statement.³³⁴ This translation also informs us that at least one of the monks knew English.

Furthermore, in the chapter on navigation, the translator(s) writes: ‘Having undertaken to render this summary of mathematics as complete as desirable, to include in it all the parts that have any relation to this science, I did not want to remain silent about navigation, even though M. Wolf makes no mention of it in his small course’.³³⁵ In this additional treatise the monks follow the deductive method of Wolff and line up definitions, remarks, problems, theorems, demonstrations, corollaries and solutions. References are also made to the recently published *Traité du navire* (1746) by the French mathematician and hydrographer Pierre Bouguer (1698–1758). Similarly, in the additional treatise on fireworks, references are made to Amédée François Frezier’s *Traité des feux d’artifice* (1741).³³⁶

The writer of the translator’s preface explicitly portrays himself as responsible for the alterations of the illustrations. He claims that the augmentation of the content ‘obliged me to double the number of the plates, in which I have changed the majority of the illustrations and had them engraved with more elegance and taste’.³³⁷ As mentioned in Chapter 6,

³³² *Cours de mathématique*, I, 71–79.

³³³ Michael Kessler, ‘A Puzzle Concerning Diderot’s Presentation of Saunderson’s Palpable Arithmetic’, *Diderot Studies*, 20 (1981), 159–173.

³³⁴ Philipp Blom, *Enlightening the World: ‘Encyclopédie’, the Book that Changed the Course of History* (New York: Palgrave Macmillan, 2004), p. 55.

³³⁵ *Cours de mathématique*, II, 324: ‘M’étant proposé de rendre cet abrégé des mathématiques le plus complet qu’on peut désirer, en y faisant entrer toutes les parties de cette science qui y ont rapport; je n’ai pas crû devoir passer sous silence ce qui regarde la navigation, quoique M. Wolf n’en ait fait aucune mention dans son petit *Cours*’.

³³⁶ *Ibid.*, III, 149.

³³⁷ *Cours de mathématique*, I, p. iv: ‘m’ont obligé d’augmenter de près de la moitié le nombre des planches, dont j’ai changé la plus-part des dessins, & les ai fait graver avec plus d’élégance & de goût’.

Pernety would later be responsible for the drawings in the dictionary manuscripts. In 1757 he also published an illustrated dictionary on painting, sculpture and engraving, which included a treatise on the different ways of painting. Against this background, it is likely that Pernety was the one hiding behind the anonymous first person singular – that he was the translator officially in charge of Wolff's course in mathematics, and Brézillac assisting.

The augmentation of Wolff's course or elements in mathematics suggests that Pernety and Brézillac were well at home in the diverse branches of the mathematical sciences. Considering that the Congregation did not provide any substantial education on these subjects, it gives a hint of the extent to which the monks were allowed to pursue their interests and 'natural inclinations'. The translator's preface is visibly influenced by the Wolffian-Leibnizian world view. The writer repeatedly depicts mathematics as the fundamental language of nature, as well as the key to all other sciences.³³⁸ When making a reference to the technology employed by the artisans, the writer (Pernety) wonders:

Is there anything more marvelous than all these machines animated, if I dare to say it, by mathematics, which governs the arrangement of their force, regulates their movement and directs all their operations [?].³³⁹

He then concludes: 'the mind of man wishes to know everything, and nothing testifies better of how much he is destined to the truth than the pleasure he experiences, sometimes in spite of himself, in the driest speculations of algebra'.³⁴⁰

³³⁸ *Ibid.*, p. ii: 'cette science, qu'on regarde à juste titre comme la clef de toutes les autres'.

³³⁹ *Ibid.*, p. ii: 'Y a-t-il rien de plus merveilleux que toutes ces machines animées, si j'ose le dire, par les mathématiques, qui dirigent l'arrangement de leurs ressorts, règlent leur mouvement, & conduisent toutes leurs opérations'.

³⁴⁰ *Ibid.*, p. ii: 'L'esprit de l'homme veut tout sçavoir; & rien ne marque mieux combien il est destiné à la vérité, que le charme qu'il éprouve quelque-fois malgré lui, dans les spéculations les plus sèches de l'algèbre'.

8. TRANSLATING WOLFF’S MATHEMATICAL LEXICON (c. 1743–1747)

Shortly after the appearance of the *Elementa matheseos universae* (1713–1715), Wolff published a mathematical dictionary: the *Mathematisches Lexicon* (1716).³⁴¹ In 1734, this work appeared in a considerably augmented and illustrated edition, titled *Vollständiges Mathematisches Lexicon*.³⁴² According to the historian of ideas Giorgio Tonelli, it was the most important mathematical dictionary of the early eighteenth century.³⁴³

When Jombert in May 1743 received permission to translate and publish Wolff’s abridged *Elementa* (the course in mathematics), the license also comprised nine additional works. One of them was ‘the mathematical dictionary of Wolff’.³⁴⁴ In a bookstore catalogue printed the same year, Jombert specified that the dictionary would be translated from the latest edition, consisting of one large volume in-quarto, enriched with illustrations.³⁴⁵ In other words, Jombert was talking about the *Vollständiges Mathematisches Lexicon*, containing thirty-six plates.

Three years later, in 1746, Jombert announced in an advertisement that Wolff’s dictionary would be considerably augmented and printed in-folio – the largest paper size – and supplied with ‘a multitude of figures’. The bookseller now presented a modified title, which suggested that the scope of content was to be expanded as well: ‘New dictionary of mathematics *and physics* [my emphasis] and all the areas depending on them’.³⁴⁶ In the same advertisement, the course and the dictionary were each declared as being *sous presse*, ‘under print’. This formulation should not be taken literally. The

³⁴¹ Christian Wolff, *Mathematisches Lexicon* (Leipzig: Gleditsch, 1716).

³⁴² Christian Wolff, *Vollständiges Mathematisches Lexicon* (Leipzig: Gleditsch, 1734).

³⁴³ Giorgio Tonelli, *A Short-Title List of Subject Dictionaries of the Sixteenth, Seventeenth and Eighteenth Centuries as Aids to the History of Ideas* (London: Warburg Institute, 1971), p. 34. A supplementary volume with diverse mathematical lists was published in 1747.

³⁴⁴ See the license printed in *Cours de mathématique*, II, end of the volume.

³⁴⁵ ‘Le même libraire imprime les livres suivantes’, in Guillaume Le Blond, *Éléments de la guerre des sièges*, vol. I (Paris: Jombert, 1743), pp. xii–xiii: ‘la dernière édition, gros in-4, enrichi de figures’.

³⁴⁶ ‘Livres qui se trouvent dans la même boutique’, in *Les éléments d’Euclide*, ed. by Jacques Ozanam [1709] (Paris: Jombert 1746), p. 528: ‘Nouveau dictionnaire de mathématique et de physique et de toutes les parties qui en dépendent [...] traduit de l’Allemand de M. Wolffius et augmenté considérablement, in-folio, avec beaucoup de figures, *sous presse*’.

censor did not approve the finished manuscript of the *Cours de mathématique* until 1 January 1747.³⁴⁷ According to the February number of the *Mercure de France* (1747), the work would not appear in Jombert's store until around Easter.³⁴⁸ Consequently, when the bookseller described the two works as *sous presse* in 1746, he did not imply that the finished manuscripts had arrived to the printing press, but rather that both projects were in progress, 'about to be printed' (with a stretch on the 'about').

In all the bookseller's advertisements, the translations of Wolff's two works are presented next to each other. In each case, the translators are anonymous. We know by now that Pernety and Brézillac were the anonymous translators of the course in mathematics. Were they also translating and augmenting Wolff's *Vollständiges Mathematisches Lexicon*? In fact, the dictionary manuscripts suggest that they did.

IDENTIFYING THE MAURIST DRAFT AS THE TRANSLATION OF WOLFF'S LEXICON

Of the Maurists' six dictionary volumes, the material gathered in volume four seems to have been written first. First of all, it is the only volume preceded by a title page (and what could more clearly mark a beginning?). Secondly, the draft contains no references to works published after 1746, while the other manuscripts refer to books published as late as 1753. Furthermore, on folio 60, the current year is indicated to be 1747. Before continuing to the contents of the draft, this information must be examined further.

The article AGE DU MONDE (Age of the world) refers to the time that has passed since the birth of Christ as 'the third age'. The writer then specifies that it 'currently consists of 1747 years'.³⁴⁹ The content of this article is actually copied from the *Dictionnaire de Trévoux*, which in turn is copied from Basnage de Beauval's *Dictionnaire universel*. In each of these two dictionaries, the number of years composing the third age is adapted to the time of writing, which precedes the publication date by a couple of years. For example, Basnage de Beauval writes that the third age consists of 1698

³⁴⁷ *Cours de mathématique*, II, end of the volume, 'Approbation du censeur royal'.

³⁴⁸ *Mercure de France* (February 1747), 100: 'Il paroîtra à Pâques'.

³⁴⁹ BnF, MS f. fr. 16982, fol. 61, AGE DU MONDE: 'Le troisième âge est actuellement de 1747 ans'.

years – and the dictionary was published in 1701.³⁵⁰ Similarly, the second edition of the *Dictionnaire de Trévoux* (published in 1721) declares that the third age consists of 1713 years.³⁵¹ In the fourth edition (1743) the years have been changed to 1741.³⁵² Consequently, the Maurist writer is not simply reproducing the number stated in the source, but modifies it to the time of his own writing. This suggests that this article (and the surrounding ones) were compiled in 1747 – but it remains unclear during what time of the year. Considering that the manuscript of the *Cours de mathématique* was completed in late 1746 (since the censor approved it on 1 January 1747), it is plausible that the first folios of the dictionary draft also were written already in late 1746. In that case, the Maurists may have reached folio 60 and the article AGE DU MONDE already in the first half of 1747.

This draft is a translation of Wolff's *Vollständiges Mathematisches Lexicon*, considerably augmented by additional literature. Thirty articles are accompanied by references to planned illustrations, of which many – but not all – correspond to Wolff's lexicon (1734).³⁵³ The working title on the first folio reads: 'Dictionary of mathematics and physics, arts and crafts'. This seems to be a paraphrase of the title announced by Jombert in 1746: 'New dictionary of mathematics and physics and all the areas depending on them'.³⁵⁴

The draft only covers A–ALLER. The handwriting then ends abruptly in the middle of the last page, as if the work was intentionally interrupted. Otherwise, all articles are written in consecutive order and without major

³⁵⁰ *Dictionnaire universel*, ed. by Henri Basnage de Beauval, 3 vols (Rotterdam: Arnoud & Leers, 1701), I, AGE (en chronologie).

³⁵¹ *Dictionnaire de Trévoux*, 4 vols (Paris: Delaulne and others, 1721), I, 196, AGE DU MONDE.

³⁵² *Dictionnaire de Trévoux*, 5 vols (Paris: Delaulne and others, 1743), I, 216, AGE DU MONDE.

³⁵³ BnF, MS f. fr. 16984, fol. 1, ABAJOUR (1 fig.), fol. 2, ABAISSER (1 fig.), fols. 2–3, ABAQUE (3 fig.), fol. 12, ABSCISSE (1 fig.), fol. 15, ACANTE (1 fig.), fol. 18, ACCÉLÉRATION (1 fig.), fol. 21, ACCORD (1 fig.), fol. 33, ACROTERAS (1 fig.), fol. 35, ACTION (2 fig.), fols. 50–51, AEOLIPILE (1 fig.), fols. 55–56, AFFLÛT (1 fig.), AFFLÛT DE MORTIER (1 fig.), fols. 57–58, AFFLÛT À ROÛAGER, -DE PLACE, -DE CAMPAGNE, -DE L'OBUS (4 fig.), fol. 72, AIGU (1 fig.), fols. 73–75, AIGUILLE AIMANTÉE (3 fig.), fol. 76^v, AIGUILLE (1 fig.), AIGUILLE HYGROMÉTRIQUE (1 fig.), fol. 77^v, AILES DE CHEMINÉE (1 fig.), fols. 80–86, AIMANT (2 fig.), fols. 88–92, AIR (1 fig.), fol. 94, AIRE (1 fig.), fols. 96–102, AIROMÉTRIE (2 fig.), fols. 104–107, AISSIEU DANS LA ROUE (2 fig.), fol. 110, ALAMBIC (1 fig.), fol. 118, ALÈGES À VOILES (1 fig.), fol. 119, ALETTES (1 fig.), fols. 128–129, ALHIDADE (1 fig.).

³⁵⁴ BnF, MS f. fr. 16982, title page: 'Dictionnaire de mathématique et physique, des arts et métiers'.

indications of missing pieces.³⁵⁵ The handwriting belongs to Pernety alone, yet he often writes ‘we’ when somehow speaking about the compilation of the draft. He also refers to his and Brézillac’s translation of Wolff’s course in mathematics as ‘ours’. For instance, in ABAQUE (Abacus), he writes:

Abacuses or arithmetic tables can be invented and formed according to one’s own liking, such as the one of doctor Saunderson, Lucasian Professor of Mathematics at the University of Cambridge, whose form and use we have described in the first volume of the abridged *Elements* of Wolff.³⁵⁶

Such expressions suggest that both Pernety and Brézillac were involved in the project, but seemingly worked on different assignments. In fact, it seems like Pernety did not know German. In a later letter addressed to one of his publishers, dated in 1776, he declared: ‘since I do not know the German language, I could not understand what had been written at the end of the manuscript. Could you please explain it to me in French or Latin [?]’.³⁵⁷ This implies that Brézillac was the translator of Wolff’s lexicon, even though it was Pernety who wrote the articles together in the draft. As we shall see, it seems like the main responsibility of Pernety was to make additions from other works.

Due to the dislocation of terms through the act of translation, it is difficult to make a complete comparison between the Maurist draft and Wolff’s *Vollständiges Mathematisches Lexicon*. Still, exemplifying observations suffice to expose their kinship. Between A–ALLER, the Maurist draft defines 402 terms. The same section of Wolff’s lexicon (1734) defines 129 terms of German, Latin, Arabic, and French origin. In comparison, the first edition of the lexicon (1716) only contained sixty-one terms between A–ALL, of which most were Latin, Arabic and French.³⁵⁸

Almost all Latin, Arabic and French terms can be found in the Maurist draft, with none or only minor orthographic changes. A few German terms

³⁵⁵ There is only one indication of a missing piece: BnF, MS f. fr. 16982, fols. 115–116. See Chapter 4.

³⁵⁶ BnF, MS f. fr. 16982, fol. 3, ABAQUE: ‘On peut inventer et se former des abaqués ou tables d’arithmétique chacun selon sa fantaisie. Telle est celle du docteur Saunderson, seu Professeur Lucasien pour les Mathématiques dans l’Université de Cambridge, dont nous avons donné la description et l’usage dans le premier volume de l’abrégé des *Elements* de Wolff’.

³⁵⁷ Meillassoux-Le Cerf, *Dom Pernety et les Illuminés d’Avignon*, p. 296, ‘Extrait d’une lettre de Pernety à l’imprimeur Dekker, 8 août 1776’: ‘Comme je n’entends pas la langue allemande, je n’ai pas pu comprendre ce que l’on a écrit à la fin du Manuscrit. Je prie donc de me l’expliquer en français ou en latin’.

³⁵⁸ See Appendix 1: Nomenclature.

have also been directly imported, and these are of particular interest since they clearly show that the Maurists were using the second and latest edition of Wolff's lexicon (1734).³⁵⁹ For instance, ABLAUFFENDE LEISTEN ('Sloping ledge') was first included in this edition, and it has been imported and translated by Brézillac.³⁶⁰ Otherwise, the majority of the German terms between A-ALLER are missing in the Maurist draft, since they translated to French would have been positioned after ALLER.³⁶¹ Sixteen Latin terms on AE- are also missing.³⁶² However, in these cases the draft explicitly refers to alternative spellings on E-, and the monks never got that far.³⁶³

The draft contains fifty explicit references to Wolff (or simply 'W' written in the margin).³⁶⁴ In these cases, the articles are total or partial translations of the German work. Even articles without references to Wolff obviously

³⁵⁹ BnF, MS f. fr. 16982, fol. 7, ABNEHMEN (Wolff, *Vollständiges* [hereafter W], p. 5), fol. 10, ABPFALEN (W, p. 5), fol. 14, ABZIEHEN (W, p. 17).

³⁶⁰ BnF, MS f. fr. 16982, fol. 7: 'ABLAUFFENDE LEISTEN, nom purement allemand, que Goldman donne en général à tous les membres médiocres, qui sont terminés dans le bas par une ligne horizontale, et la hauteur est adoucie en quart de cercle. Telles sont les cymaises et les gueules renversées. Voyez CYMAISE'; Wolff, *Vollständiges*, p. 5: 'ABLAUFFENDE LEISTEN, werden vom Goldmann alle mittelmäßige Glieder genennet, welche unten mit einer waagrechten Fläche unterzogen und an der Höhe mit einem ausgenommenen Theil eines Viertel-Creysses geschwächt sind; dergleichen die Hohl-Kehlen oder Hohl-Leisten, die Karnik und Kehl-Leisten. S. CYMANTIUM'.

³⁶¹ For instance, six terms on ABEND- (Eng. 'Evening', Fr. 'Soir'), two terms on ABLAUFF (mod. Ger. 'Abfluss') such as ABLAUFF DES WASSERS (Eng. 'Drain', Fr. 'Tuyau d'écoulement'), four terms on ABWEICHUNG (Eng. 'Deviation', Fr. 'Déviation'), nine terms on AEHNLICHE (Eng. 'Similarity, similar', Fr. 'Similitude, similaire'), ABMESSEN (Eng. 'Measure', Fr. 'Mesurer'), ABSCHREITEN (Eng. 'Measuring by walking', Fr. 'Arpenter en comptant ses pas'), ABWÄGEN (Eng. 'Measure, adjust, balance', Fr. 'Mesurer, calculer, niveler'), ABSTAND (Eng./Fr. 'Distance'), ABTHEILUNG (mod. Ger. 'Aufteilung', Eng./Fr. 'Division'), etc.

³⁶² AEQUANS LUNAE, AEQUATIO (six entries), AEQUATIONES, AEQUATION DER UHR, AEQUATOR, AEQUILATERUM, AEQUILIBRATIONIS CURVA, AEQUILIBRIUM, AEQUINOCTIAL-CIRCUL, AEQUINOCTIAL-PUNCT, AEQUINOCTIAL-UHR.

³⁶³ BnF, MS f. fr. 16982, fol. 13: 'AEQUATIO voyez EQUATION', fol. 51: 'AEQUATEUR voyez EQUATEUR', fol. 51: 'AEQUINOCTIAL voyez EQUINOCTIAL', etc.

³⁶⁴ BnF, MS f. fr. 16982, fol. 1, AB, ABAJOUR, fols. 2–3, ABAQUE, fols. 3–4, ABAQUE ou TAILLOIR, fol. 5 ABAVENT, fol. 6, ABEILLE, ABEILLE À EAU, fol. 7, ABLAUFFENDE LEISTEN, ABNEHMEN, fol. 10, ABPFALEN, ABRAGEN, fol. 11, ABSCHNITTE, fol. 12, ABSCISSE, fol. 14, ABZIEHEN, fol. 15, ACAMPTES, fols. 16–17, ACCÉLÉRATION, fol. 19, ACCESSIBLE, fol. 20, ACCLASTES, fol. 33, ACROTERAS, fol. 34, ACTINOBOLISM, fol. 37, ADALOR, ADAR, fol. 45, ADDITION, fol. 46, ADERAIMIN, fol. 46^v, ADHIL, fols. 50–51, AEOLIPILE, fol. 59, AGATHITYCHI, fol. 60, AGATHODAEMON, AGE, fol. 63, AGGER, fol. 69, AIGLE, fol. 71, AIGRETTES (ref. to *Cours de math.*), fol. 73, AIGUILLE AIMANTÉE, fol. 76^v, AIGUILLE À COPIER, fol. 77^v, AILES, fol. 88, À JOUR, AIR, fols. 96–102, AIROMÉTRIE, fol. 105, ASSIEU DANS LA ROUE, fol. 109, AIYAR, fol. 110, ALACHA, ALALICEH ou ALALICHT, fol. 113, ALBARIUM OPUS, fol. 116, ALCOR, fol. 117, ALDERAIMIN, ALDHAFERA, fol. 123, ALGÈBRE, fol. 127, ALGETHI, ALGOL, fols. 133–134, ALLÉE (grande).

derive from the lexicon since they reproduce the latter's definitions, illustrations, and stated sources down to the last page number and publication date.³⁶⁵ Besides, many of these terms are absent from the *Dictionnaire de Trévoux* (1743).³⁶⁶

Brézillac has also translated articles located after ALL- in the German work, such as AIR (Wolff: LUFFT) and ABEILLE (Wolff: FLIEGE).³⁶⁷ In other cases, two or more articles have been merged into one. For instance, ACRE (a measure of land) is a combined translation of Wolff's ACRE and ACKER. Here Brézillac (through the handwriting of Pernety) explicitly comments on the translation activity: 'ACKER, which I am here translating as ACRE, means in German [...]'.³⁶⁸

The above observations clearly show that the Maurists were working on Wolff's *Vollständiges Mathematisches Lexicon* (1734). Considering that the two monks already collaborated with Jombert in translating Wolff's *Elementa* – which basically treated the same areas as the lexicon – everything leads to believe that the Maurist draft corresponded to the project that the bookseller had described as 'New dictionary of mathematics and physics and the areas depending on them'. This identification will prove to be of great importance.

These observations also provide valuable clues to the Maurists' working process and its duration. The translation of German terms located after ALL-, such as LUFFT and FLIEGE, suggests that Brézillac had made a full inventory of Wolff's lexicon in order to know where in the alphabet the translated terms would be placed. This means that even though the writing of the draft might have been initiated in late 1746 or early 1747, the preparatory work

³⁶⁵ BnF, MS f. fr. 16982, fol. 4, ABATON (Wolff, p. 1), fol. 15, ACANTHE (W, p. 18, ACANTHUS), fol. 36, ACUBENE (W, p. 21), fols. 76^v–77, AIGUILLE HYGROMÉTRIQUE (W, p. 21, ACUS HYGROMETRA), fols. 25–26, ACCOUSTIQUE (W, p. 22, ACUSTICA), fol. 46, ADEGIGE (W, p. 24), fol. 63, AGGREGAT (W, p. 45), fol. 110, ALAMAC ou ALAMAK (W, p. 45), fol. 46, ALCOVE (W, p. 46), fol. 119, ALEZET (W, p. 46), fol. 126, ALGENEB (W, p. 54), fol. 128, ALGORITHMES DES INFINIS (W, p. 55, ALGORITHMUS INFINITESIMALIS), fol. 128, ALHAJAT (W, p. 55).

³⁶⁶ Absent from the *Trévoux*: ABATON, ABLAUFFENDE LEISTEN, ABNECHMEN, ABPFALEN, ABSCHNITTE, ABSCISSE, ACAMPTES, ACCLASTES, ACTINOBOLISM, ACUBENE, ADALOR, ADEGIGE, ADERAIMIN, ADHIL, AGATHIYCHI, AGATHODAEMON, AIGUILLE HYGROMÉTRIQUE, ALACHA, ALALICHT, ALAMAC, ALCOR, ALDERAIMIN, ALDHAFFERA, ALGETHI, ALHAJATH. Alternative spellings have been considered.

³⁶⁷ BnF, MS f. fr. 16982, fols. 88–92, AIR (Wolff, 1734, p. 783, LUFFT), fols. 73–75, AIGUILLE AIMANTÉE (W, pp. 796–797, MAGNET-NADEL), fol. 6, ABEILLE (W, p. 505, FLIEGE), fols. 94–96, AIRE (Wolff, pp. 500–502, FLÄCHE).

³⁶⁸ BnF, MS f. fr. 16982, fol. 32: 'ACRE, *acker*, que je traduis ici par *acre*, signifie en allemand [...]'; Wolff, *Vollständiges*, pp. 19–20, ACKER, ACRE.

must have started much earlier, and thus been carried out concurrently with the translation of Wolff's *Elementa*. This scenario is even more likely considering that the Maurists were making an augmented translation. Additional literature needed to be selected and subjected to similar inventories before the writing of the dictionary draft could begin.

Documents deriving from this preparatory activity have actually been preserved. The Index volume contains several inventories of nomenclature written by Pernety. One of them concerns Bouguer's *Traité du navire*, published by Jombert in 1746.³⁶⁹ As earlier mentioned, this work was also used to augment the *Cours de mathématique*, and it is cited at least twice in the dictionary draft.³⁷⁰ Another document contains nearly four hundred terms between A–V, supplied with references to various works on engineering, architecture, mathematics and astronomy. The occurrence of a reference to Wolff's dictionary in the same document reveals its association with the draft.³⁷¹ The indication of titles, volumes, chapters and page numbers makes it possible follow in the steps of Pernety and to locate the terms within the designated works. Some of these books were sold at the store of Jombert, such as the *Architecture hydraulique* (1737)³⁷² and *La science des ingénieurs* (1729) of the engineer Bernard Forest de Belidor (1698–1761).³⁷³ There are also references to the *Dictionnaire mathématique* (1691) of the mathematician Jacques Ozanam (1640–1718),³⁷⁴ and unspecified works of the mathematician and physicist Alexis-Claude Clairaut (1713–1765).³⁷⁵

While articles likely were rewritten several times – consequently hiding the trace of the original writer/translator – there would have been little use in rewriting inventories of this kind. These documents therefore suggest that it

³⁶⁹ BnF, MS f. fr. 16984, fols. 244–246.

³⁷⁰ BnF, MS f. fr. 16982, fol. 25, ACCORES, fol. 27, ACCULER.

³⁷¹ BnF, MS f. fr. 16984, fol. 218^v: 'ENAR, v. ACHOMAR, D. W [Dictionnaire de Wolff]'; Wolff, *Vollständiges*, p. 19: 'ACHOMAR, s. ENAR'. Wolff's lexicon is not used in the later manuscripts.

³⁷² BnF, MS f. fr. 16984, fols. 218^v–219: 'EAU, Bel. *a. h. t.* 1, 139', 'FORCE, *ibid.*, 3 et 42', 'HÉRISSON, B. *arch. hy.* t. 1, p. 367', 'LUNETTES, Bel. *arch.* t. 1, p. 346', etc.; Bernard Forest de Belidor, *Architecture hydraulique, ou l'art de conduire, d'élever et de ménager les eaux pour les différens besoins de la vie*, vol. I (Paris: Jombert, 1737), pp. 139, 3, 42, 367, 346.

³⁷³ BnF, MS f. fr. 16984, fol. 219: 'MANNEAUX, Bel. *Sc. des ing.* Ch. 14, p. 99'; Belidor, *La science des ingénieurs dans la conduite des travaux de fortification et d'architecture civile* (Paris: Jombert, 1729), liv. 4, ch. 14, p. 99.

³⁷⁴ BnF, MS f. fr. 16984, fol. 218^v: 'FILER DE L'ECOUTE, Oz, 308', fol. 219^v: 'POINTE DE COMPAS, Oz, 252'; Jacques Ozanam, *Dictionnaire mathématique ou idée générale des mathématiques* (Amsterdam: Huguetan, 1691), pp. 308, 252.

³⁷⁵ BnF, MS f. fr. 16984, fols. 219–220: 'MEMBRE D'UNE ÉQUATION, Clairaut', 'MONOME, Clairaut', 'PUISSANCE, Clairaut', 'QUANTITÉ, Clairaut'.

was the main responsibility of Pernety to expand the content of the dictionary. This list also gives a hint of the vast and time-consuming work preceding the writing of the draft. Besides translating Wolff's lexicon, the monks were scrutinizing a number of technical works in search for additional articles to compose the dictionary under construction.

AN AUGMENTED TRANSLATION BECOMES A NEW DICTIONARY

Wolff's lexicon is the most frequently used and cited source in the Maurist draft. Still, the information drawn from this work barely composes a quarter of the content. Pernety and Brézillac were indeed making an augmented translation, and so augmented that it more accurately could be described as a new dictionary. In the following subchapter, the characteristic of this new work is distinguished through an analysis of the scope of content, the use of additional sources, and the approach to 'things and words' – that is, whether the dictionary leaned towards an encyclopedic or linguistic content, to use the notions of d'Alembert and Quemada.³⁷⁶

Expanding the Scope of Content

In 1743 Jombert announced that the translated dictionary would comprise one large volume in-quarto. Three years later he declared that it would be considerably augmented and printed in-folio. At the same time he presented its new title and description, which in its totality reads:

New dictionary of mathematics and physics and all the areas depending on them, where the origin, the development and principles of the sciences are treated, and the method for acquiring sufficient knowledge for understanding and applying them correctly in short time; with the history of the most famous authors that have treated them and instructive remarks facilitating the comprehension and selection of their works.³⁷⁷

In several important aspects, this description differed from the original title of Wolff's *Vollständiges Mathematisches Lexicon*:

³⁷⁶ See Chapter 3.

³⁷⁷ 'Livres qui se trouvent dans la même boutique', in *Les élémens d'Euclide*, p. 528: 'Nouveau dictionnaire de mathématique et de physique et de toutes les parties qui en dépendent; où l'on donne l'origine, les progrès et les principes des sciences et la méthode d'en acquérir en peu de temps une connoissance assez étendue pour en raisonner exactement, et en faire une juste application. Avec l'histoire des auteurs les plus célèbres qui en ont traité, et des remarques instructives pour faciliter l'intelligence et le choix de leurs ouvrages'.

Complete mathematical lexicon with all the technical terms and objects commonly occurring within theoretical and applied mathematics, clearly explained; with constant reference to the history of mathematics and mentioning of useful notes together with the best and most distinguished writings thoroughly dealing with each topic; moreover also with the expressions and phrases of the mine surveyors, and the related artisans and craftsmen; finally, everything organized to the benefit of specialists as well amateurs of the marvelous mathematics.³⁷⁸

The lexicon of Wolff was presented as a mathematical dictionary that also contained expressions of ‘related’ professions, such as mine surveyors, artisans and manufacturers. The French augmented translation was defined as a dictionary of mathematics and physics ‘and all the areas depending on them’. Thus, each title presented a point of departure in form of one or two fields of knowledge, followed by inclusions of other areas based on their relation to or dependence of the former. In Wolff’s lexicon, that point of departure was mathematics in its pure and applied forms. In the title of Jombert, physics has been extracted from its subordinated position within the category of applied mathematics and made a second, independent point of departure. The preliminary title of the Maurists’ draft made the same statement. The work was presented as a ‘dictionary of mathematics and physics, arts and crafts’.

By the mid-eighteenth century, physics still constituted a rather diffuse category of knowledge. It was partly synonymous with the elder notion of natural philosophy, but also included new areas of experimental knowledge in the empirical tradition of Francis Bacon (1561–1626). Natural philosophy and physics had relations to the equally diffuse concept of chemistry, whose demarcations towards alchemy and hermetic philosophy still were unsettled. In turn, chemistry and alchemy were connected to medicine, botany, pharmacy and metallurgy. Physics could also serve as an umbrella term for anatomy and natural history, i. e. flora and fauna.³⁷⁹ According to the mathematician and historian Pierre Crépel, all eighteenth-century dictionaries – including the *Encyclopédie* – expressed rather ambivalent definitions of physics, and its elements were often overlapping more

³⁷⁸ Wolff, *Vollständiges Mathematisches Lexicon, darinnen alle Kunst-Wörter und Sachen, Welche In der erwegenden und ausübenden Mathesi vorzukommen pflegen, deutlich erkläret: Überall aber Zur Historie der Mathematischen Wissenschaften dienliche Nachrichten eingestreuet Und die besten und auserlesensten Schrifften, welche jede Materie gründlich abgehandelt angeführet; Ferner auch Die Mund- und Redens-Arten derer Marckscheider auch hieher gehöriger Künstler und Handwercker beschrieben; Und endlich alles zum Nutzen so wohl gelehrter als ungelehrter Liebhaber der vortreflichen Mathematick eingerichtet worden* (1734).

³⁷⁹ Yeo, ‘Classifying the Sciences’, pp. 244–245.

established disciplines. As Crépel remarks, physics was nowhere and everywhere.³⁸⁰

Consequently, when Jombert, Pernety and Brézillac (or whoever was ultimately responsible) made physics a second point of departure for including related subjects in the dictionary, they opened up for a radically expanded scope of content with unclear limits. In the Maurists' draft, this expansion is visible through the presence of non-mathematical aspects of physics, as well as chemistry, alchemy, hermetic philosophy, and natural history (limited). None of these fields are treated in the lexicon of Wolff. Compared to the large number of articles concerned with the mathematical sciences, these additional subjects are in clear minority in the Maurist draft, but their presence indicates a movement towards a broader coverage. The draft even contains articles that cannot be identified as depending either on mathematics or physics, such as descriptions of French academies and ancient dance forms.³⁸¹ Their presence may reflect a tentative expansion towards an even broader scope of content, approaching the coverage of the universal dictionaries of arts and sciences.

Additional Sources

The *Dictionnaire de Trévoux* constitutes an important additional source in the Maurist draft. However, in contrast to the all-embracing use of Wolff's lexicon, the *Trévoux* is only used selectively. The Maurists have copied certain entries on natural sciences, arts and crafts, but consistently excluded purely linguistic treatments, citations and moral statements. For instance, the article ABÎME (Abyss) is entirely copied from the *Trévoux*. While the Jesuit dictionary considers the term in aspects of everyday language, moral philosophy, religion, heraldry and natural history, the Maurists have only shown interest in the latter area. Furthermore, when copying this specific entry, they have excluded genealogical treatments of the word and several biblical references. There is a brief mentioning that the term sometimes denotes 'the immense cavities of the earth where God gathered the waters during the third day, and which Moses calls the grand abyss'.³⁸² Otherwise,

³⁸⁰ Pierre Crépel, 'La "physique" dans l'*Encyclopédie*', *Recherches sur Diderot et sur l'Encyclopédie*, 40–41 (October 2006), 251–283 (par. 7 of 84), <http://rde.revues.org/337> [accessed 2014–02–15].

³⁸¹ BnF, MS f. fr. 16982, fols. 14–15, ACADÉMICIEN, ACADÉMICIENNE, ACADÉMIE, fol. 47, ADONIS.

³⁸² BnF, MS f. fr. 16982, fols. 6–7, ABÎME: 'ces cavernes et creux immenses de la terre, où Dieu rassembla les eaux le troisième jour et que Moïse appelle le grand abîme'; *Dictionnaire de Trévoux* (1743), I, 63–64, ABYME.

the article basically concerns the theory of the English naturalist Doctor John Woodward (1665–1728), saying that all oceans have a common origin inside the earth.

Even though the article ABÎME is entirely copied from the *Trévoux*, the latter is not acknowledged as the source. In this and every other case, the Maurists simply reproduce the sources stated in the *Trévoux*, as if they had consulted these works themselves. The same strategy is applied in the use of Wolff's lexicon. Whenever Wolff ascribes the definition of a certain term to a particular author, the Maurists refer to same author – even though the text itself is copied/translated from the lexicon. Still, they may note 'W' in the margin as a reminder of the articles' origin. Whenever a work of Wolff is specified, it is the treatises that the lexicon itself summarizes, such as his studies in experimental physics.³⁸³ Thus, when the German philosopher is explicitly mentioned, it is Wolff the mathematician and philosopher, not the lexicographer. Clearly, to the Maurists it was the origins of the ideas that were of importance, not the medium from which they were drawn. In other words, they proceeded just like the compilers before them.

However, the Maurists are not only copying information from Wolff's lexicon and the *Dictionnaire de Trévoux*. They also use them as reference works. In several cases the Maurists have sought out the sources indicated by Wolff in order to extract more information. For instance, in EINFALLEND LICHT, redirected from ABAJOUR (mod. fr. 'Abat-jour', Eng. 'Skylight'), Wolff refers the reader to an illustration on the pages 142 and 144 in the *Cours d'architecture* of the French architect Augustin-Charles Daviler (1653–1701).³⁸⁴ In ABAJOUR, the Maurists have reproduced the reference to Daviler's work, but changed the pages to 142, 174 and 189.³⁸⁵ A closer look at the *Cours d'architecture* (1701) reveals that these are the pages referred to by Daviler himself.³⁸⁶ In other words, the Maurists revised the article of Wolff by returning to one of his building blocks. Daviler's work then became an independent source, used to provide the draft with additional articles absent in the German lexicon.³⁸⁷

³⁸³ BnF, MS f. fr. 16982, fols. 73–75, AIGUILLE AIMANTÉE, fols. 50–51, AEOLIPILE.

³⁸⁴ Wolff, *Vollständiges*, p. 408.

³⁸⁵ BnF, MS f. fr. 16982, fol. 1, ABAJOUR.

³⁸⁶ Augustin-Charles Daviler, *Cours d'architecture: explication des termes d'architecture* [1691], vol. II (Paris: Mariette, 1710), p. 363, ABAJOUR.

³⁸⁷ BnF, MS f. fr. 16982, fols. 1, 2, 4, 10–11, 15, 27, 31, 33, 49, 52, 54, 66, 77–79, 96, 103, 114, 116, 119, 129, 130–132.

The only way to distinguish reproductions of sources from those consulted first-hand is to continuously compare the Maurist draft to Wolff's lexicon and the *Dictionnaire de Trévoux*. Whenever the draft holds information not occurring in the other two, an additional work was obviously used. For instance, the Maurist article ACCÉLÉRATION contains parts copied from Wolff's lexicon and the *Dictionnaire de Trévoux*, but also the *Éléments de physique, ou Introduction à la philosophie de Newton* by the Dutch experimental demonstrator Willem Jacob 's Gravesande (1688–1742). The latter translation was published by Jombert in 1747. The Maurists explicitly refer to the fourth and fifth chapter of 's Gravesande's work, which concern experiments on air pumps and the augmenting velocity of falling objects.³⁸⁸ Neither Wolff nor the *Dictionnaire de Trévoux* refers to Newton in their respective articles, which confirms that the Maurists had consulted this work directly.³⁸⁹

This comparative procedure allows concluding that the Maurists recurrently drew information from several specialized dictionaries of mathematics, engineering, astronomy, architecture, navigation and music, such as Hieronymus Vitalis's *Lexicon mathematicum* (1668),³⁹⁰ Sébastien de Brossard's *Dictionnaire de musique* (1701),³⁹¹ and Nicolas Aubin's *Dictionnaire de marine* (1702).³⁹² There are also references to specialized monographs, of which many were sold at the store of Jombert. For instance, the article AFFÛT DE MORTIER (Mortar stand, weapon holder), contains ten specialized entries copied from the *Éléments de la guerre des sièges* by Le Blond – published by Jombert in 1743. The Maurists indicate that the articles will be accompanied by five illustrations, which correspond to the figures in Le Blond's work.³⁹³ In comparison, Wolff's article AFFUT

³⁸⁸ BnF, MS f. fr. 16982, fols. 16–18; Willhem Jacob 's Gravesande, *Éléments de physique, ou Introduction à la philosophie de Newton* [1720–1721], trans. from Latin, 2 vols (Paris: Jombert, 1747), II, 15–32.

³⁸⁹ *Dictionnaire de Trévoux* (1743), I, 78–79; Wolff, *Vollständiges*, pp. 18–19.

³⁹⁰ BnF, MS f. fr. 16982, fols. 1, 12, 15, 29, 34, 46–47, 50–51, 59, 63, 69–70, 109–110, 112–114, 120, 126–127, 129–131. See in particular fol. 2, ABALANTICA, fol. 6, ABEN RAS, fol. 10, ABRACHALEUS; Hieronymus Vitalis, *Lexicon mathematicum, astronomicum geometricum* (Paris: Billaine, 1668).

³⁹¹ BnF, MS f. fr. 16982, fols. 5, 19–22, 24, 30–31, 34, 36, 48, 65, 72, 88, 108, 134; Sébastien de Brossard, *Dictionnaire de musique* [1701] (Amsterdam: Mortier, [1710]).

³⁹² BnF, MS f. fr. 16982, fols. 8–11, 16, 25, 27, 51, 53, 54, 72; Nicolas Aubin, *Dictionnaire de marine* (Amsterdam: Brunel, 1702).

³⁹³ BnF, MS f. fr. 16982, fols. 56–59; Le Blond, *Éléments de la guerre des sièges*, I, 19, 64–65, 100.

only consists of seven lines.³⁹⁴ The article of the *Dictionnaire de Trévoux* consists of thirteen lines and contains no mentioning of a source.³⁹⁵

Based on these observations, the Maurists aspired to translate Wolff's *Lexicon* in its totality, while broadening the content with selections from the *Trévoux* and a number of subject dictionaries and specialized works.

A Reference Work, Illustrated Manual and Dictionary

The draft of Pernety and Brézillac offers another reading experience than the *Dictionnaire de Trévoux*. Like the previous French universal dictionaries, the *Trévoux* was still permeated by a focus on language. The editors emphasized the importance of knowing the proper 'way of speaking, the true significance of a word, the different meanings it can have and how to place it [in a sentence]'.³⁹⁶ The majority of the articles contained citations from famous authors, or example phrases demonstrating how the word should be used. Likewise, the preface of all editions declared that the work universally embraced 'everything that has any relationship to language', and only excluded purely historical facts.³⁹⁷

In contrast, the titles of Wolff and Jombert announced that inclusions would be made based on the relationship between subjects, not language. Furthermore, while the *Dictionnaire de Trévoux* stated that the content would be drawn from the best books, Wolff and Jombert also promised that the reader would find references for further reading. This was particularly underlined by Jombert who asserted that the content would help the reader to understand, discuss and, most notably, apply the different sciences.

This educational ambition is also visible in the draft of Pernety and Brézillac, where the articles recurrently contain advices for further reading. In this respect, the draft sometimes appears like a reference work, even when entries are brief. The short definition of AFFÛT DE BORD (Weapon stand on board) is a good example. Here Pernety adds detailed references to the *Mémoires d'artillerie* of the lieutenant Pierre de Surirey de Saint-Remy (1645–1716), which had reappeared in a third edition at the store of Jombert in 1745. The *Dictionnaire de Trévoux* gives a similar definition of AFFÛT DE BORD, but without reference to a source:

³⁹⁴ Wolff, *Vollständiges*, p. 43.

³⁹⁵ *Dictionnaire de Trévoux* (1743), I, 206.

³⁹⁶ *Ibid.*, 'Préface', p. iii: 'manière de parler, sur la véritable signification d'un mot, sur le divers sens qu'il peut avoir, sur la manière de le placer'.

³⁹⁷ *Ibid.*, 'Préface', p. v: 'tout ce qui a quelque rapport à la langue'.

[*Trévoux*]: AFFÛT DE BORD, is the name given to the canon stand used on ships.³⁹⁸

[Maurist draft]: AFFÛT DE BORD is nothing else than the marine stand, which is used on the ships to set up the canon. Mr. de Surirey de Saint-Remy describes its form and construction in his *Mémoires d'artillerie*, vol. 1, pag. 187, 204, 215, 222, 230, 244, 246, 264, 323, 214, 255 and 128, and vol. II, pag. 14, 16, 3 and 12.³⁹⁹

In this respect, the Maurist draft appears more encyclopedic and documentary in nature compared to the more linguistically inclined *Dictionnaire de Trévoux*. Although briefly, Pernety describes what the weapon stand on board *is*, while the *Trévoux* simply defines the word.

The Maurist draft also contains several indications of planned illustrations. In AIMAN (mod. Fr. 'Aimant', Eng. 'Magnet') the reader is told how to perform a simple experiment that will reveal the virtues of the magnet. The content is drawn from Wolff's lexicon, the *Dictionnaire de Trévoux* and 's Gravesande's introduction to Newton. From the latter work Pernety has copied a paragraph that describes what happens if exposing a magnet to a piece of iron. In 's Gravesande's book, this section is accompanied by an illustration. Pernety has noted 'pl.__fig.__' (*planche, figure*) in the margin, thus indicating that the figure was planned to be reproduced in the dictionary (see Figure 18). Copying 's Gravesande word-for-word, he explains the illustration:

³⁹⁸ *Dictionnaire de Trévoux* (1743), I, 206: 'AFFÛT DE BORD, est le nom qu'on donne aux affûts des canons qui servent sur les vaisseaux'.

³⁹⁹ BnF, MS f. fr. 16982, fol. 57: 'AFFÛT DE BORD n'est autre chose que l'affût marin, dont on se sert sur les vaisseaux pour monter le canon. Mr. de Surirey de Saint-Remy donne la forme et la construction dans ses *Mémoires d'artillerie*, tom. I, pag. 187, 204, 215, 222, 230, 244, 246, 264, 323, 214, 255 et 128, et tom. II, pag. 14, 16, 3 et 12.'; Pierre de Surirey de Saint-Remy, *Mémoires d'artillerie* [1697], 3 vols (Paris: Jombert, 1745).

One hooks a magnet M, to a basin of a balance, which with the weight P creates an equilibrium. Then it can be moved very easily, and when holding a piece of iron at a certain distance, the magnet will approach the iron. When pulling it away before they touch, the magnet will follow in the same way as the iron, when placed on the balance, approaches and follows the magnet if hold at a certain distance.⁴⁰⁰

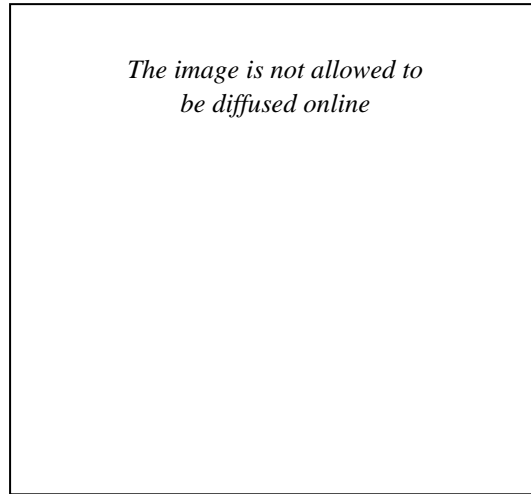


Figure 18: Detail from ‘s Gravesande, *Éléments de physique* (vol. I, pl. IV, fig. 7), described by Pernety. (Google Books)

With such descriptions and intended use of plates, the Maurist draft occasionally appears as a manual, instructing the reader how to apply the different sciences. The intended illustrations allowed the writers to enter in greater detail when describing and explaining certain phenomena. Without plates, such accounts would have been incomprehensible to an uninitiated reader.

⁴⁰⁰ BnF, MS f. fr. 16982, fol. 80, A1MAN: ‘On accroche un aiman, M, au bassin d’une balance, qui avec le poids, P, fait équilibre; alors il peut être mû très facilement, et tenant un morceau de fer à une certaine distance l’aiman approche du fer, et l’éloignant avant qu’il le touche, l’aimant le suit; de la même manière que le fer approche de l’aiman, et le suit lorsqu’il est suspendu à une balance et que l’on tient un aiman à une certain distance.’; ‘s Gravesande, I, 65–66.

9. COMPETITION WITH THE EMBRYONIC *ENCYCLOPÉDIE*

As earlier mentioned, few manuscripts concerning Jombert's editorial activities have been preserved. However, there is one document of particular interest to the history of the Maurists' project: a letter written by the bookseller himself, addressed to the Chancellor of France – the official in charge of the book trade and the promulgation of the printing licenses.⁴⁰¹ The document is undated and the name of the Chancellor is not specified, but the conservators of the BnF have placed it in a volume labeled 'the book trade under Mr. de Malesherbes'.⁴⁰² Malesherbes (1721–1794) assumed the position as Chancellor in December 1750, which means that the letter was presumed to have been compiled sometime after this date.⁴⁰³ As I will show, the content rather indicates that it was written in 1746, and more importantly, that it concerns the work of the Maurists. This document is of great interest partly because it describes the work with the dictionary, partly because it suggests a rival situation with the embryonic *Encyclopédie*. Before presenting the content Jombert's letter, I will therefore start with an overview of the pre-history of the *Encyclopédie*.

THE ORIGINS OF THE *ENCYCLOPÉDIE*

The first volume of the *Encyclopédie* was published in June 1751. The enterprise had then come a long way since its initiation six years earlier. In contrast to the previous French dictionaries of arts and sciences – which in one way or another were inheritors of the *Dictionnaire universel* (1690) of Antoine Furetière – the *Encyclopédie* started as a translation of a foreign work.

The same year as the *Dictionnaire de Trévoux* (1704) appeared in Paris, the first English universal dictionary of arts and sciences was published in London: John Harris's *Lexicon Technicum, or, an Universal English*

⁴⁰¹ BnF, MS n.a.fr. 3347, fols. 199–200, 'Requête au Chancelier de Charles-Antoine Jombert, libraire de l'artillerie et du génie, relative à la concurrence que lui créent les traducteurs de Chambers'.

⁴⁰² BnF, MS n.a.fr. 3347, 'La librairie sous Mr. de Malesherbes'.

⁴⁰³ Pierre Grosclaude, *Malesherbes: témoin et interprète de son temps* (Paris: Fischbacher, 1961), pp. 102–103.

Dictionary on Arts and Sciences. Harris (1666–1719) was a clergyman, mathematician, technician and member of the Royal Society.⁴⁰⁴ In the preface to the *Lexicon Technicum* he complained that the French dictionaries, despite their aspiration to describe the arts and sciences themselves, still were too focused on explaining words. They seemed to have been designed rather ‘to improve and propagate the French language than to inform and instruct the human mind’, he argued.⁴⁰⁵ Harris had another background than the French compilers, who mainly had received a classic education within the humanities. Furetière, Corneille and Basnage de Beauval all had a background in law. The first two were also novelists and members of the French Academy.⁴⁰⁶ The editor of the first edition of the *Dictionnaire de Trévoux*, Richard Simon, was a renowned Bible exegete. Etienne Souciet, the editor of the succeeding *Trévoux* editions (1721–1743), was a Jesuit scholar, librarian and professor in theology.⁴⁰⁷ The physico-mathematical and experimental sciences had been treated sparingly in the French universal dictionaries, and none of them contained illustrations. Due to Harris’s professional orientation, the mathematical sciences constituted the focal point of his lexicon. He also included four plates illustrating air pumps, barometers, microscopes, chemical and navigational instruments, and inserted diagrams and geometrical figures next to the articles.⁴⁰⁸ The *Lexicon Technicum* thus constituted a new step in the development of the encyclopedic dictionary – the description and explanation of the arts and sciences in lexicographic form.

Harris’s *Lexicon Technicum* would soon be surpassed by another English dictionary: Ephraim Chambers’s *Cyclopaedia, or, an Universal Dictionary of Arts and Sciences* (2 vols, 1728). Chambers (c. 1680–1740) was an apprentice of a bookseller, globe maker and engraver. Inspired by Harris’s work, he continued emphasizing the mathematical sciences but also included a wider spectrum of trades and industries, as well as the humanities. In twenty-one plates, the *Cyclopaedia* depicted aspects of physico-

⁴⁰⁴ Lael Ely Bradshaw, ‘John Harris’s *Lexicon Technicum*’, in *Notable Encyclopedias*, ed. by Kafker, pp. 107–121 (p. 108).

⁴⁰⁵ John Harris, *Lexicon Technicum: Or, An Universal English Dictionary of Arts and Sciences* [1704], vol. I (London: Browne and others, 1725), first page, unpaginated.

⁴⁰⁶ Ross, ‘Antoine Furetière’s *Dictionnaire universel*’, pp. 53–54, 64; Ross, ‘Thomas Corneille’s *Dictionnaire des arts et des sciences*’, p. 69.

⁴⁰⁷ Leca-Tsiomis, *Écrire l’‘Encyclopédie’*, pp. 79–80, 116–117, 132.

⁴⁰⁸ Bradshaw, ‘John Harris’s *Lexicon Technicum*’, pp. 112, 118.

mathematics, anatomy, the military arts, natural history, and more.⁴⁰⁹ Chambers frequently referred to the works of the Royal Society but also used the second edition of the *Dictionnaire de Trévoux* (1721), and the memoirs of the Parisian Academy of Sciences.⁴¹⁰ He included a chart of knowledge and introduced a comprehensive system of cross-references, where close to every article was linked to series of others. In this way he wished to demonstrate how the different subjects and branches were related.⁴¹¹

In February 1745, the Parisian bookseller André François Le Breton (1708–1779) obtained the license for translating Chambers’s *Cyclopaedia*.⁴¹² According to the memoirs of Le Breton, everything had started when a German scholar named Gottfried Sellius (1704–1767) approached him in June 1744, proposing to translate ‘the works of Wolff’. This episode has been mentioned by several historians treating the pre-history of the *Encyclopédie*, including John Lough and Louis-Philippe May. Lough and May each indicated that the translation project never was realized, but neither stated why.⁴¹³ However, this was one year after Jombert had obtained the license for translating Wolff’s course and dictionary of mathematics. Even though there are no records revealing if the fate of Sellius’ project was related to the activities of Jombert, it is not an improbable scenario. The Parisian community of booksellers was small and most of the time everyone knew what the others were up to. Many booksellers were even related. Le Breton and Jombert, for instance, were second cousins.⁴¹⁴

Six months later, Sellius came up with a new suggestion. He proposed to translate Chambers’s *Cyclopaedia* in collaboration with the Englishman John Mills (1717–1786 or 1796).⁴¹⁵ After Le Breton had obtained the license in February 1745, a preliminary prospectus for a *Dictionnaire universel des arts et des sciences*, ‘translated from English, by Ephraim Chambers’, was diffused and commented upon in the periodicals. However, due to repeated disagreements between the two translators and Le Breton, the collaboration

⁴⁰⁹ Lael Ely Bradshaw, ‘Ephraim Chambers’ *Cyclopaedia*, in *Notable Encyclopedias*, ed. by Kafker, pp. 123–139 (p. 127).

⁴¹⁰ Leca-Tsiomis, *Écrire l’‘Encyclopédie’*, pp. 197, 203.

⁴¹¹ Bradshaw, ‘Ephraim Chambers’ *Cyclopaedia*, pp. 123–126.

⁴¹² Lough, *The ‘Encyclopédie’*, pp. 9–10.

⁴¹³ Lough, ‘Le Breton, Mills et Sellius’, p. 271; Louis-Philippe May, ‘Documents nouveaux sur l’*Encyclopédie*: histoire et sources de l’*Encyclopédie* d’après le registre de délibérations et de comptes des éditeurs et un mémoire inédit’, *Revue de synthèse*, 15 (1938), 7–30 (p. 7).

⁴¹⁴ Bousquet-Bressolier, p. 311.

⁴¹⁵ May, p. 7.

soon ceased. The license was withdrawn in August 1745. In October, Le Breton associated himself with three other booksellers: Briasson, Durand and David. Together they decided to make a revised and augmented translation. On 21 January 1746, the Chancellor granted them a new license, issued for an *Encyclopédie ou dictionnaire universel des arts et des sciences*, ‘translated from the English dictionaries of Chambers and Harris, with additions’. This was the first time that the enterprise was called an encyclopedia, and the first time that it was acknowledged as a combined translation of the two English works, with an unspecified amount of additions. The mathematician and academician Abbé Jean Paul de Gua de Malves (c. 1712–1786) was engaged as the editor in charge, d’Alembert as inspector of the scientific content, and Diderot as translator. A year later in August, Diderot and d’Alembert replaced Gua de Malves as editors. In 1748, they started to search for additional collaborators.⁴¹⁶

THE LETTER OF JOMBERT

The letter of Jombert has previously only been mentioned by the book historian Greta Kaucher, who in 2009 defended her thesis on the professional activities of the Jombert family. In her forthcoming book, she remarks that the large-scale project described in the bookseller’s letter apparently never was realized, and that nothing is known about its history and collaborators.⁴¹⁷ I will argue that Jombert actually was talking about the work of Pernety and Brézillac, and that the letter was written in 1746. Due to its importance, the whole document has been translated and included at the end of the subchapter. The French transcription can be read in Appendix 6.

Jombert begins the letter by presenting a large-scale enterprise in which he has invested a lot of time and money. He calls it a ‘Dictionary of mathematics, physics and all the sciences and arts that depend thereof, and

⁴¹⁶ Lough, *The ‘Encyclopédie’*, pp. 9–14; Alain Pons, ‘Chronologie’, in *Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers, textes choisis*, ed. by Alain Pons, vol. I (Paris: Flammarion, 1986), pp. 7–11 (p. 7).

⁴¹⁷ Kaucher, *Les Jombert: une famille de libraires parisiens dans l’Europe des Lumières (1680–1824)* (Paris: Droz, forthcoming 2014/2015), second part, chapter III, subchapter 3, ‘Le crédit auprès de la direction de la Librairie et la tentation de l’arbitrage’ (pagination not yet fixed). I met with Kaucher in 2010 and 2011 to discuss the letter, and she was kind to let me read extracts from her forthcoming book. Kaucher had initially assumed that the letter was addressed to Malesherbes and that it had been compiled sometime after 1750. After our discussions she changed the date.

which properly speaking is a Universal Dictionary'.⁴¹⁸ He talks about the authors in plural, but without revealing their names. However, he asserts that they have been working on assembling all the necessary material for nearly three years. When describing this preparatory work, Jombert informs the Chancellor that he has ordered translations of several foreign works with the intention of including their content in the dictionary. The first work to be presented is Wolff's mathematical lexicon 'whose plan and method have been followed and which serve as base and foundation for this project'.⁴¹⁹ The other works are: 's Gravesande's *Élemens de physique*, Desaguliers's *Physique expérimentale*, Struyck's *Géographie physique* and Wolff's *Cours de mathématique*. Jombert then adds that the Chancellor granted him a general license for all these works 'three years ago'. In fact, they can all be found in the license obtained on 28 May 1743:

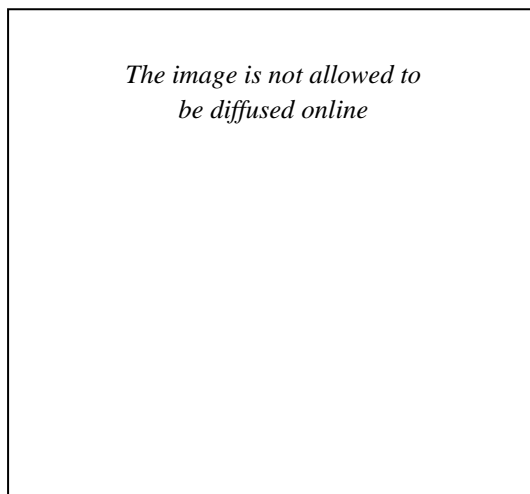


Figure 17: The license obtained by Jombert on 28 May 1743, including the works of Wolff, 's Gravesande, Struyck, and Desaguliers. (Google Books)⁴²⁰

⁴¹⁸ BnF, MS n.a.fr. 3347, fol. 199: 'Dictionnaire sur les mathématiques, la physique et toutes les sciences et arts qui en dépendent et qui à proprement parler est un Dictionnaire Universel'.

⁴¹⁹ BnF, MS n.a.fr. 3347, fol. 199^{r-v}: 'Le Dictionnaire de mathématique et des arts qui y ont rapport, par le célèbre M. Wolffius [...] dont on a suivi le plan et la méthode, et qui sert de base et de fondement à celui-ci'.

⁴²⁰ *Cours de mathématique*, II, end of the volume. The markings in the image have been added by the author.

Against this background, everything suggests that the letter was written in 1746. Jombert was thus addressing Henri François d'Aguesseau (1688–1751), Chancellor of France between 1727 and 1750, and not Malesherbes.

The project described by Jombert fits the Maurist draft perfectly. The dictionary under construction is said to be based on Wolff's lexicon, yet presented as a new and independent work. The bookseller even underlines that it 'properly speaking is a Universal Dictionary'. As shown in Chapter 8, the Maurists were augmenting the translation to such an extent that the draft was approaching the coverage of the universal dictionaries of arts and sciences. Jombert's statement that the authors have been assembling all the necessary material for nearly three years – thus since 1743 or 1744 – is also consistent with the conclusion that Pernety and Brézillac must have initiated the preparatory work long before 1746/1747. The fact that the translation of Wolff's course in mathematics is declared as part of this preparatory work further reinforces the monks' involvement. Moreover, the Maurist draft does not only refer to the course in mathematics, but also 's Gravesande's introduction to Newton, which Jombert explicitly presents as another foreign work intended to be incorporated in the dictionary. The Maurists never refer to the works of Desaguliers and Struyck, but this absence has a fully reasonable explanation. Desaguliers's *Cours de physique expérimentale*, translated from English by the Jesuit scholar Pezenas, did not appear until in 1751, and the translation of Struyck's *Géographie physique* was never realized.⁴²¹ In other words, at this point in time (1746), Jombert partly talked about plans and ambitions not yet realized. Nevertheless, together all these particularities strongly indicate that the bookseller was referring to the dictionary compiled by Pernety and Brézillac.

After having presented the enterprise in question, the bookseller proceeds to the main reason for the letter. Speaking of himself in third person (as 'the suppliant'), he informs the Chancellor that he has been dismayed to learn that 'some of his colleagues just have obtained a new license for a dictionary in *just about the same style as his* [my emphasis], even though it originally was supposed to be nothing but a simple translation of the Encyclopedia of Chambers'.⁴²² Jombert is describing the embryonic *Encyclopédie*. He further asserts that his colleagues – thus referring to Le Breton, Briasson, David and

⁴²¹ Kaucher, *Les Jombert*, second part, chapter III, subchapter 3. See footnotes on Struyck and Desaguliers.

⁴²² BnF, MS n.a.fr. 3347, fol. 199^v: 'quelqu'uns de ses confrères viennent d'obtenir un privilège pour un dictionnaire à peu près dans le même goût que le sien, quoiqu'il ne dût être d'abord qu'une simple traduction de l'Encyclopédie de Chambers'.

Durand – have heard about his work and now want to stop the prospectus he is about to announce to the Public. They also intend to ‘considerably augment their translation with the purpose of bringing down the work undertaken by the suppliant’.⁴²³ Jombert therefore begs the Chancellor to prescribe boundaries for the augmentations planned for the rivaling project, since he fears that he would be completely ruined if faced with the competition from his colleagues.⁴²⁴

The dating of the letter to 1746 is further strengthened by the way Jombert speaks about the rivaling project, which clearly is in an early stage. He worries about the augmentations that the translators of the *Cyclopaedia* intend to do, not what they have already done. Had he been addressing Malesherbes in December 1750 or early 1751, these augmentations would already have been a fact. The famous *Prospectus* describing the outline of the *Encyclopédie* was diffused from October 1750, and the first volume appeared at the end of June 1751.⁴²⁵ In the letter, Jombert compares the new development to ‘the plan’ that the booksellers earlier have published, in which the project was presented simply as a translation the *Cyclopaedia*.⁴²⁶ In other words, he refers to the initial prospectus, diffused in 1745. The ‘new license’ thus designates the one obtained in January 1746, in which the work for the first time was portrayed as a combined translation of the dictionaries of Chambers and Harris, with an unspecified amount of additions.

To the Lord Chancellor,
My Lord,

Charles Antoine Jombert, bookseller on artillery and engineering, has the honor of informing your Greatness that he who for several years has led the work of an extensive project in form of a Dictionary of mathematics, physics and all the sciences and arts that depend thereof, and which properly speaking is a Universal Dictionary, this enterprise has already cost him great expenses, both due to the authors who have been working for nearly three years on assembling all the necessary material to fill this vast project, and due to the translations that he has ordered of several excellent works, printed in different languages in foreign countries, to be incorporated in this grand course of universal science, such as for example, the *Dictionary of mathematics and the related arts*, by the famous Mr. Wolfius, translated from German, an excellent work whose plan and method has been followed and which serve as the base and foundation for this project; the *Elements of the mathematical physics and the philosophy of Newton*, by ‘s Gravesande, translated from Latin; the *Physical*

⁴²³ BnF, MS n.a.fr. 3347, fol. 199^v: ‘d’augmenter considérablement leur traduction dans le dessein de faire tomber l’ouvrage entrepris par le suppliant’.

⁴²⁴ BnF, MS n.a.fr. 3347, fol. 199^v.

⁴²⁵ Lough, *The ‘Encyclopédie’*, pp. 19–20.

⁴²⁶ BnF, MS n.a.fr. 3347, fol. 199^v: ‘le plan qu’ils en ont publié’.

Geography or Introduction to the general knowledge of the Universe, by Mr. Struyck, translated from Dutch; the curious treatise on the *Experimental Physics* by the doctor Desaguliers, translated from English; and the grand *Course of the mathematical sciences*, by Mr. Wolfius, translated from Latin and revised on the German edition, not to speak of several other books on sciences, arts and crafts.

The suppliant proceeded with the work on this Universal Dictionary with confidence, given the favor your Greatness gave him three years ago by granting a general license for each and one of these works, so that no one has the right to oppose to their translations or to the extracts that must be made in order to form the grand work which is in question, nor to refer in any way to these different treatises. At present day, as it is far advanced and it is about time to announce the subject to the public, the suppliant has the dismay of discovering that some of his colleagues not only have obtained a license for a dictionary in just about the same style as his, even though it originally was supposed to be nothing but a simple translation of the Encyclopedia of Chambers, but also that the same booksellers, having heard about his project, want to oppose the publication of his prospectus, and intend to go beyond the limits they have prescribed to themselves in the plan that they have published, and to considerably augment their translation with the purpose of bringing down the work undertaken by the suppliant, and render all his expenses useless.

These unfortunate circumstances compel the suppliant to resort to the protection of your Greatness, to beg him to show consideration for the justice of his cause, and to represent him who more than three years ago obtained a license for the works above which ought to constitute his Dictionary, and consequently having made all the expenses and research necessary to render it as complete and instructive as possible, and who would be completely ruined if this work would be taken away from him or rendered useless by the competition of his fellow booksellers. Therefore he dares hope that you, My Lord, will grant him the permission to publish the project under the title *Universal dictionary of mathematics, physics, sciences and arts*, and that your Greatness at the same time will have the benevolence of prescribing boundaries for the additions that the translators of Chambers intend to add to their Dictionary. The suppliant is particularly well-founded in his demand since his entire collection consists only of books on mathematics, sciences and arts (a trade carried on by both father and son for over a century, albeit the most difficult and the least lucrative one of the book trade). Since these augmentations not possibly can be drawn from other books than of the very same he has been in possession of for so long, they will not fail to make a considerable injustice to his prints and to make a great part of his collection useless, which will infallibly lead to its ruin and the one's of the large family for which he is responsible.⁴²⁷

RIVALS – IN WHAT ASPECTS?

It is easy to dismiss the idea of Jombert's project as a potential rival to the *Encyclopédie* when retrospectively knowing what this work later became. However, in 1746 nobody knew that the translation of Chambers's two-volume *Cyclopaedia* in the end would comprise seventeen volumes of text and eleven of plates. Nobody knew that the work would engage some one

⁴²⁷ BnF, MS n.a.fr. 3347, fols. 199–200. The French original can be read in Appendix 6: The Letter of Jombert.

hundred and thirty collaborators, that the *Discours préliminaire* (1751) would form a philosophical manifesto, or that the articles would contain severe criticism of the Catholic dogmas. By 1746, this work had not yet become the ‘torch of Enlightenment’ that we know.

The early projects of Jombert and Le Breton could actually be described as ‘about the same style’, and thus rivals, in several aspects. Each of them started as French translations of foreign dictionaries – the one English and the other German – which emphasized the role of the physico-mathematical and experimental sciences. In this respect they diverged from the French universal dictionaries in the tradition of Furetière’s more language-based *Dictionnaire universel*. In the contemporary advertisements of Jombert, the relationship between subjects was central in descriptions of the dictionary in the making, just as the interlinkage of knowledge would be in the *Encyclopédie*. Moreover, both works were to include illustrations. At this time there were plenty of smaller, specialized dictionaries that contained plates, but as mentioned, so far none of the French universal dictionaries had taken that step. This limited their possibilities to provide more detailed descriptions and explanations, and forced them to a more language-based approach. In contrast, Wolff’s *Vollständiges Mathematisches Lexicon* (1734) contained thirty-six plates, and the dictionary of Chambers (1728) twenty-one.

Illustrations played an increasingly important role in the dissemination of scientific knowledge in the eighteenth-century. According to the historian J. B. Shank, the emergence of technical illustrations was closely related to the culture of public experimental science. Some of the most influential illustrated works derived from public demonstrators such as Herman Boerhaave (1668–1738), Petrus van Musschenbroek (1692–1761), ‘s Gravesande, and John Theophilus Desaguliers (1683–1744).⁴²⁸ The latter two were each popularizing the physico-mathematics of Newton. Desaguliers’s *Course in Experimental Philosophy* was published in 1734, and ‘s Gravesande’s *Physices elementa mathematica* in 1720–1721.⁴²⁹ The first French translations of these two important works – ordered by Jombert – were thus intended to be used for the Maurists’ dictionary.

⁴²⁸ J. B. Shank, *The Newton Wars and the Beginning of the French Enlightenment* (Chicago: University of Chicago Press, 2008), pp. 152–153.

⁴²⁹ William R. Shea, ‘The Rhetoric of Experiments and Scientific Illustrations in the Enlightenment’, in *Science and the Visual Image of the Enlightenment*, ed. by William R. Shea (Canton: Science History Publications, 2000), pp. 39–56 (pp. 39–40).

Neither Jombert nor Le Breton presented their projects as mere translations. Each dictionary was intended to include additions from other works, and this particularity transformed them to new enterprises with similar building blocks. Diderot and d'Alembert would praise Newton as the hero of enlightenment per excellence, and the Maurists planned to incorporate the contents of two of the most influential works popularizing and demonstrating his philosophy. The documents of Le Breton show that the publishers of the *Encyclopédie* early procured 'the works of Wolff'.⁴³⁰ The historian Marcel Thomann has pointed out that Wolff indeed was 'everywhere present in the *Encyclopédie*' – in articles on mathematics as well as on jurisprudence, metaphysics, physics and theology.⁴³¹ Similarly, the Maurists' bibliography included 'Harris's dictionary', but not Chambers's *Cyclopaedia*.⁴³²

Jombert had obtained the license to translate Wolff's lexicon two years before Le Breton's license to translate Chambers's *Cyclopaedia*. However, while Le Breton in January 1746 had received permission to make an augmented work, Jombert had yet not. This may be why he presented the project and the preparatory work in such detail in the letter to d'Aguesseau, and asked for permission to publish it as a 'Universal dictionary of mathematics, physics, sciences and arts'.

When Jombert begs the Chancellor to prescribe limits for the rivaling project, he remarks that his work is far more advanced. He also stresses that he is particularly well-equipped to execute this kind of enterprise, since his entire book collection is specialized on sciences and arts. It therefore worries him that the additions planned by the translators of Chambers will require books that he has the monopolized right to sell and utilize. This was actually in accordance with the book trade regulations during the *Ancien Régime*. The license granted the holder the exclusive right to sell a book in the entire kingdom for a certain number of years, during which no one else was allowed to sell it without his permission, or to make extracts.⁴³³ In this way, the *Encyclopédie* was not only threatening Jombert's dictionary project, but his entire business. It is uncertain if Jombert knew that his colleagues intended to use the works of Wolff, but if he did, it is easy to understand his worries.

⁴³⁰ Irène Passeron, 'Quelle(s) édition(s) de la *Cyclopaedia* les encyclopédistes ont-ils utilisée(s)?', *Recherches sur Diderot et sur l'Encyclopédie*, 40–41 (October 2006), 287–292 (par. 15 of 54): <http://rde.revues.org/index4342.html> [accessed 2012–08–21].

⁴³¹ Thomann, p. 241: 'partout présent dans l'*Encyclopédie*', pp. 242–245.

⁴³² BnF, MS f. fr. 16984, fol. 265.

⁴³³ *Cours de mathématique*, II, see the license at the end of the volume.

In 1746, Le Breton and his colleagues estimated that the *Encyclopédie* would amount to eight volumes of text and two of plates.⁴³⁴ This was far more than envisioned by Jombert. Still, the bookseller asserted that the rivalry between the two projects was perceived as reciprocal. It is hard to know how far Jombert's account of the situation can be trusted as accurate. No document so far found can support that the publishers of the *Encyclopédie* actually wanted to stop the publication of Jombert's prospectus, or that he was about to publish one. Nevertheless, since the two projects shared several common denominators that distinguished them from the preceding French dictionaries of arts and sciences, it would not be all that surprising if Le Breton and his colleagues really did consider the project of Jombert as a potential threat – at least at this early stage of planning and gathering of sources. Jombert was specialized on works on sciences and arts and had an explicit practical orientation. He certainly had a book collection highly pertinent for the production of a universal dictionary of mathematics, physics, arts and sciences. He also was well-known for including technical illustrations in his publications and for working with some of the most prominent artists and engravers in Paris, including Cochin.

Unfortunately, there is no registered answer from d'Aguesseau, but judging by the subsequent events it is quite obvious that Jombert did not get the response he had hoped for. In 1747, the project was still described as an augmented translation of Wolff.⁴³⁵ Jombert was too late. Apart from being outrun by Le Breton in obtaining a new license, Jombert also had another great disadvantage: he worked alone. The latest edition of the Jesuits' *Dictionnaire de Trévoux* (5 vols, 1743) was published by several booksellers and printers who formed a financial alliance.⁴³⁶ Le Breton was the first printer of the King and possessed a well-equipped printing atelier, but he also associated himself with three other publishers in order to share the expenses.⁴³⁷ As Greta Kaucher points out, 'Jombert did not have the capacity to stand up to such a project, and so his intention of editing a *Universal dictionary of mathematics and physics, sciences and arts* could not be fulfilled'.⁴³⁸

⁴³⁴ Proust, *Diderot et l'Encyclopédie*, p. 46.

⁴³⁵ *Mercure de France* (February 1747), 103.

⁴³⁶ *Quand le 'Dictionnaire de Trévoux'*, ed. by Turcan, pp. 42–44, 74.

⁴³⁷ Martin, 'Publishing Conditions', p. 46.

⁴³⁸ Kaucher, *Les Jombert*, second part, chapter III, subchapter 3, 'Le crédit auprès de la direction de la Librairie et la tentation de l'arbitrage': 'Jombert n'était pas de taille à affronter un tel projet, ainsi son intention d'éditer un *Dictionnaire universel, mathématiques et physiques, des sciences et des arts* ne put être menée à son terme'.

10. RUPTURE AND CONTINUATION

(c. 1747–1754/55)

The history of the Maurists' dictionary can be divided in two phases: an early (c. 1743–1747) and a late (c. 1747–1754/55). The manuscripts suggest that a turning point occurred sometime in 1747, when the draft based on Wolff was interrupted.⁴³⁹ From this point onwards, the work of the Maurists and the work of Jombert continued as two separate projects, developing in different ways. I will start by examining the path of Jombert.

RUPTURE WITH JOMBERT

In 1749 – three years after the letter to d'Aguesseau – Jombert and the bookseller Jacques Rollin (c. 1702–1768) published the prospectus of a 'Universal dictionary of mathematics and physics', planned to appear in 1750. The work was presented as a combination of several mathematical works, among which the dictionary of Wolff now was the second to be enumerated. The whole title reads:

Universal dictionary of mathematics and physics, containing the explication of the terms of these two sciences and the arts depending upon them, drawn from the mathematical dictionaries of Ozanam, Wolf, Stone, and a large number of other works, with their origin, their progression, their revolutions, their principles, and the thoughts of the most famous authors on each subject.⁴⁴⁰

Based on the presence of Wolff, this work seems to be the continuation of the project described in earlier advertisements, as well as in the letter to the Chancellor. However, the prospectus reveals a great novelty. The author of

⁴³⁹ The estimation of this date is based on the fact that the year is stated to be 1747 on folio 60 of the draft based on Wolff, and that the handwriting is interrupted seventy-five folios later. Since the draft probably was initiated already in late 1746, and that Pernety basically were rewriting already existing excerpts and translations, I consider it likely that the draft was interrupted sometime in 1747.

⁴⁴⁰ Alexandre Saverien, *Prospectus: Dictionnaire universel de mathématique et de physique, contenant l'explication des termes de ces deux sciences, & des arts qui en dépendent, tirés des Dictionnaires de mathématique d'Ozanam, de Wolf, de Stone, & d'un grand nombre d'autres ouvrages, avec leur origine, leurs progrès, leurs révolutions, leurs principes, & les sentimens des plus célèbres auteurs sur chaque matière* (Paris: Jombert & Rollin, 1749).

the dictionary – the only author – is presented as Alexandre Saverien. There is no mentioning of any collaborators.

Alexandre Saverien (1720–1805) was a naval engineer and mathematician. According to Kaucher, Jombert had published one of his works on navigation in 1745 and the same year applied for a license for another book which Saverien later published in 1750.⁴⁴¹ Jombert had thus been collaborating with this writer for a long time. Saverien's *Dictionnaire universel de mathématique et de physique* finally appeared in 1753, in two volumes.⁴⁴² The advertisement written by the booksellers explained the three-year delay by the fact that the author had revised the majority of the articles.⁴⁴³

Kaucher remarks that Wolff's dictionary of mathematics, announced as *sous presse* from 1746 onwards, probably was translated to be part of Saverien's dictionary.⁴⁴⁴ Considering the Maurist draft, this assumption requires reconsideration, or at least a rephrasing. The dictionary of Saverien had a prehistory. When Jombert in 1746 described a large-scale enterprise using Wolff's lexicon as point of departure, he was not yet referring to the future work of Saverien. First of all, he repeatedly spoke about the anonymous authors in plural. At this point in time, Pernety and Brézillac were already collaborating with Jombert in translating Wolff's course in mathematics, which treated the same subjects as the lexicon. Besides, my analysis of the Maurist draft shows that the monks indeed started making an augmented translation of Wolff's *Vollständiges Mathematisches Lexicon* (1734). The compilation of the draft might have been initiated in late 1746 or early 1747, but everything suggests that it was preceded by a longer period of preparatory work, including inventories of literature, the making of excerpts, translations, etc. Certainly, one could imagine a scenario where the Maurists all along simply had been assisting Saverien, but the occurrences of phrases like 'as we/I have written in Wolff's course in mathematics' hardly resemble the voice of an assistant, but rather an author referring to a past

⁴⁴¹ Kaucher, *Les Jombert*, 'Annexes', notices 904–906.

⁴⁴² Alexandre Saverien, *Dictionnaire universel de mathématique et de physique, où l'on traite de l'origine, du progrès de ces deux sciences et des arts qui en dépendent et des diverses révolutions qui leur sont arrivées jusqu'à notre temps, avec l'explication de leurs principes et l'analyse des sentiments des plus célèbres auteurs sur chaque matière*, 2 vols (Paris: Jombert & Rollin, 1753).

⁴⁴³ 'Avertissement des libraires', in Saverien, *Dictionnaire*, I, p. xxiv.

⁴⁴⁴ Kaucher, *Les Jombert*, 'Annexes', notice 907: 'Ce qui était annoncé sous presse dès 1746 comme un Dictionnaire de mathématiques de Wolff a dû être traduit pour faire partie de cet ouvrage'.

achievement.⁴⁴⁵ This suggests that Saverien replaced the Maurists sometime after 1747, and then transformed the dictionary in the making.

COMPARISONS OF THE WORKS OF THE MAURISTS, SAVERIEN, AND WOLFF

The dictionary of Saverien and the Maurist draft display both similarities and differences. The similarities strengthen the theory of a mutual history, and the differences the thesis that the Maurist project was the one that Jombert described to the Chancellor in 1746.

Scope of Content

In the preface, Saverien divides the mathematical sciences in three branches: pure mathematics, physics and mixed mathematics. Physics is defined as considering all ‘the properties discovered by vision, touch, hearing, smell, and taste’.⁴⁴⁶ Via these senses, Saverien constructs a narrative where practically all fields of knowledge are related to physics and mathematics. He starts by describing the perception of light and colors, coldness and heat, soft and hard materials, sounds and flavors. He then moves on to the objects possessing these qualities, the sciences examining them, the instruments and methods they use, and finally – their relationship to mathematics. All the areas of mathematics and physics are portrayed as interlinked, like a chain. The observation of the celestial movements (astronomy and cosmography) is connected to the measuring of time (gnomonics and chronology), the measuring of land (geodesy and geography) and navigation. The latter serve as entrance to the construction of boats (naval architecture), which leads to civil and military architecture, to artillery and ballistics, the study of bodies and fluids – either in motion (mechanics, dynamics and hydraulics) or at rest (hydrostatics). At times, Saverien breaks the chain and returns to one of the senses for a new starting point, such as hearing as the foundation for studies of acoustics, music and harmony.⁴⁴⁷

The language of Saverien exposes distinct similarities to the recently published *Encyclopédie*. He emphasizes the interlinkage of the (mathematical) sciences and describes them in a systematic chart of

⁴⁴⁵ BnF, MS f. fr. 16982, fol. 3, ABAQUE : ‘dont nous avons donné la description et l’usage dans le premier volume de l’abrégé des Elemens de Wolff’, fol. 71, AIGRETTES : ‘comme je l’ai dit dans le tome III, page 196 du *Cours de mathématique* de Wolff’.

⁴⁴⁶ Saverien, *Dictionnaire*, I, p. v: ‘propriétés découvertes par la vûe, par le tact, par l’ouïe, par l’odorat, & par le goût’.

⁴⁴⁷ *Ibid.*, pp. v–xv.

knowledge, called *Système figuré des sciences mathématiques*. Using the popular tree metaphor, he writes:

Since all the parts of mathematics are connected, it was necessary to make this liaison known, to indicate it, to bring the twigs to the branches and these to others, and so on all the way back to the trunk. In following this progression [*enchaînement*], I had the satisfaction of seeing the tree be reborn, even though entirely divided in pieces.⁴⁴⁸

Despite the ambitious preface, Saverien's dictionary is actually limited to pure and applied mathematics. Physics remains diffuse and limited. While it in the preface is described as potentially including everything, the chart portrays it as a diffuse leftover category, subdivided in experimental, systematic and occult studies (see Figure 19). The only specified example is astrology, part of the occult physics. In the preface, experimental physics is described as an umbrella category for aerometry, pneumatics, pyrotechnics, and experiments on electricity.⁴⁴⁹ In the chart, however, most of these areas have been placed under the category applied mathematics.

All the fields listed in Saverien's chart are considered in Wolff's lexicon and course in mathematics. They are also treated in the Maurist draft. Neither Wolff nor the Maurists presented a similar tree of the mathematical sciences, but it is clear that Pernety and Brézillac interpreted physics in a wider sense, since they included articles on chemistry, alchemy and metallurgy, different materials, minerals, metals, and physical qualities (all excluded by Saverien). The monks also demonstrated an incipient interest in practical arts and crafts, such as carpentry. 'Crafts' was even emphasized on the title page of the draft. Saverien, on the other hand, has a more negative attitude towards manual labor. He concludes for instance in the preface that Wolff's lexicon could have been further limited – without losing any of its merit – 'by ignoring the articles on mechanical arts'.⁴⁵⁰ Thus, despite the idea of mathematics and physics as permeating all forms of knowledge, the dictionary of Saverien is strictly confined to the (physico)-mathematical sciences. The Maurists thus envisioned a much broader scope of content.

⁴⁴⁸ Saverien, *Dictionnaire*, I, p. xx: 'Comme toutes les parties des mathématiques se tiennent les unes les autres, il falloit faire connoître cette liaison, l'indiquer, ramener les rameaux aux branches, celles-ci à d'autres, ainsi jusques au tronc. En suivant cet enchaînement, j'ai eu la satisfaction de voir renaître l'arbre, quoique entièrement découpé'.

⁴⁴⁹ *Ibid.*, p. viii.

⁴⁵⁰ *Ibid.*, p. xxvi: 'en négligeant les articles mécaniques des arts'.

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Figure 19: ‘Map of the system of the mathematical sciences’, in Saverien’s *Dictionnaire universel de mathématique et de physique* (1753), I, p. xxviii.
(Google Books)

Nomenclature

The Maurist draft defines 402 individual terms between A-ALLER. Wolff's lexicon defines 129 terms in the corresponding section. Of these, the monks have translated *at least* fifty-six.⁴⁵¹ In comparison, Saverien's dictionary defines forty-nine terms between A-ALLE(R) (on nineteen pages in-quarto), of which thirty-one are translated from the same section of Wolff.⁴⁵²

A-ALLE(R)	The Maurist Draft	Wolff	Saverien
Total number of terms	402	129	49
Articles translated from Wolff's section A-ALLE(R)	56	–	31

Table 4: The number of terms between A-ALLER in the Maurist draft (c. 1747), Wolff's lexicon (1734), and the dictionary of Saverien (1753).

This simple overview shows that the Maurists started making a dictionary of far greater proportions than both the works of Saverien and Wolff. Compared to Saverien, Brézillac translated nearly double as many articles. Saverien's dictionary is even smaller than the German lexicon, and could thus hardly be called a considerably augmented translation, as Jombert described the project in earlier advertisements and the letter to the Chancellor.

Sources

Despite the fact that the prospectus of 1749 presented the work of Saverien as based on the dictionaries of Wolff, Ozanam and Stone, this is never mentioned in the preface. Saverien asserts that he has consulted the memoirs of the academies, the learned journals, and the classical works of the most famous mathematicians. The dictionaries of Ozanam, Stone and Wolff are only presented as predecessors.⁴⁵³ In the articles, Saverien rarely

⁴⁵¹ Here I am not counting articles translated from other parts of the alphabet (e.g. AIR from LUFFT, etc.), or Latin terms explicitly indicated to be translated later (e.g. AEQUATIO, voyez EQUATION). As stated, many of the German terms would likely have ended up after ALLER if translated to French.

⁴⁵² See Appendix 1: Nomenclature.

⁴⁵³ Saverien, *Dictionnaire*, I, pp. xx–xxi, xxv–xxvi.

states the source that he has been using. In contrast to the recurrent tendency of Pernety/Brézillac to write ‘W’ or ‘Wolff’ in the margin, there is never an explicit declaration that something has been translated from Wolff. However, there is no doubt that Wolff’s lexicon constitutes the most important building block in Saverien’s dictionary – both as the source of information and for constructing the list of nomenclature. The dictionary of Stone is considerably more limited than the German lexicon. The definitions are shorter, the terms are fewer, and the majority has been treated at greater length by Wolff.⁴⁵⁴ The dictionary of Ozanam is not really a dictionary at all since it consists of thematic essays in non-alphabetical order. There are no explicit references to the dictionaries of Ozanam and Stone in the Maurists’ articles, but each work has been noted in the working lists, which suggest that they were consulted.⁴⁵⁵

Saverien and the Maurists systematically and meticulously reproduce the sources stated in Wolff’s lexicon. Everything is copied: the authors, the titles of their works, the publication dates, the volumes, the chapters and the pages.⁴⁵⁶ These reproductions serve as landmarks revealing the compilers’ indebtedness to Wolff’s lexicon, even though their choices of words and the organization of the text occasionally differ. Whenever the same illustration has been imported from Wolff, the Maurists and Saverien have described it in a close to identical manner. The articles ABSCISSE (Abscissa) and AIGUILLE HYGROMÉTRIQUE (Hygrometric needle) are some of the most illustrative examples, which can be read in Appendix 5.

The sizes of the articles are similar and range from a few lines to several columns. Almost all the longest articles in the Maurist draft are also the longest ones in Saverien’s dictionary. Important exceptions are the Maurists’ rather elaborate treatments of AIROMÉTRIE (Aerometry)⁴⁵⁷ and ACCÉLÉRATION,⁴⁵⁸ which Saverien has reduced to only a few lines. In each case, the Maurists have expanded the content from Wolff and sections from ‘s Gravesande’s introduction to Newton. This pattern, where Saverien

⁴⁵⁴ Edmund Stone, *New Mathematical Dictionary* (London: Senex and others, 1726).

⁴⁵⁵ BnF, MS f. fr. 16984, fol. 265, col. 2: ‘Ozanam, *Dict. de Mathématique*’, ‘Stone, *Dict. de Mathématique*’; fol. 218^v, references to Ozanam.

⁴⁵⁶ ABEILLE (Saverien, p. 3; BnF, MS f. fr. 16982, fol. 6; Wolff, p. 506, FLIEGE), ACAMPTES (S, p. 4; fr. 16982, fol. 15; W, p. 18), ACCLASTES (S, p. 4; fr. 16982, fol. 20; W, p. 20), ACCOUSTIQUE (S, p. 5; fr. 16982, fol. 26; W, p. 22), AIGLE (S, p. 7; fr. 16982, fol. 69; W, p. 24, ADLER), ALGÈBRE (S, pp. 17–18; fr. 16982, fols. 121–126; W, pp. 47–50).

⁴⁵⁷ BnF, MS f. fr. 16982, fols. 96–102.

⁴⁵⁸ BnF, MS f. fr. 16982, fols. 16–19.

simply reproduces or reduces while the Maurists add, can be seen on several occasions.⁴⁵⁹

In some cases, Saverien has made additions identical to the Maurist draft. For instance, in the article ABAQUE (Abacus), mainly translated from Wolff, Pernety/Brézillac remarks that a certain kind of abacus can be seen in the library of the Parisian abbey of Saint-Geneviève. They write: ‘Claude du Moulinet describes another kind of abacus which was in use among the Romans. There is one in the Cabinet of the library of Sainte-Geneviève, which is not very different’.⁴⁶⁰ This is followed by a description of the said abacus. A similar remark is nowhere to be found in the works of Wolff, Vitalis, Stone, Ozanam, or the *Dictionnaire de Trévoux* – but Saverien, too, writes: ‘Claude du Moulinet describes another sort of abacus in the cabinet of the library of Sainte-Geneviève, which was in use among the Romans. Since it is not very different from the one of Pythagoras, it does not deserve particular attention’.⁴⁶¹ In contrast to the Maurists, he does not describe it further but he still takes the time to add this brief and rather redundant information (since he declares it unworthy of further attention). This similarity could be explained by Pernety/Brézillac and Saverien having access to the same literature. Still, it is peculiar how they – among all the choices possible – chose to make the exact same addition. The possibility that Saverien had consulted the Maurist draft should therefore not be excluded.

These observations strongly indicate that the two projects had the same origin: that Pernety and Brézillac started working on the project that later was appointed to Saverien.

⁴⁵⁹ ACANTHE (Saverien, p. 4; BnF, MS f. fr. 16982, fol. 15; Wolff, p. 18), ADEGIGE (S, p. 6; fr. 16982, fol. 46; W, p. 24), ADAR (S, p. 5; fr. 16982, fols. 37–38; W, p. 23), ADDITION (S, pp. 5–6; fr. 16982, fols. 38–45; W, pp. 23–24, ADDIREN).

⁴⁶⁰ BnF, MS f. fr. 16982, fol. 2, ABAQUE: ‘Claude du Moulinet décrit une autre espèce d’abaque tel qu’il étoit en usage chez les Romains. On en voit dans le cabinet de la Bibliothèque de Sainte-Geneviève, qui n’en diffère guère’.

⁴⁶¹ Saverien, *Dictionnaire*, I, 2, ABAQUE: ‘Claude du Moulinet, dans le cabinet de la Bibliothèque de Sainte-Geneviève, décrit une autre façon d’abaque, tel qu’il a été en usage chez les Romains. Comme il diffère fort peu de celui de Pythagore, il ne mérite pas une attention particulière’.

The transformation of a large-scale project to a more limited specialized dictionary could be understood as commercial strategy on the behalf of Jombert. The development of the *Encyclopédie* from 1747 onwards was no secret to the Republic of Letters. As stated, in October 1747 Diderot and d'Alembert replaced Abbé Gua de Malves as the editors in charge, and from 1748 they started recruiting additional collaborators from the intellectual elite.⁴⁶² It is possible that Jombert realized that he did not have the means to compete with Le Breton by going bigger – but he could go smaller. In fact, this strategy was adopted by many publishers and writers during the succeeding decades. In the backwash of the voluminous *Encyclopédie*, the so-called 'portable' dictionaries dramatically increased in number. By choosing a smaller and cheaper format, it was possible to attract the readers that could not afford subscribing to the *Encyclopédie*.⁴⁶³

Due to the lack of sources, the reasons for replacing the Maurists with Saverien remain unknown. Generally speaking, it was not uncommon that dictionary projects changed writers and editors. It happened twice with the *Encyclopédie*. Since the license was granted the publisher, the regulations of the book trade favored the rights of the booksellers rather than the writers.⁴⁶⁴ Per definition, the dictionaries of arts and sciences were compilations of other works. The publisher principally needed a compiler and translator, not necessarily an author or philosopher. Still, the compiler needed to be well-educated in the related subjects in order to know the difference between 'good' and 'bad' books and theories. In this respect, it is possible that Jombert – personally familiar with the many prominent scholars gradually engaging in *Encyclopédie* (whose attitudes towards the monastic orders were no secret) – preferred a secular engineer rather than Benedictine monks, even though their previous collaboration had been successful.

However, the Maurists did not stop working on a dictionary. In fact, their continuing efforts would well surpass the work initiated in collaboration with Jombert.

⁴⁶² Pons, 'Chronologie', p. 7.

⁴⁶³ Rétat, p. 232.

⁴⁶⁴ Kirsop, pp. 21–22.

The draft based on Wolff ends abruptly with a headline of an unwritten article on the middle of the last page. Pernety's handwriting then starts over from the beginning of the alphabet in the manuscripts gathered in volume two. This material contains articles where the current year is indicated to be 1748. In BATAILLON, largely copied from Le Blond's *Essai sur la castramétation*, Pernety makes a reference to 'the present war of 1748'.⁴⁶⁵ In the original text, Le Blond only speaks of the 'present war' – without specification of a year.⁴⁶⁶ Pernety is thus once again revealing the time of his own writing. Thereafter one finds multiple references to articles and works published between 1749 and 1753. The latest explicit date is January 1751,⁴⁶⁷ but Pernety also recurrently refers to David Jeffries's treatise on diamonds, which was translated to French in 1753.⁴⁶⁸ A closer look at Pernety's articles and the French and the English edition (1751) reveals that Pernety follows the nomenclature and definitions of the French edition down to the last word.⁴⁶⁹ Had he himself been translating terms and descriptions directly from the English original, there would have been at least some small deviation from the French edition – but there is not.

The above dates confirm that these manuscripts were written after the draft based on Wolff. The complete absence of references to the German lexicon further shows that this material constituted a new project.

The limited presence of the handwriting of Brézillac could suggest that he left the project in an early stage. If considering also external documentation, the probability of this scenario is reinforced. As mentioned in Chapter 7, after the death of Dom Jacques Martin in 1751, the Superiors charged Brézillac to continue his uncle's work on the *Histoire des Gaules*.⁴⁷⁰ The

⁴⁶⁵ BnF, MS f. fr. 16980, fol. 40: 'dans la présente guerre en 1748'.

⁴⁶⁶ Guillaume Le Blond, *Essai sur la castramétation, ou sur la mesure et le tracé des camps* (Paris: Jombert, 1748), p. 13: 'dans la présente guerre'.

⁴⁶⁷ BnF, MS f. fr. 16980, fol. 197, MUMIE: 'Mercure de France de janvier 1751'.

⁴⁶⁸ BnF, MS f. fr. 16980, fol. 204, OUTIL À EPREUVE; pl. 6.

⁴⁶⁹ BnF, MS f. fr. 16980, fol. 254, TABLE, fol. 45, BIZAUX, fol. 59, CEINTURE, fol. 214, PAVILLONS, fol. 101, CULACE, fol. 95, COURONNE, fol. 125, FACETTES DE TRAVERSE, fol. 92, CÔTES; David Jeffries, *Traité des diamants et des perles, traduit de l'Anglois sur la seconde édition qui a été considérablement augmentée* (Paris: Debure & Tillard, 1753), pp. xxx–xxxi, TABLE, BIZAUX, CEINTURE, PAVILLONS, CULACE, COURONNE, FACETTES DE TRAVERSE, CÔTES; Jeffries, *A Treatise on Diamonds and Pearls*, 2nd edn (London: The Author, 1751), (non-paginated): TABLE, BEZIL, GIRDLE, PAVILIONS, COLLET, CROWN, SKILL-FACETS, RIBS.

⁴⁷⁰ Tassin, p. 690.

Manuscripts Department of the BnF has conserved a large collection of unpublished papers composed along the production of this work. Among them one finds an agreement concluded between Martin, Brézillac and the bookseller Le Breton, dated 18 November 1748. The document is written by Brézillac and signed by all three. In this text, Brézillac explicitly and repeatedly writes ‘we, the authors’ – in plural.⁴⁷¹ In other words, even if Martin officially was in charge until his death, this document shows that Brézillac was deeply involved in the *Histoire des Gaules* already by the end of 1748. Still, it is not impossible that he continued working on the dictionary project as well; that his drafts later were rewritten by other hands, or perhaps were lost with the missing third piece. Either way, as shown in Chapter 6, the handwriting analysis shows that Pernety received assistance from five to six additional writers.

The periodical press indicates that the dictionary enterprise was no secret to the learned circle in Paris. The annual *La France littéraire* (1754, 1755) stated that Dom Antoine-Joseph Pernety – in present tense – ‘works on a *Dictionary of arts and crafts*’.⁴⁷² From the volume of 1756 onwards he was declared occupied with other subjects, including the treatise on diplomatics with Dom Tassin and his own works on hermetic philosophy. Since the Congregation had an elaborate network of contacts within the literary world of Paris, there is no reason to doubt the information provided in *La France littéraire*. However, it is uncertain how far it can be used to precisely estimate the project’s duration. The volumes for the years 1755, 1756 and 1757 actually all appeared in 1757, even though their title pages announced different years of printing.⁴⁷³ Whether or not the compilation corresponded to the stated years remains unknown. Furthermore, an advertisement in the volume of 1755 announced that the content was the same as the preceding year.⁴⁷⁴ Considering that the latest source (so far found) in the preserved dictionary manuscripts was published in 1753, it seems likely that the project was interrupted sometime either during this year or the immediately succeeding ones: in 1754 or 1755.

There is no explicit information revealing whether or not the Maurists continued collaborating with a bookseller. However, compiling a large-scale

⁴⁷¹ BnF, MS f. fr. 17506, fol. 337^{r-v}.

⁴⁷² *La France littéraire* (1754), p. 186; (1755), p. 186: ‘Il travaille au *Dictionnaire des arts et métiers*’. Pernety is not included in the *Almanach des Beaux-Arts* (1752-1753).

⁴⁷³ *Dictionnaire des journaux*, ed. by Sgard: <http://c18.net/dp/dp.php?no=78> [accessed 2014–03–11].

⁴⁷⁴ *La France littéraire* (1755): ‘Cet almanach est tel qu’il parut l’année dernière’.

dictionary was an expensive matter in eighteenth-century France. Each monastery of the Congregation of Saint-Maur received an annual sum for the literary activities, intended for the purchase of paper, ink, books, etc. Still, most of the funding derived from either royal pensions or the booksellers with whom the scholars signed a contract.⁴⁷⁵ Considering the large amount of paper and recently published books used for the Maurist dictionary, it is highly unlikely that the Superiors would have agreed to finance this project for several years if there was no external funding or prospect of publication. The very fact that the information about the enterprise was communicated to the *La France littéraire* suggests that it was intended to be published – for why otherwise tell the public? Furthermore, the correspondence of other Maurists' scholars indicates that updates about the works in progress normally reached the journalists via the publishers.⁴⁷⁶ Against this background, it is likely that Pernety and his colleagues collaborated with a bookseller also during the second phase of the project. But if this bookseller no longer was Jombert (no sources can support or contradict his continuous involvement), who could it have been?

Pernety's first own publication, the *Dictionnaire portatif de peinture, sculpture et gravure*, appeared in 1757. As we shall see, the manuscripts suggest that this dictionary was based on articles and illustrations originally compiled for larger enterprise.⁴⁷⁷ The bookseller publishing the dictionary was Jean-Baptiste Claude Bauche (1712–1777). One year later, he also published Pernety's *Les fables égyptiennes et grecques* and the *Dictionnaire mytho-hermétique*. The store of Bauche was located just a stone's throw from Jombert. Bauche was furthermore married to the daughter of Jacques Rollin, Jombert's older associate.⁴⁷⁸

A closer look at bookstore catalogues of Bauche reveals that he owned several of the works most frequently consulted by Pernety and his colleagues in the compilation of the later dictionary manuscripts.⁴⁷⁹ Considering that booksellers often supplied the writers with the books they needed for

⁴⁷⁵ Gasnault, pp. 20–22, 40–41.

⁴⁷⁶ Robert, pp. 12, 78.

⁴⁷⁷ See Chapter 12, 'Envisioning an Illustrated Dictionary'

⁴⁷⁸ *Dictionnaire des imprimeurs*, ed. by Barbier, pp. 177–178.

⁴⁷⁹ *Catalogue des livres de sortes & d'assortimens, qui se trouvent chez Bauche fils, Quay des Augustins, à Sainte-Geneviève, 1752* (Paris: Bauche, 1752); *Catalogue des livres qui se trouvent chez Bauche, librairie à Paris, Quay des Augustins, à Sainte Geneviève et à Saint Jean dans le désert, 1755* (Paris: Bauche, 1755). Just to mention some of the works that will be treated in the Chapters 12–13: 'Gemelli Careri, *Voyage du tour du monde*; Corneille de Bruyn, *Voyages*; Anson, *Voyage autour du monde*; Col de Vilars, *Cours de chimie*; Winslow, *Exposition anatomique*; Charas, *Pharmacopée*'.

completing the planned publication, this correspondence makes Bauche a plausible candidate for being the publisher replacing Jombert. Compared to the latter, Bauche's professional orientation was more diverse. During the 1750s he was on several occasions suspected for selling prohibited books, and he also undertook some large-scale editorial projects that never were realized. At two points he was accused for not honoring his agreement with his printers. From 1760 onwards he faced great financial problems and was forced to sell parts of his library.⁴⁸⁰ There is no mentioning of a dictionary of arts and crafts being in progress (i.e. *sous presse*) in his catalogues or in the manuscripts preserved in his name.⁴⁸¹ On the other hand, the same goes for the majority of the works he published. His involvement in the Maurists' enterprise thus remains unverified.

The Maurists' choice to finally abandon the dictionary enterprise could have many reasons. First of all, it is not unthinkable that the project simply became too large and expensive to manage. Richard Yeo has pointed out that encyclopedic dreams almost always have outrun the achievements, and many ambitious works stranded just before reaching the finishing tape. Even printed encyclopedias and dictionaries display traces of 'failure just averted', since the number of entries and terms commonly decline towards the end of the alphabet.⁴⁸² Secondly, Pierre Gasnault has remarked that a surprising number of Maurist enterprises were left unfinished. The monks commonly worked in pairs or teams, but the individual collaborators were rarely exchangeable. Therefore, the defection, illness or death of one or several of them could easily compromise the entire project.⁴⁸³ Since nothing is known about the additional collaborators of Pernety, it cannot be excluded that such factors played a role in the enterprise's fate. At least it seems like Brézillac got his hands full after his uncle's death in 1751. Thirdly, if Bauche indeed was the bookseller responsible, it is not impossible that his professional and financial situation contributed to the development.

But there is also another circumstance to consider: the *Encyclopédie*. In order to determine if and how the *Encyclopédie* was significant to the fate of the Benedictine project, we must first learn what kind of dictionary the Maurists were making.

⁴⁸⁰ *Dictionnaire des imprimeurs*, ed. by Barbier, pp. 177–182.

⁴⁸¹ I have consulted all the relevant manuscripts enumerated in *Dictionnaire des imprimeurs*, ed. by Barbier, pp. 181–182.

⁴⁸² Yeo, *Encyclopaedic Visions*, p. 4.

⁴⁸³ Gasnault, pp. 15–16.

PART IV.
THE MAURISTS'
MANUSCRIPTS COMPARED

11. COVERAGE AND ORGANIZATION OF KNOWLEDGE

The following part of the dissertation is focused on the manuscripts compiled during the second period (c. 1747–1754/55). While the draft based on Wolff consists of some one hundred and thirty folios, the material preserved from the later phase amount to over a thousand. In this respect, the second project constituted a much greater enterprise. How did Pernety and his colleagues intend to distinguish the new dictionary from the preceding one? Did the initial occupation – the making of an augmented translation of Wolff’s lexicon in collaboration with Jombert – continue to influence their work in some way? Were they still compiling a dictionary possible to describe as ‘about the same style’ as the parallel enterprise of Diderot and d’Alembert? In short: what kind of dictionary where the Benedictines making?

DEFINING THE SECOND PROJECT

The draft based on Wolff was explicitly presented as a ‘Dictionary of mathematics and physics, arts and crafts’. Unfortunately, there is no title page describing the objective of the later manuscripts. All drafts immediately begin with articles, without any introducing headlines. Even though several writers make references to the work as a whole (i.e. ‘this dictionary’), they never specify the full title. However, there is a title mentioned in one of the working lists. The Index volume contains a catalogue of planned illustrations that correspond to the articles written from 1747 onwards. The front page of the catalogue announces that it contains the figures described and explained in the ‘Universal dictionary of arts and crafts’.⁴⁸⁴ Except for the epithet ‘universal’, this title corresponds to the one given in *La France littéraire* (1754, 1755).⁴⁸⁵

In 1747, Fortet remarked that Pernety and Brézillac were working on a ‘universal dictionary of the mechanical and liberal arts, crafts, and all the

⁴⁸⁴ BnF, MS f. fr. 16984, fol. 1: ‘Dictionnaire universel des arts et métiers’.

⁴⁸⁵ *La France littéraire* (1754, 1755), p. 186.

sciences that have any relation to them’.⁴⁸⁶ This description can be compared to the title presented by Jombert a year earlier: ‘New dictionary of mathematics and physics and all the areas depending on them’.⁴⁸⁷ At first sight, the two descriptions seem rather different, but they actually partly overlap one another.

From Antiquity onwards, knowledge had been classified in a number of ways. By the mid-eighteenth century, many of these categorizations were still current in common language, but their meanings and boundaries had changed. The scholastic distinction between liberal and mechanical arts was such a case. The seven *artes liberales* had traditionally embraced grammar, logic and rhetoric (*trivium*), and arithmetics, geometry, music and astronomy (*quadrivium*). The juxtaposing *artes mechanicae* designated a wide variety of practical skills, such as shoe- and clothmaking, shipbuilding, navigation, hunting and agriculture. This division was thus similar to the Aristotelian distinction between *scientia* (body of theoretical knowledge) and *techne* (practice or skill). During the Renaissance, the *trivium* was fusing with the concept of *studia humanitatis*, which besides rhetoric and the classical languages also included history, ethics, politics and law. From the seventeenth century onwards, the boundaries between the traditional liberal and mechanical arts started to collapse, not the least due to the expansion and fusion of the mathematical sciences (*quadrivium*) with a number of mechanical arts. At the same time, *art* was increasingly used to denote practice or method, in contrast to *science* (theoretical knowledge).⁴⁸⁸

By the mid-eighteenth century, most large-scale dictionaries – including the *Dictionnaire de Trévoux* and the *Encyclopédie* – still used the old formulation ‘liberal and mechanical sciences and arts’ to describe their contents, even though their coverage extended far beyond the areas traditionally embraced by these categories.⁴⁸⁹ In other words, these formulations had basically come to mean that the dictionaries treated the humanities and the mathematical sciences, as well as other categories of theoretical and practical knowledge.

⁴⁸⁶ Martène, IX, 342.

⁴⁸⁷ *Les éléments d’Euclide*, ed. by Ozanam, p. 528.

⁴⁸⁸ Yeo, ‘Classifying the Sciences’, pp. 241, 243; Burke, pp. 84, 99–100; ARTFL *Dictionnaires d’autrefois*. See ART and SCIENCE in the *Dictionnaire de l’Académie française* (1694):

<http://artfl-project.uchicago.edu/content/dictionnaires-dautrefois> [accessed 2014-03-19].

⁴⁸⁹ *Dictionnaire de Trévoux* (1743), title page: ‘les sciences & les arts, soit libéraux, soit mécaniques’; *Encyclopédie*, I (1751), p. i: ‘il doit contenir sur chaque science & sur chaque art, soit libéral, soit mécanique, les principes généraux qui en sont la base’.

Consequently, Dom Fortet's description suggested that the Maurist project would include the humanities (*trivium/studia humanitatis*), the mathematical sciences (*quadrivium*), the practical arts and crafts and related bodies of theoretical knowledge. In this respect, the only addition compared to the title of Jombert was the humanities. Otherwise, both descriptions made sure to mention *related* or *depending* sciences and arts, in contrast to *all* sciences and arts.

Considering that the draft based on Wolff seemingly was abandoned sometime in 1747, and that Fortet – in all likelihood – compiled the annual report towards the end of the year, it is likely that he actually referred to the succeeding project of Pernety and Brézillac. Since the three monks lived in the same abbey, Fortet had a direct insight to the work he described. Perhaps he even reproduced the writers' own preliminary title of the dictionary. However, the title indicated on the illustration catalogue and the description later given by *La France littéraire* did not make any distinction between mechanical and liberal arts, and neither of them mentioned anything about related sciences. Each simply presented the project as a (universal) dictionary of arts and crafts. What did this imply? Did *art* designate only practical knowledge, or did it comprise the mechanical and liberal arts together: the humanities and the mathematical sciences? In short: how are the Maurists' later manuscripts best described?

THE SCOPE OF CONTENT COMPARED TO THE FIRST DRAFT

As can be seen in Table 5, practically all the mathematical sciences considered in the draft based on Wolff are still present in the Maurists' later manuscripts. The articles written by Pernety consider arithmetics and geometry (pure mathematics), but also applied or mixed mathematics such as optics, mechanics, hydraulics, astronomy, navigation, civil, naval and military architecture, warfare and artillery. Even physics is still included.⁴⁹⁰ However, these categories are not as dominant as they were in the first draft. Pernety now demonstrates a strong interest in two large, additional categories: practical professions and natural history.

⁴⁹⁰ BnF, MS f. fr. 16980. See Appendix 4: Fields of Knowledge.

‘Dictionary of Mathematics, Physics, Arts and Crafts’ (based on Wolff’s <i>Lexicon</i>) (c. 1743–1747)	‘Universal Dictionary of Arts and Crafts (and Related Sciences)’ (c. 1747–1754/55)	French Terminology (used by the writers)
Aerometry	–	Airométrie
Acoustics	Acoustics	Acoustique
–	Agriculture	Agriculture
Alchemy	Alchemy	Alchymie
Algebra	Algebra	Algèbre
–	Anatomy	Anatomie
–	Ancient coins, measurements, arts and crafts, culture	Ancienne monnaie, mesure etc.
Architecture (civil, naval, military)	Architecture (civil, naval, military)	Architecture civile, marine et militaire
Arithmetics	Arithmetics	Arithmétique
Artillery	Artillery	Artillerie
Astrology	Astrology	Astrologie
Astronomy	Astronomy	Astronomie
–	Bakery, pastry, cooking, etc.	Boulangerie, pâtisserie, cuisine
Botany	Botany	Botanique
Carpentry	Carpentry	Charpenterie
Chemistry	Chemistry	Chymie
Chronology *limited	–	Chronologie
Commerce	Commerce	Commerce
–	Engraving	Gravure
–	Falconry	Fauconnerie
Fishing *limited	Fishing	Pêche
–	Forestry	Bûcheronnage (termes de bûcheron)
–	Gardening	Jardinage
Geometry	Geometry	Géométrie
Hermetic philosophy	Hermetic philosophy	Philosophie hermétique
–	Heraldry	Blason
Hydraulics	Hydraulics	Hydraulique
Hydrostatics	Hydrostatics	Hydrostatique
–	Hunting	Chasse
–	Manufacture of instruments and equipment of the diverse arts and crafts	Epinglier, aiguillier, etc.
Mechanics	Mechanics	Mécanique
–	Medicine	Médecine
Metallurgy *limited	Metallurgy	Métallurgie
Military arts	Military arts	Arts militaires/guerre
–	Mining	Termes de mine/mineur
Music	Music	Musique
–	Music instruments	Instruments de musique
Natural history *limited	Natural history (animals, plants, minerals, metals etc.)	Animaux (insectes, serpents, poissons, quadrupèdes etc.), plantes, minéraux, métaux.
Navigation, life on board	Navigation, life on board	Navigation /marine
Optics	Optics	Optique
Painting	Painting	Peinture
Perspective	Perspective	Perspective

–	Pharmacy	Pharmacie
Physics	Physics	Physique
–	Poetry	Poésie
–	Printing	Imprimerie
Sculpture	Sculpture	Sculpture
–	Surgery	Chirurgie
–	Workers on gold, silver and precious stones	Joillier, orfèvre
–	Work on glass	Verrerie
–	Works/workers on iron and steel	Acierie, forge de fer
–	Works on silk, wool, textiles, etc.	Ouvriers en soie, laine, textile
–	Works on stone, shale, plaster etc.	Ouvriers en pierre, ardoise, plâtre
–	Writing	Termes d'écrivain

Table 5: The fields of knowledge treated in the later manuscripts compared to the draft based on Wolff.

Pernety has written a multitude of entries on the extraction, processing and refinement of metals; the furnaces and tools involved in the production of steel and iron, copper, and lead, as well as the cutting and polishing of precious stones. A large number of articles concern diverse manufactures and the related commerce, such as the production of earthenware, porcelain, silk, paper, glass, wax candles, church clocks, musical instruments, olive oil, and groceries. Pernety also takes an interest in the works of the lumbermen and carpenters, the construction of nets and traps, the elements of hunting, falconry, botany, gardening, householding and agriculture. To this one can add entries on historical aspects of crafts and objects, such as ancient currencies, measurements, astronomical concepts and buildings. Besides this, Pernety treats the art of writing, printing and publishing, painting, sculpture and engraving, as well as anatomy, surgery and chemistry.

Natural history constitutes the second major addition. Pernety describes hundreds of insects, animals, trees and fruits, medicinal plants and herbs, curious sea shells and mollusks, beautiful stones and poisonous vapors, strange fossils, Egyptian mummies and frozen mammoths. In this category, the utile and the curious blend together in a vivid mix. Studies of the animal and plant kingdoms also recurrently converge with physics and medicine. The regenerating ability of the polyp, the chrysalis of the caterpillar, and the sightings of microscopic animalcules all form a part of the endeavor to understand the laws of Nature – and life itself.

The manuscripts of Pernety touch upon nearly every area treated in detail by the co-writers. Natural history is also considered by NH-3, whose articles

are gathered in the third volume.⁴⁹¹ The small and incomplete contribution of NH-2, inserted among the manuscripts of Pernety, also concerns natural history and medicine.⁴⁹² Similarly, the draft written by AGR-1 and AGR-2, gathered in the first volume, considers agriculture, gardening, viniculture and animal husbandry.⁴⁹³ The fifth volume constitutes the largest coherent unit of the dictionary manuscripts. MED-1, MED-2, and MED-3 are responsible for more than three thousand articles on medicine, surgery, anatomy, chemistry, alchemy, hermetic philosophy, pharmacy and botany. The writers describe different diseases, syndromes and pharmaceutical treatments; they explain the muscular and nervous systems, the digestion, conception, and the blood circulation. The reader is told how to apply diverse bandages, fixate a fracture, mix an antidote and use chemical equipment. Through consideration of medicinal plants and the manufacture of surgical instruments, the draft has connections to both natural history and crafts, but there are also articles without any explicit connection to medicine.⁴⁹⁴

Judging by the corresponding content, the majority of the working lists derive from the second project. Pernety and his colleagues have made a multitude of thematic lists enumerating crafts and trades, animals, plants, shells, minerals, metals and stones. They have listed the terminology within medicine, agriculture and architecture, as well as the terms used by bakers, jewelers, carpenters and the workers on iron, steel, copper, lead, gold, silk, wool and textiles. Also the drawings made by Pernety correspond to the articles of the second project. The figures predominantly depict aspects of crafts and manufactures, but the working lists suggest that illustrations of animals and plants, anatomy, surgical instruments, and chemical equipment were planned as well.⁴⁹⁵

This simple overview shows that the succeeding project was not confined to only the mechanical arts and crafts, although the practical and ‘useful’ certainly was in focus. Compared to the draft based on Wolff, the Maurists added fields rather than excluded. However, in contrast to the suggestion of

⁴⁹¹ BnF, MS f. fr. 16981.

⁴⁹² BnF, MS f. fr. 16980, fols. 1^{r-v}–3^{r-v}.

⁴⁹³ BnF, MS f. fr. 16979.

⁴⁹⁴ For instance, BnF, MS f. fr. 16983, fol. 61: ‘BLATTA BYZANTIA, c’est un petit coquillage qui est long comme la moitié du petit doigt, mince et de couleur brune. Il renferme un petit poisson rouge qui a l’odeur du nard. Le coquillage ne conserve plus d’odeur dès que le poisson en est ôté’; fol. 118: ‘COLOPHANE, s. f. *Colophania*, c’est une sorte de gomme dont se servent les musiciens pour frotter les archets de leurs instruments’.

⁴⁹⁵ See Chapter 12, Appendix 3: Illustrations, Appendix 2: Working Lists.

Fortet, the manuscripts do not treat all the liberal arts. The *trivium* or *studia humanitatis* is highly underrepresented. There are a few articles on poetry, but very little on grammar and nothing on history, ethics, politics and law. The monks were thus focusing on the *quadrivium* (the mathematical sciences), mechanical arts and crafts, and ‘related’ bodies of theoretical knowledge, such as physics, natural history and medicine.

These observations suggest that Pernety and Brézillac indeed remained influenced by the project begun in collaboration with Jombert. As described in Chapter 8, already Wolff’s mathematical lexicon displayed an interest in the expressions of the ‘related’ artisans and manufacturers. The relationship between mathematics and the mechanical arts and crafts had also been emphasized in the translator’s preface of Wolff’s *Cours de mathématique*, and the monks included ‘crafts’ in the preliminary title of the first draft. This practical approach was very much in line with the professional orientation of Jombert, whose collection included a great number of courses and manuals related to engineering and manufacture.⁴⁹⁶ His catalogue printed in 1747 enumerates books on glassworks, the coloring of textiles, the construction of chimneys and mills, but also general works such as the anonymous *Secrets concernant les arts et métiers* (1716), and Jean-Baptiste Guélard’s *Description abrégée des principaux arts et métiers* (c. 1743).⁴⁹⁷ The catalogue also includes titles on natural history, medicine and botany.⁴⁹⁸ As described in Chapter 10, the dictionary of Saverien contained very little on crafts and manufactures. Even though the preface explained that mathematics and physics could serve as the organizational principle for practically all fields of knowledge, the content was limited to the classical mathematical sciences and experimental physics. In this respect, the initial ambition of Jombert – as he described it in the letter to d’Aguesseau – were to a greater deal (about to be) realized in the Maurists’ succeeding work.

ESTABLISHING LIMITS: THE INVENTORY OF THE *DICTIONNAIRE DE TRÉVOUX*

The Maurists might have expanded the scope of content in relation to the first draft on Wolff, but how did it compare to other dictionaries of arts and

⁴⁹⁶ *Catalogue des livres imprimez ou qui se trouvent en nombre chez Charles-Antoine Jombert* (Paris: Jombert, 1747), pp. 1–3.

⁴⁹⁷ *Ibid.*, p. 17.

⁴⁹⁸ *Ibid.*, pp. 15–16, 18–19.

sciences? What did the emphasis on the *related* sciences, as in contrast to *all* sciences, imply?

Before the publication of the *Encyclopédie*, the *Dictionnaire de Trévoux* was the largest dictionary of arts and sciences available in the French language. Therefore it is not that surprising to find two Maurist inventories of ‘terms of interest’ located in the Jesuit dictionary. There are no headlines actually announcing these lists to be inventories of the *Trévoux*, but considering the content, this is the best way to describe them. Besides the fact that they are following the nomenclature of the said dictionary, many terms are accompanied by exhortations to take a closer look at the articles in the *Dictionnaire de Trévoux*, such as ‘see *Trévoux*’ or simply ‘see *Tr.*’.⁴⁹⁹ This material provides a unique insight to the monks’ process of establishing limits for their project.

The first inventory is written by Brézillac and constitutes his only preserved (visible) contribution. The second derives from two of the additional writers: AGR-1(NH-3), who seems to have been a second major contributor next to Pernety, and MED-1, one of the medical writers. Each inventory starts from A, but their pattern of selection differs.

The spelling of the terms differs in the editions of the *Dictionnaire de Trévoux*. Due to this particularity – combined with the fact that new terms were introduced in every new augmented edition – it is possible to determine which editions the Maurists used. Brézillac begins by listing terms following the spelling of the second edition (1721).⁵⁰⁰ From F he switches to the augmented edition of 1743. This can be determined partly by the differing spelling, partly by the fact that he has included the new terms.⁵⁰¹

During the two first folios on A, Brézillac notes close to every term in the Jesuit dictionary. The selections regard everything from theology, grammar, jurisprudence, ethics and politics to mathematics and physics. In other words, at this point Brézillac included terms related to all the liberal arts, as well as theology. He then gradually starts to exclude certain areas of knowledge, albeit in an inconsistent manner. This could suggest that he was a bit unsure about the limits of the project at hand. When his handwriting

⁴⁹⁹ BnF, MS f. fr. 16984, fol. 46^v: ‘ACTE, voyez *Trévoux*’, ‘ACTION, v. *Tr.*’, fol. 47: ‘ADMINISTRATION, v. *Trévoux*’, fol. 48^v: ‘AILE, v. *Tr.*’

⁵⁰⁰ See for instance BnF, MS f. fr. 16984, fols. 43–44^v, ABBA ou ANBA, ABATEMENT, ABATIS, ABATRE, ABÉCÉ, ABBOI; *Dictionnaire de Trévoux* (1721, 1732, 1743), I.

⁵⁰¹ For instance, BnF, MS f. fr. 16984, fols. 54–70, FILARDEAU, FILOCHE, FLIPOT, FOANG, GALLE, GENEVRETTE, GILLET, HAUTE DE CHAUSSSES, HÉPATITE, HIGIÈNE, PAISSELURE, PAONE. See *Dictionnaire de Trévoux* (1743), III (F–K), IV (L–PAZ), where new terms are marked with the symbol of a pointing hand.

stops in the middle of P, his selections are more similar to the scope of content of the later manuscripts, but still too wide to be corresponding. AGR-1 and MED-1 then takes turn in finishing the inventory, and their selections are immediately more precise and consistent. After this, they remake the whole inventory from A, now using the *Trévoux*-edition of 1743 from the start.⁵⁰² Compared to Brézillac, AGR-1 and MED-1 are remarkably consistent in their inclusions and exclusions of diverse fields of knowledge, and the result corresponds perfectly to the coverage in the later article drafts. In other words, at this point there was no question about the limits and objective of the dictionary under construction, which suggests that this inventory was compiled after the one of Brézillac.

AGR-1 and MED-1 supply each term with a classification, which specifies in which meaning the term will be considered. A comparative reading of the *Dictionnaire de Trévoux* therefore shows exactly what kind of terms and entries that are included and excluded. This is illustrated in Tables 6 and 7, where two sample sections from the inventory have been transcribed. The left columns contain the ‘terms of interest’ noted by the Maurists, and the right columns the ones omitted in the same sections in the *Trévoux*. In order to avoid confusion, only the classifications given by the Maurists and some explicatory phrases from the *Trévoux* have been translated. The terms themselves are reproduced in French.

The first section ranges from ABACO to ABASSI (Table 6). Here the Maurists have noted terms on arithmetics, architecture, botany, cooking, heraldry, music, falconry, gardening, anatomy and medicine. They have also included an animal, a tree, a Persian coin, and an ancient royal ornament.⁵⁰³ These types of subject correspond to the contents of the Maurists’ manuscripts (see Table 5). Then, if turning to the right column, one sees what kind of subjects the monks exclude. All terms related to the Bible and the Christian tradition, mythology, customs, moral philosophy, geography (rivers, mountains, villages) and ethnical groups or ‘people’ have been left out. The Maurists are also systematically avoiding obsolete terms and words of everyday language, that is, words without a connection to a specific field of knowledge.⁵⁰⁴ The last choice indicates that the Maurists wanted to focus on specialized terminology.

⁵⁰² BnF, MS f. fr. 16984, fol. 123^{r-v}, inclusion of the new terms ABCÉDER, ABRITE, ABROUTIE ou RABOURGIE, etc.

⁵⁰³ BnF, MS f. fr. 16984, fol. 123.

⁵⁰⁴ *Dictionnaire de Trévoux* (1743), I, 7–14.

<i>Noted terms and entries</i>	<i>Excluded terms and entries</i>
<p>ABACO, ‘arithmetic table’ ABACOT, ‘ancient ornament of the King’ ABADA, ‘savage animal’</p> <p>ABAJOUR, ‘term of architecture and botany’</p> <p>ABAISSÉ, ‘term of the pastrycook’</p> <p>ABAISSÉ, ‘term of heraldy’ ABAISSER, ‘term of music’ ABAISSER, ‘term of falconry’ ABAISSER, ‘term of gardening’ ABAISSSEUR, ‘term of anatomy’</p> <p>ABANDONNER, ‘term of falconry’</p> <p>ABANDONNÉ, ‘term of medicine’</p> <p>ABAUQUE, ‘terme of architecture’</p> <p>ABAREMO, ‘Brazilian tree’</p> <p>ABASSI, ‘Persian coins’</p>	<p>ABADDON ‘is in the Apocalypse’ ABADIR, ‘term of mythology’ ABAEUZ, ‘term of customs’</p> <p>ABAISSER [general language]</p> <p>ABAISSSEMENT [gen. lang.] ABAISSSEMENT ‘is used figuratively regarding moral subjects’ ABAISSER [gen. lang.] ABAISSER, ‘within moral philosophy’</p> <p>ABALOURDIR, ‘obsolete word’ ABANA, ‘river in Syria’ ABANDON [gen. lang.] ABANDON, ‘used by the Mystics’ ABANDONNEMENT [gen. lang.] ABANDONNER, [gen. lang.]</p> <p>ABANDONNÉ, [gen. lang.]</p> <p>ABATEENS, ‘people of Argos’ ABANTES, ‘Thracian people’ ABANTIDE, ‘it is the Négreponte’ [a Greek island]</p> <p>ABARE, ‘name of people’</p> <p>ABARIM, ‘Arabic mountain’ ABARO, ‘small village in Syria’ ABASOURDIR [gen. lang.] ABASSE, or ABASCE, ‘inhabitant of Abassie’</p>

Table 6: The Maurists’ inclusions and exclusions of terms and entries between ABACO–ABASSI in the inventory of the *Dictionnaire de Trévoux* (1743).

In the *Dictionnaire de Trévoux*, the significance of common words is often demonstrated by a number of example sentences where religion and ethics constitute standard themes. ABANDONNEMENT is for instance explained as resignation to God, or to lead a sinful life.⁵⁰⁵ Similarly, ABANDONNER is exemplified with ‘God never abandons those who are in need’, or a man slave to his passions.⁵⁰⁶ Such expressions are never seen in the Maurists manuscripts. By focusing solely on specialized terminology, the monks seldom step outside the secular realm. If anything, the monks seem to actively avoid metaphysical and purely philosophical (speculative) aspects. This can particularly been seen in Table 7 and the Maurists’ selections of entries to HOMME (Man). Here the monks have noted HOMME as considered within natural history, medicine, war, and heraldry, but they have excluded the *Trévoux*’s entries on philosophy, ethics, theology, jurisprudence and customs. They have also rejected general meanings, such as someone occupying a profession, or someone which courage.

<i>Noted entries</i>	<i>Excluded entries</i>
HOMME, '[natural] history'	HOMME, 'in philosophy'
HOMME, 'medicine'	
HOMME, 'war'	
HOMME, 'heraldry'	
	HOMME, 'in moral philosophy'
	HOMME, '[gen. language]'
	HOMME, 'within theology'
	HOMME, 'within jurisprudence', etc.
	HOMME FEUDAL, 'in terms of customs'
	[Followed by a multitude of minor entries, such as HOMME GENTIL, HOMME D'INTELLIGENCE, HOMME-LIGE, etc.]

Table 7: The Maurists’ inclusions and exclusions of entries on HOMME (Man) in the inventory of the *Dictionnaire de Trévoux* (1743).

⁵⁰⁵ *Dictionnaire de Trévoux* (1743), I, 11: ‘résignation, vertu par laquelle nous nous remettons de tout entre les mains & à la conduite de Dieu’, ‘le pécheur est dans un grand abandonnement, lors qu’il ne sent plus de remords’.

⁵⁰⁶ *Ibid.*, pp. 11–12: ‘Dieu n’abandonne jamais les siens au besoin’, ‘un homme qui est entraîné par ses passions, qui en est devenu l’esclave, qui s’y prostitue absolument’.

The consistency of the Maurists choices becomes clear if considering the selections of terms within a larger alphabetical section, such as AB–ABY.⁵⁰⁷ In this section, the *Dictionnaire de Trévoux* (1743) contains 238 terms with one or several entries. Of these, seventy-eight are noted in the Maurists' inventory.⁵⁰⁸ They correspond to close to all the terms/entries on practical arts, crafts, and natural sciences in the *Trévoux*. In fact, the monks have only excluded six terms within this category (derivative variations excluded).⁵⁰⁹ Four of these exist as articles in the first draft based on Wolff, which means that only two terms actually remained unnoticed.⁵¹⁰ The omitted 160 terms principally concern general language, obsolete words, derivative variations and proper names, but also metaphysics, general/speculative philosophy, religion, ethics, customs, jurisprudence, politics and geography. In other words, these areas occupy the largest part of the *Dictionnaire de Trévoux*.

The inventory shows that the Maurists were vacuuming their predecessor for terms on practical arts, crafts, and (natural) sciences. As described in Chapter 8, Pernety and Brézillac were using the *Dictionnaire de Trévoux* in a highly selective way already in the first draft based on Wolff. Entries on sciences, practical arts and crafts were copied, but purely linguistic treatments, citations and moral statements consistently excluded. This pattern thus continued and became refined in the second project.

In order to contextualize the Maurists choices, their selections from the *Dictionnaire de Trévoux* can be compared to the selections of the *encyclopédistes*. Marie Leca-Tsiomis has convincingly shown that Diderot and d'Alembert used the *Trévoux* for constructing the nomenclature of their own dictionary.⁵¹¹ In the section AB–ABY, the *Encyclopédie* contains 208 terms. Of these, 146 can be found in the *Trévoux*. The *encyclopédistes* have thus rejected ninety-two terms, compared to the Maurists' 160. A comparative reading shows that the exclusions of the *encyclopédistes* mostly concern proper names (or names of families),⁵¹² obsolete words⁵¹³ and

⁵⁰⁷ I have chosen a section on A since the draft based on Wolff covered A–ALLER.

⁵⁰⁸ Four terms are doublets (alternative spellings). The section also contains an additional term which is non-existent in the *Dictionnaire de Trévoux*. See Appendix 1: Nomenclature.

⁵⁰⁹ AB (astronomie), ABAT-JOUR (t. de marchands de bois), ABOKELLE (monnaie), ABOMASUS (ventricules des animaux), ABONDANT (mathématiques), ABSTRAIRE (mathématiques).

⁵¹⁰ BnF, MS f. fr. 16982, fol. 1, AB, fol. 4, ABAT-JOUR, fol. 7, ABONDANT, fol. 13, ABSTRAIRE.

⁵¹¹ Leca-Tsiomis, *Écrire l'Encyclopédie*, pp. 149–157.

⁵¹² For instance, ABACHER, ABDALLA, ABBASSIDE, ABDIAS, ABERCE, ABIBON, ABIHAIL, ABONDE, ABRAHAM, ABRAHE, ABRAHEZ.

⁵¹³ For instance ABAISER, ABALOURDIR, ABATEIS, ABELISER, ABSCONSER.

derivative variations.⁵¹⁴ Otherwise, the *Encyclopédie* and the *Trévoux* largely treat the same areas of knowledge, but the former on fewer terms and with more elaborate articles. These conclusions correspond to the tendencies observed by Leca-Tsiomis in the section IO–JOUISSANCE.⁵¹⁵

The above observations reveal that the Maurists were more selective than the *encyclopédistes* in their use of the *Trévoux*. Each of them excluded proper names, obsolete words and derivative variations, but the Maurists also rejected certain fields of knowledge. The Benedictines were making a dictionary with a more delimited content. As stated in Chapter 3, Leca-Tsiomis has described the differing logics of the *Dictionnaire de Trévoux* and the *Encyclopédie* in terms of lexicographic universalism and encyclopedism. While the first is characterized by an accumulation without discernment, the second selects, cuts, classifies, orders, restrains or excludes.⁵¹⁶ Following this categorization, also the Maurists were operating according to an encyclopedic logic. They were not simply accumulating terms, but actively choosing, cutting and excluding.

Judging by the first inventory of Brézillac, it seems like the monks initially contemplated to include also theology, mythology, jurisprudence, ethics, and politics. Since Fortet in 1747 stated that the dictionary would include ‘all the liberal arts’, one can only assume that the inventory of Brézillac was compiled around this time. When the additional writers remade the inventory, the character of the project had changed. Thanks to this document, it is possible to make an educated guess about what the missing pieces of the Maurists’ manuscripts might have contained. Considering the consistency of the selections of AGR-1 and MED-1 – and their correspondence to the content of the preserved article drafts – it is highly unlikely that the missing pieces should have been concerned with any of the areas omitted in the inventory. If anything, they rather contained more articles on arts and crafts, medicine and natural history. As mentioned in Chapter 6, the sections of NH-2 and MED-3 (each ending abruptly in the middle of a sentence) principally treat medicine and natural history.

⁵¹⁴ The *Encyclopédie* includes ABATTRE but excludes ABATTU and ABATURE. It includes ABBAYE but not ABBATIAL; ABDICATION but not ABDIQUER; ABOLITION but not ABOLIR or ABOLISSEMENT, etc.

⁵¹⁵ Leca-Tsiomis, *Écrire l’‘Encyclopédie’*, pp. 153–155.

⁵¹⁶ *Ibid.*, p. 152.

ESTIMATING THE SIZE OF THE PLANNED DICTIONARY

Not every term listed in the inventory can be found in the article drafts. Between AB–ABY, the latter contain a total of fifty-eight terms (with one or several entries), of which some are non-existent in the *Dictionnaire de Trévoux*.⁵¹⁷ This number can be compared to the draft based on Wolff, which contains fifty-two terms (with one or several entries) between AB–ABY. Again, it is necessary to recall that pieces are missing and that the alphabetical span had not been closed when the second project was interrupted. It is therefore hard to estimate the size of the planned dictionary, although the working lists and the inventories provide a supplementary idea of the work envisioned.

If assuming that all the terms noted from the *Trévoux* were intended to be included, and if considering that the monks also drew material from a multitude of other publications, it is reasonable to believe that the final product would have surpassed *at least* the last edition of Corneille’s *Dictionnaire des arts et sciences* (1732), with seventy-eight terms between AB–ABY, and perhaps also the first *Dictionnaire universel* of Furetière, with ninety-five terms in the same section. However, the works of Corneille and Furetière each included terms of religion, jurisprudence, politics and ethics. The Maurists’ dictionary would thus have been more focused in content, yet equal or superior in size.

Dictionaries, Drafts and Inventories	Number of terms between AB–ABY
<i>Dictionnaire de Trévoux</i> (1743)	238
<i>Encyclopédie</i> (1751)	208
<i>Dictionnaire universel</i> (1701) ed. by Basnage de Beauval	144
Furetière’s <i>Dictionnaire universel</i> (1690)	95
Corneille, <i>Dictionnaire des arts et sciences</i> , 2nd edn (1732)	78
The Maurist draft based on Wolff (c. 1743–1747)	52
The Maurists’ later manuscripts (c. 1747–1754/55)	58 (unfinished & missing pieces)
The second Maurist inventory of the <i>Trévoux</i> (1743)	78
Brézillac’s first inventory of the <i>Trévoux</i> (1721)	140

Table 8: Overview of the number of terms between AB–ABY in contemporary dictionaries and the Maurists’ manuscripts.

⁵¹⁷ See Appendix 1: Nomenclature.

CREATING CLUSTERS OF KNOWLEDGE: COMPARISONS TO
THE *ENCYCLOPÉDIE*

All eighteenth-century dictionaries of arts and sciences were based on certain assumptions about the relationship between subjects. Despite their assertions of being ‘universal’, none of them covered all forms of knowledge – not even the *Encyclopédie* (as pointed out by d’Alembert himself).⁵¹⁸ History, biography and geography were commonly treated in a separate lexicographic genre – the historical dictionary – and received limited if any attention in the universal dictionaries.⁵¹⁹ Besides this common trait, there were also variations in the focal point of the individual works, depending on the compilers areas of interest and expertise.

Even though the Maurists’ manuscripts do not contain a programmatic preface or a systematic chart of knowledge, they are not without order or implicit ideas about the connection between different areas of human activity. The monks’ inclusions and exclusions create a cluster of knowledge where certain areas are gathered together and demarcated towards the ones excluded. In this process, the idea of relation seems to have been crucial. One way to further display the nature of this idea is to compare the Maurists’ manuscripts to the chart of knowledge in the *Encyclopédie*: the *Système figuré des connaissances humaines*.

In the *Discours préliminaire*, d’Alembert defines one of the objectives of the *Encyclopédie* as ‘to explain, as far as possible, the order and connection between the parts of human knowledge’.⁵²⁰ This order was most visible in the chart of knowledge, which was based on a division once made by Francis Bacon. The latter had imagined the arts and sciences as a tree, where the human mind constituted the trunk and point of origin. From there, the faculties of understanding – memory, reason and imagination – formed three separate branches, each corresponding to a category of knowledge: history, philosophy and poetry. The latter three were then subdivided in smaller twigs.⁵²¹ This basic image constituted the foundation of the chart of Diderot and d’Alembert, but with some important modifications. Bacon had placed the science of God in a separate, parallel tree, and thereby emphasized its independence from the human mind (a necessity for revealed knowledge).

⁵¹⁸ Lough, *The ‘Encyclopédie’*, p. 73.

⁵¹⁹ Yeo, ‘Classifying the sciences’, p. 251.

⁵²⁰ *Encyclopédie*, I (1751), p. i: ‘exposer autant qu’il est possible, l’ordre & l’enchaînement des connoissances humaines’.

⁵²¹ Burke, p. 99.

The *encyclopédistes* inserted the science of God in the column of reason, and thereby made it a subcategory of philosophy. Theology, the queen science, was dethroned.⁵²²

As seen in the translated version of the chart (Figure 20), the column of memory and history is divided in three areas. The first is composed of sacred, ecclesiastical, and civil history. The second comprises natural history, consisting of knowledge about the animal, plant and mineral kingdoms. The third area contains crafts and manufactures – man’s diverse uses of nature. This category enumerates professions related to work and uses of gold and silver, precious stones, iron, glass, skin, stone, silk and wool.

At the top of the column of reason and philosophy one finds general metaphysics and ontology. Right below is the science of God. The latter includes natural and revealed theology, superstition, divination, black magic, etc. The next large category is the science of man, immediately subdivided in logic and ethics. Logic embraces the art of thinking, remembering and communicating, whose smaller twigs includes diverse practices such as writing, printing and heraldry, but also grammar and other aspects of language. Ethics is specified as either general or particular, where the latter includes jurisprudence, economy, commerce and politics. The next great category is the science of nature, immediately divided in mathematics and particular physics. The first designates pure and mixed mathematics and the unspecified field of physico-mathematics. Mixed mathematics implies mechanics, optics, chronology, perspective, astronomy, hydraulics, hydrostatics, navigation, etc. – that is, all those areas treated in Wolff’s course and lexicon. Particular physics is first subdivided in zoology, which includes anatomy, physiology and medicine as well as hunting, fishing and falconry. Just below zoology one finds physical astronomy (including astrology), meteorology and cosmology. These headings are followed by botany (including agriculture and gardening), mineralogy, and chemistry. The latter embraces pyrotechnics, metallurgy, alchemy and natural magic.

Imagination and poetry is divided in sacred and profane expressions. The column comprises music, painting, sculpture, civil architecture and engraving as well as literary genres such as novels, tragedies, comedies, pastorals and allegories.

⁵²² Robert Darnton, ‘The Philosophers Trim the Tree of Knowledge: The Epistemological Strategy of the *Encyclopédie*’, in R. Darnton, *The Great Cat Massacre and Other Episodes in French Cultural History* (New York: Basic Books, 1984), pp. 191–213 (pp. 199–200).

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Figure 20: The ‘Map of the System of Human Knowledge’ of the *Encyclopédie*. The areas marked in squares represent the fields of knowledge treated by the Maurists. (‘The Encyclopedia of Diderot and d’Alembert: Collaborative Translation Project’)⁵²³

⁵²³ <http://quod.lib.umich.edu/d/did/tree.html> [accessed 2014-03-13]. The squares have been added by the author.

The Maurists' coverage of fields of knowledge is marked by squares in Figure 20. As seen, their selections cut right through the divisions of the *Encyclopédie*. The monks include and exclude subjects from all columns. From memory, the Maurists give considerable attention to natural history and the crafts and manufactures, while they omit sacral, ecclesiastical, and civil history. When treating the history of diverse discoveries, they often touch upon the history of learned literature, but it does not constitute an independent category of investigation and inventory. From the column of reason and philosophy, practically all the sciences of nature are treated in the Maurists' manuscripts, while metaphysics, the science of God and large parts of the sciences of man (grammar, ethics, etc.) are excluded. The only exceptions are a few parts regarding the art of communication and remembering (logic), such as writing, printing and heraldry. Finally, from the column of imagination the monks consider music, painting, sculpture, architecture, engraving and sometimes poetry, but seldom any other literary genres.

Organization and Division of Knowledge

The observations above clearly show that the Maurists did not aspire to cover as many fields of knowledge as the *Encyclopédie*. Here we have the first and biggest differences between the two projects. However, in order to determine what to include and exclude, the monks still needed to evaluate the totality of knowledge according to some selective, organizing principle. We have already seen that they broke up the traditional category of liberal arts by excluding the *trivium*. Considering how their choices cut right through the columns of the *Encyclopédie*, their point of departure was obviously another than the trisection of human understanding. The monks operated from a much more pragmatic and concrete outlook. Instead of beginning in a theoretical notion of man's mind, they seem to have started in man's productive activity. The sciences necessary for executing these activities – such as natural history (knowledge about the animal, plant and mineral kingdoms) – were then included.

By the divisions of the *encyclopédistes*, the practice of the goldsmith and the glass-maker (identified as based on memory) are distinguished from the practice of the printer, surgeon, mathematician and physicist (based on reason), the engraver, painter and architect (based on imagination). By the Maurists' divisions, the practices of all these professions are gathered together, and thus implicitly contrasted towards the excluded work of the

theologian, politician, lawyer, historian, philosopher and grammarian. This distinction thus differs from the traditional Aristotelian division between *scientia* (theoretical body of knowledge) and *techne* (practice or skill).⁵²⁴

In the Maurists' manuscripts, even mathematics is presented as an art and not only a science. GÉOMÉTRIE is for instance ambiguously defined as an 'art or science teaching how to measure quantities, discover their relationship and deduce them from each other'.⁵²⁵ This description can be contrasted towards the *Encyclopédie* where geometry is defined as 'the science of the properties of a surface'.⁵²⁶ The Maurists chose to emphasize what people *do* with mathematics rather than what it *is*, as some detached entity. Mathematical knowledge is portrayed as practiced.

Furthermore, through the divisions of Bacon, Diderot and d'Alembert, natural history was separated from the sciences of nature. According to Richard Yeo, the dichotomy between these two categories gradually dissolved in the latter half of the eighteenth century. Concurrently with this development, the attempts to relate all fields of knowledge to each other were abandoned.⁵²⁷ In the Maurist cluster, no such dichotomy is drawn between natural history and the sciences of nature.

The Maurist manuscripts thus seem to offer an outlook on the contemporary society where the practical and productive arts and sciences are separable from religion, metaphysics, ethics, law and politics – areas devoted to social interaction or 'pure thought', without a tangible outcome.

Included

Natural history
Crafts and manufactures
Mathematical and physical sciences
Music, painting, architecture, engraving

Excluded

Sacred, ecclesiastical, civil, and literary history
Metaphysics, theology, religion
Grammar, logic, ethics, politics, law, etc.
Belles-lettres

The Maurists may have chosen other words for describing this division of knowledge. Perhaps they would not have said much about it all. Nevertheless, interestingly enough, what we seem to see in their selections is a division approaching the separation of the natural sciences from the humanities, which would not be fully institutionalized until the end of the nineteenth century. As earlier stated, the *studia humanitatis* commonly

⁵²⁴ Yeo, 'Classifying the Sciences', pp. 241, 243.

⁵²⁵ BnF, MS f. fr. 16980, fol. 150: 'GÉOMÉTRIE, art ou science qui apprend à mesurer les grandeurs, à découvrir leurs rapports, et à déduire les unes des autres'.

⁵²⁶ *Encyclopédie*, VII (1765), 630: 'GÉOMÉTRIE, la science des propriétés de l'étendue'.

⁵²⁷ Yeo, 'Classifying the Sciences', pp. 254, 266.

consisted of five subjects: grammar, rhetoric, poetry, history and ethics, where the latter two also was linked to politics and law.⁵²⁸ All these areas – otherwise composing a considerable part of the Maurist erudition – were excluded by the Benedictine compilers.

The Maurists' cluster of knowledge is highly unusual in the eighteenth-century context of dictionaries of arts and sciences. Certainly, others had separated the science of God from the sciences of man and nature. As stated, Bacon had placed the science of God in a separate tree and thus avoided making it dependent of the human mind. However, to actually exclude metaphysics, religion, ethics, politics, law and grammar from a dictionary of arts and sciences was highly uncommon, not to say unprecedented. Furetière, Corneille, Basnage de Beauval, the writers of the *Trévoux*, Chambers, as well as the *encyclopédistes* all treated religion, law, ethics and politics as part of the category 'sciences and arts', even though these areas received various amount of attention.⁵²⁹ The same formula was followed in universal dictionaries published in other European languages, such as Johann Heinrich Zedler's *Grosses vollständiges Universal-Lexicon aller Wissenschaften und Künste* (68 vols, 1731–1754), and Gianfrancesco Pivati's illustrated *Nuovo dizionario scientifico e curioso sacro-profano* (10 vols, 1746–1751).⁵³⁰ Also kindred works such as Dennis de Coetlogon's *Universal History of Arts and Sciences* (1745) embraced the human and divine fields of knowledge.⁵³¹ Harris's *Lexicon Technicum* was the only one to have excluded theology and been designedly short on grammar, ethics, logic and metaphysics – but the latter four were still included. Bradshaw remarks that Harris never engaged in criticism of the government or the Church, and that his main objective simply was to present 'a comprehensive treatment of modern advances in sciences'.⁵³² In this respect, the *Lexicon Technicum* was perhaps the predecessor most similar to the work of the Maurists, although the Benedictines went farther in their exclusions. They also included areas that Harris never treated, such as the trades and industries.

⁵²⁸ Burke, pp. 99–100.

⁵²⁹ Ross, 'Antoine Furetière's *Dictionnaire universel*', pp. 62–64; Ross, 'Thomas Corneille's *Dictionnaire des arts et des sciences*', pp. 72, 77, 79; Bradshaw, 'Ephraim Chambers' *Cyclopaedia*', pp. 134–135.

⁵³⁰ Peter E. Carels and Dan Flory, 'Johann Heinrich Zedler's *Universal Lexicon*', in *Notable Encyclopedias*, ed. by Kafker, pp. 165–196 (pp. 189–193); Silvano Garofalo, 'Gianfrancesco Pivati's *Nuovo dizionario*', in *Notable Encyclopedias*, ed. by Kafker, pp. 197–219 (p. 218).

⁵³¹ Loveland, pp. 1–3.

⁵³² Bradshaw, 'John Harris's *Lexicon Technicum*', pp. 111–112.

To be sure, besides the many specialized dictionaries treating individual subjects (e.g. chemistry or geometry), there were also contemporary dictionaries embracing a smaller or larger cluster of knowledge, such as the medical arts or the mathematical sciences (Wolff, Ozanam etc.). However, none of these works approached the number of fields now tied together in the Maurists' manuscripts. The Benedictines were making a new kind of dictionary: a hybrid. They were not compiling yet another specialized subject dictionary, but nor a universal dictionary in the tradition of Furetière. It was a dictionary of arts, crafts, and the *related* sciences, from where religion, metaphysics, ethics, politics, and jurisprudence were omitted.

The Predilection for the Productive and Utile

Even though the Maurists and the *encyclopédistes* did not strive for the same coverage of knowledge or used the same organizational principle, they obviously shared the interest in the productive and utile. When discussing the column of memory, Bacon had given considerable attention to ecclesiastic history, but far less to natural history and the crafts and manufactures. Diderot and d'Alembert went in the opposite direction. In the *Discours préliminaire*, ecclesiastic history was only mentioned briefly while the mechanical arts and crafts were given considerable attention. Robert Darnton has pointed out that Diderot and d'Alembert 'did not seek out the hand of God in the world but rather studied men at work, forging their own happiness'.⁵³³ Studying men at work was exactly what the Maurists were doing.

Furthermore, Darnton remarks that the editors of the *Encyclopédie* used the chart of knowledge, the *Prospectus*, and the *Discours préliminaire* for arguing that the sacred should be excluded from the world of learning. By making the human mind the organizational principle, they declared that all knowledge derived from sensation and reflection. As the science of God was subordinated to philosophy, the editors could expose the reasons for cutting it out. Knowledge without an empirical base was discarded.⁵³⁴ In the advertisement accompanying the third volume (1753), d'Alembert asserted that metaphysics in the succeeding volumes would be reduced to 'what it contains to be true and utile, that is, very little'.⁵³⁵

⁵³³ Darnton, 'The Philosophers', p. 199.

⁵³⁴ *Ibid.*, pp. 194–195, 209.

⁵³⁵ *Encyclopédie*, III (1753), p. v: 'à ce qu'elle contient de vrai & d'utile, c'est-à-dire à très peu de chose'.

The historian of ideas Gunnar Broberg has pointed out that the *Encyclopédie* often has been ‘taken as the starting point for a new concept of knowledge because of its antimetaphysics’.⁵³⁶ Similarly, according to the philosopher Martine Groult, the editors of the *Encyclopédie* were pioneering in ‘liberating encyclopedism from a religious point of departure’.⁵³⁷

The Maurist compilers also approached the diverse fields of knowledge from a secular point of view. By their inclusions and exclusions, the metaphysical and sacred were separated from the empirical, tangible and concrete activities of man. In contrast to the *encyclopédistes*, the monks did not explain or justify their exclusions with epistemological arguments. By simply focusing on the concrete, they took an alternative, non-confrontational road and arrived to a ‘similar’ result – in the meaning of emphasizing the utile and productive of universal interest to all, irrespectively of beliefs.

OTHER ASPECTS OF ORDER

The Maurists’ manuscripts display two fundamental orders: one alphabetical and one thematic. As shown in Chapter 5, the dictionary material was divided in thematic volumes at the BnF, but the conservators followed an already existing division of units: thematically and alphabetically organized drafts, written by different handwritings. For instance, the drafts on agriculture and medicine – compiled by AGR-1 and AGR-2, respectively MED-1, MED-2 and MED-3 – each starts from A and appear to be neatly rewritten.

Could this double order in the Maurists’ manuscripts reflect the ambition of making a thematic *and* alphabetical dictionary – something like Panckoucke’s *Encyclopédie méthodique* (1782–1832), the successor the *Encyclopédie* of Diderot and d’Alembert – or was it simply the result of the work being interrupted before all drafts had been written together? Due to the absence of a preface it is hard to know for sure. However, considering that there are articles on medicine and agriculture also in the manuscripts of

⁵³⁶ Gunnar Broberg, ‘The Broken Circle’, in *The Quantifying Spirit in the Eighteenth Century*, ed. by Tore Frängsmyr, J. L. Heilbron and Robert E. Rider (Oxford: University of California Press, 1990), pp. 45–71 (p. 48).

⁵³⁷ Martine Groult, ‘L’encyclopédisme dans les mots et les choses: différence entre la *Cyclopaedia* et l’*Encyclopédie*’, in *L’encyclopédisme au XVIII^e siècle*, ed. by Françoise Tilkin (Geneva: Droz, 2008), pp. 169–190 (p. 169): ‘libérant l’encyclopédisme du point de départ contraignant du divin’.

Pernety, the separate drafts on agriculture and medicine could hardly have been regarded as complete and ‘ready for print’. It is therefore likely that the thematic division represented a phase in the textual production rather than the intended layout of the finished dictionary.

Here we need to take a moment to consider how the manufacture of a large-scale dictionary like this would have been executed. Reasonably, each writer began by working his way through previous dictionaries and specialized works, one by one, extracting information and terms of interest. During this first stage, excerpts could only have been compiled directly in alphabetical order if the source itself was a dictionary. In monographs and academic memoirs, terms of interest starting on all letters would occur from the beginning to the end. When a writer responsible for a certain area of knowledge had gone through all the pertinent sources, he likely rewrote all articles in one draft before handing it over to the editor for inspection and further instructions. Such a working scenario is for instance indicated in the *Discours préliminaire* of the *Encyclopédie*, where d’Alembert states that ‘each of our colleagues has made a dictionary of the part for which he is responsible, and we have gathered all these dictionaries together’.⁵³⁸ Reasonably, the editor(s) of the Maurist project would have done the same, if they ever had got that far. The heterogeneous manuscripts of Pernety and NH-3 (subjected to re-arrangement at the BnF) were likely abandoned in the first phase – the gathering of excerpts from a multitude of sources. As described in Chapter 5, the collages are characterized by correlations between shades of ink, handwriting variation, and references to particular works. The thematic drafts on agriculture and medicine, on the other hand, likely derive from the second phase. They refer to a multitude of sources (dictionaries as well as specialized works), but have been rewritten in two thematic drafts.

Against this background, I do not consider the thematic division of the Maurists’ manuscripts as corresponding to its intended, final form.

A Reasoned Organization

While the compilers prior to Diderot and d’Alembert had used the epithet ‘universal’ to describe their ambitions, the *Encyclopédie* was presented as a ‘reasoned’ dictionary. Terms were classified in relation to the chart of knowledge, and subjects connected to each other through a system of cross-

⁵³⁸ *Encyclopédie*, I (1751), p. xxxvi: ‘chacun de nos collègues a fait un dictionnaire de la partie dont il s’est chargé, & nous avons réuni tous ces dictionnaires ensemble’.

references – an inheritance from Chambers’s *Cyclopaedia*. In this way, the *Encyclopédie* aspired to create an order of things besides the alphabetical order of words. In the article DICTIONNAIRE, d’Alembert explained that the cross-references of the *Encyclopédie*

principally serve to display the encyclopedic order, and not only to explain a word by another like in the other dictionaries [...] In this respect, an encyclopedic dictionary sets out to display the scientific link between the article that one reads and other articles, so one can look them up if one likes.⁵³⁹

Studies of the digitized *Encyclopédie* have revealed that the classifications and cross-references did not turn out as systematic as the editors portrayed them. Many terms were sorted in categories without correspondence in the chart of knowledge, and cross-references were made to non-existent articles. Of some 77,000 terms, about 22,000 remained unclassified.⁵⁴⁰ These deficiencies aside, the rational organization of the *Encyclopédie* still surpassed its French predecessors.

In the *Dictionnaire de Trévoux*, only the terms belonging to well-established fields of knowledge were supplied with a label. In other cases, the area of use as well as the significance of the term was simply described, e.g. ‘X is said about Y’. Meaning was communicated through contextualization rather than classification. Cross-references commonly referred the reader to another spelling or a synonym, but on some occasions also to related subjects.

Where did the Maurists place themselves in this tradition? The fact that the manuscripts are unfinished and incomplete is a great disadvantage in comparative studies of this kind. Reasonably, creating an overall order would have been one of the last efforts required of the editor(s) in charge. Since the project never reached this phase, the manuscripts do not appear to be particularly systematic – at least not compared to the *Encyclopédie*. Still, some reflections on this topic can be provided.

⁵³⁹ *Encyclopédie*, IV (1754), 969: ‘serviront principalement à montrer l’ordre encyclopédique, & non pas seulement comme dans les autres dictionnaires à expliquer un mot par un autre. [...] Un dictionnaire encyclopédique joint à cet avantage celui de montrer la liaison scientifique de l’article qu’on lit, avec d’autres articles qu’on est le maître, si l’on veut, d’aller chercher’.

⁵⁴⁰ Russell Horton and others, ‘Mining Eighteenth-Century Ontologies: Machine Learning and Knowledge Classification in the *Encyclopédie*’, *Digital Humanities Quarterly*, 3:2 (2009). Published online: <http://www.digitalhumanities.org/dhq/vol/3/2/000044/000044.html> [accessed 2013–10–03].

Classification

The classification of terms is uneven in the Maurists' article drafts, but the working lists reveal a stronger tendency towards categorization. This is not only seen in the many thematic lists – of which a full overview can be seen in Appendix 2 – but also in the second inventory of the *Dictionnaire de Trévoux*, where the Maurists have supplied each term with a classificatory label. A comparative reading shows that these often are non-existent in the *Trévoux* and thus the monks' own.

While the *Dictionnaire de Trévoux* had expanded its proportions for each new edition, the Maurists planned to make a more limited work. As a consequence, they would not simply absorb and reproduce the articles of their predecessor and then add some more. They needed to cut and choose. Even though the Maurists' may not have envisioned a reasoned dictionary comparable to the *Encyclopédie*, the very fact that they were making a smaller and more focused work led them in a similar direction. When actively choosing from the content of the *Trévoux*, they needed to specify which entries to include. Reproducing the definitions would have taken up too much space. Classification was therefore a necessary step.

LARME (Tear or drop) is an illustrative example of the Maurists' efforts to classify. In the *Dictionnaire de Trévoux* (1743) this term has eight entries.⁵⁴¹ The Maurists have noted six.⁵⁴² As usual, entries on religious and linguistic aspects have been excluded.⁵⁴³ While the reader of the *Trévoux* in the majority of the cases understands the significance of the term due to contextualized descriptions, the Maurists engage in more explicit acts of classification. The first entry of the *Trévoux* begins: 'LARME, water that emerges from the corner of the eye through the compression of the muscles, caused by pain, sorrow, inflammation or an external agent'.⁵⁴⁴ In the inventory, the Maurists have noted 'LARME, medicine' and thereby discerned the content as relevant from a perspective of physiology or anatomy. The *Trévoux* states: 'LARME is also said about the sap dropping from some trees'.⁵⁴⁵ Here the Maurists have written 'LARME, botany'. Another entry reads: 'LARME also signifies figures or representations of drops. The modern

⁵⁴¹ *Dictionnaire de Trévoux* (1743), IV, 96–97.

⁵⁴² BnF, MS f. fr. 16984, fol. 164.

⁵⁴³ *Dictionnaire de Trévoux* (1743), IV, 97: 'LARME, se dit aussi en parlant de la pénitence [...] La Magdelène arrosa de ses larmes les piés du Sauveur, & les essuya de ses cheveux', 'On appelle proverbialement des larmes de crocodile'.

⁵⁴⁴ *Ibid.*, p. 96: 'LARME, eau qui sort du coin de l'oeil par la compression des muscles, causée par quelque douleur, affliction, fluxion, ou par quelque agent extérieur'.

⁵⁴⁵ *Ibid.*, p. 97: 'LARME se dit aussi du suc qui distille goutte à goutte de quelque arbre'.

philosophers have made marvelous experiments with drops of glass, by letting a drop of melted glass fall into water'.⁵⁴⁶ The Maurists have noted 'glass-works'. The *Trévoux* adds that 'one also paints figures of tears on the tombstones and uses them on the ornaments during funerals'.⁵⁴⁷ Here the Maurists have written 'painting'. And so on.

Since the *Trévoux* aspired to cover every aspect of language, there was no real incitement to ponder the division and classification of knowledge – everything would be included anyway. As the Maurists envisioned a more limited work, selection, division and classification became necessary for practical reasons. Compared to the *Dictionnaire de Trévoux*, the Maurists' working lists thus show a development towards a more systematic approach to knowledge. It remains uncertain how or if this would have been visible in the finished product. Still, in regards of classification it is possible that the Maurists' dictionary would have placed itself somewhere between the Jesuit predecessor and the parallel enterprise of the *philosophes*.

General Articles and Cross-References

In the *Encyclopédie*, the general articles defining the fields of knowledge are commonly long and elaborate. The history of the art or science is described, the most pertinent authors noted, the basic principles and procedures are explained and accompanied by cross-references to the specialized articles treating their elements. In the Maurists' manuscripts the general articles are few and brief. There is no general definition of physics, architecture, astronomy, navigation or natural history, although there are shorter definitions of agriculture, anatomy, chemistry, geometry, medicine, pharmacy and surgery.

Even if considering that the Maurists' manuscripts were left unfinished and that pieces are missing, the purpose of the general articles seems not to have been to educate on the said art or science, but rather to provide a basic conceptual framework. AGRICULTURE is for instance only broadly defined as the 'art of cultivating the earth and rendering it ample so it gives us fruits of all kinds'.⁵⁴⁸ ANATOMIE is the 'art which by means of dissection teaches the structure of the human body, and simultaneously shows the number,

⁵⁴⁶ *Dictionnaire de Trévoux* (1743), IV, p. 97: 'LARME, se dit aussi des figures ou représentations de larmes. Les philosophes modernes ont fait de merveilleuses expériences sur des larmes de verre, qui se font avec une goutte de verre fondu tombant dans de l'eau'.

⁵⁴⁷ *Ibid.*, p. 97: 'on peint aussi des figures de larmes sur les tombeaux, & on en applique sur les ornemens qui servent aux pompes funèbres'.

⁵⁴⁸ BnF, MS f. fr. 16979, fol. 1, AGRICULTURE: 'art de cultiver la terre & la rendre abondante de manière qu'elle nous donne des fruits de toutes sortes'.

arrangement, location and function of all the parts of which it is composed'.⁵⁴⁹ CHYMIE (Chemistry) is defined by Pernety as the 'art of reducing compounds to their basic principles by the use of fire, and to compose new bodies [...] through the mixture of different substances'.⁵⁵⁰ MED-1 defines the same term as 'the anatomy of natural bodies, or the art of analyzing them, reducing them to the first principles, discovering their hidden virtues, and revealing their internal harmony' (copied from the *Dictionnaire de Trévoux*).⁵⁵¹ Similarly, METALLURGIE is simply described as the 'part of chemistry that treats metals and teaches how to prepare and purify them for the use of medicine'.⁵⁵² APOTHICAIRERIE (Pharmacy) is defined as 'either the store where the pharmacists keep and sell their remedies or the laboratory where they are prepared. It is also the art of preparing them'.⁵⁵³ More extensive definitions are given of CHIRURGIE (Surgery), MÉDECIN (Doctor), and MÉDECINE, but compared to the *Encyclopédie*, they are still very brief.⁵⁵⁴ All substantial information about the proceedings of these arts is instead given in the specialized articles. Consequently, there are no cross-references between general and specific treatments. Descriptions of chemical equipment, muscles, and plows do not refer the reader back to CHYMIE, ANATOMIE and AGRICULTURE. Due to the limited information given in the latter, there simply would be no use.

However, the Maurists do use cross-references, albeit not as often as Chambers or the *encyclopédistes*. Even though many are of purely linguistic art (i.e. 'see this spelling or synonym instead'), there are also those indicating where to read about an immediately related subject. For instance, the article CHENILLE (Caterpillar) refers to CRISALIDE (Chrysalis) for a fuller treatment of its transformation to a butterfly.⁵⁵⁵ Aspects of foundry refer to

⁵⁴⁹ BnF, MS f. fr. 16983, fol. 26, ANATOMIE: 'art qui par la dissection fait connoître la structure du corps humain, et fait voir en même tems le nombre, l'arrangement, la situation et l'usage de toutes les parties dont il est composé'.

⁵⁵⁰ BnF, MS f. fr. 16980, fol. 79, CHYMIE: 'art de réduire les corps composés en leur principes par le moyen du feu, & de composer de nouveaux corps [...] par le mélange de différentes matières'.

⁵⁵¹ BnF, MS f. fr. 16983, fol. 106, CHYMIE: 'l'anatomie des corps naturels ou l'art d'en faire l'analyse, de les réunir à leurs premiers principes, d'en découvrir les vertus cachées, et d'en démontrer l'harmonie intérieure'.

⁵⁵² BnF, MS f. fr. 16983, fol. 338, METALLURGIE: 'partie de la chimie qui traite des métaux et qui enseigne à les préparer et les dépurier pour l'usage de la médecine'.

⁵⁵³ BnF, MS f. fr. 16983, fol. 36, APOTHICAIRERIE: 'ou la boutique où les apothicaires gardent et vendent leurs remèdes, ou le laboratoire où ils les préparent. C'est aussi l'art de les bien préparer'.

⁵⁵⁴ BnF, MS f. fr. 16983, fols. 102, 330–331.

⁵⁵⁵ BnF, MS f. fr. 16980, fol. 74.

other aspects of the same process.⁵⁵⁶ An article on a mechanical part of the printing press refers to the general article PRESSE (Printing press),⁵⁵⁷ and an article describing a piece of the violin refers to VIOLON, etc.⁵⁵⁸ Subjects are related to each other, but on a more concrete and immediate level than in the *Encyclopédie*.

In the article ENCYCLOPÉDIE, Diderot remarked that the cross-references could be used to ‘change the way people commonly think’.⁵⁵⁹ By associating subjects with others, they were perceived in a new light. John Lough has pointed out that Diderot himself actually used cross-references rather sparingly, and those filling a polemical or satirical function are quite hard to find.⁵⁶⁰ One of the most famous examples, however, is the connection between ANTHROPOPHAGES (Cannibals) and EUCHARISTIE (Holy Communion), which often has been brought out as an ironizing remark about the religious sacrament. In this article, the theologian Edme-François Mallet (1713–1755) informs that the first Christians were accused for cannibalism and killing children, but he underlines that this accusation was based on misinterpretation and ignorance. Still, the connection between cannibalism and the sacrament was planted in the reader’s mind.⁵⁶¹

Not surprisingly, since the Maurists avoided religion, politics and ethics, there is no witty or ironic use of cross-references comparable to the *Encyclopédie*. In this respect, the Maurists were breaking rather than making associations. Articles on arts, crafts, and sciences are not utilized to criticize religion, politics, or ethics, just as little as the latter are allowed to encroach on the former. In contrast to the *encyclopédistes* and the Jesuits, the Maurists were not making a critical or apologetic dictionary, but a pragmatic.

Since the Maurist enterprise was confined to the physico-mathematical sciences, practical professions, and related ‘useful’ areas of knowledge, the work had an intrinsic order of things besides the alphabetical order of words. The unfinished manuscripts may not come close to the systematic design of the *Encyclopédie*, but compared to the *Dictionnaire de Trévoux*, they expose a clear tendency towards a more reasoned organization, based on the perceived interrelationship of subjects.

⁵⁵⁶ BnF, MS f. fr. 16980, fol. 94, COUPELLE D’AFFINAGE: ‘voyez CENDRÉ [...] voyez aussi ESSAY’.

⁵⁵⁷ BnF, MS f. fr. 16980, fol. 14, ARBRE DE LA VIS: ‘en termes d’imprimerie [...] voyez PRESSE’.

⁵⁵⁸ BnF, MS f. fr. 16980, fol. 48, BOUTON: ‘terme de luthier [...] voyez VIOLON’.

⁵⁵⁹ *Encyclopédie*, V (1755), 642: ‘changer la façon commune de penser’.

⁵⁶⁰ Lough, *The ‘Encyclopédie’*, p. 94.

⁵⁶¹ *Encyclopédie*, I (1751), 498, ANTHROPOPHAGES.

12. A WEB OF BORROWED TEXTS AND IMAGES

The previous chapter has explored similarities and differences in coverage and organization of knowledge in the Maurists' manuscripts, the *Encyclopédie* and the *Dictionnaire de Trévoux*. In the following two chapters, the focus is transferred to building blocks: the uses of other texts. This chapter functions as a more general introduction to the subject, while the next will contain concrete comparisons within diverse areas of knowledge.

STUDYING INTERTEXTUALITY IN EIGHTEENTH-CENTURY DICTIONARIES

The dictionaries of arts and sciences did not aspire to produce new knowledge, but to mediate established theories from the 'best ancient and modern authors'.⁵⁶² In the *Discours préliminaire*, d'Alembert acknowledged that 'our function as editors mainly consists in organizing a material of which the greatest part has been entirely given to us'.⁵⁶³ Also the title page of the *Encyclopédie* announced that the work had been 'compiled from the best authors'.⁵⁶⁴

The role of the dictionaries of arts and science was to be a bridge between the world of the savants and the amateurs; to separate good books from bad, and to summarize and popularize knowledge. To the compilers this entailed keeping up with new discoveries and publications, evaluating them and simultaneously correcting the deficiencies of the predecessors within the genre. The dictionaries thus required constant supplements, alteration and updates to stay current.⁵⁶⁵ As stated in the Introduction, close to all works within this genre related to or built on each other. This implied a reproduction and continuous modification of a certain nomenclature and set of definitions. A brief look at the dictionaries of Furetière, Corneille,

⁵⁶² Antoine Furetière, *Dictionnaire universel*, 3 vols (La Haye/Rotterdam: Arnoud & Leers, 1690), title page: 'Le tout extrait des plus excellens auteurs anciens & modernes'; *Dictionnaire de Trévoux*, all editions, title page: 'Le tout tiré des plus excellens auteurs, des meilleurs lexicographes, étymologies & glossaires qui ont paru jusqu'ici en différentes langues'.

⁵⁶³ *Encyclopédie*, I (1751), p. i: 'notre fonction d'éditeurs consiste principalement à mettre en ordre des matériaux dont la partie la plus considérable nous a été entièrement fournie'.

⁵⁶⁴ *Ibid.*, front page: 'recueilli des meilleurs auteurs'.

⁵⁶⁵ Groult, 'Comment commencer une construction?', p. 139; Broberg, p. 50.

Basnage de Beauval and the *Dictionnaire de Trévoux* suffices to recognize a remarkable amount of common terms, definitions and building blocks. Many of these also reappear in the contemporary specialized dictionaries, which used the larger universal dictionaries as sources. Together they form a complex web of borrowed text. Leca-Tsiomis points out that when studying encyclopedic manufacture, ‘it is as necessary as often impossible to know exactly who takes what, from whom, and when’.⁵⁶⁶

Fundamentally, borrowing the ideas of others is how narratives about knowledge are constructed even today. We continuously reproduce the results and interpretations of some, while we modify or question others (this dissertation is no exception). However, compared to modern academic works, these reproductions were much more concrete in the eighteenth century. Large textual entities were copied in a multitude of books, with or without references to a source. This practice was particularly visible in the dictionaries. They were not only influenced by the ideas expressed in other works – they reproduced parts of their contents word-for-word. In this respect, studying intertextuality in eighteenth-century dictionaries does not come down to simply tracing intellectual influences, but also textual origins.

In the *Discours préliminaire*, d’Alembert noted that

the prevalent practice is to refer to or cite the sources in a vague, often unfaithful and perhaps even confusing manner, so when it comes to the different parts constituting an article, it is unclear exactly which author you should consult on what subject, or if you should consult them all, which makes the verification process long and laborious.⁵⁶⁷

D’Alembert assured that the writers of the *Encyclopédie* would try to avoid this inconvenience as far as possible by citing the authors directly in the articles. Still, this ambition was far from realized. Proust early remarked that

all the articles of the *Encyclopédie*, even the most ‘original’ ones, are partly based on borrowed material. Sometimes they consist of nothing more than long citations placed after each other, with or without reference to a source.⁵⁶⁸

⁵⁶⁶ Leca-Tsiomis, *Écrire l’Encyclopédie*, p. 169: ‘aussi nécessaire que souvent impossible de savoir exactement qui prend quoi, à qui, et quand’.

⁵⁶⁷ *Encyclopédie*, I (1751), p. xxxvii: ‘La coutume vulgaire est de renvoyer aux sources, ou de citer d’une manière vague, souvent infidèle, & presque toujours confuse; en sorte que dans les différentes parties dont un article est composé, on ne sait exactement quel auteur on doit consulter sur tel ou tel point, ou s’il faut les consulter tous, ce qui rend la vérification longue & pénible’.

⁵⁶⁸ Proust, ‘Questions sur l’*Encyclopédie*’, p. 40: ‘Tous les articles de l’*Encyclopédie*, même les plus ‘originaux’, sont faits de matériaux en partie empruntés. Ce ne sont même parfois que de longues citations mises bout à bout, avec ou sans indication de source’.

The interest in the sources of the *Encyclopédie* has increased in the last decades. Some of the resulting studies have required reconsiderations of the earlier conceptions of the articles of the *encyclopédistes*. For instance, the literary historian Tatsuo Hemmi has examined Diderot's use of sources in the supplement to the article ÂME (Soul). This account has often been regarded as one of the earliest expressions of the materialistic thinking of the *philosophe*. Hemmi shows that the article actually is built on borrowings from five different works, and that Diderot's references are not only incomplete but partly erroneous. Some text parts have been transcribed word-for-word, others slightly modified or more freely summarized after the originals. Diderot intervenes with personal remarks of various sizes on several occasions, but the transition from the voices of others to his own is normally made without distinction. Hemmi therefore describes the article as a mosaic text, where a plurality of voices blends together.⁵⁶⁹

Insights like these are particularly useful to the historians of science and ideas studying early-modern scientific or philosophical literature. When analyzing and contextualizing the ideas expressed in modern texts, we commonly regard them as deriving from the writer, even though he or she (naturally) always is inspired by other texts and intellectual debates. However, one cannot read eighteenth-century encyclopedias, or any other scientific work for that matter, with the modern assumption that the words presented therein are the author's own, simply because no source is stated. The same principle applies to images. As pointed out by the art historian Anthony Griffiths, the eighteenth-century engravers were trained in imitating the drawings and plates of others, and it was not uncommon that images were reproduced repeatedly over a century or more.⁵⁷⁰

From Antiquity to the Renaissance, imitation constituted a fundamental part of classic scholarship. According to Julia C. Hayes, accusations of plagiarism only gradually emerged from the sixteenth and seventeenth centuries onwards, as originality became increasingly estimated. Still, imitation remained predominant in the diffusion of authoritative knowledge regarding sciences and arts.⁵⁷¹ The regulations of the book trade in mid-eighteenth-century France only acknowledged the bookseller's right to his publications. The author did not own his words and was commonly only recognized for his ideas or discoveries. Intellectual and literary property was

⁵⁶⁹ Hemmi, pp. 42–43.

⁵⁷⁰ Griffiths, *Prints and Printmaking*, pp. 51–52.

⁵⁷¹ Hayes, pp. 115–118.

not the same. Consequently, ‘plagiarism’ in the eighteenth century did not mean what it means today. The article *PLAGIAIRE* in the *Encyclopédie* – illustratively enough copied word-for-word from Chambers’s *PLAGIARY*⁵⁷² – stated:

Lexicographers, at least those who treat of the sciences and arts, seem to be exempt from the laws of *mine* and *thine* [...] Indeed it is to a large extent in the nature of a good dictionary, such as we hope this one will be, to make use of the best discoveries of others; that which we borrow from other we borrow openly in broad daylight, always citing the sources where we have delved [...] If we steal, it is in the manner of the bees who only take booty for the public good, and one cannot quite say that we pillage authors, but rather that we take contributions for the good of literature [...].⁵⁷³

Borrowing texts from others could thus be sanctioned if it was for the greater good of the Republic of Letters. Hayes argues that these attitudes towards plagiarism and imitation are crucial in understanding the intellectual tradition in which the *encyclopédistes* were working.⁵⁷⁴

Consequently, distinguishing the novelty of a dictionary fundamentally comes down to studying the choices of the compilers: their decisions to include and exclude certain terms and fields of knowledge (as treated in Chapter 11), but also to use certain texts instead of others – to reproduce certain voices while leaving others out. The significance of these acts does not become clear unless they are compared to the preceding and contemporary works within the same genre.

IDENTIFYING THE MAURISTS’ SOURCES

There are four categories of information revealing what sources the Maurists used or intended to use. Combined they make it possible to follow in steps of the writers and to read what they had been reading. These categories of information are:

- 1) Explicit references to works and authors in the articles
- 2) The articles themselves
- 3) Inventories of the nomenclature of other works
- 4) The bibliography
- 5) The illustrations

⁵⁷² Bradshaw, ‘Ephraim Chambers’ *Cyclopaedia*, p. 136.

⁵⁷³ Hayes, p. 128. English translation by Hayes.

⁵⁷⁴ *Ibid.*, p. 129.

Explicit and repeated references to works and authors provide the most obvious starting point for identifying sources. However, already in the draft based on Wolff, Pernety and Brézillac often reproduced the references stated in the consulted works. Thereby they concealed that the information actually had been drawn from a mediating source. In the first draft, these mediating (and unmentioned) works commonly were either Wolff's lexicon or the *Dictionnaire de Trévoux*. Due to the detailed inventory of the latter, it is safe to say that the Maurists were well familiar with the contents of the Jesuit dictionary. Therefore, in the study of the later manuscripts, all articles under examination have been compared to the *Dictionnaire de Trévoux* in order to exclude unacknowledged imitation.

The bibliography is also, naturally, informative regarding the Maurists' building blocks.⁵⁷⁵ On four folio-pages, this document enumerates works frequently occurring in the article drafts as well as those never mentioned. The latter were either used without acknowledgement, or were intended to be used later. Irrespectively, their presence in the list represents an interest on the behalf of the compilers and thus helps envisioning the work imagined. Three pages are related to the second project, while one clearly was compiled concurrently with the first draft. Here Pernety has noted authors such as 'Wolff', 'Daviler, *Architecture*', 'Jerome Vitale, *Lexicon mathematicum*', 'Gravesande, *Éléments physique mathématique*', 'Ozanam, *Dictionnaire mathématique*', 'Stone, *Dictionnaire mathématique*', 'Bouguer fils, *Traité du navire*', 'Clairaut, *Algèbre et géométrie*', 'St. Remy, *Mémoires d'artillerie*', etc. This page can be seen in the left photo of Figure 21. At the end of the same page, Pernety starts enumerating works that are recurrent in the later manuscripts, but never mentioned in the first draft.⁵⁷⁶ In other words, when continuing on the second project, Pernety did not bother to start a new bibliography. In fact, many of the works enumerated on the first list are still used in the later manuscripts, with the important exception of Wolff's lexicon. The photo to the right shows a page clearly deriving from the second project since it contains works published at a later stage, such as John Tuberville Needham's *Nouvelles observations microscopiques* (1750).

⁵⁷⁵ BnF, MS f. fr. 16984, fols. 263–264, 265^{r-v}.

⁵⁷⁶ BnF, MS f. fr. 16984, fol. 265. For instance, '*Spectacle de la nature*', '*Mémoires pour servir à l'histoire des insectes*', and 'Alvare Alfonse Barba, *De l'art métallique*'.

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Figure 21: Two folios from the bibliography located in the Index volume.⁵⁷⁷
(The author's photos, BnF)

The illustrations constitute another important tool for identifying sources. Since none of the previous French universal dictionaries included plates, the occurrence of a described figure can only mean that an illustrated work constituted the writer's first-hand source. For this reason, it is relevant to take a closer look at the Maurists' efforts of making an illustrated dictionary.

ENVISIONING AN ILLUSTRATED DICTIONARY

There are three categories of information revealing the Maurists' plans for including illustrations in their dictionary:

- 1) The illustration lists
- 2) Abbreviations in the articles, e.g. 'pl. __ fig __'
- 3) Finished drawings and printed clippings

⁵⁷⁷ BnF, MS f. fr. 16984, fols. 264–265.

The Illustration Lists

The Index volume contains two alphabetical catalogues and four thematic lists concerned with illustrations.⁵⁷⁸

The two catalogues, roughly on twenty leaves each, range from A to Z. Pernety has written both of them. The title on the first catalogue reads: ‘Indications of books and the plates they contain, from where the figures described and explained in the *Universal Dictionary of Arts and Crafts* should be drawn’.⁵⁷⁹ The abundance of different ink variations suggest that the contents were compiled during a longer period of time. Together the two catalogues enumerate 536 terms on flora and fauna, arts and crafts. Of these, 332 are followed by references to a copy-source, with specification of the volume, page, plate and figure.⁵⁸⁰ Sometimes Pernety has added remarks such as ‘must be sketched just as it is’ or ‘needs to be done’.⁵⁸¹ Of the remaining terms, eighty-four are missing instructions or simply refer to another word. The other 120 are followed by comments such as ‘see the figures that I have made on *papier de serpent*’, or simply ‘see my figures’.⁵⁸² Here Pernety refers to the finished drawings. The catalogues thus basically enumerate figures planned to be copied and those already finished. The majority are related to articles written by Pernety himself. The left photo of Figure 22 shows a page enumerating terms on C, followed by detailed references to the copy-source.

The alphabetical catalogues are followed by four thematic lists, compiled by the three medical writers. Each contain a heading referring to a work or an author, followed by specification of the plates and figures intended to be copied. Here there are no indications of finished drawings. The lists concern anatomy, surgical instruments and chemical equipment.⁵⁸³ The right photo in Figure 22 shows one of the lists written by MED-1, which describes a plate on the circulatory system in Joseph-Bénigne Winslow’s *Exposition anatomique* (1732).

⁵⁷⁸ BnF, MS f. fr. 16984, fols. 1–39^v, 40–43.

⁵⁷⁹ BnF, MS f. fr. 16984, fol. 1: ‘Indications des livres et planches y contenues, où l’on doit prendre les figures dont on donne la description ou explication dans le *Dictionnaire universel des arts et métiers*’.

⁵⁸⁰ See Appendix 3: Illustrations.

⁵⁸¹ BnF, MS f. fr. 16984, fols. 28, 34, 17^v, 32: ‘Il faut dessiner tel qu’il est’, ‘Il faut la faire’.

⁵⁸² BnF, MS f. fr. 16984, fols. 4^v, 12^v, 16^v, 18, 19: ‘voyez dans les figures que j’ai faites en papier de serpent’, ‘voyez mes figures’.

⁵⁸³ See Appendix 2: Working Lists.

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Figure 22: A page from Pernety's alphabetical illustration catalogue, and a thematic list describing a plate on anatomy.⁵⁸⁴
(The author's photos, BnF)

Abbreviations in the Articles

Throughout the article volumes, the writers have added references to accompanying illustrations by using abbreviations such as 'pl.__fig.__'. The lack of specifying numbers suggests that they were intended to be added later, once the total number of illustrations had been fixed. While the first draft based on Wolff contains thirty references to illustrations, the later manuscripts have over five hundred. The majority is found in volume two and three, written by Pernety and NH-3, but there are indications in all volumes.⁵⁸⁵ Some of them correspond to the finished drawings or the planned illustrations noted in the catalogues and thematic lists, but far from all of them. Thus, it seems like the Maurists imagined a dictionary with at least some five hundred individual figures.

⁵⁸⁴ BnF, MS f. fr. 16984, fols. 4^v, 40.

⁵⁸⁵ BnF, MS f. fr. 16979, fols. 2, 7, 39, 40; fr. 16983, fols. 302, 304, 307, 322, 335.

Finished Drawings and Printed Clippings

On three occasions, finished drawings have been inserted next to the related articles in the manuscripts of Pernety.⁵⁸⁶ The Index volume contains a printed clipping and a drawing of two astrological or alchemical tables.⁵⁸⁷ Otherwise, the preserved drawings are all gathered at the end of volume two. Here one finds a collage of ninety-five paper-slips, all labelled by Pernety, arranged and numbered by the conservators of the BnF. The collection is preceded by a title page with a clipping from the *Explication des divers monumens singuliers* (1739) – a work by Dom Jacques Martin, the uncle of Brézillac. The figure has no apparent connection to the rest of the content and seems to function solely as an ornament. It depicts two female peasants in traditional clothing. Above the clipping, Pernety has written: ‘Figures on papier de serpent’.⁵⁸⁸ All in all, the collection contains 137 headlines and 203 figures. Of these, seven are printed clippings (possibly planned to be copied later), the rest are drawings.

The first half of the collection represents musical instruments (48 headlines and 68 figures). Here one finds flutes, hunting-horns, bagpipes, castanets, lyres, violins and more. The second part of the collection concerns crafts and manufactures, and principally the refinement of metals and the production of steel and iron (89 headlines and 135 figures). The figures depict workbenches and lift constructions, carts and buckets used in mining, small and large furnaces and a magnitude of tools. There is no explicit information on the sources from where the drawings have been copied. Nevertheless, with a little comparative detective work, close to all of them can be identified, since Pernety refers to the sources in related articles.⁵⁸⁹

In mid-eighteenth-century Paris, book illustrations were principally produced by engravings or etchings in copper plates. According to Griffiths, it was common to reproduce the images of other works, but if the engraver was not in possession of the original plates, ‘a designer had to make an actual-size drawing in reverse which was so highly-finished that the engraver (who was almost always a different person) could work from it’.⁵⁹⁰ It seems like Pernety himself assumed the task of being that designer.

⁵⁸⁶ BnF, MS f. fr. 16980, fol. 20: ‘AIGUILLE, instrument de chirurgie’, fol. 204: ‘OUTIL À EPREUVE, jouaillier’, fol. 265: ‘TOURILLON, instrument, blanchissage de la cire’.

⁵⁸⁷ BnF, MS f. fr. 16984, fol. 35^v, RIFLARD BRETELÉ, fol. 247^{r-v}.

⁵⁸⁸ BnF, MS f. fr. 16980, fol. 283: ‘Figures en papier de serpent’; Jacques Martin, *Explication des divers monumens singuliers* (Paris: Lambert, 1739), pl. 7, p. 294.

⁵⁸⁹ See Appendix 3: Illustrations.

⁵⁹⁰ Griffiths, *Prints for Books*, p. 10.

Generally, he has alternated between two drawing techniques. Half the time, shades have been made by straight horizontal lines or cross-hatching, which were the same shading techniques used by engravers and etchers.⁵⁹¹ These drawings would therefore have been easy to reproduce in print. On other occasions, however, Pernety has colored the figures with what seems to be a water based crayon, which leaves no visible lines. This effect could not easily have been transferred into print using engraving or etching techniques. It is therefore uncertain what Pernety had in mind for these drawings.

Pernety seldom reproduces an original plate in its totality. He selects certain figures and sometimes modifies the image dramatically. This is particularly seen in the use of older literature, such as *De re metallica* of the famous metallurgist Gregorius Agricola (1494–1555). This work was first published in 1556 and then underwent several new editions in the succeeding century. Unfortunately, there is no clue on which edition Pernety had used. In accordance with the pictorial conventions of the sixteenth and seventeenth century, the plates of Agricola display a quite muddled imagery. Workers are depicted in diverse outdoor and indoor environments where several activities are in progress at the same time, and tools and instruments are dispersed on the ground. The sceneries contain a variety of details irrelevant to the actual craftsmanship in focus, such as a couple kissing in a nearby cottage, workers resting against a stone, a sword leaned against a tree, dogs running around or sleeping next to the equipment.⁵⁹² Pernety copies selectively and extracts only the objects described in his articles. For instance, the CRIBLE DE MINE (Mining sieve) is portrayed in an abstract manner, without surroundings or workers. In Agricola's plate, the sieve is depicted handled by two men, barely discernable in the middle of the lively environment (see Figure 23). Similarly, in Pernety's depiction of a ROTISSOIR (Grill), the workers managing the grill have been extracted from the surrounding landscape and the perspective changed from the side to the front (see Figure 24).

⁵⁹¹ Information communicated by the art historian Hannah Williams, specialized on eighteenth-century France.

⁵⁹² Gregorius Agricola, *De re metallica* [1556] (Basel: Regis, 1621), pp. 267, 276, 279, 299, 317.

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Figure 23: Pernety has extracted a mining sieve from the muddled imagery of Agricola's *De re metallica*.⁵⁹³
(The author's photo, BnF; Gallica, BnF)

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Figure 24: Pernety's version of the grill depicted in Agricola's *De re metallica*.⁵⁹⁴
(The author's photo, BnF; Gallica, BnF)

Similar modification techniques would be used in the making of the plates of the *Encyclopédie*. The literary scholar Charles Kostelnick and the historian William H. Sewell have remarked how the machines and tools often were extracted from their physical and cultural contexts, and the crowded, cluttered work spaces depicted in a more abstract and unrealistic fashion. In this way, the focus was transferred to the equipment itself. Kostelnick and Sewell has interpreted this tendency as an expression of the new scientific ideals and Enlightenment values – the idea that the mechanical arts and

⁵⁹³ BnF, MS f. fr. 16980, fol. 297, CRIBLE DE MINE; Agricola, p. 225.

⁵⁹⁴ BnF, MS f. fr. 16980, fol. 303, ROTISSOIR; Agricola, p. 353.

crafts should be depicted in an exact and rational way, just like any other ‘scientific’ knowledge.⁵⁹⁵ The same tendency is detected in several of the central sources of Pernety, just as well as in his own drawings. Even though the latter pale in comparison with the elegant plates of the *Encyclopédie*, they display the same rational approach to technological knowledge.

The Missing Pieces

Regarding the finished drawings, there is a discrepancy between the information provided in Pernety’s illustration catalogues and what has actually been preserved. First of all, 56 of the finished pieces are unmentioned in the catalogue. Secondly, only 80 of the 120 figures therein stated to be finished have been preserved. This means that 40 are missing. Half of them regard printing, engraving and painting.⁵⁹⁶

A year or two after the abandonment of the dictionary project, Pernety published his illustrated dictionary of painting, sculpture and engraving (1757). A closer look at this publication reveals the fate of some of the missing pieces. Close to all terms on painting, engraving and printing noted in the illustration catalogue can be found in this work – and most of them are accompanied by an illustration.⁵⁹⁷ Due to this correspondence, at least some of the plates in the *Dictionnaire portatif de peinture* seem to have been based on the drawings of Pernety, and originally made for the universal dictionary of arts, crafts, and related sciences. A look at these plates thus gives a hint of the content envisioned for the original project (Figure 25).

⁵⁹⁵ Charles Kostelnick, ‘Visualizing Technology and Practical Knowledge in the *Encyclopédie*’s Plates: Rhetoric, Drawing Conventions, and Enlightenment Values’, *History and Technology: An International Journal*, 28:4 (2012), 443–454 (p. 446); William H. Sewell, ‘Visions of Labor: Illustrations of the Mechanical Arts before, in, and after Diderot’s *Encyclopédie*’, in *Work in France: Representations, Meaning, Organization, and Practice*, ed. by. Stephen Laurence Kaplan and Cynthia J. Koepp (London: Cornell University Press, 1986), pp. 268–276.

⁵⁹⁶ BnF, MS f. fr. 16984, fol. 1^v, AUGE, APPUY-MAIN, fol. 3, BACQUET (d’imprimeur), BACQUET (de graveur), BERCEAU, BLOC, BOËTES, BOUCHON, BRUNISSOIR, fol. 5, COUTEAU, CROISSÉE DE PRESSE, fol. 7^v, ENCRIER, fol. 12^v, MARMITE, fol. 15^{r-v}, PETITE PRESSE, PINCEAU, PROPORTIONS (du corps humain), PÛPITRE, fol. 18, TABLE, TAMPON (d’imprimeur), TAMPON (de graveur).

⁵⁹⁷ Pernety, *Dictionnaire portatif*, p. 19, AUGE (fig. 2), p. 21, APPUI-MAIN (refers to BAGUETTE, fig. 1), BACQUET (d’imprimeur, fig. 4), BACQUET (de graveur, fig. 3), p. 28, BERCEAU (fig. 5), p. 31, BLOC (no illustration), BOËTES (‘voyez PRESSE’), p. 36, BOUCHON (fig. 9), p. 41, BRUNISSOIR (fig. 13), p. 117, COUTEAU (fig. 23), p. 119, CROISSÉE (voyez PRESSE), p. 297, ENCRIER (fig. 28), p. 405, MARMITE (no illustration), p. 477, PRESSE (fig. 50), p. 465, PINCEAU (fig. 44), pp. 480–485, PROPORTION (corps humain) (no illustration), p. 486, PUPITRE (fig. 51), p. 524, TABLE (no illustration), p. 526, TAMPON (d’imprimeur, fig 62), TAMPON (de graveur, fig. 61).

Since most of the terms on painting, engraving and printing noted in the illustration catalogue are nowhere to be found in the article drafts, everything suggests that also the articles were reused for this smaller, specialized dictionary. This means that the dictionary manuscripts originally contained more articles on these topics. Here we have another possible explanation for the missing third piece, as discussed in Chapters 5 and 6.

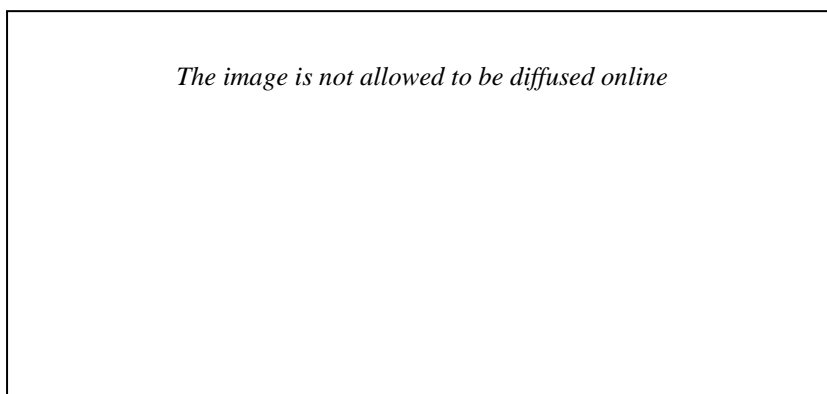


Figure 25: Illustrations printed in Pernety's
Dictionnaire portatif de peinture, sculpture et gravure (1757).⁵⁹⁸
(Gallica, BnF)

⁵⁹⁸ Pernety, *Dictionnaire portatif*, pl. 5, 6, 7.

13. COMPARISONS OF SOURCES, ARTICLES AND ILLUSTRATIONS

The Maurists' manuscripts constitute a veritable patchwork of old and new ideas. Instead of forming a coherent outlook on the world, the articles rather reflect the richness of view-points in the contemporary intellectual landscape. Similarly, the preface of the *Dictionnaire de Trévoux* stressed that it was bound to contain a multitude of opinions since it reproduced the thoughts of diverse authors.⁵⁹⁹ A contemporary critic also claimed that the *Encyclopédie* 'instead of forming a body of doctrine is nothing but a chaos of contradictions where there are as many different systems and principles as there are authors contributing with articles'.⁶⁰⁰ In order to form a general idea of the contents of a large-scale dictionary, it is therefore a good strategy to look at its building blocks.

One of the strengths of the *Encyclopédie* has often been considered its use of updated information.⁶⁰¹ When Proust briefly described the Maurists' manuscripts in 1965 he stated that the articles were 'based on the best sources'.⁶⁰² What did this imply? Did the Maurists rely on the same building blocks as the *encyclopédistes* and/or the Jesuits? If so, how did they use them? Did they choose to focus on the same things within the mutually treated areas of knowledge?

This chapter is divided in three subchapters. The question of sources and intertextuality is central in all of them. The first subchapter is solely devoted to the mechanical arts and crafts, since the treatment of these areas has been considered as one of the most novel features of the *Encyclopédie*. The second subchapter discusses central sources on natural history, the medical arts, and the mathematical sciences. The first two fields receive considerable attention in the Maurists' manuscripts, while the third composes a smaller category. Since the mathematical sciences constituted the focal point of the first draft based on Wolff, I have found it relevant to make at least a brief comment upon the building blocks of the later project. The third and final

⁵⁹⁹ *Dictionnaire de Trévoux* (1743), I, p. iv.

⁶⁰⁰ Lough, *The 'Encyclopédie'*, p. 116: 'au lieu de former un corps de doctrine, n'est qu'un chaos de contradictions où l'on trouve autant de systèmes et de principes différents qu'il y a d'auteurs qui ont fourni des articles'.

⁶⁰¹ Broberg, p. 48.

⁶⁰² Proust, *L'Encyclopédie*, pp. 45–46.

subchapter discusses selected articles. Here I will examine aspects of encyclopedic (documentary) and linguistic contents, but also the choice and use of sources on a more concrete level.

Naturally, none of the three subchapters constitute comprehensive accounts. To get a complete idea of the Maurists' use of sources within any area of knowledge it would be necessary to digitize the content and create a database for textual comparisons. Such a work has not been possible to realize within the frame of this dissertation. As the first study of the history and contents of the Maurists' dictionary, the analysis is bound to be either general or exemplary.

When comparing the sources of the Maurists and the *encyclopédistes*, I have principally used the digitized ARTFL *Encyclopédie*, based on the first edition.⁶⁰³ Regarding the *Dictionnaire de Trévoux*, I have consulted the Parisian editions of 1743 and 1752. The Maurists' inventories suggest that the edition of 1743 was used during the compiling phase. Comparisons to this edition therefore give an idea of the Maurists' starting point and what kind of building blocks they added. The edition of 1752 gives a complementary image of the Maurists' choices since it was prepared concurrently with the Benedictine enterprise and the *Encyclopédie*. Combined these two editions make it possible to form a general idea of how the efforts of the Maurists, the Jesuits and the *encyclopédistes* resembled and differed from each other.

Due to the previous affiliation with Jombert, it is reasonable to believe that Pernety and Brézillac by 1747 were well-aware of the parallel project of the *encyclopédistes*. Nevertheless, for about four years (1747–1751), the Maurist work would have proceeded without any concrete influence from the *Encyclopédie*. Between 1751 and 1754, its first four volumes (covering A–DIZ) would in theory have been available for the monks to consult. The fifth volume, covering DO–ES, appeared in November 1755. By then, the Maurists' work was either approaching its end or had already been interrupted. This means that the compilation of the largest part of the manuscripts coincided with the preparation of the volumes of the *Encyclopédie*, but preceded the publication of most of them. Furthermore, it is unclear whether – or when – the monks actually got access to the work. Since the catalogue of the printed collection of the library of Saint-Germain-des-Prés was destroyed in the fire in 1795, we do not know if the abbey

⁶⁰³ ARTFL *Encyclopédie*, <http://encyclopedia.uchicago.edu/>. [accessed 2014–03–13]. All references to articles are made to the letter-press volumes.

owned a copy. However, in the *Dictionnaire portatif de peinture* (1757), Pernety thoroughly discusses the article ENCAUSTIQUE of the *Encyclopédie*.⁶⁰⁴ At one point he also refers to claims made by Diderot ‘on several occasions in his dictionary’.⁶⁰⁵ This suggests that Pernety, at least by 1756, was well familiar with the content of the *Encyclopédie*. Consequently, even though the Maurists never explicitly refer to the *Encyclopédie* in the manuscripts, it is necessary to be observant of tacit borrowings in articles on A-DIZ.

THE MECHANICAL ARTS AND CRAFTS

During the fifteenth and sixteenth centuries, the liberal arts were considered as the finest, most noble forms of knowledge, while the mechanical arts had lower status.⁶⁰⁶ Concurrently with the growing trade and urbanization and the progress within industries and engineering, the mechanical arts were slowly rising in the ranks from the late seventeenth century onwards.⁶⁰⁷ Still, the previously low status of manual labor continued to be visible in many of the dictionaries of arts and sciences, where only limited attention was devoted to these subjects.

The description of the technical innovations applied in the industries and the workshops of the artisans has repeatedly been regarded as one of the most innovative features of the dictionary of Diderot and d’Alembert.⁶⁰⁸ Darnton identified this treatment as ‘the most extensive and original part of the *Encyclopédie*’.⁶⁰⁹ Leca-Tsiomis and Proust have stressed how the large collection of technical terms demonstrates the extraordinary effort of Diderot in constructing a ‘language of the arts’.⁶¹⁰ Similarly, according to the intellectual historian Aude Doody, the *Encyclopédie* was to ‘expand the horizons of what counted as common cultural knowledge [...] as it made the work of manufacturers the subject of legitimate interest and scrutiny on the

⁶⁰⁴ Pernety, *Dictionnaire portatif*, pp. lxxiii–lxxv, lxxvii–lxxviii.

⁶⁰⁵ *Ibid.*, p. lxxxiv, ‘dans plusieurs endroits de son dictionnaire’.

⁶⁰⁶ Burke, p. 84.

⁶⁰⁷ Roche, *France in the Enlightenment*, pp. 41–55.

⁶⁰⁸ Cynthia J. Koepf, ‘Making Money: Artisans and Entrepreneurs in Diderot’s *Encyclopédie*’, in *Using the ‘Encyclopédie’: Ways of Knowing, Ways of Reading*, ed. by Daniel Brewer and Julie C. Hayes (Oxford: Voltaire Foundation, 2002), pp. 119–141 (p. 119).

⁶⁰⁹ Darnton, ‘The Philosophers’, p. 198.

⁶¹⁰ Leca-Tsiomis, ‘L’*Encyclopédie*’,

http://dalembert.obspm.fr/SerieII_presentation_Encyclopedie_Marie_Leca-Tsiomis.php [accessed 2013–10–31].

part of the emergent bourgeoisie'.⁶¹¹ In order to properly understand the Maurists' efforts in this area, the originality of the *Encyclopédie* must first be discussed.

Already in the *Prospectus* and the *Discours préliminaire*, Diderot and d'Alembert emphasized that the treatment of the mechanical arts and crafts constituted one of the greatest novelties of the enterprise. The editors depicted themselves as the first to visit the workshops and to talk to the craftsmen, and to illustrate their machines, tools and procedures of work. D'Alembert even asserted that prior to the *Encyclopédie*, 'almost nothing has been written on the mechanical arts'.⁶¹² These claims were widely exaggerated. Since 1693, the Parisian Academy of Sciences had been working on a major enterprise called *Descriptions des arts et des métiers*, aspiring to describe and illustrate all the practical arts and professions. From 1709 onwards, the mathematician, naturalist, inventor and metallurgist René Antoine Ferchault de Réaumur (1683–1757) directed the work. The first volume of the *Descriptions* did not appear until 1761. By then, the seven first letterpress volumes of the *Encyclopédie* were already on the market. Nevertheless, Réaumur and his colleagues had been working on essays and plates intended for the *Descriptions* for over half a century, and thus long before the *Encyclopédie* was even contemplated.⁶¹³

Several minor works on the mechanical arts and crafts had also been published in the first half of the eighteenth century. A quick look at the catalogues of Jombert suffices to get an idea of their number and diversity. However, according to Proust, most of these books addressed specialists. In contrast, Diderot wanted to make the secrets of the artisans available and comprehensible to a wider audience, and this popularizing effort constituted the true novelty of the *Encyclopédie*.⁶¹⁴ Diffusing knowledge about the mechanical arts and crafts was namely a sensitive matter in the eighteenth century. The dominating mercantilist ideology held that the amount of wealth in the world was fixed, which implied that each country competed to accumulate as much bullion as possible. It was therefore considered necessary to maintain secrecy over the most advanced mechanical arts. However, the historian of science John R. Pannabecker has remarked that

⁶¹¹ Doody, p. 75.

⁶¹² *Encyclopédie* (1751), I, p. xxxix: 'on n'a presque rien écrit sur les arts mécaniques'.

⁶¹³ Georges Huard, 'Les planches de l'*Encyclopédie* et celles de la *Description des Arts et Métiers* de l'Académie des Sciences', *Revue d'histoire des sciences et de leurs applications*, 4:3–4 (1951), 238–249 (p. 242).

⁶¹⁴ Proust, *Diderot et l'Encyclopédie*, pp. 178–179, 185–188, 205, 207.

the *Encyclopédie* not always presented the most updated knowledge of the time. In fact, many descriptions were typical of the late seventeenth and early eighteenth century, and thus far from representing the latest progress within the diverse technological fields. Pannabecker therefore suggests that Diderot's descriptions rather should be seen as a political act – as a way of undermining the control of the guilds and promoting a more liberal view on economy – and as an ideological commitment to the useful and productive forces of the society.⁶¹⁵

The historian Cynthia J. Koepp has questioned that Diderot should have been the first to popularize knowledge about technology. She stresses that the popular *Spectacle de la nature* (8 vols, 1732–1750) of Abbé Noël-Antoine Pluche (1688–1761) played a crucial role in the increasing esteem for the crafts and mechanical arts in the mid-eighteenth century. From the 1730s onwards, this work appeared in at least fifty-seven editions in French alone and became the fourth most common book in Parisian libraries and collections.⁶¹⁶ Each volume had a specific theme. The seventh volume, published in 1746, was solely devoted to mechanical arts and diverse practical professions. The work contained more than two hundred engravings, of which the majority depicted machines and processes of work. Koepp points out that the plates of the *Spectacle de la nature* looked 'remarkably like miniature versions of Diderot's grand folio volumes'.⁶¹⁷ Furthermore, based on Pluche's own accounts, she argues that he just like Diderot and Réaumur had visited the workshops, talked with the artisans and taken notes on their techniques and activities.⁶¹⁸

Still, the *Encyclopédie* was indeed the first large-scale dictionary to include detailed accounts on the mechanical arts and crafts side by side with the many liberal arts and sciences. Proust stresses that none of the preceding works – including Chambers's *Cyclopaedia* – had provided more than some basic definitions of the terms used within these areas, and none had illustrated them with plates. Nevertheless, the descriptions and illustrations of the *Encyclopédie* were principally based on earlier specialized publications, as well as the texts compiled by the specialist collaborators

⁶¹⁵ John R. Pannabecker, 'Diderot, the Mechanical Arts, and the *Encyclopédie*: In Search of the Heritage of Technology Education', *Journal of Technology Education*, 6:1 (1994). Published online: <http://scholar.lib.vt.edu/ejournals/JTE/v6n1/pannabecker.jte-v6n1.html> [accessed 2013–10–31]; Lough, *The 'Encyclopédie'*, p. 90.

⁶¹⁶ Koepp, 'Advocating for Artisans', p. 246.

⁶¹⁷ *Ibid.*, p. 248.

⁶¹⁸ *Ibid.*, p. 262.

(mostly master artisans). It is therefore unlikely that Diderot's personal visits to the workshops had played such an essential role in the compilation as the editors maintained. Above all, their frequency was surely exaggerated. They rather had supplementary function than being the primary source of the technical descriptions.⁶¹⁹

Let us now return to the project of the Maurists. Already in 1747, Fortet had specified that Pernety and Brézillac would treat both the liberal and mechanical arts and the crafts. Prior to the publication of the *Encyclopédie*, none of the universal dictionaries had included crafts (*métiers*) in their main titles. The manuscripts show that Pernety, in parallel to Diderot, devoted great attention to the practical professions and mechanical arts. Compared to the *Encyclopédie*, these article drafts are less numerous and extensive in size, but compared to the *Dictionnaire de Trévoux*, their contents are considerably more elaborate. Pernety may not have visited the workshops of the artisans or have had assistance from specialists in the fields, but by using the literature available, he described aspects of the mechanical arts and crafts side by side with liberal arts and sciences. Here it is useful to recall that Pernety himself – just like Diderot – came from a family of merchants and master artisans. Even though he entered the Congregation in an early age, he still had spent his first sixteen years in this environment.

The Index volume contains a multitude of lists related to the description of the mechanical arts and crafts. One document enumerates some three hundred and fifty practical professions, seemingly intended to be treated in the dictionary.⁶²⁰ Other lists contain over a thousand terms employed by bakers, carpenters, and the workers on iron, copper, lead, silk, wool and weaving.⁶²¹ Similar to the *Encyclopédie*, the articles clearly were written for a wider audience and not just for specialists. Considering the broad scope of content, the Maurists were not addressing only one group of professionals.

Far from all the articles refer to a specific source. The bibliography in the Index volume contain a great number of specialized works and academic memoirs never mentioned in the article drafts, which suggests that they either were used without acknowledgment, or were intended to be used later.⁶²²

⁶¹⁹ Proust, *Diderot et l'Encyclopédie*, pp. 178–179, 185–188, 194–195, 202, 205, 207.

⁶²⁰ BnF, MS f. fr. 16984, fols. 231–235.

⁶²¹ BnF, MS f. fr. 16984, fols. 236–243, 248^v–255^v.

⁶²² For instance, BnF, MS f. fr. 16984, fol. 263: '*Les descriptions de l'art de l'impression et des arts qui y servent*, par Mrs. des Billettes et Jaugeon de l'Académie en 1702', '*Les descriptions de tous les instrumens de musique dont on se sert en France*, par Mr. Carré

Among the explicitly mentioned sources, the *Spectacle de la nature* of Abbé Pluche is a central building block.⁶²³ Pernety's illustration catalogues enumerate thirty-four figures planned to be copied from the seventh volume (1746) devoted to mechanical arts and crafts.⁶²⁴ If any of these drawings were realized before the project's interruption, they have not been preserved. Nevertheless, a look at the original plates gives an idea of the dictionary imagined. Figure 26 shows four plates in the *Spectacle de la nature*, specifically indicated to be copied by Pernety.⁶²⁵ In proper order, they depict the tools and devices used in wax candles manufacture; the operation of an olive oil press; the polishing of glass, and a lead foundry.

Due to Pernety's plans to copy practically all the technical plates of the *Spectacle de la nature*, the Maurists' dictionary would have several common denominators not only with the *Encyclopédie*, but also the *Descriptions des arts et des métiers*. The art historian Madeleine Pinault-Sorensen has pointed out that the mechanical arts and crafts treated by Pluche generally overlapped the ones considered by the Academy and Réaumur. Even though the first volumes of the *Descriptions* did not appear until in 1761, several of its finished plates were circulating among the engravers in Paris decades ahead. Due to distinct similarities, Pinault-Sorensen has argued that Pluche likely had used these as models for his own illustrations. And so did the *encyclopédistes*.⁶²⁶

academicien, en 1702', *Description des arts et métiers qui concernent la soye*, M. Jaugeon, mémoire de l'Académie de 1704', *La description de l'orgue et de toutes ses parties*, mémoire de l'Académie de 1702, p. 308, avec les figures', *Mémoire sur l'horlogerie*, 1750, Guerin et Jombert', *Dissertation sur la glace*, par M. Dortous de Mairan, Imp. Royale, 1749', *Traité des pierres gravées* par Mr. Mariotte 1750'.

⁶²³ BnF, MS f. fr. 16980, fols. 87, 89, 110, 112, 128, 132, 134, 135, 173, 260. See in particular fol. 195^{r-v}, MOULE: 'la façon d'opérer et se servir de ces instrumens est décrite assez au long dans le tome VII du *Spectacle de la nature*, page 304 et suiv., édition de 1746'.

⁶²⁴ See Appendix 3: Illustrations.

⁶²⁵ BnF, MS f. fr. 16984, fol. 4^v, CERCEAU À CIERGE, COUTEAU À CIERGE, fol. 8^v, FONDERIE DU PLOMB, fol. 15, PRESSE À HUILE, POLI DES GLACES, fol. 16^v, ROULOIR DE CERGE, ROULER LES CIERGES. These terms are followed by specific references to the above plates of Pluche.

⁶²⁶ Madeleine Pinault-Sorensen, 'Les planches du *Spectacle de la nature* de l'abbé Pluche', in *Écrire la nature au XVIII^e siècle: autour de l'abbé Pluche*, ed. by Françoise Gevrey, Julie Boch and Jean-Louis Haquette (Paris: Presses de l'Université Paris-Sorbonne, 2006), pp. 141–162 (p. 155).

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Figure 26: Four plates from the *Spectacle de la nature*,⁶²⁷
planned to be copied by Pernety.
(The author's photos, BnF)

The first volume of plates of the *Encyclopédie* did not appear until in 1762. As a consequence, the seven letterpress volumes published between 1751 and 1757 referred to illustrations that nobody yet could see. Despite the assurance of the publishers that all the plates were finished already by the early 1750s, this claim has been revealed as an exaggeration. According to the historian Jean Haechler, contemporary documentation suggests that the majority of the plates were still unfinished at the end of the decade.⁶²⁸ This means that the *encyclopédistes*, at least from the mid-1740s to the mid-50s, principally described the illustrations of others, and that the plates later published were modified after these originals. Pinault-Sorensen has shown

⁶²⁷ Noël-Antoine Pluche, *Spectacle de la nature*, vol. VII (Paris: Estienne, 1746), pl. IX, 'La fabrique des cierges et de la Bougie', pl. VII, 'Le pressoir à huile', pl. XIII, 'La poli des glaces', pl. IV, 'La fonderie du plomb'.

⁶²⁸ Jean Haechler, *L'Encyclopédie: les combats et les hommes* (Paris: Belles Lettres, 1998), pp. 293–298.

that many plates were directly copied from Chambers's *Cyclopaedia*, but the *encyclopédistes* also drew inspiration from a multitude of other works.⁶²⁹

In 1756, Réaumur complained in a letter to a fellow academician that he had found out that some one hundred and fifty plates engraved for the *Descriptions des arts et des métiers* were currently being copied by the publishers of the *Encyclopédie*. Weakened by age, Réaumur never followed up on the accusation and then passed away the year after. In November 1759, an engraver involved in the preparation of the plates of the *Encyclopédie* stepped forward with similar accusations in the *Année littéraire*. He claimed that the articles on the crafts and mechanical arts in the seven first volumes of the *Encyclopédie* actually were describing the plates engraved for the *Descriptions*.⁶³⁰ To convince the public, he urged the readers to take a closer look at the article ARDOISE (Shale), because 'there you will find the second and fourth plate [...] described with all their letters and cross-references'.⁶³¹ According to the conservator and historian Georges Huard, the illustration described in ARDOISE corresponds perfectly to the original plate of Réaumur, while it actually differs from the plate later published for the *Encyclopédie*.⁶³²

The kinship between the *Descriptions*, Pluche's *Spectacle de la nature* and the *Encyclopédie* is perhaps most visible in the plates of the bleaching of wax.⁶³³ As seen in Figure 27, all three show a somewhat unrealistically clean and bare industrial hall, containing the same number of barrels, tubs and stairs. Compared to the plate of the *Descriptions*, Pluche has turned the angle towards the side, while the *Encyclopédie* has shifted it to the front, but each has added a barred window and a number of workers. Also in this case Pernety has indicated Pluche's plate as planned to be copied.⁶³⁴

⁶²⁹ Pinault-Sorensen, 'Les planches du *Spectacle de la nature*', p. 158; Pinault-Sorensen, 'Les métamorphoses des planches: quelques exemples', *Recherches sur Diderot et sur l'Encyclopédie*, 12 (1992), 99–112 (pp. 100–101); Pinault-Sorensen, 'À propos des planches de l'Encyclopédie', *Recherches sur Diderot et sur l'Encyclopédie*, 15 (1993), 143–152 (pp. 147–149).

⁶³⁰ Huard, pp. 239–243.

⁶³¹ *Ibid.*, p. 246: 'vous y trouverez la planche 2^e et 4^e [...] décrites avec toutes leurs lettres et renvois'. The different parts of a figure were commonly marked with letters, to which the descriptions in the articles referred.

⁶³² *Ibid.*, p. 246.

⁶³³ Pinault-Sorensen, 'Les planches du *Spectacle de la nature*', p. 155.

⁶³⁴ BnF, MS f. fr. 16984, fol. 3: 'BLANCHISSAGE DE LA CIRE, *ib* [Spectacle de la nature], pl. 8'.

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Follow the links in the footnotes

Figure 27: The bleaching of wax in the *Descriptions des arts et métiers*,⁶³⁵ the *Spectacle de la nature*,⁶³⁶ and the *Encyclopédie*.⁶³⁷
(CNUM; the author's photo, BnF; ARTFL)

Due to the common practice of imitation in the eighteenth century, the similarities between the *Spectacle de la nature*, the *Descriptions*, and the *Encyclopédie* are neither surprising nor exceptional. What is important is simply to recognize that the Maurists and the *encyclopédistes* worked within the same tradition of borrowed texts and images. The fact that they simultaneously began compiling an illustrated dictionary of arts, crafts, and sciences implied that they, compared to the non-pictorial *Dictionnaire de Trévoux*, needed to turn to other (and often the same) types of sources.

⁶³⁵ *Descriptions des arts et métiers, faites ou approuvées par Messieurs de l'Académie royale des sciences de Paris*, 20 vols (Neuchâtel: Imprimerie de la Société typographique, 1771–1783), XIV (1780), 'Cirier', pl. iv. *Conservatoire numérique des Arts et Métiers* (CNUM). <http://cnum.cnam.fr/CGI/fpage.cgi?4KY58.14/637/100/665/617/665> [accessed 2014–02–21].

⁶³⁶ Pluche, VII, pl. VIII, 'Blanchissage de la cire'.

⁶³⁷ *Recueil de planches sur les sciences, les arts libéraux et les arts mécaniques, avec leur explication*, 11 vols (Paris: Le Breton, 1762–1772), III (1763), 'Blanchissage des cires', pl. II: ARTFL *Encyclopédie*, http://artflsrv02.uchicago.edu/images/encyclopedia/V20/plate_20_8_2.jpeg [accessed 2014–03–11].

Pluche is not the Maurists' only connection to the *Descriptions des arts et des métiers*. Pernety also frequently refers to Réaumur's treatise on the manufacture of steel.⁶³⁸ When Réaumur was appointed director of the *Descriptions*, he developed an interest in the steel industry. Supported by the King in collecting all the necessary documentation, he started corresponding with prominent *maîtres de forges* in the progressive steel and mining districts in Germany. He also visited local forges where he executed his own experiments in order to improve the industry. Between 1720 and 1722 he presented several memoirs to the Academy, explaining the technical terminology of the workers and the procedures used in the manufacture of various kinds of steel. According to the historian of science Arthur Birembaut, Réaumur became the first to describe in detail the modern manufacture of formable iron castings. The memoirs were intended to be part of the *Descriptions* but due to their importance they were published separately in 1722, as *L'art de convertir le fer forgé en acier et l'art d'adoucir le fer fondu* ('The art of converting wrought iron into steel and the art of making cast iron malleable'). The work contained seventeen plates that illustrated the construction and functions of diverse furnaces, as well as the tools used in the forging and softening process. One also found a depiction of Réaumur's own invention: a device for testing the flexibility of steel bars. In 1762, a revised edition of the work was inserted in the *Descriptions*, where several of the original plates were reproduced.⁶³⁹

The manuscripts of Pernety contain seventeen finished drawings copied from the work of Réaumur, described in the related articles.⁶⁴⁰ The figures depict melting pots as well as diverse furnaces for steel and copper works – both as they would appear to the naked eye and as dismantled into pieces, exposing their inner construction and function. As a consequence, the manuscripts contain several illustrations that twenty years later would reappear in the *Descriptions des arts et métiers*. Three of them can be seen in Figure 28. In proper order, they depict Réaumur's devise for testing the flexibility of steel bars, a small furnace for founding iron (dismantled into pieces), and a large furnace for softening cast iron.

⁶³⁸ BnF, MS f. fr. 16980, fols. 27, 91, 105, 124, 127, 134, 138–140, 151, 180, 185, 188, 205, 219, 223, 239, 256, 258–260, 266^v, 271. See in particular fol. 16: 'ADOUCIR le fer fondu ou le fer forgé [...] voyez la manière d'y réussir dans *L'art de convertir le fer forgé en acier*, par Mr. de Réaumur'.

⁶³⁹ Arthur Birembaut, 'Réaumur et l'élaboration des produits ferreux', *Revue d'histoire des sciences et de leurs applications*, 11:2 (1958), 138–166 (pp. 140–147, 151, 154, 160).

⁶⁴⁰ See Appendix 3: Illustrations.

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Follow the links in the footnotes

Figure 28: The original images by Réaumur (above),⁶⁴¹ the copies by Pernety (middle),⁶⁴² and the reproduction in the *Descriptions* (below).⁶⁴³
(The author's scans and photos, BnF; CNUM)

⁶⁴¹ Antoine Ferchault de Réaumur, *L'art de convertir le fer forgé en acier et l'art d'adoucir le fer fondu* (Paris: Brunet, 1722), pl. 10 (p. 308), pl. 15 (p. 494), pl. 13 (p. 446).

⁶⁴² BnF, MS f. fr. 16980, fols. 301, 302, 298.

⁶⁴³ *Descriptions des arts et métiers*, II (1774), pl. VII, 4th section, fig. 1; XV (1781), 'Adoucissement du fer', pl. III, pl. I et V, fig. III. (CNUM):

<http://cnum.cnam.fr/CGI/fpage.cgi?4KY58.2/745/100/750/717/750> [accessed 2014-02-21].

<http://cnum.cnam.fr/CGI/fpage.cgi?4KY58.15/605/100/630/601/630> [accessed 2014-02-21].

<http://cnum.cnam.fr/CGI/fpage.cgi?4KY58.15/607/100/630/601/630> [accessed 2014-02-21].

Besides the work of Réaumur, Pernety also refers to the *Traité de l'art métallique* (1730) of the Spanish metallurgist Alvaro Alfonso Barba, Agricola's *De re metallica*, and Emanuel Swedenborg's *Regnum Subterraneum* (1734).⁶⁴⁴ About forty minor figures of the finished illustrations are copied and modified from Agricola, and nine from Barba.⁶⁴⁵

All the above works are also recurrent sources in the related articles of the *Encyclopédie*.⁶⁴⁶ For instance, the *maître de forge* Étienne Jean Bouchu (1714–1773) discusses extensively the treatise of Réaumur in the articles FORGE (Foundry) and FORGES (Iron Foundries).⁶⁴⁷ Agricola and Réaumur are cited in Diderot's ACIER (Steel).⁶⁴⁸ Agricola, Swedenborg and Barba are discussed in d'Holbach's MÉTALLURGIE, and Swedenborg once again in FER (Iron).⁶⁴⁹ Agricola, as the eldest authority on metallurgy, is the most cited. Some of the plates on metallurgy and mineralogy are also explicitly drawn from *De re metallica*.⁶⁵⁰

In contrast, the works of Réaumur, Barba, Agricola and Swedenborg are not included in the bibliography of the *Dictionnaire de Trévoux* (eds. 1743, 1752).⁶⁵¹ Nor are they mentioned in any of the central articles ACIER, FER, FONTE (Casting) or FORGE.⁶⁵² In the edition of 1752, there is a brief reference to the treatise of Réaumur in the new entry FORGEABLE, but here the writer simply explains that the term *malléable* means that the iron is formable or forgeable.⁶⁵³ The reader is provided with a synonym, but no description of the process itself. Similarly, FONTE is basically defined as 'the act of founding' and 'founded metal in a certain quantity'.⁶⁵⁴ In contrast,

⁶⁴⁴ See for instance BnF, MS f. fr. 16980, fol. 53, CALCINER: 'on trouve la manière de calciner les métaux dans le *Traité de l'art métallique* d'Alvare Alfonse Barba, édit. 1730', fol. 100, CRIBLE DE MINE: 'on trouve les autres dans Agricola *De re metallica*', fol. 270: 'TUYERE, terme de forge [...] Emanuel Swedenborg'; fr. 16984, fol. 265^v: 'Emanuel Swedenborg, *Regnum subterraneum*'.

⁶⁴⁵ See Appendix 3: Illustrations.

⁶⁴⁶ ARTFL *Encyclopédie*, search words: Agricola, Swedenborg, Réaumur, Barba, Réaumur.

⁶⁴⁷ *Encyclopédie*, VII (1757), 147, 156, FORGES (Grosses), 166, FORGE.

⁶⁴⁸ *Encyclopédie*, I (1751), 101–102, ACIER.

⁶⁴⁹ *Encyclopédie*, X (1765), 432, 435, MÉTALLURGIE.

⁶⁵⁰ ARTFL *Encyclopédie*, search word: Agricola.

⁶⁵¹ *Dictionnaire de Trévoux* (1743), I, 'Table des auteurs'; *Dictionnaire de Trévoux*, 7 vols (Paris: Compagnie des libraires associés, 1752), I, 'Table des auteurs'.

⁶⁵² *Dictionnaire de Trévoux* (1743), I, 119, ACIER; III, 144–148, FER, 351, FONTE, 367, FORGE; *Dictionnaire de Trévoux* (1752), I, 170–171, ACIER; III, 1727, FONTE, 1747, FORGE; *Supplément au Dictionnaire universel françois et latin*, 2 vols (Paris: Compagnie des libraires associés, 1752), I, 1089, FER, 1129, FONDRE, 1130–1131, FONTE.

⁶⁵³ *Dictionnaire de Trévoux* (1752), III, 1747, FORGEABLE.

⁶⁵⁴ *Dictionnaire de Trévoux* (1743), III, 351, FONTE: 'action de fondre', 'le métal fondu en certaine quantité'; (1752), III, 1727, FONTE.

Pernety's FONTE occupies six columns and includes a detailed account of the foundry of church bells. The latter description is principally based on the *Spectacle de la nature*, from where related plates are indicated to be copied.⁶⁵⁵ In this particular case, FONTE in the *Encyclopédie* (1765), signed by Diderot, is not much longer than the one of the *Trévoux*, and basically concerned with various ways of using the term.⁶⁵⁶

The example of metallurgy and the steel industry clearly demonstrates how the interest of the Maurists and the *encyclopédistes* differed from the Jesuits. On the whole, the former two devoted greater attention to the practical and useful professions, and aspired to describe and illustrate their diverse procedures of work. In doing so, they largely relied on the same literature.

The Benedictines and the *philosophes* would also use the same sources regarding other crafts and practical arts. There are even cases when they have copied the exact same illustrations. For instance, the vast majority of Pernety's sixty-eight drawings of musical instruments (*lutherie*) have been copied from the *Harmonie universelle* (1636) of Marin Mersenne (1588–1648).⁶⁵⁷ Practically all of these figures can also be found in the *Encyclopédie*, of which five examples are seen in Figure 29.

Furthermore, regarding jewelry and the works on precious stones, Pernety frequently refers to (and copies an illustration from) Jeffries' *Traité des diamants et des perles* (1753).⁶⁵⁸ The same work is also stated as one of the main books on jewelry in the *Encyclopédie*, but never mentioned in the *Dictionnaire de Trévoux*.⁶⁵⁹ Dom Bernard de Montfaucon's *Antiquité expliquée* (15 vols, 1719–1724) is Pernety's main source on ancient crafts, tools and measurements, from where he has copied six figures.⁶⁶⁰ The same work is cited on numerous occasions in the *Encyclopédie*, while it is not mentioned in the bibliography of the *Dictionnaire de Trévoux* (although occasionally referred to throughout the volumes).⁶⁶¹ Naturally, these are just a few examples.

⁶⁵⁵ BnF, MS f. fr. 16980, fol. 132, FONTE; fr. 16984, fol. 8^v, FONTE.

⁶⁵⁶ *Encyclopédie*, VII (1765), 106, FONTE.

⁶⁵⁷ See Appendix 3: Illustrations.

⁶⁵⁸ BnF, MS f. fr. 16980, fols. 92, 95, 101, 124, 125, 171, 176, 214, 226, 239, 254. See in particular the illustration on fol. 204, OUTIL À EPREUVE; Jeffries, *Traité des diamants et des perles*, pl. 6.

⁶⁵⁹ *Encyclopédie*, XII (1765), 597, GRAVURE.

⁶⁶⁰ BnF, MS f. fr. 16980, fols. 65, 87, 102, 104, 186. See Appendix 3: Illustrations.

⁶⁶¹ ARTFL *Encyclopédie*, search word: Montfaucon; *Dictionnaire de Trévoux* (1743, 1752), I, 'Table des auteurs'; *Supplément* (1752), II, 1878, PILE.

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Figure 29: Musical instruments from Mersenne's *Harmonie universelle* (1636) (above),⁶⁶² copied by Pernety (middle),⁶⁶³ and reappearing in the *Encyclopédie* (1767) (below).⁶⁶⁴
(Gallica, BnF; the author's photos, BnF; ARTFL)

The Maurists' unfinished manuscripts cannot compete with the dimensions of the *Encyclopédie*, but they show that the monks were thinking along the same lines. They were each acknowledging and appreciating the useful arts and technology transforming the eighteenth-century society. While the *Dictionnaire de Trévoux* fundamentally was focusing on language, the Benedictines and the *encyclopédistes* were describing and illustrating men at work, their tools and products. Diderot's description of the mechanical arts

⁶⁶² Marin Mersenne, *Harmonie universelle, contenant la théorie et la pratique de la musique*, 2 vols (Paris: Cramoisy, 1636), II, liv. 3, pp. 175–176, and liv. 7, pp. 49, 48.

⁶⁶³ BnF, MS f. fr. 16980, fols. 284, 287.

⁶⁶⁴ *Recueil de planches*, V (1767), 'Lutherie, seconde suite, instrumens anciens & instrumens étrangers', pl. I (fig. 13, 12), pl. II (fig. 24, 21, 20): ARTFL *Encyclopédie*, http://artflsrv02.uchicago.edu/images/encyclopedia/V22/plate_22_14_13.jpeg [accessed 2014–02–21].
http://artflsrv02.uchicago.edu/images/encyclopedia/V22/plate_22_14_14.jpeg [accessed 2014–02–21].

and crafts has been regarded as a political/ideological act and as one of the most novel features of the *Encyclopédie*. Considering the Maurists' parallel popularizing efforts, the *encyclopédistes* were neither alone nor original in their lexicographic and encyclopedic endeavor, although they certainly were the most successful.

NATURAL HISTORY, MEDICINE, AND MATHEMATICS

Approximately forty percent of the articles written by Pernety are concerned with animals, plants and minerals. NH-3 has written nearly nine hundred articles on related subjects. Also the small contribution from NH-2 contains entries on natural history, and the three medical writers often describe different animals, plants and minerals used within pharmacy and chemistry. Commonly, Pernety and NH-3 refer to different authors, but all writers have at least some sources in common.

When it comes to the world of insects, Pernety cites prominent seventeenth-century naturalists such as Maria Sibylla Merian,⁶⁶⁵ and Joseph Pitton de Tournefort.⁶⁶⁶ However, most of all he relies on another of Réaumur's pioneering works: *Mémoires pour servir à l'histoire des insectes* (6 vols, 1734–1742), illustrated by 267 plates.⁶⁶⁷ The content of Pernety's manuscripts suggests that he had worked his way through all the six volumes and systematically created articles on practically all the species treated by the academician. At one point the monk explicitly declares that 'almost every description of insects that I give in this dictionary is drawn from Mr. de Réaumur'.⁶⁶⁸

The *Mémoires pour servir à l'histoire des insectes* are also recurrently cited in the articles concerning insects in the *Encyclopédie*. In many cases they are even stated as the only source.⁶⁶⁹ Most of these articles have been signed by Louis Jean Marie Daubenton (1716–1799), himself a naturalist and assistant of Georges-Louis Leclerc de Buffon (1707–1788) – the rival of

⁶⁶⁵ BnF, MS f. fr. 16980, fols. 27, 29, 36, 64, 69, 92, 137, 200, 224, 227, 245, 255, 276.

⁶⁶⁶ BnF, MS f. fr. 16980, fols. 40, 92, 154, 175, 181, 185, 222, 225, 228, 245.

⁶⁶⁷ BnF, MS f. fr. 16980, fols. 71–73^v, 75–78, 80, 96, 125^{fr-v}, 143, 190, 212, 228, 232, 262^v.

⁶⁶⁸ BnF, MS f. fr. 16980, fol. 211, PAPILLON (à tête de mort): 'Mr. de Reaumur, dont je tire presque toutes les descriptions des insectes que je donne dans ce dictionnaire, au moins celles qu'il a insérées dans ses *Mémoires pour servir à l'histoire des insectes*'.

⁶⁶⁹ *Encyclopédie*, I (1751), 306, ALVÉOLES; II (1752), 368, BOURDON; III (1753), 293, FAUX-CHENILLES (entry on CHENILLE); V (1755), 995, ESSAIM; X (1765), 496, MIEL; XI (1765), 876, PAPILLON; XV (1765), 518, STIGMATE.

Réaumur. The *Dictionnaire de Trévoux* does not mention the *Mémoires* in the bibliography of 1743, but they have been added in the edition of 1752.⁶⁷⁰ However, since the *Trévoux* did not include any illustrations, many descriptions of insects are rather brief. For instance, in the edition of 1743 the article ABEILLE (Bee) amounts to one and half column and predominantly refers to sixteenth- and seventeenth-century naturalists.⁶⁷¹ In 1752, the article has grown to seven and a half columns, but the latest source is a memoir of the naturalist and astronomer Giovanni Maraldi, published in 1712. Réaumur is never mentioned.⁶⁷² In contrast, the articles of Pernety and Daubenton are each based on the more recent work of Réaumur. At the end, Daubenton even remarks that the reader can find more information in the *Mémoires* of Réaumur, ‘from where this summary has been drawn’.⁶⁷³

Pernety’s illustration catalogues refer to 119 individual figures in the *Mémoires* as planned to be copied.⁶⁷⁴ If any of these drawings were realized, they have not been preserved. Nevertheless, if one follows the notes of Pernety, the figures intended to be part of the dictionary can be located in the work of Réaumur. As seen in Figure 30, the plates later appearing in the *Encyclopédie* were not essentially different. Observe in particular the larva crawling along the straw in a downward direction.

Pernety repeatedly expresses his admiration and appreciation for the work of Réaumur. ‘Everything therein is curious, everything is charming, and everything is described in such a beautiful manner of expression, that one cannot read [this author] without feeling a complete satisfaction’, he writes.⁶⁷⁵ Seemingly inspired by Réaumur’s observations, Pernety tells the reader how the gardener of the abbey of Saint-Germain-des-Prés (apparently aware of the monk’s predilection for natural history) had found a caterpillar so beautiful that he brought it to him in the beginning of September. Pernety writes that he kept it in a box, watched it turn into chrysalis and then emerge as a butterfly the next spring.⁶⁷⁶

⁶⁷⁰ *Dictionnaire de Trévoux* (1743, 1752), I, ‘Table des auteurs’.

⁶⁷¹ *Dictionnaire de Trévoux* (1743) I, 27–28, ABEILLE.

⁶⁷² *Dictionnaire de Trévoux* (1752), I, 37, ABEILLE.

⁶⁷³ *Encyclopédie*, I (1751), 23, ABEILLE: ‘dont cet abrégé a été tiré’.

⁶⁷⁴ See Appendix 3: Illustrations.

⁶⁷⁵ BnF, MS f. fr. 16980, fol. 6, ABEILLE: ‘Tout y est curieux, tout y est charmant et tout y est raconté avec une façon de s’exprimer si jolie, qu’on ne peut lire [...] [cet auteur] sans une satisfaction entière’.

⁶⁷⁶ BnF, MS f. fr. 16980, fol. 252, SPHINX.

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Figure 30: Butterflies, caterpillars, and chrysalides in the *Mémoires* (1734) of Réaumur (the two plates to the left),⁶⁷⁷ and in the *Encyclopédie* (1768).⁶⁷⁸
(Gallica, BnF; ARTFL)

When Pernety a decade after the interruption of the dictionary project was asked to accompany Bougainville to the Falkland Islands, he was known as a connoisseur of natural history and botany.⁶⁷⁹ Prior to the expedition, Pernety had never published anything on these topics. Here the dictionary manuscripts can fill in the blanks regarding the origins of his interests and reputation.

Furthermore, travel literature plays a central role in Pernety's descriptions of exotic trees, fruits, plants, animals and diverse curiosities. The most common sources are the French translations of the *Voyages* (1725) by the Dutch explorer Cornelis de Bruyn (c. 1652–1727),⁶⁸⁰ and the *Voyage du tour du monde* (1719) by the Italian explorer Gemelli Careri (1651–1725).⁶⁸¹

⁶⁷⁷ Antoine Ferchault de Réaumur, *Mémoires pour servir à l'histoire des insectes*, 6 vols (Paris: Imprimerie Royale, 1734–1742), I (1734), pl. 13 (p. 342), pl. 48 (p. 654).

⁶⁷⁸ *Recueil de planches* VI (1768), 'Suite du règne animal, insectes', pl. LXXXI: ARTFL *Encyclopédie*, http://artflsrv02.uchicago.edu/images/encyclopedia/V23/plate_23_4_31.jpeg [accessed 2014–02–21].

⁶⁷⁹ Martin-Allanic, I, 97.

⁶⁸⁰ BnF, MS f. fr. 16980, fols. 87, 19, 21, 26, 29, 36, 38–39, 44–47, 51, 53, 68, 82, 92, 105, 110–111, 129, 144–146, 150, 159, 162, 164–166, 168–172, 181, 185, 197, 199, 202, 205–206, 213, 225–226, 242, 246–247, 249, 253, 262–263, 272, 277, 281. See in particular fol. 171, LAUDANUM: 'Corneille le Bruyn (*Voyage du Levant*, t. II, pag. 498, édit. de Paris 1725)', fol. 263, TJALLAGAN: 'Corn. Bruyn. *Voyage de Moscovie et de Perse*, t. 3. p. 481, édit. de Paris, 1725'.

⁶⁸¹ BnF, MS f. fr. 16980, fols. 12, 19, 21–22, 24, 29, 32–33, 36–37, 45–48, 52–58, 65, 78–79, 81, 86, 93, 101, 108, 110–111, 127–128, 144, 146, 150–152, 154, 161, 163, 167–68, 170, 172, 174, 176–177, 180–184, 186, 189, 199, 202–203, 205–207, 214–215, 218, 232, 234, 239, 243–245, 248–249, 253–256, 262, 265, 267, 271, 275, 277–282. The references are often abbreviated 'Gem. Carr.'

Each work is richly illustrated and depicts landscapes, havens, urban scenarios, buildings and ancient monuments, but also plants, fruits, trees and animals. Pernety is primarily extracting information about the last four categories, and whenever there is an illustration in the said works, he has indicated it as planned to be copied.⁶⁸² He also occasionally refers to the French translation of the *Voyage Round the World* (1748) by the Englishman George Anson,⁶⁸³ the works of Pierre Bouguer (also treated in the draft based on Wolff)⁶⁸⁴ and the French explorer Charles-Marie de La Condamine (1701–1774). La Condamine's *Voyage de la rivière des Amazones* (1745) contained some of the first accounts of the poisonous arrows of the Indians, which are retold in one of the articles of Pernety.⁶⁸⁵ Considering how many months the monk must have spent reading the exotic accounts of all these explorers, it is not hard to understand why Pernety a decade later chose to undertake his own travels, and write his own travel accounts.

All the above works are also recurrently cited in the *Encyclopédie*.⁶⁸⁶ La Condamine was even one of the contributors. In contrast, the bibliography of the *Dictionnaire de Trévoux* (eds. 1743 and 1752) mentions 'Le Brun, voyages', but and there is nothing on Careri, Anson, Bouguer, or La Condamine.⁶⁸⁷

While Pernety has drawn his information from more recent publications, the second major writer on natural history, NH-3, has relied on older works. The most frequently cited source is the illustrated *Historiae naturalis* (6 vols, 1649–1653) by John Jonston (1603–1675), which synthesized the works of sixteenth-century naturalists such as Guillaume Rondelet, Conrad

⁶⁸² For instance, BnF, MS f. fr. 16980, fol. 26, ANGOERT, fol. 44, BIEDE MAKALAGIE, fol. 180, MABOL, fol. 243, SANTOR, fol. 244, SAPOTE, fol. 253, STRELET; Cornelis de Bruyn, *Voyage de Corneille le Brun par la Moscovie, en Perse et aux Indes orientales* [1698], trans. from Dutch, 2 vols (Amsterdam: Wetstein, 1718), I, fig. 33 (Strelet), fig. 59 (Angoert), fig. 99 (Biede Makalagie); Gemelli Careri *Voyage du tour du monde* [1699], trans. from Italian, 6 vols (Paris: Ganeau, 1719), V, p. 177 (Mabol and Santor), VI, p. 214 (Sapote).

⁶⁸³ BnF, MS f. fr. 16980, fol. 12, ABROLLOS: 'Voyage de George Anson, 4^e edition de Hollande, p. 33'. This work was first published in London in 1748 and underwent some forty editions during the succeeding decades. The French translation appeared in Amsterdam in 1749, and was reprinted several times during the following years. As seen above, Pernety claims to be using the fourth Amsterdam-edition, but does not state which year.

⁶⁸⁴ BnF, MS f. fr. 16980, fols. 97, 114, 127, 146, 163, 176, 184, 256, 264, 274.

⁶⁸⁵ BnF, MS f. fr. 16980, fol. 102, CURARE.

⁶⁸⁶ ARTFL *Encyclopédie*, search words: Corneille le Brun, lebrun, Gemelli Careri, Carreri, George Anson, Anson, Bouguer, La Condamine.

⁶⁸⁷ *Dictionnaire de Trévoux* (1743, 1753), I, 'Table des auteurs'.

Gesner, Pierre Belon, and Ulyssus Aldovrandus.⁶⁸⁸ While NH-3 always acknowledges Jonston as the source, he also reproduces the references to the above mentioned authors, as well as their references to Aristotle, Dioscorides and Pline. Consequently, the Ancients are more visible in the manuscripts of NH-3 than in the ones of Pernety. However, NH-3 also refers to a multitude of works published after Jonston's *Historiae naturalis*, such as the popular and richly illustrated *Thesaurus animalium* (1710) by the botanist and anatomist Frederik Ruysch (1638–1731).⁶⁸⁹ Furthermore, NH-3 recurrently indicates figures to be copied from both the *Historiae naturalis* and the *Thesaurus animalium*.

The works of Jonston, Rondelet, Gesner, Belon, Aldovrandus, and Ruysch are also standard references in the *Dictionnaire de Trévoux* and the *Encyclopédie*.⁶⁹⁰ Thus, when it comes to natural history, the same older sources occur in all three dictionaries, while Pernety and the *Encyclopédie* also used more recent publications, especially the *Mémoires* of Réaumur. However, it should be noted that the monks never refer to Buffon's *Histoire naturelle* (appearing from 1749 onwards), which constituted a central source of the *Encyclopédie*.

The Medical Arts

Regarding the medical arts, the *Encyclopédie* holds contributions from some thirty writers.⁶⁹¹ In the Maurists' manuscripts, four writers (or handwritings) are responsible for the same areas. Pernety has written some articles on anatomy, surgery and chemistry, but the majority of the subjects related to medicine are treated by MED-1, MED-2 and MED-3.

Due to the detailed references provided by at least MED-2, it is possible to get a good idea of the sources. Besides a multitude of articles published in journals and academic memoirs, it is the Parisian professors, lecturers and demonstrators at the *Jardin royal des Plantes* who dominate the content. A number of articles are partly or entirely based on the *Dictionnaire de*

⁶⁸⁸ BnF, MS f. fr. 16981, fols. 1–6, 8–12, 14–16, 18–23, 26–27, 30–32, 34–35, 41–44, 46, 48, 53, 56–57, 61–62, 64–65, 67, 72–74, 77–78, 80, 82–89, 91–92, 96–99, 103, 105, 110, 115–116, 125, 141–143, 153, 155–156, 159–160, 168, 170–171, 179, 188, 192, 198, 215, 220, 232, 241, 244, 246, 248.

⁶⁸⁹ BnF, MS f. fr. 16981, fols. 13, 22, 26, 38–39, 45, 52–53, 60, 67, 103, 165–167, 171–173, 189–190, 192, 194–195, 197–201, 212–235, 244–247.

⁶⁹⁰ *Dictionnaire de Trévoux* (1743, 1752), I, 'Table des auteurs'; ARTFL *Encyclopédie*, search words: Jonston, Johnston, Rondelet, Gesner, Belon, Bellon, Aldovrandi, Aldovrandus, Aldrovande, Ruysch. See also the discussion on ALUCO in 'Selected Articles'.

⁶⁹¹ Maxime Laignel-Lavastine, 'Les médecins collaborateurs de l'*Encyclopédie*', in *Revue d'histoire des sciences et de leurs applications*, 4:3–4 (1951), 353–358 (p. 354).

Trévoux, of which some are found already in the draft based on Wolff.⁶⁹² While the *Trévoux* never was explicitly mentioned by Pernety and Brézillac, the medical writers are more open about their use of the Jesuit dictionary, to which they explicitly refer on several occasions.⁶⁹³ Nevertheless, the articles copied from the *Trévoux* seem to be in minority.

Without a doubt, the work most frequently cited in the entire volume is Winslow's illustrated *Exposition anatomique* (3 vols, 1732).⁶⁹⁴ Jacques-Bénigne Winslow (1669–1760) was the official lecturer in anatomy at the *Jardin royal des Plantes* between 1743 and 1758, and thus active concurrently with the compilation of the Maurists' manuscripts.⁶⁹⁵ His *Exposition anatomique* condensed and systematized the anatomical knowledge of the time and became a popular textbook among medical students due to its clear descriptions and detailed illustrations. The work was reprinted in thirty-two editions, translated to a number of languages, and would exert a great influence on anatomical literature for over a century.⁶⁹⁶ Regarding anatomy, the Maurists thus certainly used one of the most updated sources on the market. Similarly, in the article ANATOMIE of the *Encyclopédie*, the work of Winslow was acknowledged as 'the best there is on the solid body parts'.⁶⁹⁷ Winslow is furthermore cited over a hundred times throughout the letterpress volumes.⁶⁹⁸ Also the *Dictionnaire de Trévoux* (eds. 1743 and 1752) mentions Winslow in the bibliography.⁶⁹⁹ However, the Maurists' use of the work seems to have been far more

⁶⁹² BnF, MS f. fr. 16983, fol. 12, ACETUM, -alkalisé, -radicalisé, -philosophorum, fol. 29, ACIDE; fr. 16982, fols. 27, 31; *Dictionnaire de Trévoux* (1743), I, 110, 118.

⁶⁹³ BnF, MS f. fr. 16983, fol. 119, COMPAGNON, fol. 137, COLEUR, fol. 152, DAME, fol. 160, DENTISTE, fol. 162, DESENRHUMER, fol. 169, DIGESTION.

⁶⁹⁴ BnF, MS f. fr. 16983, fols. 25, 61, 67–68, 70–71, 74, 78, 80, 82–86, 90, 105, 107–108, 120, 124, 130–131, 136, 138, 141, 144, 146, 152, 154, 158–159, 165–166, 168, 170, 173–174, 177–178, 190–191, 193, 196, 199–201, 205, 209, 212–216, 218, 222, 224, 226–228, 232–239, 272–277, 279, 287, 288, 290–292, 295–297, 320, 327, 329, 334, 336–338, 340–342, 345, 354, 357–358, 361, 364–365, 367–369, 371, 373–374, 384, 390–394.

⁶⁹⁵ Andrew Cunningham, *The Anatomist Anatomis'd: An Experimental Discipline in Enlightenment Europe* (Surrey: Ashgate, 2010), p. 131.

⁶⁹⁶ Ole Peter Grell, 'Between Anatomy and Religion: The Conversions to Catholicism of the two Danish Anatomists Nicolaus Steno and Jacob Winslow', in *Medicine and Religion in Enlightenment Europe*, ed. by Ole Peter Grell and Andrew Cunningham (Hampshire: Ashgate, 2007), pp. 205–222 (p. 205); Régis Olry, 'Winslow's Contribution to our Understanding of the Cervical Portion of the Sympathetic Nervous System', in *Journal of the History of Neurosciences*, 5:2 (1996), 190–196.

⁶⁹⁷ *Encyclopédie*, I (1751), 415, ANATOMIE: 'le meilleur qu'on ait sur les parties solides'.

⁶⁹⁸ ARTFL *Encyclopédie*, search word: Winslow.

⁶⁹⁹ *Dictionnaire de Trévoux* (1743, 1752), I, 'Table des auteurs'.

extensive.⁷⁰⁰ The Index volume also contains a list of plates intended to be copied from the *Exposition anatomique*.⁷⁰¹ One of these plates, depicting the nervous system, can be seen in Figure 31 next to the related plate of the *Encyclopédie*. Considering the web of borrowed texts and images, it is hard to say whether the *Exposition anatomique* constituted the first-hand source of the *encyclopédistes* or if they copied another work. Nevertheless, also in this case the Maurists would have mediated the same kind of information as the *encyclopédistes*.

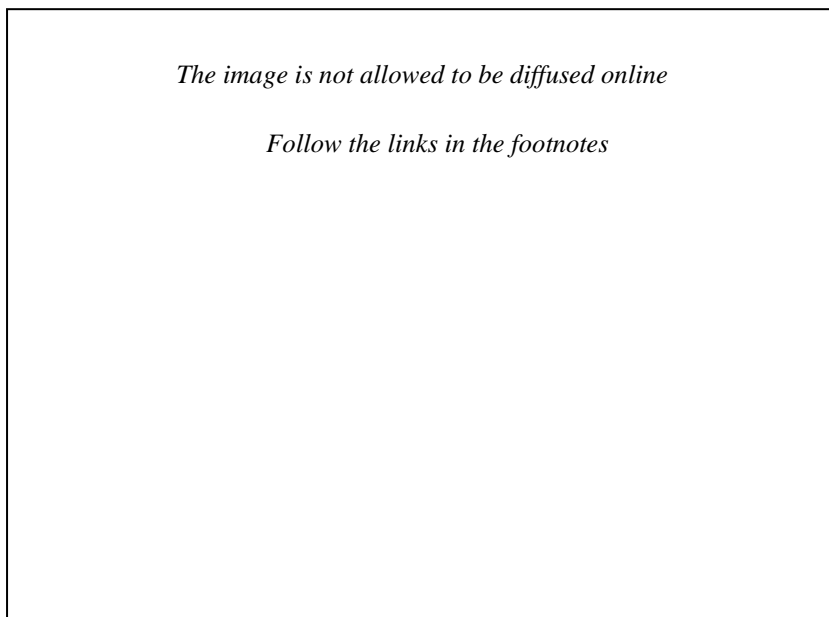


Figure 31: The nervous system in Winslow's *Exposition anatomique* (1732),⁷⁰² and the corresponding plate in the *Encyclopédie* (1762).⁷⁰³
(BIU Santé; ARTFL)

⁷⁰⁰ See the discussion on NERF in 'Selected Articles'.

⁷⁰¹ BnF, MS f. fr. 16984, fol. 40^{r-v}.

⁷⁰² <http://www.biusante.parisdescartes.fr/histmed/medica/page?20995&p=773>
[accessed 2014-02-20].

⁷⁰³ *Recueil de planches*, I (1762), 'Anatomie', pl. X: ARTFL *Encyclopédie*,
http://artflsrv02.uchicago.edu/images/encyclopedia/V18/plate_18_4_16.jpeg
[accessed 2014-02-21].

When it comes to surgery, the Maurist writers commonly refers to Pierre Dionis's *Cours d'operations de chirurgie* (1707),⁷⁰⁴ and Élie Col de Vilars's *Dictionnaire françois-latin des termes de médecine et de chirurgie* (1741) and *Cours de chirurgie* (1740–1741).⁷⁰⁵ Dionis (1643–1718) was a lecturer at the *Jardin royal des Plantes* in the 1670s, where he performed open-air dissections and demonstrations in surgery. Col de Vilars (1675–1747) had been the dean of the faculty of medicine at the University of Paris.⁷⁰⁶ The Maurists' illustration lists also enumerate figures planned to be drawn from a work on surgical instruments by the French surgeon René-Jacques de Garengeot (1688–1759).⁷⁰⁷

All the above works are discussed by the Chevalier Louis de Jaucourt (1704–1779) in the article CHIRURGIE (Surgery) in the *Encyclopédie*. Certainly, Jaucourt mentions many more works than those cited by the Maurists. Still, the dictionary of Col de Vilars is described as a standard work already in the first paragraph.⁷⁰⁸ In an overview of the books necessary for those wishing to instruct themselves more deeply in the art of surgery, the *Cours d'opérations de chirurgie* of Dionis is described as 'one of the good modern summaries'.⁷⁰⁹ The same section mentions Garengeot's work on surgical instruments, 'which has been reprinted several times, translated to several languages and is in the hands of everyone'.⁷¹⁰

The *Dictionnaire de Trévoux* (1743) lists Dionis as one of the consulted sources, but does not mention Col de Vilars or Garengeot. However, in the edition of 1752, Col de Vilars has been added.⁷¹¹

⁷⁰⁴ BnF, MS f. fr. 16983, fols. 9–10, 12, 14–15, 19, 22, 25, 27–30, 36–39, 48, 53, 61, 66, 71, 78, 80–81, 102, 114, 115, 126, 131, 146–147, 152–157, 160–161, 169–170, 173–175, 180, 186–187, 189–190, 194–196, 216, 220, 224–228, 234, 245, 266–267, 275–276, 278, 310, 312, 316, 319, 349, 351, 367, 374, 385.

⁷⁰⁵ BnF, MS f. fr. 16983, fols. 23, 52, 61, 66–67, 89, 101, 105, 113–114, 121, 125, 128, 135, 144, 185–186, 211, 217, 234, 240, 248, 250, 266–267, 270, 273–275, 283, 287, 291–293, 298, 316, 320, 321, 323, 325–326, 333, 335, 338–339, 343–345, 347–349, 357, 365, 369, 371, 388.

⁷⁰⁶ Cunningham, p. 119.

⁷⁰⁷ BnF, MS f. fr. 16984, fol. 41^{r-v}, 'Instruments de chirurgie de Mr. de Garengeot': 'AIGUILLE pour faire des sutures aux plaies superficielles, pl. 185, fig. 2, 3' (noted by MED-1), 'GORGERET, tom. I, pl. ou pag. 290' (noted by MED-2), 'PELICAN, tom. II, pag. 71, fig. 3' (noted by MED-3). These figures are located in René-Jacques de Garengeot, *Nouveau traité des instrumens de chirurgie les plus utiles* [1723], 2 vols (Paris: Huart, 1727), I, pl. 185, pl. 290; II, pl. 71.

⁷⁰⁸ *Encyclopédie*, III (1753), 350, CHIRURGIE.

⁷⁰⁹ *Ibid.*, p. 352: 'C'est un des bons abrégés modernes'.

⁷¹⁰ *Ibid.*, p. 353: 'Ce traité, avec celui des instrumens, a été réimprimé plusieurs fois, traduit en plusieurs langues, & est dans les mains de tout le monde'.

⁷¹¹ *Dictionnaire de Trévoux* (1743, 1752), I, 'Table des auteurs'.

By the mid-eighteenth century, the language of chemistry was still rooted in the metaphorical and esoteric terminology of alchemy. This would not fundamentally change until the diffusion of the chemical system of Antoine Lavoisier (1743–1794) in the 1780s. Nevertheless, from the mid-seventeenth century onwards, several authors had tried to distinguish chemistry as an empirical practice separate from the more obscure tradition of alchemy. To show their independence, these writers emphasized the connections to pharmacology, metallurgy and mineralogy.⁷¹² In the early dictionaries of arts and sciences, chemistry and alchemy were often conglomerated. Corneille made no distinctions between them,⁷¹³ and although Harris was skeptical towards alchemy, he did not reject the idea of the transmutation of metals, which even Newton had thought possible.⁷¹⁴

In the Maurists' manuscripts, chemistry is still occasionally merging with alchemy when it comes to the less mystical expressions. For instance, terms drawn from the *Dictionnaire hermétique* (1695), attributed to the doctor William Salmon (1644–1713), are variously classified as chemistry, alchemy, hermetic and spagyric philosophy.⁷¹⁵ The dictionary of Salmon was used as an additional source already in the first draft based on Wolff, where all the articles up to ALIMENT were transcribed. Curiously enough, MED-1 only begins copying where Pernety/Brézillac left off, which could suggest that articles compiled for the first project were still intended to be used for the second.⁷¹⁶ Generally, the definitions drawn from this work are short (seldom more than a few lines) and limited to aspects of language. Mostly the medical writers are not judging the accuracy of the alchemist claims, but simply try to explain what the practitioners (probably) refer to

⁷¹² Marco Beretta, *The Enlightenment of Matter: The Definition of Chemistry from Agricola to Lavoisier* (Canton: Science History Publications, 1993), pp. xii–xiii, 15–16.

⁷¹³ Ross, 'Thomas Corneille's *Dictionnaire des arts et des sciences*', p. 75.

⁷¹⁴ Bradshaw, 'John Harris's *Lexicon Technicum*', p. 115.

⁷¹⁵ BnF, MS f. fr. 16983, fols. 20, 22, 24, 28–29, 37–39, 76, 97, 102, 110, 115, 129, 154, 204, 229; William Salmon, *Dictionnaire hermétique, contenant l'explication des termes, fables, énigmes, emblèmes et manières de parler des vrais philosophes* (Paris: D'Houry, 1695).

⁷¹⁶ BnF, MS f. fr. 16982, fol. 11, ABBREUER LE COMPÔT (Salmon, p. 1), fol. 7, ABLUTION (S, p. 2), fol. 28, ACHELOÛS (S, p. 2), fol. 30, ACIER DE PHILOSOPHE (S, p. 2), fol. 37, ADAPTION (S, p. 3), fol. 54, ADDITION DE L'OR PHILOSOPHALE (S, p. 3), fol. 46, ADDUITE (S, p. 3), fol. 49, ADULPHUR (S, p. 4), fol. 46, ADMINISTRER (S, p. 4), fol. 53, AFFERMER (S, p. 4), fol. 54, AFFLAMBER (S, p. 4), fol. 54, AFFLICTION (S, p. 4), fol. 60, AGAZOPH (S, p. 4), fol. 62, AGENT (S, p. 4), fols. 70–71, AIGLE DES PHILOSOPHES, AIGLE DEVORANT LE LION, AIGLE ÉTENDUE, AIGLE ROUGE FIXE ou AIGLE VOLANTE (S, pp. 4–5), fol. 94, AIRAIN DES PHILOSOPHES (S, p. 5), fol. 113, ALBAR ARIS (S, p. 6), fol. 114, ALBIFICATION (S, p. 6), fol. 130, ALIMENT (S, p. 6); fr. 16983, fol. 20, ALIMENT DE LA PIERRE.

when using a certain term – such as that the ARBRE DES PHILOSOPHES (The Philosophers' Tree) is as a metaphor for mercury.⁷¹⁷ On some occasions, however, critical attitudes towards the mystical tradition are expressed. The Rosicrucians are for instance described by MED-2 as 'chemists or cabalists' who

wallow in thousands of illusions and do nothing but thinking about the philosopher's stone, the universal medicine, the secret of rejuvenation, performing wonders, dominating the demons, and to this bizarre philosophy can be added a religion which is hardly less [bizarre].⁷¹⁸

The article contains no reference to a source and the description does not correspond to the dictionary of Salmon, the *Dictionnaire de Trévoux*, or the *Encyclopédie*, and could thus be the writer's own words. This and other expressions form a glaring contrast towards the later writings of Pernety, where hermetic philosophy and alchemy would be discussed in more positive terms. MED-2 describes the hermetic terminology as bizarre,⁷¹⁹ and MED-1 remarks that 'the tradition based on repeated experiments is a much more certain road to convince us about the properties of plants'.⁷²⁰

On the whole, articles on hermetic philosophy and alchemy constitute a negligible part of the Medicine volume, and they are completely absent from the drafts of Pernety. At the same time, the bibliography enumerates a large number of authors of alchemical works, who rarely or never are mentioned in the articles.⁷²¹ It is therefore possible that the manuscripts originally contained more accounts on alchemy and hermetic philosophy, and that they – just like the articles on painting, sculpture and engraving – were extracted to compose the later works of Pernety. On the other hand, it is equally possible that Pernety simply were noting works of interest, and that he would not study these further until after the project's interruption.

The majority of the articles classified as chemistry in the Medicine volume refer to authors in the respected branch of pharmaceutical chemistry. Among the more recent works cited by MED-2 one finds the *Traité de la*

⁷¹⁷ BnF, MS f. fr. 16983, fol. 37, ARBRE DES PHILOSOPHES.

⁷¹⁸ BnF, MS f. fr. 16983, fol. 227, FRÈRES DE LA ROSE CROIX: 'Ils se repaissaient [repaissaient] de mille chimères, ne pensant qu'à la pierre philosophale, à la médecine universelle, au secret de rajeunir, de faire des prodiges, de dominer sur les démons, joignant à cette philosophie bizarre une religion qui ne l'est guère moins'.

⁷¹⁹ BnF, MS f. fr. 16983, fol. 293, JUS.

⁷²⁰ BnF, MS f. fr. 16983, fol. 154, DECOMPOSITION: 'la tradition fondée sur des expériences réitérées est une voie beaucoup plus sûre pour nous convaincre des propriétés d'une plante'.

⁷²¹ BnF, MS f. fr. 16984, fols. 264.

chimie médicinale (1750) by Paul Jacques Malouin.⁷²² Malouin (1701–1778) was a doctor at the faculty of medicine in Paris and member of the Academy of Sciences. He also was the writer of some seventy-five articles on chemistry in the first volume of the *Encyclopédie*.⁷²³ Otherwise, the most common sources of the Maurist compilers are the *Pharmacopée universelle* and *Cours de chimie* by Nicolas Lemery (1645–1715),⁷²⁴ and the *Pharmacopée royale, galénique et chymique* by Moyse Charas (1619–1698).⁷²⁵ All three works first appeared at the end of the seventeenth century but underwent several revised editions in the course of the eighteenth century. Unfortunately, there are no indications of which editions the Maurists were using. According to the historian of science Marshall Leicester, the *Cours de chimie* of Lemery was one of the most popular chemical works before the birth of modern chemistry.⁷²⁶ Inspired by the Cartesian corpuscular model, Lemery explained the properties of substances by the shapes of the atoms, and thereby dressed the chemical reactions in a scientific language. Typically, acids were described as sharp and spiky, alkalis as porous, and their chemical reactions understood in a mechanical sense.⁷²⁷ The works of Charas and Lemery are noted in the bibliography of the *Dictionnaire de Trévoux*, but not Malouin.⁷²⁸

In the article CHIMIE in the *Encyclopédie*, the chemist Gabriel François Venel (1723–1775) contrasts the utility of the pharmaceutical branch of chemistry with the obscure variants of alchemy and hermetic philosophy. In the former category, the works of Lemery and Charas are described as being of prominent rang.⁷²⁹ Lemery's *Cours* is presented as the only elementary study in chemistry appearing in France before 1723, and appreciated 'for its exactitude in operations and the frequent and well-advised observations of

⁷²² BnF, MS f. fr. 16983, fols. 243–244, GOUTTES D'ANGLETERRE, fol. 261, HUILE, fol. 284, INJECTION, fol. 306, LAUDANUM, fol. 314, LIQUEUR ROÏALE, fol. 315, LITHONTRIBON.

⁷²³ Rémi Franckowiak, 'La chimie dans l'*Encyclopédie*: une branche tour à tour dépréciée, réévaluée et autonome', *Recherches sur Diderot et sur l'Encyclopédie*, 40–41 (October 2006), 221–231. <http://rde.revues.org/342> [accessed 2014–02–21].

⁷²⁴ BnF, MS f. fr. 16983, fols. 4, 24, 51, 152, 153, 168, 177, 187, 192, 207, 208, 215, 262.

⁷²⁵ BnF, MS f. fr. 16983, fols. 42, 259, 264, 265, 306, 318, 321, 328, 336, 340, 341, 349, 370.

⁷²⁶ Henry Marshall Leicester, *A Source Book in Chemistry 1400–1900* (London: Oxford University Press, 1968), p. 53.

⁷²⁷ Allen G. Debus, *The French Paracelsians: The Chemical Challenge to Medical and Scientific Tradition in Early Modern France*, 2nd edn (Cambridge: Cambridge University Press, 2002), p. 147; Leicester, p. 54.

⁷²⁸ *Dictionnaire de Trévoux* (1743, 1752), I, 'Table des auteurs'.

⁷²⁹ *Encyclopédie*, III (1753), 432, CHIMIE.

the practical’.⁷³⁰ Charas is also cited in a number of articles written by Jaucourt, Venel and Diderot, and his work is explicitly stated as one of the sources for the plates on chemistry.⁷³¹ Similarly, the Maurists have noted three figures of chemical distilling apparatus as planned to be copied from the *Pharmacopée* of Charas.⁷³² Figure 32 shows two of the designated plates, next to the ones of the *Encyclopédie*. Once again, they are not essentially different.

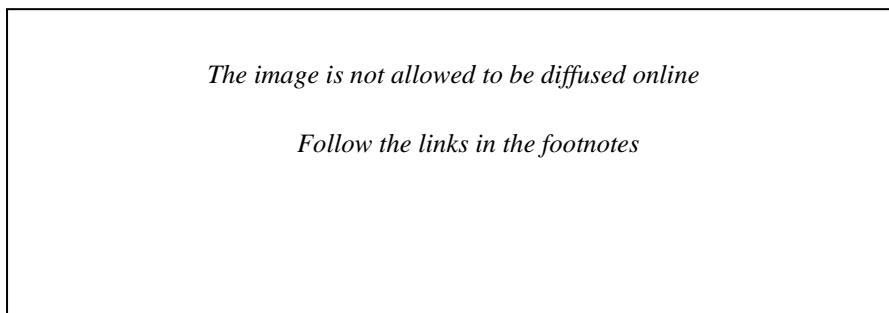


Figure 32: Two plates of distilling apparatus from Charas’ *Pharmacopée royale*⁷³³ and two of the plates in the *Encyclopédie*.⁷³⁴
(Gallica, BnF; ARTFL)

The Mathematical Sciences

Compared to the many articles on natural history and medicine, the articles on the mathematical sciences are fewer to the number, and Pernetty the sole writer.⁷³⁵ In the first draft, articles on pure mathematics (arithmetics and geometry) were predominantly based on the lexicons of Wolff and Vitalis. In the later manuscripts, these authors have been replaced by French mathematicians and academicians such as Philippe de la Hire (1640–1718), Guillaume de l’Hôpital (1661–1704), and Pierre Varignon (1654–1722).⁷³⁶

⁷³⁰ *Encyclopédie*, III (1753), 437, CHIMIE: ‘l’exactitude des opérations, & les observations fréquentes & judicieuses de manuel’.

⁷³¹ ARTFL *Encyclopédie*, search word: Charas, Charras.

⁷³² BnF, MS f. fr. 16984, fol. 42, ‘Alambics &c. de Charras’.

⁷³³ Moyse Charas, *Pharmacopée royale, galénique et chymique* (Paris: the author, 1676), pl. 1, pl. 5.

⁷³⁴ *Recueil de planches*, III (1763), ‘Chimie’, pl. VII, VIII: ARTFL *Encyclopédie*, http://artflsrv02.uchicago.edu/images/encyclopedia/V20/plate_20_5_12.jpeg [accessed 2014–02–21].

http://artflsrv02.uchicago.edu/images/encyclopedia/V20/plate_20_5_13.jpeg [accessed 2014–02–21].

⁷³⁵ See Appendix 4: Fields of knowledge.

⁷³⁶ BnF, MS f. fr. 16980, fols. 60, 108, 120, 165, 172, 177, 230, 238, 252, 277.

All three are also frequently cited in the *Encyclopédie* and the *Dictionnaire de Trévoux*.⁷³⁷ Regarding the wider category of mixed or applied mathematics, such as mechanics, acoustics, optics, hydraulics, leveling, astronomy, architecture and navigation, the most common sources are academic memoirs and articles published in the learned journals. All in all, there are more than sixty references to memoirs published between 1699 and 1750. In these cases, Pernety often gives detailed references to the exact year and page from where the information has been drawn.⁷³⁸ As a consequence, the later articles on the mathematical sciences are drawn from a much more heterogeneous material than the ones in the first draft. There is no longer one recurrent authority. The same can generally be said about the *Encyclopédie* and the *Dictionnaire de Trévoux*, which makes it harder to pinpoint and compare principal sources.

Compared to the frequent use of ‘s Gravesande’s introduction to Newton in the draft based on Wolff, treatments of Newtonian physico-mathematics are much sparser in the later manuscripts, but they do occur. Pernety’s article SON (Sound) seems to be based entirely on Newton, where he describes the latter’s wave theory.⁷³⁹ The actual source remains unmentioned, but the text does not correspond to any of the universal dictionaries. Also the entry written by d’Alembert in the *Encyclopédie* considers the Newtonian wave theory,⁷⁴⁰ while the *Dictionnaire de Trévoux* (1743) does not mention Newton at all. The description is brief and the writer rapidly moves on to examples of how to use the word ‘sound’ in sentences and poems.⁷⁴¹

Conclusions

Considering the vast proportions of the Maurists’ manuscripts, the *Dictionnaire de Trévoux*, and the *Encyclopédie*, the above observations are concerned only with fragments. In the discussed examples, however, similar

⁷³⁷ BnF, MS f. fr. 16980, fols. 60, 177, 120, 230, 238; ARTFL *Encyclopédie*, search word: de la Hire, l’Hôpital; *Dictionnaire de Trévoux* (1743, 1752), I, ‘Table des auteurs’. De la Hire is not included in the bibliographies, but he is mentioned on several occasions throughout the work (both editions).

⁷³⁸ BnF, MS f. fr. 16980: Memoirs published in 1699 (fols. 16, 60, 102, 103, 144, 200, 223), 1700 (fols. 54, 60, 114, 175, 202, 236, 261), 1701 (fols. 33, 152, 165, 187, 203, 204, 236, 238, 250), 1702 (fols. 33, 35, 39, 46, 102, 103, 109, 197, 204, 205, 232, 226, 245), 1703 (fols. 57, 59, 92, 215), 1704 (fols. 94, 102, 135, 143, 144, 165, 174, 177, 187, 225, 252, 277), 1724 (fols. 230, 231), 1727 (fol. 223), 1739 (fol. 223), 1740 (fol. 223), 1743 (fol. 237), 1745 (fol. 273), 1750 (fols. 27, 167, 181, 264).

⁷³⁹ BnF, MS f. fr. 16980, fol. 250, SON.

⁷⁴⁰ *Encyclopédie*, XV (1765), 343–344, SON.

⁷⁴¹ *Dictionnaire de Trévoux* (1743), V, 1660–1661, SON.

and/or the same sources occur in all three works, but compared to the Jesuit compilers, the Maurists and the *encyclopédistes* tended to include more recent works, along with illustrations. This particularity could be explained by the differing origins of the three projects. .

The *Dictionnaire de Trévoux* started as Catholic edition of Basnage de Beauval's Protestant edition of Furetière's *Dictionnaire universel*. It then appeared in revised and augmented editions in the course of the eighteenth century. In contrast, the *Encyclopédie* and the Maurist project constituted new enterprises, each beginning as an augmented translation of a foreign, illustrated dictionary. In the second phase the Maurists no longer relied on one particular work. In this respect they were making a completely new dictionary. Even though they turned to the *Dictionnaire de Trévoux* for constructing a basic list of terms (and sometime also for information), they needed to rely on specialized works to a higher degree, since they intended to include illustrations. This was probably the strongest incitement to actively seek out more recent publications.

As mentioned, the *philosophes* often portrayed the religious orders as backwards and as medieval remains.⁷⁴² Considering how posterity for a long time gave the *philosophes* the preferential right of interpretation, the updated nature of the *Encyclopédie* (compared to the *Dictionnaire de Trévoux*) has surely more than once been regarded as a result of the compilers being secular scholars – ‘the forces of modernity’.⁷⁴³ In this respect, through the Maurist project, the differences between the *Dictionnaire de Trévoux* and the *Encyclopédie* (as well as the singularity of the latter) can be perceived in a new light. Due to the web of borrowed texts and images, the Maurists envisioned a dictionary with traits similar to the *Encyclopédie* before the latter had been realized. Pernety was making his drawings and inventories of illustrations some ten years before the publication of the plates of the *Encyclopédie*. Indeed, dictionary of Diderot and d'Alembert would surpass the Maurists' efforts in every way, but the manuscripts show that the monks and the *philosophes*, in many aspects, were moving in the same direction.

⁷⁴² McManners, ‘Voltaire and the Monks’, pp. 325–326, 332.

⁷⁴³ Outram, p. 4

SELECTED ARTICLES:
ENCYCLOPEDIC AND LINGUISTIC CONTENTS

The elaborateness of the Maurists' accounts varies greatly. Many articles only consist of a few lines, while others occupy several columns or folios. There are differences in the practices of the individual writers, but also internal variations depending on subject and sources. Generally, the same can be said about the *Dictionnaire de Trévoux* and the *Encyclopédie*. Each contains definitions on a few lines as well as descriptions extending over several pages. Mostly, the articles of the *Encyclopédie* are more voluminous than those of the *Dictionnaire de Trévoux* and the Maurists, but there are cases when the roles are reverse. In such a heterogeneous material it is hard to identify some articles as representative for the whole. Nevertheless, in my exhaustive reading of the Maurists' manuscripts and (selective) comparisons to the *Dictionnaire de Trévoux* and the *Encyclopédie*, certain recurrent tendencies have been detected.

It would be misleading to describe the *Dictionnaire de Trévoux* as only occupied with language. Compared to its predecessors it contained much more information about the things and phenomena themselves. Still, since the Jesuit dictionary was concerned with also general words and meanings, it easily appears as more linguistically inclined than the Maurists' manuscripts. Not only is the latter limited to specialized terminology, but the majority of the Benedictine writers also consistently omit the grammatical information otherwise accompanying terms in dictionaries, e.g. 's. m.' for *substantif, masculin*. In fact, grammatical categories are only used by NH-2 and MED-1. They are rarely or never seen in the drafts written by Pernety, NH-3, AGR-1, AGR-2, MED-2 and MED-3. Due to this particularity, the focus on the things themselves is underlined, and further reinforced through the intended use of illustrations. When it comes to subjects, the Maurists also demonstrated a more distinct interest in the useful arts and crafts.

In this subchapter I will discuss a number of articles that illustrate these tendencies, where the Maurists and the *encyclopédistes* also have relied on the same building blocks. In other words, these examples have not been chosen randomly, but exactly because they demonstrate a general inclination in the clearest way possible.

The article AIGUILLER (Needle-maker) is such an illustrative case. The *Dictionnaire de Trévoux* (eds. 1743 and 1752) simply defines this term as a worker who makes needles. The accounts of Pernety and the *encyclopédiste*

are more elaborate. The latter compiler is anonymous, but considering that the article concerns crafts and was published in the first volume of the *Encyclopédie*, it is likely that Diderot was responsible. The two accounts are close to identical in structure, narrative order and contents. They enumerate the same dates, tools, professions, and elements of the needle-makers' educational path.

[*Trévoux*, 1743/1752]: NEEDLE-MAKER, s. m. Worker who makes needles. *Acuum artifex*.⁷⁴⁴

[*Pernety*]: NEEDLE-MAKER, *acuum fabri*, artisan who makes and sells needles, awls, &c.

The regulations of the guild they form in Paris date from 15 September 1599. They are thereby qualified as master needle-makers, awl-makers, makers of chisels, angular needles, and many other small tools used by goldsmiths, shoemakers, harness-makers, printers and others.

The apprenticeship takes five years, the service as journeyman three years after the apprenticeship, and finally, the realization of the masterpiece. One must be 20 years old to become master. These formalities are not necessary for the children of masters, for whom experience only suffices.

Each master should have his distinctive mark, which imprinted on a lead plate is housed for safe-keeping in the Chamber of the prosecutor of the King at Châtelet. By the patent letters of Louis XVI, dated October 1695, the guild of the needle-makers has been merged with the pin-makers', and has since then only three guild masters: two needle-makers and one pin-maker.⁷⁴⁵

[*Encyclopédie*, 1751]: NEEDLE-MAKER, artisan who makes and sells needles, awls &c.

The needle-makers form a guild in Paris whose regulations date from 15 September 1599. By these regulations they are qualified as master needle- and awl-makers, makers of chisels, angular needles and other small tools used by goldsmiths, shoemakers, harness-makers, and others, &c. According to the regulations, nobody can become master that has not reached the age of twenty, who has not been in apprenticeship for five years and then served as journeyman for three years, and who has not made his masterpiece. However, this does not apply to the sons of masters, who are accepted simply after examination.

Each master is obliged to have his own mark, which should be imprinted on a plate housed at the prosecutor of the King at Châtelet.

Towards the end of the seventeenth century, the guild of the needle-makers, having trouble making a living, was merged with the pin makers' by the patent letters of the year 1695. The guild masters of the two corporations were reduced to three, that is, two needle makers and one pin maker. Some changes in the regulations were made, but the rest remained valid. See PIN-MAKER.⁷⁴⁶

⁷⁴⁴ *Dictionnaire de Trévoux* (1743), I, 255; (1752), I, 344. For the French transcription of this and the following articles, see Appendix 5: Articles.

⁷⁴⁵ BnF, MS f. fr. 16980, fol. 21.

⁷⁴⁶ *Encyclopédie*, I (1751), 210.

There is no clue revealing when the article of Pernety was compiled, but it is not impossible that it was written after the publication of the first volume of the *Encyclopédie* (1751). In theory, the similarities could thus derive from Pernety copying Diderot, but there are indications contradicting such a scenario. Besides the fact that the two articles display variations in the choice and order of words, Pernety also includes information absent from the *Encyclopédie*. He remarks for instance that the masters' mark is imprinted on a 'lead plate', while Diderot only writes 'plate'. He also specifies that the patent letters of Louis XVI were dated in October 1695, while the *Encyclopédie* only states the year. These particularities rather suggest that Pernety and Diderot were basing their accounts on the same source, which remains unmentioned by both. And quite rightly, the original article – with all the additional specifications stated by Pernety – can be found in the *Dictionnaire universel de commerce* (1723) of Jacques Savary (1657–1723), the Inspector General of the manufactures for the King.⁷⁴⁷

Prior to the *Encyclopédie*, the work of Savary was the most important dictionary of commerce and manufactures. According to Proust, all the basic problems that Diderot was facing, such as how to describe machines and processes of work and how to create a 'language of the arts', had already been addressed at great length by Savary.⁷⁴⁸ His dictionary therefore constituted an important building block of the *Encyclopédie*.⁷⁴⁹ Apparently, also Pernety acknowledged the value of this work. The first edition of the dictionary of Savary appeared in 1723, which means that it would have been available to the Jesuit compilers working on the revised editions of 1743 and 1752. The fact that they chose not to use it, while Pernety and Diderot did, once again illustrates the different priorities of the three teams. The Jesuits were simply not that interested in the lower professions of manual work.

The same tendency can be seen in the article TÉRÉBRATION (Terebration), referring to the extraction of the sap of trees by means of an auger. The *Dictionnaire de Trévoux* provides a brief definition of the term and then quickly moves on to issues of etymology. The articles of Pernety and the *Encyclopédie* are distinguished by a greater attention to the process itself. Once again they rely on the same source and even copy the same passages.

⁷⁴⁷ Jacques Savary, *Dictionnaire universel de commerce* [1723], vol. I (Amsterdam: Janson, 1726), pp. 58–59, AIGUILLER.

⁷⁴⁸ Proust, *Diderot et l'Encyclopédie*, p. 206.

⁷⁴⁹ Ryuji Kojima, 'Aux sources de l'Encyclopédie: les éditions du *Dictionnaire universel de commerce* utilisées par les encyclopédistes', *Recherches sur Diderot et sur l'Encyclopédie*, 45 (2010), 153–159.

This time the possibility of plagiarism is definitely ruled out, since the article of the *Encyclopédie* appeared in the sixteenth volume, published in 1765.

In contrast to the *Dictionnaire de Trévoux*, Pernety omits the discussion on etymology and proceeds directly to what terebration actually implies. He refers to Francis Bacon's writings on the subject and describes how the method has been perfected and standardized by the Royal Society in London. He also reproduces a detailed description of the procedure, as it has been explained by a certain doctor Tonge. Pernety states the source to be 'Acta philosoph. Aprilis 1669, pag. 51' – that is, the Latinized name for the *Philosophical transactions* of the Royal Society. The April number of the said journal only contains the treatise of doctor Tonge, which furthermore is located elsewhere than on the page indicated by Pernety.⁷⁵⁰ This suggests that the monk actually had consulted a mediating source, and simply reproduced its references. The work can be identified as the *Curiositez de la nature et l'art sur la végétation* (1703) by Abbé Pierre de Vallemont (1649–1721). This book contains the same treatment of both Bacon and Tonge, and the same (faulty) reference to the *Philosophical transactions*.⁷⁵¹ Pernety explicitly refers to Vallemont's work on other occasions (as well as in the bibliography), which confirms that it was in his possession.⁷⁵²

The article TÉRÉBRATION of the *Encyclopédie*, written by Jaucourt, starts with a general account on different kinds of saps and the various ways of extracting them. In the next paragraph, Jaucourt moves on to Bacon (here awarded with the epithet 'immortal'). He explains how the method has been perfected and standardized in England, and reproduces the description by the same doctor Tonge. In contrast to Pernety, Jaucourt does not mention the Royal Society. Nor does he refer to a specific source. However, judging by the content of the article, also Jaucourt had consulted the work of Vallemont – only he copied a little bit more than Pernety.⁷⁵³

⁷⁵⁰ *Philosophical Transactions* (April 1669), pp. 126–136.

⁷⁵¹ Pierre de Vallemont, *Curiositez de la nature et l'art sur la végétation* [1703], vol. I (Brussels: Cellier & Leonard, 1734), pp. 143–147.

⁷⁵² BnF, MS f. fr. 16980, fol. 165, INSERTIONS, fol. 213, PARENCHYME, fol. 248, SÈVE, fol. 273^{r-v}, VÉGÉTATION: 'Ceux qui voudront s'instruire plus au long sur cet article peuvent consulter [...] les *Curiosités sur la végétation* de l'abbé Vallemont'; fr. 16984, fol. 265^v.

⁷⁵³ Jaucourt reproduces the account regarding a certain Mr. Ratrai and Dr. Hervey, each treated in Vallemont, pp. 129–130.

[*Trévoux*, 1743/1752]: TEREBRATION, s. f. The action of drilling a whole with an auger. That is how Danet explains the word *Terebratio* under *tero* in his *Racines Latines*, and this explanation is far more French than the one that he gives in his *Dict. Latin & François*, where *terebratio* is achieved by *piercing with the auger*. Through terebration one draws a pleasant liquid similar to wine from the branches of the coconut palm, which can be conserved by cooking or made into vinegar. *Spect. de la Nat.* to. 2, p. 428.⁷⁵⁴

[*Pernety*]: TEREBRATION, term of physics that signifies the action of piercing a body with an auger. It is particularly used to describe the action of piercing a tree with an auger or other instrument when the sap starts to rise, in order to extract and retain the juice more naturally than by trituration. Mr. Bacon, Chancellor of England, talks about terebration but he only proposes it as a remedy for discharging excessive sap from trees in order to make them more prolific. The Royal Society of London has well surpassed Bacon. They have perfected terebration to such a degree that nothing is left to do for other physicists. It has been standardized and reduced to a method. Doctor Tonge says that the tree should be pierced on the south side, with the auger traversing the core and pushed as far as an inch from the bark on the north side, and the whole directed upwards. The whole should be made close to the ground. *Acta philosoph. Aprilis* 1669, pag. 51. The proper time for this is from January to mid-May, and in the middle of the day.⁷⁵⁵

[*Encyclopédie*, 1765]: TEREBRATION, s. f. (*Botan.*) the art of extracting sap from trees by piercing them. In plants there are water-based, wine-colored, oily, gummy, resinous, and tarry saps. They come in all sorts of colors and qualities. These saps sometimes emerge spontaneously and coagulate in gum. Sometimes they emerge from cuts in the bark, such as the saps of the scammony and poppy, &c., which then dry in the sun. Saps are extracted by contusion, pressing and distillation.

But there is a new way of extracting sap, particularly the sap of trees. It is made by terebration, that is, by piercing the trunk of the tree with an auger when the sap starts to rise in the beginning of spring. This method was unknown to the Ancients, or at least nobody is known to have mentioned it. We owe this invention to the Englishmen. The immortal Bacon, Chancellor of England, speaks of this terebration, but he only proposes it as a remedy for making the trees more prolific. He has therefore compared it to blood-letting. These preliminary views of Bacon have been well surpassed. The Englishmen have standardized the terebration and reduced it to a method. Then they realized that the saps extracted by methodical terebration could have great use.

This is how to proceed, according to Doctor Tonge: there are, he says, different ways of extracting the sap from a tree. In order to acquire a larger amount, it is not enough to cut the tree lightly with a knife. It is necessary to pierce the trunk from the south side, from there pass through the core and not stop until an inch from the bark on the north side. The auger must be directed in such a way that the hole always leads upwards, in order to give place for the outflow of the sap. Observe that the hole should be made close to the ground. [...] (D.J)⁷⁵⁶

⁷⁵⁴ *Dictionnaire de Trévoux* (1743), VI, 139; *Supplément* (1752), II, 2212.

⁷⁵⁵ BnF, MS f. fr. 16980, fol. 261.

⁷⁵⁶ *Encyclopédie*, XVI (1765), 152–153.

When it comes to the military arts, Pernety principally uses the works of Guillaume Le Blond (as he did in the draft based on Wolff).⁷⁵⁷ Le Blond was a Parisian professor of mathematics, a tutor in the royal household and a writer on military sciences and engineering.⁷⁵⁸ He was also the main contributor on the art of warfare in the *Encyclopédie*. According to Kafker, the documents of the booksellers suggest that Le Blond became involved in the enterprise around 1748, and received payment until 1760. His articles, amounting to over seven hundred fifty, appear in all volumes. Kafker describes him as an erudite compiler who ‘presented the views of standard authorities’ rather than an original thinker. He had never himself been to war and relied heavily on the works of contemporary soldiers and writers.⁷⁵⁹

In the *Dictionnaire de Trévoux* the article devoted to CASTRAMÉTATION (Castrametation, ‘the art of measuring and tracing out the military camp’) simply states that the word is scarcely in use anymore and that its origin is Latin rather than French. The article of Pernety is more elaborate and focused on describing the activity itself. At the end of the article he refers to Le Blond’s *Essai sur la castramétation*, published by Jombert in 1748. Quite rightly, the content is drawn from the preface and the first chapter of the said work.⁷⁶⁰

Turning to the *Encyclopédie*, the abbreviation ‘Q’ reveals that the article CASTRAMÉTATION has been written by Le Blond.⁷⁶¹ Actually, it is a word-for-word reproduction of the preface to his *Essai sur la castramétation*. Le Blond is thus copying himself – and so is Pernety. As a consequence, the articles CASTRAMÉTATION in the *Encyclopédie* and in the Maurists’ manuscripts contain identical building blocks, even though the one of Pernety is more condense. Still, they each point out that castrametation constitutes one of the most important parts of the military arts, and they mention the same authoritative texts.

⁷⁵⁷ BnF, MS f. fr. 16980, fols. 56, 58, 213, 217 (explicit references).

⁷⁵⁸ Frank A. Kafker, *The Encyclopedists as Individuals: A Biographical Dictionary of the Authors of the ‘Encyclopédie’* (Oxford: Voltaire Foundation, 1988), pp. xix, 192–193.

⁷⁵⁹ *Ibid.*, p. 193.

⁷⁶⁰ Le Blond, *Essai*, pp. iii–xxi, 1.

⁷⁶¹ See ‘Symbols used to designate contributors to the *Encyclopédie*’, in Lough, *The ‘Encyclopédie’*, p. 402.

[*Trévoux*, 1743/1752]: CASTRAMETATION, s. f. The art to place a camp, an army. *Castrorum metatio*. The field marshal should know castrametation well. This word is scarcely used for modern camps. It is rather Latin than French.⁷⁶²

[*Pernety*]: CASTRAMETATION, this is properly speaking the art of measuring and tracing out the camps. Sometimes this word is given a wider signification to include all that which makes a camp advantageous relative to the opinion of the General. The castrametation is one of the most important and most difficult operations of the military art. It is about choosing the place where the army should camp, and it must be appropriately protected from enemy infringement. The general rules are to have sufficiently of terrain to accommodate the infantry, the cavalry, the artillery, the supplies, the officers of each unit, and all the baggage, and so that the army easily can move out of the camp and have enough space in front of it in order to engage in battle if the enemy is sighted.

Polybe and Végèce have entered in great detail on the one [the castrametation] of the Romans, and the famous Maurice, Prince d'Orange is regarded as the first to have re-established or imitated it towards the end of the sixteenth century.

Stevin has written a treatise on castrametation. There are some things on it in *La Doctrine militaire* of Sieur de la Fontaine, engineer of the King, and in the *Travaux de Mars* of Allain Manesson Mallet. Mr. Le Blond, professor in mathematics of the Pages of the Grand Stable of the King &c., has recently published a work on this subject, which has the title *Essai sur la castramétation*, at Charles Ant. Jombert, 1748.⁷⁶³

[*Encyclopédie*, 1752]: CASTRAMÉTATION, s. f. It is properly speaking the art of tracing out the camp and calculating all the different proportions. This word derives from Latin *castrum*, camp, and *metiri*, to measure. See CAMP.

The castrametation is such an important part of the military art that it is rather surprising that it has been completely neglected by the modern authors who have written about warfare.

Polybe and Végèce have entered in great detail on the ones of the Romans, and their writings have been of great use for the establishment of the order and arrangement of our camps, even though they differ in several aspects from the ones of the Romans. [...]

This roman system had been forgotten in Europe, when the famous Maurice, Prince d'Orange, thought to re-establish it, or rather imitate it around the end of the sixteenth and beginning of the seventeenth century. [...]

His camp, as described by Stevin in his *Castramétation* [...]

This disposition or formation of the camp then spread to the majority of the other states of Europe. It has without a doubt been observed in France, because it is described by several authors, particularly in the book *La Doctrine militaire*, written in 1667 by the Sieur de la Fontaine, engineer of the King, and in the *Travaux de Mars*, by Allain Manesson Mallet. [...]

Préface des essais sur la castramétation, by M. le Blond. (Q)⁷⁶⁴

⁷⁶² *Dictionnaire de Trévoux* (1743), I, 1788; *Supplément* (1752), I (no addition).

⁷⁶³ BnF, MS f. fr. 16980, fol. 58.

⁷⁶⁴ *Encyclopédie*, II (1752), 754–755.

The majority of Pernety's articles on military arts that refer to Le Blond are written with a tint of ink slightly diverging from other articles. This suggests that they were compiled in a row, as the monk worked his way through the author's productions. In the article BATAILLON – also referring to the *Essai sur la castramétation* – Pernety has added a piece of information which makes it possible to pinpoint the time of his writing. As mentioned in Chapter 10, the text is copied from a section where Le Blond refers to 'the present war'.⁷⁶⁵ Pernety, who so far has copied close to every sentence word-for-word, suddenly makes an addition. He writes 'the present war of 1748',⁷⁶⁶ and thereby specifies the time of his own textual production. Since 1748 was the year when Le Blond's *Essai* appeared at the bookstore of Jombert, it seems like Pernety rather quickly got his hands on a copy. This was also the year when Le Blond started making articles on the military arts for the *Encyclopédie*. Ironically, this means that Pernety and Le Blond concurrently compiled articles for two different encyclopedic projects, each of them using his *Essai sur la castramétation* as source.

In some cases, Pernety's articles actually contain more information drawn from Le Blond than the articles written by Le Blond himself. CANONIERE (Army tent) is such an example. Here Pernety indicates that an illustration will be included. This figure can be found among the finished drawings, and it is copied directly from Le Blond's *Essai*. In this case, even the article in the *Trévoux* is longer and more focused on describing the tent itself than the *Encyclopédie*. However, due to the presence of the illustration, Pernety engage in an even more detailed description. With subsequent references to the letters on the figure, he explains step by step how the tent is constructed; he presents the measurements and names of the individual parts, and describes the arrangement of the tents in the camp.

⁷⁶⁵ Le Blond, *Essai*, p. 13.

⁷⁶⁶ BnF, MS f. fr. 16980, fol. 40, BATAILLON.

[*Trévoux*, 1743/1752]: CANONIÈRE, or CANONNIERE', s. f., is said about a type of tent made of cloth and raised with two poles, in which the gunners rest. *Tentorium libratoribus tormentorum assignatum*. It is also a small tent which is made in form of a roof, and which does not have walls like the other ordinary tents. They are used by the soldiers and all the officers of the house of the King. There are two officers in each *canonière*, or seven soldiers.⁷⁶⁷

[Pernety]: CANONIÈRE, in terms of warfare, is the name given to the tent of the soldiers. Their disposition consists of a square, ABCD, of which each side is six feet, and from which one of them a semicircle with a three-foot circumference, CBE, is constructed. This semicircle is called the *cul-de-lampe* of the tent. The opening is the AD on the opposite side of the *cul-de-lampe*. The tent is held up by two bars, HF and LG, which are called forks. They are placed perpendicularly to the ground and are about six feet high. These forks support a third bar, FG, placed horizontally or parallel to the ground, and this bar is called the crossbeam. The *canonières* are not particularly high so you cannot stand upright except under the crossbeam. At the bottom, the cloth is surrounded by rings or loops of rope, through which stakes are driven into the ground in order to stretch the cloth of the tent so the water will run downwards more easily.

Pl. __ Fig. __

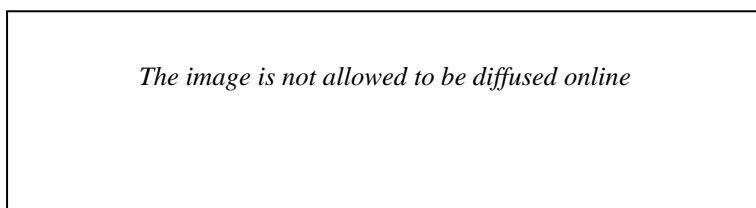


Fig. 33: The *canonière* in the *Essai sur la castramétation* by Le Blond,⁷⁶⁸
copied by Pernety.⁷⁶⁹
(The author's photos, BnF)

The *canonières* are placed in such a way that the first of each row are at the beginning of the camp, and since they all are of the same size, together they form regular and similar streets. The common custom is to form as many streets or rows of tents perpendicular to the front of the camp as there are companies in the battalion.

In order to make the streets of the camp wider and more convenient, it is customary to place two rows of tents back-to-back, so that their *cul-de-lampes* touch or approach each other closely. Their openings, which are facing opposite directions, lead to different streets, with the exception of the first tent of each company, whose opening is facing the head of the camp, and the last one, which faces the back.

Le Blond. See CAMP and its figure.⁷⁷⁰

[*Encyclopédie*, 1752]: 'CANONIÈRES', s. f. pl., are the tent of the soldiers and horsemen. A *canonière* should contain seven soldiers. (Q)⁷⁷¹

⁷⁶⁷ *Dictionnaire de Trevoux* (1743), I, 1665; *Supplément* (1752), I (no addition).

⁷⁶⁸ Le Blond, *Essai*, pl. 2.

⁷⁶⁹ BnF, MS f. fr. 16980, fol. 295.

⁷⁷⁰ BnF, MS f. fr. 16980, fol. 56.

⁷⁷¹ *Encyclopédie* (1752), II, 619.

The manuscripts written by Pernety's colleagues display the same tendency of expanding the encyclopedic or documentary content of the articles. Here one could take the example ALUCO (a species of owls), where NH-3, the writer of the *Trévoux*, and Diderot obviously have consulted and translated the same section in John Jonston's *Historiae naturalis*. Chambers's *Cyclopaedia* (1728) had no entry on ALUCO, and the later supplements only contained a very brief definition.⁷⁷² This suggests that Diderot rather had consulted the article of the *Dictionnaire de Trévoux* and then returned to Jonston for more information. All three articles contain several identical expressions and choices of words, and they are presented in the same order. However, in this particular case, the article of the Maurist is the most elaborate. While the *Trévoux* and the *Encyclopédie* only describe one variant of the owl, NH-3 describes two. He is also the only one giving exact references to the original work, where he copies Jonston's references to Belon, Aldovrandus and Aristotle. Moreover, at the end of the article, NH-3 indicates that the figure given in Jonston's work will be reproduced in the dictionary.

[*Trévoux*, 1743/1752]: ALUCO, BELL. JONST. It is a sort of owl, or nocturnal bird. There are several kinds. The one has the size of a capon, and the other of a pigeon. Their color is leaden grey, with white marks. The head is big, without ears, garlanded with feathers. The beak is white. Their eyes are large, black, and appear to be deep-seated because of the many small feathers surrounding them. Their legs are all covered with yellow feathers. The feet are furry with long and sharp claws. They live in ruins, towers and caves. They feed on rats and small birds. Their hoot is frightful. Their blood, dried, made to powder, and consumed in up to twenty *grains* for ten days, is good for asthma.⁷⁷³

[NH-3]: ALUCO, sort of owl or nocturnal bird of prey of which there are two sorts. The first has the size of a capon. The color is leaden grey with white marks. The head is big, without ears, garlanded with feathers. It has a white beak, big and black eyes, which appears reinforced because of the many small feathers surrounding them. The legs are covered with small white feathers; the feet are furry and armed with long, large, curved claws. It lives in ruins, towers and the cavities of old oak-trees. It prowls over the fields during the night; it feeds on rats and small birds. The throat is so wide that it swallows pieces the size of an egg, after having removed the bones, the fur or feathers.

The second sort is barely the size of a pigeon. On the back of its head, neck, back and wings, the plumage is speckled with black down to the roots, and the head is iron grey. The front of the head appears to be encircled by small feathers in white and fiery

⁷⁷² A Supplement to Mr. Chambers's *Cyclopaedia: or, Universal Dictionary of Arts and Sciences*, 2 vols (London: Innys and others, 1753), I: 'ALUCO, in zoology, the name by which authors have called the common white owl, or, as we commonly call it, the barn owl, or church owl. Ray's *Ornithol.* p. 67. See OWL'.

⁷⁷³ *Dictionnaire de Trévoux* (1743), I, 353; (1752), I, p. 476.

red, with a circle in the color of brown. The eyes, which are very black towards the inner corners, are adorned with obscure brown. It has reddish legs and feet, with spiky white fur, and armed back and front with long, extremely sharp and very black claws. Its hoot during the night is so terrifying that women and children are frightened. This sort is much rarer than the first.

Each [sort] contains a great deal of volatile salt and oil. Their blood is very good for asthma, if dried, pulverized and swallowed. The dose ranges from a *demi-scrupule* to two. Its brain is considered proper for agglutinating wounds.

Belon, cap. 32; Aldov. lib. 8 & 5; Arist. lib 8. Cap. 3; Jonst. pag. 32. tab. 19. Pl. __fig. __⁷⁷⁴

*The image is not
allowed to be
diffused online*

Fig. 34: The Aluco.⁷⁷⁵
(Google Books)

[*Encyclopédie*, 1751]: ALUCO, name of a bird mentioned in [the works of] Belon, Aldovrandus and Jonston. It is a sort of owl whose size varies. It is big, either like a capon or a pigeon. Its plumage is leaden grey with white marks. It has a big head, garlanded with feathers, without any visible ears. Its beak is white, its eyes large, black, and covered with feathers which reinforces them; its furry paws armed with long and curved talons. It lives in ruins, caves, and the cavities of oak-trees. It prowls over the fields during the night. It feeds on rats and birds. It has a very large throat and its hoot is gruesome.

Its flesh contains a great deal of volatile salt and oil. Its blood, dried and pulverized, is good for asthma. Its brain tissue makes wounds agglutinate. The dose of the pulverized blood ranges from a *demi-scrupule* to two *scrupules*.⁷⁷⁶

The article NERF (Nerve) is an interesting example that illuminates the development of the anatomical language and knowledge from the late seventeenth century onwards. Here I will include also the earlier universal dictionaries. In Furetière's *Dictionnaire universel* (1690) the article NERF roughly occupies one column, and begins:

NERVE. Subst. masc. Term of Anatomy. According to the doctors, it is a spermatie part of the animal body, which originates in the brain or the spinal marrow. Its figure is long and round. It is marrowy on the inside and membranous on the outside, and it carries the animal spirit for sensation and motion.⁷⁷⁷

⁷⁷⁴ BnF, MS f. fr. 16981, fols. 4–5.

⁷⁷⁵ John Jonston, *Historiae naturalis de avibus, libri VI*, [1650] ([Heilbrunn]:[Eckebrecht], 1756), tab. 19. The account on the *Aluco* can be found on p. 46 in this edition.

⁷⁷⁶ *Encyclopédie*, I (1751), 305.

⁷⁷⁷ Furetière, *Dictionnaire universel*, II: 'NERF subst. masc. Terme d'Anatomie. C'est selon les médecins une partie spermatique du corps de l'animal, qui naist du cerveau ou de la moelle de l'épine. Sa figure est longue & ronde. Elle est moelleuse par dedans, membraneuse par dehors, et elle porte l'esprit animal pour le sentiment & le mouvement'.

Furetière then speaks of three kinds of nerves: those connected to the bones, the muscles, and the brain and spine. He remarks that the Ancients counted seven pairs or bundles of nerves connected to the brain, and enumerates their names according to Galen. He then adds that the Moderns have counted another thirty pairs deriving from the spinal cord, but they are not specified by names. The last paragraph refers to Raimond Vieussens' *Neurographie universelle* (1684) and a treatise by the English anatomist Thomas Willis. Thus, Furetière's article principally focuses on the information provided by the ancient authorities. They are the first to be presented and the only ones that are discussed in detail, while the article is concluded with a short mentioning of more recently published works.

In the revised edition of Basnage de Beauval (1701), the article has been modified and the language refined, which is visible already in the introducing lines.

NERVE, s. m. Term of Anatomy. A long, round and white body, which derives its origin in the brain and the spinal marrow, and which is distributed in all parts of the body. The nerve is composed of small fibers, deriving from the cortical substance of the brain and the cerebellum. It is covered by two membranes made of the *pia* and *dura mater*. The use of the nerve is to carry the *animal spirits* for sensation and motion.⁷⁷⁸

Following Furetière, the article mentions that the Ancients counted seven pairs of nerves, but these are now only summarized in a Latin verse. It is then remarked that the Modern anatomists count ten pairs from the brain, and thirty from the spinal marrow. After having mentioned them by name, the article concludes with the same references to Vieussens and Willis. Thus, even if the ancient authorities still are mentioned first, the focal point has been transferred to the information provided by modern sources.

The first edition of the *Dictionnaire de Trévoux* (1704) reproduced the article of Basnage de Beauval down to the last word. Even in the revised editions of 1743 and 1752 the account is the same. The only modification in the introduction is an addition of the Latin term *nervus*, and the exclusion of 'the animal spirits' from the last line. In other words, by the mid-eighteenth century, the *Dictionnaire de Trévoux* provided the reader with the same

⁷⁷⁸ *Dictionnaire universel*, ed. by Basnage de Beauval, II: 'NERF. s. m. Terme d'Anatomie. Corps long, rond, & blanc qui prend son origine du cerveau & de la moëlle de l'épine, & qui se distribue dans toutes les parties du corps. Le nerf est composé de petites fibres qui viennent de la substance corticale du cerveau & du cervelet. Il est couvert de deux membranes faites de la pie & de la dure mère. L'usage du nerf est de porter les *esprits animaux* pour le sentiment & pour le mouvement'.

information as five decades earlier. And just as in the previous dictionaries, the article amounts to about one column.⁷⁷⁹

The article written by MED-2 occupies four and a half columns. Even if the text would have been reduced in print, it surpasses the article of the *Trévoux* in size. Furthermore, except for a limited borrowing from the *Trévoux*, the article is entirely based on Winslow's *Exposition anatomique* (1732), which is visible already in the introducing lines.⁷⁸⁰

NERVE, term of Anatomy. The anatomists use the term nerves for the white cords which derive their first origin either in the brain or the cerebellum, by means of the medulla oblongata or the spinal marrow in the back. From there they extend in form of bundles, systematically arranged in pairs, like separate trunks which then are divided in branches, in twigs, in ramifications and strings, distributed in all the parts of the body.⁷⁸¹

In contrast to the preceding universal dictionaries, the article starts right away with the most up-dated information regarding the nervous system. After a long account on all the technical names of the nerve pairs (copying two pages from Winslow), the writer explicitly states the *Exposition anatomique* to be the source. The article is concluded with the brief remark on the Ancients, the Latin verse, and the treatises of Vieussens and Willis.

The unsigned article of the *Encyclopédie*, published in 1765, occupies four and a half columns. The first part corresponds to Chambers's *Cyclopaedia*, where the introducing lines apparently has been drawn from the *Dictionnaire de Trévoux*.⁷⁸²

⁷⁷⁹ *Dictionnaire de Trévoux* (1743), IV, 1162–1163, NERF.

⁷⁸⁰ Jacques-Benigne Winslow, *Exposition anatomique de la structure du corps humain*, 4 vols (Paris: Desprez, 1732), III, 199–200: 'Tous les nerfs du corps humain tirent leur première origine, ou du cerveau, ou du cervelet, moyennant la moëlle allongée, ou de la moëlle de l'épine du dos. Ils en viennent en manière de faisceaux très-symétriquement arrangés par paires, & comme autant de troncs séparés, qui se divisent ensuite en branches, en rameaux, en ramification & en filets'.

⁷⁸¹ BnF, MS f. fr. 16983, fols. 351–353: 'NERF, terme d'anatomie. Les anatomistes appellent nerfs, des cordons blancs qui tirent leur première origine, ou du cerveau, ou du cervelet, moyennant la moëlle allongée ou de la moëlle de l'épine du dos. Ils en viennent en manière de faisceaux très symétriquement arrangés par paires, et comme autant de troncs séparées, qui se divisent ensuite en branches, en rameaux, en ramification, et en filets, et se répandent dans toutes les parties du corps'.

⁷⁸² Ephraim Chambers, *Cyclopaedia: Or, An Universal Dictionary of Arts and Sciences*, 2 vols (London: Knapton and others, 1728), II, 625, NERVE'; According to Passéron, 'Quelle(s) édition(s)', <http://rde.revues.org/index4342.html> [accessed 2014-02-26], it is uncertain exactly which edition(s) of the *Cyclopaedia* that the *encyclopédistes* used, but it is likely that it was the fourth or fifth appearing in the 1740s.

[*Encyclopédie*]: NERVE, s. m. In Anatomy, a round, white and long body, like a cord, composed of several threads or fibers; deriving its origin either from the brain or the cerebellum; distributed in all the part of the body by means of the medulla oblongata and the spinal marrow; serving to transport a particular juice which some physicist call *animal spirits*, which is the organ of sensation and the performance of various motions. See SENSATION, MUSCULAR MOTION, &c.⁷⁸³

After the translation of Chambers, the *encyclopédiste* adds the section regarding the Ancients, including the Latin verse. Then he reproduces the exact same two pages from Winslow's *Exposition anatomique* as transcribed by MED-2, only the *encyclopédiste* never states the source. Winslow is not mentioned until in the following entry, signed by Jaucourt.⁷⁸⁴ Due to the use of the *Exposition anatomique*, the scientific terminology in the Maurists' manuscripts and the *Encyclopédie* is far more specialized than in the previous dictionaries, including Chambers's *Cyclopaedia*.

The articles discussed in this subchapter cannot do justice to the variety of uses of texts in the three dictionaries (no few examples could). However, in a concrete way, they illustrate the recurrent tendencies described in the previous subchapter. Since the Maurists and the *encyclopédistes* envisioned illustrated dictionaries, they could enter in greater detail in technical descriptions. For this reason, they tended to seek out other sources than the Jesuit compilers. The fact that they were making new works and not revised editions is probably the best explanation for why they also included more recent information. Moreover, compared to the Jesuits, the Maurists and the *encyclopédistes* were much more interested in the useful and practical arts and crafts.

⁷⁸³ *Encyclopédie*, XI (1765), 100: 'NERF, s. m. en Anatomie, corps rond, blanc & long, semblable à une corde composée de différens fils ou fibres, qui prend son origine ou du cerveau, ou du cervelet, moyennant la moëlle allongée & de la moëlle épiniere, qui se distribue dans toutes les parties du corps, qui sert à y porter un suc particulier que quelques physiciens appellent *esprits animaux*, qui est l'organe des sensations, & sert à l'exécution des différens mouvemens. Voyez SENSATION, MOUVEMENT MUSCULAIRE, &c.'

⁷⁸⁴ *Ibid.*, pp. 100–102, 'NERF, jeux de la Nature sur'.

PART V.
A MONASTIC REFLECTION OF
THE FRENCH ENLIGHTENMENT

14. THE MAURIST ENTERPRISE AND ENLIGHTENMENT THOUGHT

It seems that for the last three hundred years,
the nature has destined the middle of the century
to be the time for revolution in the human spirit.⁷⁸⁵

d'Alembert

The previous parts of the dissertation have shown that the Maurists started making a dictionary unique in the eighteenth-century. By focusing on the utile, productive, and curious, they gathered the physico-mathematical sciences, mechanical arts, crafts, medicine, and natural history in one work. Through the exclusion of religion, metaphysics, ethics, politics, and law, the Maurists' manuscripts form a glaring contrast to the universal dictionaries in the tradition of Furetière and the *Dictionnaire de Trévoux*. Even though the Maurists did not aspire to cover as many areas of knowledge as the *Encyclopédie*, their project had several common denominators with the parallel and larger enterprise of Diderot and d'Alembert. Besides devoting great attention to the useful basic crafts, they also planned to include illustrations, which was unprecedented among the French dictionaries of arts and sciences.

However, although the *Encyclopédie* has been appreciated as a reference work, it has above all become known as the medium of Enlightenment thought par excellence. Indisputably, the dictionary of Diderot and d'Alembert was an ideological work, which was particularly visible in the *Discours préliminaire*, the diverse advertisements of the editors, and in central articles such as ENCYCLOPÉDIE.

Up to this point, the focus has been directed towards the history of the Maurist project and aspects of encyclopedic manufacture. When now knowing more about the characteristics of this enterprise, it is time to address its relationship to Enlightenment thought and values. Some of these were defined already in Chapter 2: the appetite for knowledge and education; the taste for inventory and systematization; the necessity of religious tolerance and freedom of thought; the conviction that knowledge

⁷⁸⁵ Cited in Groult, 'Comment commencer une construction?', pp. 139–140.

should be based on rational inquiry and empirical observations instead of prejudice, superstition and unverifiable sources; the appreciation of the utile and productive, etc.

Do the Maurists' manuscripts express these ideas and values? And if so, what can this enterprise tell us about the monastic community in which it was produced?

A MONASTIC COMMUNITY IN TRANSFORMATION

Even though the Maurist dictionary never was finished and published, the very fact that this project for a decade was carried out in the abbey of Saint-Germain-des-Prés witness of the complexity of attitudes existing in the intellectual center of the Congregation of Saint-Maur. By the mid-eighteenth century, much had changed since the days of Mabillon. Not only had the great tutor been of the opinion that studies in physics, mathematics, and medicine should be forbidden for monks, he had also argued that the Maurists' publications

must count for nothing whatever does not contribute to the progress of the faith, to good morals, to the good of the Church, the State, the monastic life, or to the improvement to the fine arts. Even then I would prefer to leave aside the arts, which are less useful than curious and pleasant [...].⁷⁸⁶

The dictionary compilers were doing the very opposite of the recommendations of Mabillon. They treated everything he had wanted to see forbidden, and omitted religion, ethics and politics – the subjects otherwise contributing 'to the progress of faith, good morals, to the good of the Church, the State and the monastic life'. Pernety's revised edition of Dom Claude Martin's *Manuel bénédictin* (1754) contained similar accounts on attitudes towards studies and the secular world. The manual encouraged the monks to 'mortify their spirit in curiosity and the desire to know things that do not belong to their profession'.⁷⁸⁷ It also stated:

Those who leave the world to devote themselves to serving God in withdrawal must resign their spirit and body. [...] There is no better way to assure their vocation than

⁷⁸⁶ Mabillon, *Treatise on Monastic Studies*, p. 200. For the original French, see Mabillon, *Traité des études monastiques*, p. 572.

⁷⁸⁷ *Manuel bénédictin*, pp. 382–382: 'Ils mortifieront l'esprit dans sa curiosité et dans le désir de sçavoir les choses qui ne sont point de leur profession'.

by ceasing to love and think about the vanities of the century, in order to be only occupied with God and the ways of serving him.⁷⁸⁸

As Pernety was preparing these pages, he was simultaneously working on a dictionary of arts, crafts, and sciences. Supposed to turn his back on the world, to discipline his spirit in the desire to know things not belonging to his profession, he had devoted several years to nothing but the world. Supposed to be only occupied with God, he directed an enterprise which excluded him entirely.

When knowing that Pernety a decade later would leave his Congregation, it is tempting to regard the dictionary project as a proof of the interpretations of Bricaud and Vissac: that Pernety had trouble reconciling with the monastic spirit.⁷⁸⁹ However, the monastic life itself was in transformation. As shown in Chapter 7, Pernety and Brézillac had not been the first Maurist scholars to devote themselves to medicine, physics, mathematics, and technology – and they would not be the last.

The eighteenth-century writers found themselves in another situation than those of the preceding century. While the first generation of Maurists had assumed their scholarly tasks with the ambition of consolidating the monastic reform, exciting the spirituality of the young monks, and defending the Catholic textual tradition, the eighteenth-century writers addressed a much wider audience.⁷⁹⁰ As pointed out by Henri-Jean Martin, the Maurists' relationship to the book trade is crucial in understanding why they increasingly came to devote themselves to profane erudition in the eighteenth century. The demands of the public were changing. The publishers adapted to these changes, and the writers adapted to the publishers. The Maurist scholars were well aware of what was commercially marketable.⁷⁹¹ Furthermore, concurrently with the increasing criticism directed towards the monastic orders, the Maurists emphasized that they wished to make themselves useful to the public.⁷⁹² These aspirations culminated in the Request of Mitigation in 1765. In the following controversy, the tensions existing between individual monks, monasteries,

⁷⁸⁸ *Manuel bénédictin*, p. 285: 'Ceux qui quittent le monde, pour se consacrer au service de Dieu dans la retraite, doivent y renoncer d'esprit et de corps [....] Ils ne peuvent donc mieux assurer leur vocation, qu'en cessant d'aimer, & de penser aux vanités du siècle, pour n'être occupés que de Dieu & des moyens de le servir'.

⁷⁸⁹ Bricaud, p. 7; Vissac, p. 223.

⁷⁹⁰ Hurel, in *The Reception*, p. 1013.

⁷⁹¹ Martin, 'Les Bénédictins, leurs libraires et le pouvoir', p. 284.

⁷⁹² Gasnault, p. 26; Barret-Kriegel, pp. 128–129.

the capital and the provinces, became abundantly clear. The Maurists did not compose a uniform body, sharing exactly the same attitudes. The professional writers only constituted two percent of all monks, and the life of the Parisian scholars was highly different from those living in retreat in remote provincial monasteries.⁷⁹³

To sort individuals in different categories of ‘enlightenments’ based on their institutional or religious belongings faces the same problem as establishing the boundaries of a singular, homogeneous Enlightenment. As pointed out by Dan Edelstein, one will always find diversity within such groupings, just as one can find similarities in between. Labels such as Protestant, Catholic, Monastic, Benedictine, or even Maurist enlightenments run the risk of establishing the belief or institution as the intellectual context of primary relevance, and thus reducing the importance of other inputs. They also entail separating groups from each other, and making them appear as compartmentalized, internally unitary phenomena.

Certainly, the Maurist scholars were educated within a regulated and hierarchical institution, but they also were individuals with different backgrounds, who entered the monasteries at various points in life (some even leaving whole careers behind).⁷⁹⁴ As the Congregation encouraged the monks to cultivate their ‘natural talents’, the professional scholars came to work on different subjects.⁷⁹⁵ As a consequence, besides the common sacred texts, the individual writers received external input from a variety of sources – in short, a complex palette of impressions that never can be fully reconstructed. When confronted with the Maurists’ dictionary manuscripts, one can only imagine how many hours, days, months and years the monks spent going over thousands of pages of specialized books, articles, memoirs and dictionaries. The second inventory of the *Dictionnaire de Trévoux* alone contains close to ten thousand terms of interest, and the bibliography enumerates more than two hundred works, of which many surely were subjected to similar inventories (now lost). By following the steps of the writers, it becomes clear that the Maurist compilers were familiar with many of the most important scientific works of the seventeenth and eighteenth centuries.

⁷⁹³ Hurel, ‘La vie monastique’, pp. 367–386.

⁷⁹⁴ Dominique Julia and L. Donnât, ‘Le recrutement d’une congrégation monastique à l’époque moderne: les Bénédictins de Saint-Maur, esquisse d’histoire quantitative’, in *Saint-Thierry, une abbaye du XVI^e au XX^e siècle* (Saint-Thierry: Association des amis de l’abbaye de Saint-Thierry, 1979), pp. 565–594 (pp. 582–583).

⁷⁹⁵ Hurel, in *Académies*, pp. 463–464.

On the whole, the Congregation of Saint-Maur thus embraced individuals responding to contemporary ideas and debates in different ways, just as the society at large. Just because the dictionary project was allowed to be carried out in the Parisian headquarters for almost a decade does not mean that it was some kind of manifesto for the Congregation's overall attitudes. However, it is perhaps the project most clearly illustrating the new strain of values co-existing with traditional monastic ideals. The enterprise can be seen as a manifestation of an increasing liberty of action: a tolerance of diversity and devotion to profane and more marketable subjects. The scholars were given room to respond to the 'tastes of the time' and thereby be of use to the nation and the public. I shall now take a closer look at what kind of 'tastes' and ideas the compilers of the Maurist dictionary were picking up and mediating.

A RESPONSE TO THE 'TASTES OF THE TIME'

The very project of defining and describing the terms and elements of the sciences, arts and crafts was indeed symptomatic of the age of Enlightenment. The eighteenth century has been described as a period when science and entertainment – the useful, the curious and the spectacular – went hand in hand.⁷⁹⁶ While 'curiosity' had been interpreted in a strict negative sense in the seventeenth century – especially within the Church – positive definitions gained ground in the succeeding century. Concurrently with the rise of a popular culture of collecting and consumerism, the 'curious' became an immensely modish notion, endlessly mentioned in titles, prefaces, dissertations and periodicals.⁷⁹⁷ These expressions would also find their way into the publications of the Maurists. When Dom Rivet in 1733 published the first volume of the *Histoire littéraire de la France*, he remarked in the preface that nothing was more worthy of 'arousing the curiosity' than the history of learning and education.⁷⁹⁸ In the succeeding pages, curiosity was repeatedly described as both noble and utile.⁷⁹⁹

⁷⁹⁶ *Science and Spectacle in the European Enlightenment*, ed. by Bernadette Bensaude-Vincent and Christine Blondel (Hampshire: Ashgate, 2008).

⁷⁹⁷ Neil Kenny, *The Uses of Curiosity in Early Modern France and German* (Oxford: Oxford University Press, 2004), pp. 1–24, 105–106, 160–161.

⁷⁹⁸ *Histoire littéraire de la France*, ed. by Antoine Rivet and others, vol. I (Paris: Osmont and others, 1733), p. i. 'piquer la curiosité'.

⁷⁹⁹ *Ibid.*, pp. xvii–xviii.

By exposing and describing theoretical and practical knowledge, dictionaries in general had both educational and entertaining elements. They were also concerned with how to use words properly, which was necessary for engaging in civil dialogue in the salons, coffee shops, masonic lodges, societies, academies, and other learned social settings. Since dictionaries fundamentally were based on the books of others, Richard Yeo has regarded them as expressions of ‘the modern assumptions about the public character of information and the desirability of free intellectual and political exchange’.⁸⁰⁰ As an illustrated compilation of the scientific books of its time, the Maurist enterprise can be inscribed in this larger culture of science and entertainment, sociability and commercialism.

In the preface to the *Dictionnaire portatif de peinture* (1757), published shortly after the abandonment of the greater enterprise, Pernety seized the opportunity to speak his mind about the role of the dictionary in a century when ‘people wish to know everything, or rather talk about everything’. Would the ‘universal dictionary of arts, crafts, and related sciences’ ever have been finished and published, perhaps these or similar words would have served as its introduction. A closer look at this preface can therefore shed some light on the values permeating also the preceding enterprise.

Pernety starts by addressing the long-debated issue whether or not the dictionaries only encourage superficial learning. Here one can almost hear the warning voice of Dom Mabillon, who in 1691 had pointed out that a restless, flickering search for amusing facts – driven by curiosity – never could lead to true and well-founded knowledge.⁸⁰¹ Pernety acknowledges that there always will be those who only stay at the surface of things, but he still defends the dictionary as a fundamental tool for learning. Its function is to excite the curiosity or ‘natural appetite’ of the reader to such a degree that he (or she) will turn to other books for more complex answers. In order to do this, the reader first needs to be instructed in the ‘foreign’ language of the specialized field. In this way, the dictionary is portrayed as fundamental for the progress of the sciences and arts – which is of benefit to everyone. Therefore, Pernety argues, ‘we must give in to this taste of the century’.

⁸⁰⁰ Yeo, *Encyclopaedic Visions*, p. xii.

⁸⁰¹ Mabillon, *Treatise on Monastic Studies*, p. 246; Mabillon, *Traité des études monastiques*, pp. 616–617.

Despite the bad temper of certain people, which makes them smear the century's taste for the dictionaries, this appetite seems to be intensified as this genre of learning is growing. This is a proof of the advantages that the public derives from them. Some say we are flooded by them, and if we do not stop this torrent we will soon be studying nothing but dictionaries, which cannot teach us but very superficially. I am not here defending those who reduce the study of the sciences to this method, but one cannot deny that it is indispensable at least within the arts, which have developed a language foreign to almost everyone who does not practice them. How could you possibly converse with the artists, and discuss their art, if you are not familiar with their proper terms, or if you do not know how to use them correctly? The dictionaries are therefore necessary, and today more than ever, since all the estates of society benefit from the interest in the sciences and arts. People wish to know everything, or rather talk about everything, and not appear to be ignoring anything. We must give in to this taste of the century. Even if the majority will not extract more than superficial knowledge from these works, there are those who will not stay at the surface. The power of their genius will drive them to penetrate further, and their natural but often irresolute appetite will be more refined due to the ease they will have in instructing themselves in these arts, in a language which would have been altogether foreign to them without this aide.⁸⁰²

Even though these words served as introduction to a subject dictionary, the same approach to knowledge is visible in the unfinished dictionary manuscripts. Pernety addresses *les curieux* as those hungry to know more – not the ones contenting themselves with the information in the articles – and he tells them where to turn for further readings.⁸⁰³ When it comes to the appetite for knowledge, the taste for inventory, the predilection for the useful and productive, and the project of diffusing knowledge to a larger audience for the benefit of the progress of the sciences and arts, the Maurists'

⁸⁰² Pernety, *Dictionnaire portatif*, pp. iii–iv: 'Malgré la mauvaise humeur de certaines gens, qui les fait crier contre le goût du siècle pour les dictionnaires, ce goût semble se fortifier à mesure qu'on multiplie ce genre d'instruction: c'est une preuve des avantages que le public en retire. Nous en sommes, dit-on, inondés; & si l'on n'arrête ce torrent, nous n'étudierons bientôt plus que dans les dictionnaires, qui ne peuvent nous instruire que très-superficiellement. Je n'entreprends pas ici la défense de ceux qui réduisent l'étude des sciences à cette méthode; mais au moins ne peut-on nier qu'elle est indispensable dans les arts, qui se sont fait un langage ignoré de presque tous ceux qui ne les cultivent pas. Comment en effet converser avec les artistes, & raisonner avec eux sur leur art, si l'on ignore les termes qui leurs sont propres, ou si l'on n'est pas au fait du vrai sens dans lequel on les emploie? Les dictionnaires sont donc nécessaires, & plus aujourd'hui que jamais, parce que le goût des sciences & des arts a gagné tous les états. On veut sçavoir tout, ou plutôt parler de tout, & ne paroître ignorer de rien: il faut donc se prêter à ce goût du siècle. Si le plus grand nombre ne puise dans ces ouvrages que des connaissances très-superficielles, il s'en trouvera qui ne s'arrêteront pas à l'écorce; la force de leur génie les fera pénétrer plus avant, & leur goût naturel, mais souvent indécis, se développera par la facilité qu'ils auront de s'instruire des principes de ces arts, dans un langage qui leur aurait été trop étranger sans ce secours'.

⁸⁰³ See for instance BnF, MS f. fr. 16980, fol. 73^v, CHENILLE: 'Les curieux peuvent voir', fol. 223, PORCELAINE ÉMAILLÉE: 'Ceux qui seroient curieux de voir', fol. 232, PUCERON: 'à ceux qui en seroient curieux'.

manuscripts can be said to reflect the same values as the *Encyclopédie* – as well as many other contemporary books and dictionaries.

The History of Progress

In *The Enlightenment: A Genealogy*, Dan Edelstein examines how eighteenth-century writers constructed a narrative about their own age as more enlightened (*éclairé*) compared to previous periods. Edelstein calls this discourse the contemporary story about the Enlightenment. From about the 1720s onwards, this narrative was diffused through the memoirs of the academies, learned journals and books, and continued to affect the self-understanding of readers and writers of new books and articles. Eventually, this story would become the discursive centerpiece of the *philosophes*.⁸⁰⁴ The historian of science Marco Beretta has pointed out that historical accounts on the sciences became an effective instrument of the *encyclopédistes* and *philosophes* to express an ‘ideological commitment to progress’ and to illustrate how ‘the dark ages of superstition could be enlightened by reason through the efforts of men of genius’.⁸⁰⁵ But they were not alone in diffusing this narrative.

The Maurists’ manuscripts may not contain elaborate descriptions of the history of the individual fields of knowledge, but accounts of progress are recurrent themes. The past is contrasted with the more enlightened present, and the Ancients’ speculations, superstitions, and blind faith in authorities are compared to the critical observations and experiments of the Moderns. Here it is useful to recall that the scholars of the Congregation were trained in evaluating and authenticating old documents, and the values permeating their historical research were not essentially different from those of the natural sciences. In the *Traité des études monastique*, Dom Mabillon had devoted a whole chapter to ‘Criticism and its Rules’ where he advised that all materials should be examined diligently, unprejudiced and passionless, and judgments only be based on good proofs.⁸⁰⁶

In ABEILLE (Bee) Pernety points out that the Ancients believed that bees were engendered from the decaying corpses of animals. He takes an example from the Bible where Samson had found a swarm of bees and honey in the carcass of a Lion he just had killed. The Benedictine remarks that ‘experiments and observations have opened our eyes to this error’, and ‘this

⁸⁰⁴ Edelstein, pp. 2–3, 15–16.

⁸⁰⁵ Beretta, p. 2.

⁸⁰⁶ Mabillon, *Traité des études monastiques*, pp. 559–566; Mabillon, *Treatise on Monastic Studies*, pp. 186–187.

was not the only ridiculous system adopted in these times, so poorly enlightened by physics and natural history'.⁸⁰⁷ In contrast, the *Dictionnaire de Trévoux* (1743, 1752) states that some believe (in present tense) that bees can be engendered from the corpses of animals. More precisely, if one kills a bull and places the carcass in an enclosed room, bees will appear after forty-five days.⁸⁰⁸

In another article Pernety remarks that the Ancients hardly could be described as 'scrupulous observers of nature' since they 'on blind faith to an author easily accepted fables for truths, without worrying much about verifying the real'.⁸⁰⁹ The reproduction of fables and myths was not uncommon in earlier dictionaries of arts and sciences. Chambers had been convinced of the existence of mermaids, and Corneille described dragons and the phoenix as any other animals.⁸¹⁰ Also the Maurists' manuscripts contain accounts appearing somewhat naïve from a modern perspective. In ARBRE ANIMAL (Animal Tree), largely copied from Gemelli Careri's *Voyage du tour de monde* (1719), Pernety describes a tree in the Philippines whose leaves after having reached a certain maturity turn into flying animals.⁸¹¹ On the other hand, in NARWHAL (Narwhal, horned whale), he takes the opportunity to reject the myth of the Unicorn, which only is based on 'hearsay and ill-funded reports'.

Some time has already passed since we were disabused of the mistake that this defensive horn was placed on the head of a four-footed land animal called Unicorn. Since only dubious authors have spoken about it, without ever being able to declare where they had seen it or where it can be found, it has long been suspected and we think today that the Unicorn is an imaginary animal, invoked simply by hearsay and on ill-founded reports.⁸¹²

⁸⁰⁷ BnF, MS f. fr. 16980, fol. 5, ABEILLE: 'les expériences et les observations des naturalistes nous ont détrompé de cette erreur. [...] Ce n'étoit pas le seul système ridicule qu'on adoptoit dans ces tems peu éclairés par la physique et l'histoire naturelle'.

⁸⁰⁸ *Dictionnaire de Trévoux* (1743), I, 28, ABEILLE; (1752), I, 37, ABEILLE.

⁸⁰⁹ BnF, MS f. fr. 16980, fol. 80, CIGALE: 'ils n'étoient pas des observateurs scrupuleux de la nature; sur la bonne foi d'un auteur ils adoptoient aisément des fables pour des vérités sans se soucier beaucoup d'en vérifier le réel'.

⁸¹⁰ Bradshaw, 'Ephraim Chambers' *Cyclopaedia*, p. 131; Ross, 'Thomas Corneille's *Dictionnaire des arts et des sciences*', p. 73.

⁸¹¹ BnF, MS f. fr. 16980, fol. 30, ARBRE ANIMAL; Gemelli Careri, *Voyage du tour de monde*, vol. V (Paris: Ganeau, 1719), pp. 189–190.

⁸¹² BnF, MS f. fr. 16980, fol. 199, NARWHAL: 'Il y a déjà du tems que l'on est désabusé de l'erreur dans laquelle on étoit que cette corne étoit une défense, posée sur la tête d'un animal quadrupède et terrestre appellé Licorne. Comme il ne s'est trouvé que des auteurs suspects qui en ayant parlé, sans même avoir pû dire qu'ils en avoient vû, ni le lieu où on les trouvoit, on a cru et l'on pense aujourd'hui que la Licorne est un animal imaginaire, autorisé simplement sur des oui-dires et des rapports malfondés'.

In contrast, the *Dictionnaire de Trévoux* (1743, 1752) states that the Unicorn can be found in Africa. The animal is then described in detail with reference to a number of ancient authors and fifteenth- and sixteenth-century naturalists.⁸¹³ Critical remarks regarding the sources of information can also be seen in the articles of other Maurist writers. For instance, in ASSA FOETIDA (a vegetable substance used for medical purposes) MED-1 underlines the uncertainties of its origin, due to the defective accounts of the traveler-observers.

We still do not know from which plant it is drawn. All that is stated by the botanists and authors of pharmacy is nothing but simple conjectures, still only founded on the reports of travelers of little experience and little knowledge.⁸¹⁴

This account, however, is largely based on the *Dictionnaire de Trévoux*, where the uncertainty regarding the plant's origin is remarked as well.⁸¹⁵

Through the above and similar expressions, the belief in the rational, scientific method is repeatedly expressed in the Maurists' manuscripts (although not always followed). Pernety and his colleagues may not be formulating a coherent story about the progress of science and reason, but the primacy of the present over the past is constantly underlined. The monks take the side of the Moderns over the Ancients. As earlier mentioned, in the article NERF, the Maurist writer started right away with the most updated information and only mentioned outdated theories at the end. In contrast, all previous dictionaries began by discussing the ancient authorities.

The Limited Presence of God

The *encyclopédistes'* belief in reason, progress and the necessity of doubting did not only concern the sciences and arts. Above all, what distinguished the *Encyclopédie* was its critical approach to religious and political authority.

In the Maurists' manuscripts, God is only mentioned on five occasions: once in the draft based on Wolff,⁸¹⁶ and four in the later manuscripts. Even though the monks never treated theological and religious subjects, this low number is highly remarkable compared to the *Dictionnaire de Trévoux*,

⁸¹³ *Dictionnaire de Trévoux* (1743), IV, 224-225, LICORNE; (1752), IV, 341-343, LICORNE.

⁸¹⁴ BnF, MS f. fr. 16983, fol. 44, ASSA FOETIDA: 'On ignore encore de quelle plante elle sort. Tout ce qu'en dit les botanistes et les auteurs de pharmacie, ne sont que de simple conjectures, et encore ne sont elles fondées que sur le rapport de voyageurs peu entendus et peu connoisseurs'.

⁸¹⁵ *Dictionnaire de Trévoux* (1743), I, 746, ASSA FOETIDA.

⁸¹⁶ BnF, MS f. fr. 16982, fol. 6, ABÎME. See Chapter 8.

where a quote from the Scripture or a moralizing example turn up in every other article.

In TROMPETTE (Trumpet), Pernety uses the Old Testament in order to demonstrate that something is very old. He shows that this musical instrument has been around for a long time, ‘because we see that God commanded Moses to make two of them’.⁸¹⁷ In CHAPERONNÉ (Indian Cobra) he remarks that the marking on the back of the head of this snake has been said to resemble a human face. At the end of the article he adds what seems to be a personal reflection, and asks if not ‘some Mystic’ could interpret this animal as a descendant of the snake tempting Eve in Paradise, and that God imprinted this marking as a reminder.⁸¹⁸ In CAILLE (Quail, a bird), NH-3 mentions that the people in Arabia believe that this was the bird that God sent to the Israelites in order to feed them in the desert.⁸¹⁹ In other words, he speaks of the beliefs of a certain population – he does not claim that this is actually true.

The only reproduction of a general Christian dogma can be found at the beginning of HOMME (Man), written by MED-2. This part is copied from the *Dictionnaire de Trévoux*, but with some important modifications. As seen in the citations below, the grammatical and genealogical information is excluded as usual, but MED-2 then deviates from the habit of avoiding metaphysical subjects and copies the initial philosophical and religious definitions. However, he does not include all religious references. He stops right before the sentence ‘one day God will come to judge all men’.

[*Trévoux*, 1743]: HOMME, s. m. *Homo*. Reasonable animal. This is how he is defined within philosophy. In former times one used to say *hom*. This is how it is written in *Guarins le Loheranes*, the oldest novel, and the one by Vasse. Marot said Noah *le bon hom*. The privilege of reason is what distinguishes man from the beast, &c. God created man to his image and resemblance. He created him male and female. He made him king of the animals. One day God will come to judge all men. All men are mortal [...].⁸²⁰

⁸¹⁷ BnF, MS f. fr. 16980, fol. 268, TROMPETTE: ‘puisque nous voyons que Dieu commanda à Moïse d’en faire deux’.

⁸¹⁸ BnF, MS f. fr. 16980, fol. 64, CHAPERONNE.

⁸¹⁹ BnF, MS f. fr. 16981, fol. 105, CAILLE (account repeated on fol. 109).

⁸²⁰ *Dictionnaire de Trévoux* (1743), III, 1288: ‘HOMME, s. m. *homo*. Animal raisonnable. C’est ainsi qu’on le définit en philosophie. On disoit autrefois *hom*. Et il se trouve ainsi dans *Guarins le Loheranes*, le plus ancien des romans, & dans celui de Vasse. Marot a dit, Noé le bon *hom*. Le privilège de raison est ce qui distingue l’homme de la bête, &c. Dieu a créé l’homme à son image & semblance; il l’a créé mâle & femelle; il l’a établi roi des animaux. Dieu viendra un jour juger tous les hommes. Tous les hommes sont mortels’.

[MED-2]: HOMME, reasonable animal. This is how he is defined within philosophy. The privilege of reason is what distinguishes him from the beast. God created man to his image and resemblance. He created him male and female. He made him king of the animals.⁸²¹

After these introductory lines, the *Dictionnaire de Trévoux* continues with descriptions of great men and kings, followed by poems and famous citations. MED-2, on the other hand, jumps directly to the entry on Medicine, where man ‘only is considered in terms of his natural body’.⁸²² He continues to copy selected pieces from the *Trévoux*, but omits for instance the Aristotelian remark that the woman is a defective man, that the Mosaic Law forbids women to dress in man’s clothing, and the maxim that men past thirty should not act like careless young boys.

Even with theology and religion excluded, the monks would have had plenty of opportunities to include God when speaking about natural matters, but besides the above mentioned cases, they never do. Instead the natural historical and physiological accounts are characterized by a secularized deistic discourse. The writers alternate between depicting Nature as an anthropomorphic, independent force and the final cause of things (‘Nature has made it this way’), and speaking about an abstract ‘author of nature’ or an intelligence manifesting in its creations.

For instance, AVORTON (Abortion or monstrosity), written by MED-1, is defined as everything born or produced prematurely in relation to ‘the laws established by Nature’.⁸²³ In the *Dictionnaire de Trévoux* the same term is defined as the prematurely born which has not achieved its ordinary perfection.⁸²⁴ Likewise, in Pernety’s CHENILLE (Caterpillar), Nature is portrayed as an anthropomorphic educator of insects:

More than any other insect, the caterpillars make it easy for us to observe the ways in which Nature operates, and it informs us about the skills she teaches the insects to protect themselves from the dangers they are exposed to during the stern season of winter.⁸²⁵

⁸²¹ BnF, MS f. fr. 16983, fols. *251/217–252/158 (these folios have been paginated incorrectly. They constitute number 251 and 252 in order, but are labelled 217 and 158): ‘HOMME, animal raisonnable. C’est ainsi qu’on le définit en philosophie. Le privilège de la raison est ce qui le distingue de la bête. Dieu a créé l’homme à son image et semblance. Il l’a créé mâle et femelle. Il l’a établi le roi des animaux’.

⁸²² BnF, MS f. fr. 16983, fol. *252/158 (see preceding footnote): ‘ne se considère que selon le corps naturel’.

⁸²³ BnF, MS f. fr. 16983, fol. 48, AVORTON: ‘les loix que la nature a établies’.

⁸²⁴ *Dictionnaire de Trévoux* (1743), I, 871, AVORTON.

⁸²⁵ BnF, MS f. fr. 16980, fol. 71, CHENILLE: ‘les chenilles nous donnent plus de commodités qu’aucuns autres insectes d’observer les voyes que la nature a prises pour les

Similar remarks do not occur in the corresponding article of the *Dictionnaire de Trévoux*,⁸²⁶ but they can be found elsewhere. For instance, MED-1's CORDON (Navel cord), where Nature is portrayed as the independent force forming the navel of the infant, is largely copied from the *Trévoux*.⁸²⁷

References to an abstract deity are predominantly seen in the drafts of Pernety. In the article ALVÉOLE (Alveolus), he expresses his admiration for the mathematical precision of the beehive, which results in an ovation to 'the one who has taught the bees to work with such perfection' and to whom the 'most enlightened human reason' pales in comparison.

Geometry seems to be the purpose of the entire work, and to have guided its execution [...]. One is struck by surprise at the sight of this admirable work; that so small animals, so simple insects, could accomplish things that the most sublime geometry would have problems in achieving; things whose beauty, elegance and regularity are the goal of the most enlightened human reason, and the most experienced in the study of the sciences. It amazes us and makes us realize that we are small compared to the one who has taught the bees to work with such perfection.⁸²⁸

In COUSIN (Crane fly), the physiology of the insect is said to reflect a 'power and intelligence without limits', and the infinitely wise Creator 'manifesting' in the smallest of things.

What we know about the crane fly is enough for realizing the striking capacity of a power and intelligence without limits. Its trunk alone is enough for being ravished by admiration, and for praising the infinite wisdom of the Creator who has the benevolence of manifesting in so small things.⁸²⁹

Similarly, in PUCERON (Aphid), Pernety speaks of the 'author of all that exists' and the 'author of Nature'.

opérer, de nous instruire des adresses qu'elle a enseignées aux insectes pour se précautionner contre les dangers auxquels ils sont exposés pendant la rigoureuse saison de l'hiver'.

⁸²⁶ *Dictionnaire de Trévoux* (1743), II, 17, CHENILLE.

⁸²⁷ BnF, MS f. fr. 16983, fol. 132, CORDON; *Dictionnaire de Trévoux* (1743), II, 547, CORDON.

⁸²⁸ BnF, MS f. fr. 16980, fol. 23, ALVÉOLE: 'la géométrie semble avoir donné dessein de tout l'ouvrage, et en avoit conduit l'exécution [...]. On est saisi d'étonnement à la vue de cet admirable ouvrage. Que de si petits animaux, que de vils insectes fassent des choses auxquelles la plus sublime géométrie auroit peine à atteindre, des choses dont la beauté, l'élégance et la régularité sont le terme de la raison humaine la plus éclairée, et la plus exercée par l'étude des sciences, cela nous confond, et nous fait voir que nous sommes bien petits auprès de celui qui a appris aux abeilles à travailler avec tant de perfection'.

⁸²⁹ BnF, MS f. fr. 16980, fol. 96, COUSIN: 'Ce que nous connoissons du cousin suffit pour nous faire trouver des caractères frappans d'une puissance et d'une intelligence sans bornes; il ne faut que voir la construction de sa seule trompe pour être ravi d'admiration et louer la sagesse infinie du créateur qui veut bien se manifester dans de si petites choses'.

Despite the general law, established, it seems, by Nature, that no animal can reproduce its species without the mating of a male and female, there are nevertheless hermaphrodites such as the snails and the earth worms. It seems that the author of Nature wanted to withdraw the aphids from this law.⁸³⁰

The elephant, the wale, and so many other great animals whose immense size surprises us, are no more capable of increasing our admiration for the author of all that exists, than these insects, whose smallness make them lost to our eyes.⁸³¹

Once again, the corresponding articles of the *Dictionnaire de Trévoux* (all very brief) contain no similar remarks.⁸³²

Many of these expressions were likely imported from the sources. For instance, Pernety's articles on insects are predominantly based on Réaumur's *Mémoires pour servir à l'histoire des insectes*, where similar expressions are recurrent. In PUCERON it is evident that the phrase 'the author of all that exists' actually derives from Réaumur.⁸³³ Still, it would have been easy for Pernety to simply replace these diverse phrases with 'God' – but he did not.

Consequently, except for four brief references to God, the Maurists' manuscripts are largely characterized by the language of 'rational' Christianity. God is depicted as the anonymous creator, the first cause or force behind the laws of nature, and sometimes even synonymous with the latter.⁸³⁴ This kind of religious discourse was becoming increasingly common in France and England from the late seventeenth century onwards. After the religious persecutions during the Thirty Years' War (1618–1648), the search for a rational Christianity, uniting rather than dividing, became a pressing matter. If beliefs could be built on personal faith and reason instead of revealed religion, one could prevent the horrors from happening again. As phrased by Outram, the eighteenth century 'grappled with a past full of religious intolerance with the same urgency that the late twentieth century

⁸³⁰ BnF, MS f. fr. 16980, fol. 232, PUCERON: 'Malgré la loi générale établie, il semble, par la Nature, qu'aucun animal ne peut perpétuer son espèce sans l'accouplement du mâle et de la femelle, quand même ces animaux seroient hermaphrodites comme les limaçons et les vers de terre. Il semble que l'auteur de la nature a voulu soustraire les pucerons à cette loi'.

⁸³¹ BnF, MS f. fr. 16980, fol. 230, PUCERON: 'L'éléphant, la baleine et tant d'autres grands animaux, dont la masse immense nous surprend, ne sont pas plus capable d'élever notre admiration à l'auteur de tout ce qui existe, que le sont ces insectes dont la petitesse les fait perdre à nos yeux'.

⁸³² *Dictionnaire de Trévoux* (1743), I, 354, ALVÉOLE; II, 673, COUSIN; V, 598, PUCERON.

⁸³³ Réaumur, *Mémoires pour l'histoire des insectes* (1738), III, 5: 'Tout petits que sont les pucerons, ils ne sont pas moins propres que les plus grands animaux, à élever notre admiration à l'auteur de tout ce qui existe, & c'est-là un des plus grands fruits qu'on doive tirer de l'histoire-naturelle'.

⁸³⁴ Outram, pp. 41, 49.

has grappled with the issues raised by the Holocaust'.⁸³⁵ It was against this background, she argues, that the idea of religious tolerance became one of the core ideas of the Enlightenment.

In the end, the Maurists' manuscripts contain far fewer expressions of orthodox religious thought than both the *Dictionnaire de Trévoux* and the *Encyclopédie*. By focusing solely on the productive and utile arts, crafts, and sciences, the Maurists emphasized aspects of interest to all, irrespectively of their beliefs or political allegiance. Even when God is explicitly mentioned, it is in such a general manner that no confession is placed above another. Obviously, it is impossible to know how the monks reasoned when making these choices, but compared to the explicit Catholic apologetic of the *Dictionnaire de Trévoux*, interpreting them as acts of religious tolerance, or at least as strategies to avoid religious quarrels, lies near at hand.

CHOOSING A THIRD ROAD IN THE BATTLE OF THE DICTIONARIES

By excluding religion, metaphysics, politics and ethics, the Maurists avoided all the sensitive areas critically examined in the *Encyclopédie*. The manuscripts contain no equivalents to Rousseau's ÉCONOMIE, d'Alembert's GENÈVE (Geneva), Diderot's AUTORITÉ POLITIQUE, DROIT NATUREL (Natural Law) or ÂME (Soul). There is no criticism of Catholic dogmas or royal authority hidden in cross-references or articles on medicine, physics or other arts and sciences. In this way, the Maurists' manuscripts appear as the very opposite of the *Encyclopédie*, whose philosophical approach, political edge and religious skepticism made it one of the most controversial works of the eighteenth century. The same characteristics are also the main reasons for why it has been called the 'torch of Enlightenment'. However, due to the very same exclusions, the Maurists' manuscripts also appear as the opposite of the *Dictionnaire de Trévoux*, where religious and moralizing examples are found in every other article. The Benedictine enterprise thus distinguished itself from its predecessor and contemporary rival by being a highly apolitical work. While the *Dictionnaire de Trévoux* conducted a Catholic apologetic with the ambition of refuting heresy, immorality and irreligiosity, and the *Encyclopédie* turned into a *machine de guerre* towards superstition and the dogmas of the Church, the Maurist compilers chose a third road:

⁸³⁵ Outram, p. 36.

separation. The strategies of the *encyclopédistes* and the Maurists may seem far apart, but they can be understood against the same background.

During the *Ancien Régime*, church and state were so intimately intertwined that defiance to one authority inevitably implicated the other. During the fifty years preceding the initiation of the enterprises of the Maurists and the *encyclopédistes*, France had been shaken by a series of politico-religious crises due to widespread Jansenist sympathies. The term ‘Jansenism’ was coined by the Jesuits in the 1640s to denote the followers of the doctrines of the Dutch theologian Cornelius Jansen (1585–1638). Drawing on the ideas of Saint Augustine, Jansen proclaimed that man was powerless to affect his own salvation. Grace was a free gift from God and could not be earned. Coming dangerously close to the Calvinist standpoint, Jansen’s doctrines were condemned as heretical. Many members of the religious orders in France were generally suspicious of the Jesuits due to their emphasis on the authority of the Pope. In contrast, the Gallican tradition opposed Rome’s jurisdiction over the French Church. There was also a growing contempt for the Jesuits’ flexibility regarding moral issues, which was contrasted towards the more austere morality advocated by the Jansenists. For these reasons, many monastic scholars came to take sides with the writers accused for Jansenism by the Jesuits. When the papal bull *Unigenitus* in 1713 condemned the *Réflexions morales* of the alleged Jansenist Pasquier Quesnel (1634–1719) as heretical, the reaction was immense. According to the historian William Doyle, in 1714 alone some two hundred books and pamphlets were published on the subjects, which turned the theological discussions at the University of Sorbonne into a veritable chaos.⁸³⁶ A correspondent of the Pope attested that among the opponents of the bull one found ‘all the fathers of the Oratory, the Benedictines, nearly all the monks of Cîteaux and of St. Bernard, canons regular, the Dominicans, and a great number of other monks and religious of other orders, together with almost all the secular priest’.⁸³⁷ The opposition was struck down by the royal power, and several congregations – including Saint-Maur – were threatened by suppression.⁸³⁸

In the same period, also the French dictionaries of arts and sciences had been accompanied by religious quarrels. When Basnage de Beauval had

⁸³⁶ William Doyle, *Jansenism: Catholic Resistance to Authority from the Reformation to the French Revolution* (London: Macmillan, 2000), pp. 1–4, 13–14, 36, 47, 71.

⁸³⁷ *Ibid.*, p. 47.

⁸³⁸ Hurel, ‘Jansénisme et génération’, pp. 137–157; McManners, *Church and Society*, II, 391–392.

stripped the dictionary of Furetière from all remarks regarding the supremacy of the Catholic Church and the heretic nature of Protestantism, the Parisian Jesuits had announced the ongoing work with a dictionary ‘purged from everything inserted contrary to the Catholic religion’.⁸³⁹ Three years later, the *Dictionnaire de Trévoux* (1704) presented one of its characteristics as a fuller and more accurate treatment of the religious sects, and in particular those ‘dividing the Christian religion and the diverse heresies deriving from them’.⁸⁴⁰

In order to fully understand why the translation of Chambers’s *Cyclopaedia* eventually became the politically charged *Encyclopédie*, the nature of its French predecessor must be considered. According to Leca-Tsiomis, the role of the *Dictionnaire de Trévoux* for the elaboration of the *Encyclopédie* has only begun to be examined in the last decades.⁸⁴¹ When Frank Kafker in 1981 edited an anthology of nine notable predecessors of the *Encyclopédie*, the dictionary of the Jesuits was only mentioned in the passing.⁸⁴² Still, as Leca-Tsiomis remarks, the *Encyclopédie* was constructed with the *Dictionnaire de Trévoux* as counterpart. It was both its offspring and negation.⁸⁴³ Fundamentally, the same can be said about the Maurists’ enterprise. As seen in Part IV, the monks and the *encyclopédistes* would adapt similar strategies to distinguish their dictionaries as reference works from the French predecessor dominating the book market. However, while the *encyclopédistes* chose to be critical regarding religion, ethics and politics, the Maurists excluded these areas altogether. This strategy was also adapted elsewhere in eighteenth-century France.

After the Jansenist crises, many French academies made it a rule not to include members from religious orders in an attempt to avoid further quarrels on religious matters.⁸⁴⁴ According to the literary historian Hans Aarsleff, many academies also actively avoided subjects on revealed religion, metaphysics, ethics, and even law, to assure a more peaceful and productive discussion climate.⁸⁴⁵ The same approach was encouraged in also

⁸³⁹ Leca-Tsiomis: *Écrire l’Encyclopédie*, p. 58: ‘purgé de tout ce qu’on y a introduit de contraire à la Religion catholique’.

⁸⁴⁰ *Dictionnaire de Trévoux* (1704), I, ‘Préface’ (unpaginated): ‘partagent la religion chrétienne & les hérésies diverses qui en sont sorties’.

⁸⁴¹ Leca-Tsiomis, *Écrire l’Encyclopédie*, p. 3.

⁸⁴² Ross, ‘Antoine Furetière’s *Dictionnaire universel*’, p. 64.

⁸⁴³ Leca-Tsiomis, *Écrire l’Encyclopédie*, p. 241.

⁸⁴⁴ Roche, *Le siècle des Lumières en province*, II, pp. 205–206; Hurel, in *Académies*, p. 464.

⁸⁴⁵ Hans Aarsleff, ‘The Berlin Academy under Frederick the Great’, *History of the Human Sciences*, 2:2 (1989), 193–206 (pp. 197–198).

other learned circles. In 1737, the Jacobite writer Andrew Michael Ramsey (1686–1743) held a speech at one of the first masonic lodges in Paris, where he emphasized the necessity of making a universal dictionary of all the liberal arts and utile sciences, from which religion and politics should be omitted. The speech was printed the year after.

All the Grand Masters in Germany, England, Italy and throughout the whole of Europe encourage all the savants and all the artists of the brotherhood to unite in furnishing material for a universal dictionary of all the liberal arts and all the utile sciences, only theology and politics excepted.⁸⁴⁶

According to John Lough, some historians have been eager to interpret the speech of Ramsey as a reference to the *Encyclopédie*, and thereby suggesting that the latter originated as a masonic enterprise. Lough remarks that all such attempts have been fruitless, since none of the publishers, editors or main contributors had any proven connections to freemasonry. Furthermore, the dictionary of Diderot and d’Alembert certainly excluded neither religion nor politics. Lough therefore suggests that the account simply should be taken ‘as evidence of the way in which men’s minds were prepared for a large undertaking of this kind’.⁸⁴⁷ If interpreted literally, however, Ramsey’s speech demonstrates precisely how the idea of a dictionary separating theology and politics from the other sciences and arts was very much in the air, only no such work was ever published in eighteenth-century France. But the Maurists’ manuscripts show that one was initiated. If one was to exclude theology and politics, the closely related subjects of metaphysics, ethics and law necessarily followed.

The literature on Pernety contains numerous speculations regarding the monk’s connections to freemasonry. Still, no documents so far found can confirm that he was involved in masonic activities during his Benedictine years.⁸⁴⁸ However, his older cousin was. According to the historian of freemasonry Pierre Chevallier, the first two masonic lodges in Paris were installed right across the street of the abbey of Saint-Germain-des-Prés in the late 1720s. In *Les ducs sous l’acacia*, Chevallier transcribes a document compiled sometime in the 1730s, which seems to be a list of members of the

⁸⁴⁶ Cited in Lough, *The ‘Encyclopédie’*, p. 6: ‘Tous les grands maîtres en Allemagne, en Angleterre, en Italie et par toute l’Europe exhortent tous les savants et tous les artistes de la confraternité de s’unir pour fournir les matériaux d’un dictionnaire universel de tous les arts libéraux et de toutes les sciences utiles, la théologie et la politique seules exceptées’.

⁸⁴⁷ Lough, *The ‘Encyclopédie’*, p. 6

⁸⁴⁸ Amadou, pp. 922–924; Meillassoux-Le Cerf, *Dom Pernety et les Illuminés d’Avignon*, pp. 156–157.

lodge *Louis d'Argent*. It contains the name of Andrew Ramsey, but also Abbé Jacques Pernety, followed by a residential address in Paris.⁸⁴⁹ This little piece of information cannot tell us if Abbé Pernety was present when Ramsey held his speech in 1737, or if he somehow influenced the choices of his younger cousin a decade later. Either way, by this time the speech of Ramsey was already available for everyone to read. What is important is thus simply that the design chosen for the Maurist dictionary already had been publicly called for. The idea was out there.

Since the Maurists' manuscripts contain no explicatory preface, the writers' thoughts about the work under construction remain unknown. Still, if looking at what they did – irrespectively of what their self-understanding or motives were – they chose strategies adapted by several secular institutions and savants in eighteenth century France.

Philipp Blom recently described the *Encyclopédie* as the most significant event in the entire intellectual history of the Enlightenment due to the *encyclopédistes'* ambition of liberating the sciences and arts from religion.⁸⁵⁰ As stated, also Martine Groult pointed out that one of the most innovative traits of the *Encyclopédie* was that it liberated encyclopedism from a religious point of departure.⁸⁵¹ However, throughout France and Europe, religion was already increasingly being separated from other areas of knowledge. When it comes to the encyclopedic and lexicographic genre, the Maurists' manuscripts show that Benedictine monks – simultaneously with Diderot and d'Alembert – were doing the same, only without violent confrontation.

THE PROJECT'S INTERRUPTION AND THE *ENCYCLOPÉDIE*

At the end of Part III it was concluded that the Maurist enterprise seems to have been interrupted sometime between 1753 and 1755. The abandonment thus coincided with one of the most heated periods of the publication history of the *Encyclopédie*. When now knowing more about the characteristics of the Maurists' manuscripts, could this controversy have been of significance for the fate of the Benedictine project?

⁸⁴⁹ Pierre Chevallier, *Les ducs sous l'acacia, ou les premiers pas de la franç-maçonnerie française, 1725–1743* (Geneva: Slatkine, 1994), pp. 52, 56, 143.

⁸⁵⁰ Blom, pp. xiii, 11, 37, 156.

⁸⁵¹ Groult, 'L'encyclopédisme dans les mots et les choses', p. 169.

Even if Pernety and Brézillac by 1746 were made aware of the project of the *encyclopédistes* through Jombert, they could not have known what this enterprise eventually would become. One can only assume that the monks in 1747 believed that the practical focus of their own work would be a unique and useful contribution to the French genre of dictionaries of arts and sciences. None of the previous works had included illustrations and the interest in the practical arts and crafts had been poor. Due to the exclusion of the sensitive areas of religion, ethics and politics, it also had the potential of avoiding the quarrels accompanying the previous works. By 1753 or 1754, the Maurists surely had a better idea of the character of the *Encyclopédie*.

As readers of the contemporary periodicals, the criticism directed towards the *Encyclopédie* could not have evaded the Maurists' attention. Shortly after the appearance of the first volume in 1751, the Jesuit periodical *Journal de Trévoux* launched its first attacks under the direction of Father Berthier. At the end of the year, the theological thesis of Abbé Jean-Martin de Prades (c. 1720–1782) was condemned at the University of Sorbonne. Because of his involvement with the *encyclopédistes* (he had contributed one article to the *Encyclopédie* and frequented the same social circles as Diderot and d'Alembert) – the tone towards the *Encyclopédie* hardened. The historian Jeffrey D. Burson has argued that the controversy around de Prade's thesis resulted in a sharper ideological division of the intellectual climate in Paris. As a result, the attempt of the clergy 'to obliterate the most dangerous tendencies of a radicalizing Enlightenment, mortally wounded its own more moderate but no less valuable variants'.⁸⁵² The historian Dale Van Kley even suggests that it became 'the catalyst that transformed a once-fluid French Enlightenment into an embattled and self-consciously anti-Catholic 'party' of *philosophes*'.⁸⁵³

In Mars 1752, the two first volumes of the *Encyclopédie* were suppressed with an *arrêt du conseil*, with the argument that it contained 'several maxims seeking to destroy the royal authority, to establish a spirit of independence and revolt, and to under obscure and ambiguous entries build a foundation for delusion, corruption of morality, irreligion, and disbelief'.⁸⁵⁴ The editors

⁸⁵² Jeffrey D. Burson, *The Rise and Fall of the Theological Enlightenment* (Notre Dame, IN: University of Notre Dame Press, 2010), p. 1.

⁸⁵³ Dale Van Kley, 'Foreword', in Burson, *The Rise and Fall*, pp. ix–xviii (p. xvi).

⁸⁵⁴ *Arrêt du conseil d'État du Roy, qui ordonne que les deux premiers volumes de l'ouvrage intitulé Encyclopédie ou Dictionnaire raisonné des sciences, arts & métiers, par une Société de gens de lettres, seront & demeureront supprimés. Du 7 février 1752* (Paris: Imprimerie royale, 1752): 'plusieurs maximes tendantes à détruire l'autorité royale, à établir

of the *Encyclopédie* were only allowed to continue the work after having agreed to submit to sharpened supervision of the censors. After the publication of the fourth volume in 1754, new attacks derived from the *Année littéraire*, directed by Élie Fréron (1719–1776) – a severe critic of the *philosophes*. At the same time, the anonymous pamphlet *Réflexions d'un Franciscain sur les trois premiers volumes de l'Encyclopédie* (1754) again criticized Diderot and d'Alembert for wanting to demolish the foundations of religion, and called for 'vengeance'.⁸⁵⁵ This exhortation was later followed up in *La Religion vengée* (1757) where another anonymous writer remarked that the goal of the *encyclopédistes* 'was less to shed new lights on the sciences and arts than to undermine the foundation of all religions, especially Christianity'. He then added that the editors 'should have contented themselves with giving us a rational dictionary of sciences and arts, without speaking about religion'.⁸⁵⁶

Against this background one might think that the Maurist dictionary could have been an appreciated alternative. However, in the heated climate in the backwash of the *Encyclopédie*, even the omission of religion and ethics could have been regarded as offensive. Already in 1754, another anonymous pamphlet titled *Avis au public sur le troisième volume de l'Encyclopédie* (1754) criticized the *encyclopédistes* for the excessive attention devoted to aspects of technology. This was later followed up by the Jansenist Abraham-Joseph de Chaumeix in his *Préjugés légitimes contre l'Encyclopédie* (8 vols, 1758–1759), in which he condemned the dictionary for its predilection for the mundane aspects of society. He argued that the proper respect for Jesus Christ, the Holy Scriptures and the true religion was lost in details on trivial subjects. Descriptions of the mechanical arts and crafts could not teach the public about man's nature and path to happiness. Thus, the focus on manual work was in itself regarded as deceptive: it drew the attention from what really mattered.⁸⁵⁷ Even though the latter work appeared after the interruption of the Maurist project, the tone had already been set in the preceding years. While the posterity has praised the *Encyclopédie* for its occupation with the mechanical arts and crafts, the

d'indépendance & de révolte, &, sous des termes obscurs & équivoques, à élever les fondemens de l'erreur, de la corruption des mœurs, de l'irréligion & de l'incrédulité'.

⁸⁵⁵ Lough, *The 'Encyclopédie'*, pp. 115–116.

⁸⁵⁶ *Ibid.*, p. 211: 'leur but a moins été de répandre de nouvelles lumières sur les sciences et sur les arts que de saper les fondemens de toute religion, surtout la religion chrétienne'; p. 210: 'se seraient contentés de nous donner un dictionnaire raisonné des sciences et des arts sans parler de religion'.

⁸⁵⁷ Proust, *Diderot et l'Encyclopédie*, pp. 227–228; Lough, *The 'Encyclopédie'*, pp. 86, 115.

contemporaries were rather unimpressed. According to Proust, the *Journal des savants* was actually the only periodical initially recognizing the importance of the technological descriptions of the enterprise.⁸⁵⁸

With these circumstances in mind, it is possible that Pernety, his colleagues, or even the Superiors of the Congregation, no longer found it desirable to proceed with a dictionary focusing entirely on the mundane – although useful – parts of society, while excluding the areas now in need of defense and ‘vengeance’. Around the time of the project’s interruption, the Congregation of Saint-Maur also acquired a new Superior General. During the longest period of the work with the dictionary, this position had been held by Dom René Laneau (S.G. between 1739 and 1754). Dom Fortet described Laneau as a ‘protector of literature and monks devoted two studies’. He also asserted that under the direction of Laneau, ‘a noble spirit of achievement and perfection’ – comparable to the times of Mabillon – had permeated the scholarly activities of the Maurists.⁸⁵⁹ In 1754, Laneau was replaced by the aged Dom Jacques-Nicolas Maumousseau, who remained in office until his death in December 1755.⁸⁶⁰ Very little is known about Maumousseau, except for the fact that he was not a scholar (no manuscripts or publications are preserved in his name). It is therefore not impossible that this shift in the top of hierarchy, in combination with the controversy surrounding the *Encyclopédie*, became the nail in the coffin of the Maurists’ enterprise. The radical tone of the *Encyclopédie* had provoked a radical response. The time for a third road had passed.

‘TO CHANGE THE WAY PEOPLE THINK’

After the French Revolution, the German philosopher Friedrich Hegel (1770–1831) argued that the eighteenth century had been on the path towards greater spiritual and religious freedom, but that the Enlightenment had ‘betrayed itself’ by almost destroying religion altogether.⁸⁶¹ Even if the Maurist dictionary had been finished and published, it is highly unlikely that it would have had some decisive impact on the development of the intellectual climate in the latter half of the eighteenth century. Considering

⁸⁵⁸ Proust, *Diderot et l’‘Encyclopédie’*, pp. 225–227, 230.

⁸⁵⁹ Martène, IX, 345: ‘protecteur des Belles-Lettres et des religieux qui s’adonnent à l’étude’, ‘une noble émulation pour la littérature’.

⁸⁶⁰ Charvin, ‘Contribution à l’étude du personnel’, p. 222; Berlière, II, 80.

⁸⁶¹ Outram, pp. 32–33.

the speech of Ramsey and the criticism directed towards the *Encyclopédie*, some might have greeted its focus on the productive and utile, combined with the omission of delicate areas. Others might have found the same characteristics offensive – especially when coming from a monastic congregation – and interpreted the work as yet another sign of the venom spread by the *philosophes*. However, like most dictionaries in this period it would probably have passed rather unnoticed, eclipsed by the controversial but successful *Encyclopédie*.

In the past fifty years, the idea that Enlightenment thought and religion were irreconcilable has been revised many times over. Numerous researchers have shown that the French Catholic Church did not constitute a homogenous body, lacking of internal diversity or resistance to authority. Nevertheless, as stated in the Introduction, the image of the Enlightenment as a struggle between religious and secular forces has remained most easily recognizable in the controversy surrounding the *Encyclopédie*, with the reciprocal attacks between Jesuits and *philosophes*, and the binary opposition assumed by their respective dictionaries. The Maurists' manuscripts show that a third alternative was contemplated, although never fulfilled. While the Jesuits and the *philosophes* were waging a war, the Benedictines simply cut everything sensitive out, and focused on the useful and productive.

Furthermore, the Maurists' manuscripts show that some of the aspects often considered unique to the *Encyclopédie* in fact were not. Certainly, the drawings of Pernety do not come close to the elegance and magnitude of the eleven volumes of plates, and the unfinished article drafts often pale in comparison to the well-phrased essays of Diderot, d'Alembert and other prominent *encyclopédistes*. However, the manuscripts show that the monks and the *philosophes* were thinking along the same lines. In many ways, they were moving in the same direction, although on different paths.

Even though the Maurist dictionary never was finished and published, this material illuminates the evolution of the encyclopedic dictionary in mid-eighteenth-century France, as well as the intellectual transformation of a monastic community in the age of Enlightenment. In contrast to Diderot and d'Alembert, Pernety and his colleagues did not aspire 'to change the way people think'. However, these dictionary manuscripts may require us to change the way we think about Dom Pernety and the famous Congregation of Saint-Maur, as well as the *Encyclopédie* of Diderot and d'Alembert.

15. SUMMARY AND CONCLUSIONS

The Maurists' dictionary manuscripts constitute the incomplete remains of a project once abandoned in progress. Through careful analysis and combination of details and clues, the preserved article drafts and working lists allow forming an idea of not only the dictionary in the making, but also the dictionary envisioned. The aim of this dissertation has been to explore the history of the Maurist enterprise, to examine its content from a comparative perspective, and to situate the project within the contemporary encyclopedic and lexicographic tradition, the intellectual activities of the Congregation of Saint-Maur, and the Enlightenment culture.

Studying the Maurist Enterprise

The first step towards understanding the work of the Maurists was taken in Part II, with a reconstruction of the history of the physical documents in the nineteenth century. As the hands of the conservators were distinguished from those of the writers, the work hidden beneath the current arrangement was exposed. By examining the interaction and characteristics of the handwritings, I thereafter concluded that the manuscripts were the result of a collective effort, even though the material has been attributed to Pernety alone. However, for the time being, the identities of the additional writers remain unknown.

The historical documents of the BnF suggest that the dictionary material arrived to the library in two folders, but that a third part was missing. Based on the Maurists' many working lists and the inventory of the *Dictionnaire de Trévoux*, nothing suggests that this missing part should have been concerned with other areas of knowledge than those treated in the rest of the manuscripts. Indications of missing folios are first and foremost found in thematic drafts regarding natural history and medicine, and it has been shown that articles and illustrations regarding painting, sculpture, and printing were extracted to compose Pernety's *Dictionnaire portatif de peinture*. In other words, even though the Maurists' dictionary material is incomplete and unfinished, the preserved manuscripts – and especially the working lists – still make it possible to speak of the enterprise as a whole.

The Maurist Dictionary in the Lexicographic Context

Numerous lexicographic works were published in the eighteenth century, but the dictionaries of arts and sciences – aspiring to cover a larger number of specialized fields of knowledge – remained few in number. The French works preceding the *Encyclopédie* all originally appeared during a period of fourteen years (1690–1704) and then underwent revised, augmented editions in the succeeding decades. By the mid-1740s, a new competitor had not entered the field in France for forty years. With the Maurist project and the *Encyclopédie*, two new dictionaries of arts and sciences would be initiated at the same in time, but only one reached the printing press.

Parts III and IV have shown that the Maurist enterprise underwent two phases. Everything started when Pernety and Brézillac sometime around or after 1743 began collaborating with the bookseller Jombert, with the intention of making an augmented translation of the mathematical lexicon of Christian Wolff. Due to the many additions, the work transformed into an independent enterprise: a universal dictionary of mathematics, physics, and the related arts, crafts, and sciences. In 1745 Le Breton and his associates started preparing for translating Chambers's *Cyclopaedia*. A year later Jombert was made aware of their plans. In the letter to the Chancellor d'Aguesseau he described the two enterprises as 'about the same style' and claimed that there was a reciprocal rivalry. The year after, the Maurists abandoned the draft, but continued working on an enlarged universal dictionary of arts, crafts, and the related sciences.

The enterprises of the Benedictines and the *encyclopédistes* would have several common denominators, but also great differences. Their mutual predecessor, the *Dictionnaire de Trévoux*, was essentially an inheritor of the late-seventeenth-century *Dictionnaire universel* of Furetière. The former reappeared in revised and increasingly augmented editions in the course of the eighteenth century, but many of its original articles were still unaltered in 1743 and 1752. Aspiring to embrace everything with any relationship to language, it never contained a chart of knowledge or illustrations, and despite the efforts to expand the information about the things themselves, the articles continued to have a linguistic focus.

The dictionaries of the Maurists and the *encyclopédistes* each started as augmented translations of foreign illustrated works that emphasized the physico-mathematical sciences. Chambers's *Cyclopaedia* was the first to use a variation of the term encyclopedia in the title, but also to include a chart of knowledge and an elaborate system of cross-references. Wolff's lexicon was

confined to pure and mixed mathematics and related arts and manufactures. It did not have a chart of knowledge, but the connection between subjects was emphasized through their relationship to mathematics.

Even though the Maurists in the second phase no longer used the lexicon of Wolff, they remained influenced by the design elaborated in collaboration with Jombert. All the areas treated in the first draft were still included in the later manuscripts, but the scope of content further expanded. Besides pure and applied mathematics, physics, practical arts, crafts, and industries, the compilers also included related theoretical bodies of knowledge, such as natural history and medicine. As common in dictionaries of arts and sciences, they excluded history, biography, and geography (the domains of the historical dictionaries). They also omitted common words and general meanings, which reinforced the specialized nature of the work. Finally, and most importantly, they excluded religion, metaphysics, ethics, politics, and law – an unprecedented move within the genre. As a consequence, the Maurists created a cluster of knowledge approaching the division between natural sciences and humanities, first institutionalized towards the end of the nineteenth century.

The Maurist Project and the 'Encyclopédie'

Due to the web of borrowed texts and images, the Maurists envisioned a dictionary with traits similar to the *Encyclopédie* of Diderot and d'Alembert before the latter had been realized. Each team was (directly or indirectly) indebted to the parallel work of the Academy and Réaumur, but they also shared many other central building blocks. As compilers of new dictionaries – and not only editors of revised editions – they frequently relied on more recent publications. Due to their interest in the practical arts and crafts, they also turned to similar older sources. The Maurists would even use the works of scholars themselves contributing to the *Encyclopédie*, such as La Condamine, Malouin and Le Blond.

Compared to the *Dictionnaire de Trévoux*, the Maurists and the *encyclopédistes* placed greater emphasis on the relationship between subjects, the description and explanation of the things themselves, and the necessity of illustrating them with plates. In this respect, the Maurists' unrealized enterprise provides new insights into the development of the encyclopedic dictionary in France. Above all, the manuscripts show that many of the measures taken by the *encyclopédistes* were very much 'in the air'. The similar origins of the two projects further highlight the importance

of translations in the renewal of the French lexicographic genre, as well as the central role played by mathematics and illustrations.

The Dictionary, the Maurist Community, and Dom Pernety

The Maurist dictionary also provides new perspectives on the intellectual activities in abbey of Saint-Germain-des-Prés in the mid-eighteenth century – a period far less documented than the preceding century.

The Maurist scholars were industrious compilers who under almost two centuries collected and organized an immense quantity of historical material. The results were encyclopedic-like inventories of the history of literature, the Church, the Order, and the provinces of France. In the course of the eighteenth century, the intellectual activities of the Congregation were permeated by an increasing occupation with profane learning, as the professional writers adapted to the demands of the public and aspired to be useful to the nation. Against this background, it is not that surprising that some monks also decided to undertake an inventory of the useful arts, crafts, and related sciences, increasingly esteemed in the age of Enlightenment.

While monastic historians long have ignored Pernety, the historians of esotericism have predominantly taken an interest in his mystical writings and post-congregational years. The portrayal of the Benedictine period have remained one-sided, ill-funded and interpreted in the light of his later doings. These studies have not been able to explain why Pernety – if so insignificant and maladjusted in his monastic profession – was rewarded with honorary distinctions, handpicked to rewrite the constitution, and cordially recommended even after having left his Congregation. In this dissertation, I have presented an alternative interpretation of his status in the Maurist community. Pernety may not have been the ‘typical’ Maurist writer, but he is one of the most illustrative examples of the new generation of monastic scholars, open to worldly learning and reform. In Pernety we do not only see one of the strongest desires to be useful to the public, but also the high esteem for the natural sciences and useful arts so intrinsic to the Enlightenment culture. His reintroduction to the Maurists’ intellectual history gives new insights into the complexity of attitudes permeating the Congregation – and in particular the abbey of Saint-Germain-des-Prés – in the mid-eighteenth century.

The dictionary manuscripts also reveal the origins of the later interests of Pernety: his dictionaries on painting and hermetic philosophy, and the alleged translation of the agrarian Columella. When knowing that Pernety

for years scrutinized the travel literature of de Bruyn, Careri, Anson, La Condamine and Bouguer, it is easier to understand his choice to accompany Bougainville to the Falkland Islands. The extensive treatment of animals and plants also explains why he by the early 1760s was known as a connoisseur of natural history and botany. Finally, the dictionary material show that Pernety first encountered Swedenborg through the swede's works on technology and mining, while he decades later was to explore his mystical writings. In this respect, the life paths of Pernety and Swedenborg resembled one another. They each started their careers with the natural sciences, and ended up as mystics.

The Maurist Enterprise and Enlightenment Thought

In contrast to the *Encyclopédie*, the Maurists' manuscripts do not constitute a raging, flaming torch of Enlightenment. There are no scandalous treatments of politics, ethics, and religion, or clever cross-references to entertain and amaze a modern reader. These unfinished drafts do not form a programmatic manifest for Enlightenment thought, but rather a demonstration of their already all-around presence: the conviction of the relevance in diffusing knowledge about the useful and productive arts, crafts, and sciences to a wider audience; the belief that curiosity is a powerful and positive force for learning; the conception that the present has surpassed the past, and that knowledge about nature should be based on experiments and careful observation rather than blind faith in authorities. The Maurists' manuscripts place human practices and nature in focus, separated from religious dogmas, moral judgments and political implications. In this way, they reflect a contemporary trend equally as strong as the tendency of criticism: the strategy of separation. When considering the ideological opposition of the *Encyclopédie* and the *Dictionnaire de Trévoux*, it is therefore useful to recall that Benedictine monks – at the same time, in the same town – had been working on a middle road. Even though their unrealized work never made a difference at the time, it can make a difference retrospectively for how the 'battle of the dictionaries' – this whole struggle of ideas in the age of Enlightenment – is perceived.

APPENDICES

APPENDIX 1: NOMENCLATURE

WOLFF'S VOLLSTÄNDIGES MATHEMATISCHES LEXICON (1734): A–ALLE(R)

Ab / Abacus, *abaque*, *abaco* / Abajour / Abatis / Abaton / Abavent / Abdachung, *acclivitas* / Abend, *occident* / Abend-Demmerung, *crepusculum vespertinum* / Abend-Selffte des Epicycli, *medietas epicycli occidentalis* / Abend-Stern, *hesperus* / Abend-Uhr, *horologium* / Abend-Wind, *Zephyrus*, *Favonius* / Ablange Vierung, *oblongum* / Ablauß, *apophygis superior*, *le Conge d'en haut*, *il Cavo di Sopra* / Ablauß des Wassers / **Ablauffende Leisten** / Abmessen / **Abnehmen** / **Abpfählen** / Abriß, *copey*, *copie* / Absatz, *spira* / Abschnitt, *segmentum* / **Abschnitte**, *antepagmenta* (2 entries) / Abschnitts-Winkel, *angulus segmenti* / Abschreiten / **Abscisse**, *abscissa* / Absehen / Abseiten / Abstand, *abwage* / Abstech-Eisen, *ecoupe* / Abstechen / Abstecke-Schnur / Abtheilung / **Abtragen** / Abtritt, heimlich Gemach, *latrina*, *cloaque*, *egout* / Abwägen / Abwage / Abweichende Uhr, *horologium declinatum* / Abweichung, *declinatio* / Abweichung der Magnet-Nadel, *declinatio acus magneticae* / Abweichungs-Circul, *circulis declinationis* / Abweichungs-Instrument, *instrumentum declinatorum* / **Abziehen** / *Acamptae figurae* / *Acanthus* / Acceleratio / Accessible / Acker / *Aclastae figurae* / Acre / Acronychii / Acroteria / Aktinobolism / Acubene, Azubene / Acus hygrometra / Acustica / Adalor / Adar / Addiren, *additio* / Adege / Aderaimin / **Adhil** / Adler, *aquila* / Aehnliche Bogen, *arcus similes* / Aehnliche Körper, *solida similia* / Aehnliche Körper-Zahlen, *numeri solidi* / Aehnliche Diametri, *diametri similes* / Aehnliche Figuren, *figurae similes* / Aehnliche Flächen-Zahlen, *numeri plani* / Aehnliche Regel, *coni similes* / Aehnliche Verhältnisse / Aehnlichkeit, *similitudo* / Aehe der Jungfrau, *spica virginis* / **Aeolipila** / Aequans Lunae, *circulus nodorum* / Aequatio argumenti / Aequatio centri in epicyclo / Aequatio centri in eccentrico / Aequatio centri lunae / Aequationes duplicate / Aequatio summatrix / Aequation der Uhr / Aequator / Aequilaterum / Aequilibrationis curva / Aequilibrium / Aequinoctial-Circul / Aequinoctial-Punct / Aequinoctial-Uhr / Aera, *Jahr-Termin* / **Aërometrie**, *aerometria* / Aestrich, *pavimentum*, *pavement* / Aeussere Winkel, *angulus externus* / Affut / Affter-Regel, *conoides* / Affter-Kugel, *spaeroides* / **Agathitychi** / **Agathodaemon** / Agger / Aggregat / Aiygar / Alacha / Alalicht / Alamak / Albarium Opus / Alcor / Alcove / Aldebaran / Alderaimin / Aldhafera / Alezet / Al fresco / Algebra / Algebraische Gleichung, *aequatio algebraica* / Algebraische Grösse, *quantitas algebraica* / Algebraische Linie, *curva algebraica* / Algebraische Zahl, *numerus algebraicus* / Algebraische Zeichen, *signa algebraica* / **Algeneb** / **Algethi** / **Algol** / Algorithmus / **Algorithmus infinitesimalis** / Alhabor / **Alhajath** / Alidada / **Alleen** / (129)

The fifty-six terms in grey can be found translated (in whole or in parts) in the Maurist draft.

WOLFF'S MATHEMATISCHES LEXICON (1716): A–ALLE(R)

Abacus, *die Platte* / Abacus pythagoricus, *das Einmahl Eins* / Abajour / Abatis / Abaton / Abavent / Abscissa, *die Abscisse* / *Acamptae figurae* / *Acanthus* / Acceleratio / Accesibilis altitudo / *Aclastae figurae* / Acronychii / Acroteria / Acubene / Actinobolism / Acus hygrometra / Acus magnetica, *die Magnet-Nadel* / Adalor / Adigege / Additio, *das Addiren* / Aderaimin / Adhil / Adjacens angulus / Aedilis, *ein baumeister* / Aeolipila / Aequalia / Aequans lunae / Aequatio (18 entries) / Aequator / Aequilibrationis curva / Aequilibrium / Aequinoctialis circulus / Aequinoctium (2 entires) / Aërometria / Aera / Aestas, der Sommer / Aetas lunae / Africus / Aggregatum / Agathodaemon / Agatichi / Alalich / Alamak / Alacha / Albarium opus / Alcor / Alcove / Aldebaran / Alderaimin / Aldhafera / Algebra (3 entries) / Algeneb / Algethi / Algol / Algorithmus / Algorithmus infinite / Alhabor / Alhajath / Aléen / Alidada / (61).

THE MAURIST DRAFT BASED ON WOLFF (c. 1747): A-ALLER
(BnF, MS f. fr. 16982)

A / À cinq voix / À droite / À huit composition / À jour / À l'autre / A, B, C / AAA / **Ab** / Abaco / Abaisser / **Abajour**, *spiraculum* / Abalantica / **Abaque**, abacus / Abatée / Abatis / Abat-jour / **Abaton** / Abatre, abattre / **Abavent** / Abbaye / Abbréviation / Abée / Abeille, apis / Abeille à eau / Aben meh / Aben ras / Abême, *abyssus* / **Ablauffende Leisten** / Ablution / **Abnechmen** / Abondant / Abord / Abordable / Abordage / Aborder / Aborner / Aboucher / Abouement / Abougri (ou rabougri) / About / Aboutir / **Abpfahlen** / Abrachaleus / **Abragen** [abtragen] / Abreuver / Abreuvoir / Abri / Abric / Abriver / **Abschnitte**, *antepagmenta* / **Abscisse**, *abscissa* / Abside / Absolu / Absolument / Absorber / Abstract / Abstraire / Abstrait / **Abziehen** / Académicien / Académicienne / Académie / **Acamptes**, *figura acampta* / **Acante**, ou achante, *achantus* / **Acarnar** / **Accastillage** / **Accastillé** / **Accélération**, *acceleratio* / **Accélétratrice** / **Accéléré** / **Accélérer** / **Accessible** / Accident / Accidentel, *adventitius* / Accidentellement / **Acclamper** / **Acclastes**, *figura acclastae* / Accompagnateur / Accompagnement / Accompagner / Accompli / Accord / Accorde / Accordent / Accorder / Accordeur / Accordoier / Accords / Accores / Accoster / Accotar / Accouplé, *copulatus*, *conjugatus* / Accoursie / **Accoustique**, *ars acustica* / Accrocher / Accroissement, *incrémentum*, *accretio* / Accroître, *augere*, *amplificare* / Accul / Acculées / Acculement / Acculer / Acculez / **Acutez** / Acetum / Alkalisé / Acetum philosophorum / Acetum radicalum / Achamech / Achélous / Acherner / Achronique / Achroniquement / Acide / Acier / Acier de philosophes / Acointance / Acointer / Acon ou accon / Acontias / Acoudoir / Acquereaux / Acquise ou ajoutée / Acquisition / **Acre** [and Acker] / **Acronyches**, *acronychii* / **Acroteras** / Acte de cadence / Acte de delay / Acte / Actif / **Actinobolism** / Action / Actisal / Activité / Actuel / **Acubene** ou **Azubene** / Acuité / Acutangle / **Adalor** / Adaption / Adapter / **Adar** / Adar-meh / Adarige / **Addition** / Additionner / Adduire / **Adegige** / Adent / Adeptes / **Aderaimin** / Adhérence / Adhérent / **Adhil** / Adiaphore / Adieu-va / Adjacent / Adjection / Administrer / Adof / Adolescence du monde / Adonis / Adonner / Adoringen / Adosser / Adouber / Adoucir / Adoucissement / Adulphur / Adultère / **Aeolipile** / Aequation absolue / Aërer / Aërien / Aérienne / Aériens, signes aëriens / Aes ustum / Aerobo / Affaissée / Afaïsser / Affalé / Affaler / Affamer / Affectée / Affection / Affermer / Affermir / Affiner / Affirer-meh / Affirmative / Affirme / Afflamber / Affleurier / Afflût à roïager [flera] / Affolé / Affourcher / Affranchir / Affrétement / Affréter / Affréteur / Affronter / Affût (13 entries) / Affutage / Affuter / **Aflafen** / Affliction / Afraiche / Afrique / Agante / Agathe / **Agathiychi** / **Agathodaemon** / Agazoph / Age / Agée / Agent / **Agger** / **Aggregat** / Agipan / Agitation / Agluntination / Agraffe / Agréer / Agrégation / Agrégé / Agreils / Agrément / Agréur / Agrouper / Aguerri / Aichard / Aide / Aide plongeur / Aide, opis / Aide-de-camp / Aide-du-Parc des vivres / Aide-major / **Aigle** / Aigle des philosophes / Aigle dévorant le Lion / Aigle étendue / Aigle rouge fixe ou aigle volante / Aigre / Aigremore / Aigrettes / Aigreur, asperitas / Aigrir / Aigu / Aiguade / Aigue / Aiguille / Aiguille à copier / Aiguille à gargousses / Aiguille aimantée, *acus magnetica* / Aiguille de tré / **Aiguille hygrométrique** / Aiguilles de Bordeaux / Aiguilles, *gnomon index* / Aiguillettes / Aile / Aileron / Ailerons / Ailerons de portial / Ailes / Ailes de cheminée / Ailes de pavé / Ailette / Aiman philosophique / Aimant / Aimantée / Aimanter / Air / Airain / Airain des philosophes / Aire / Aire de plancher / Aire de plancher / Aire de moilon / Aire de chaux / Aire de ciment / Aire de recouper / **Airomètre** / Airométrie / Ais de bateau / Ais d'entrevous / Ais, axis / Aisance / Aisement / Aissade / Aisselier / Aisserlières / Aissi / Aissieu / Aissieu / Aissieu d'affût de bord / Aissieu dans la roue / **Aiyar**, **Aiygar** / Aiz / Ajoutée / Ajouter / Ajudant / Ajuste / Ajustée / Ajuster / Ajutages / Alaazel ou azimech / Alacaf, ou alazaph / Alacanthabut / **Alacha** / Alagobal / Alahore / Alaise / **Alaliche** ou **Alalicht** / Alamac ou Alamak / Alambic / Alanga / Alaque / Alarguer / Alarme / Alarmer / Alascha / Alatrab / Alayoth / Alazel / Albahurim / Albar / **Albarium opus** / Albâtre / Albification / Albirero / Alboaram / Alacatarus ou alsedi / Alcarnar / Alchenib / Alchetib / Alchymistes / Alcocoden / **Alcor** / **Alcove** / Alcyonien / **Aldebaran** / **Alderaimin** /

Aldhafera / Aleger / Aleger la Tournevire / Aleger le cable / Aleger les carguesfonds ou les cargue boulines / Aleges / Aleges à voile / Alehon / Alentir / Alerte / Alettes / Alezet / Alezer / Alezoir / Alezures / Alfecca ou alphetal / Alfelta / Alfidaire / Alfieri, Porte-enseigne / Alganon / Algarot / Algèbre / Algébrique / Algébriste / Algebutar / Algedi deneb / Algeneb / Algethi / Algeuse, Rigel / Algol / Algomeysa / Algorab / Algorithme, *algorithmus* / Algorithme des infinis, *algorithmus infinitesimalis* / Alhabor / Alhaioth / Alhaiseth / Alhajath / Alhidade, ou Alidada / Alhirto / Alichon / Alignement / Aligner / Aliment / Aliot / Aliquante / Aliqoute / Alisé, ou alizé / Alkaest / Alkali / Alkaliser / Alkindus / Alkool / Alkooliser / Allé / Allemande / Aller / (402)

The fifty-six terms in grey are drawn/translated (in whole or in parts) from the same alphabetical section in Wolff's *Vollständiges Mathematisches Lexicon*.

The terms have been arranged in alphabetic order. They do not correspond to their exact order of appearance in the Maurists' draft.

SAVERIEN'S *DICTIONNAIRE UNIVERSEL DE MATHÉMATIQUE ET DE PHYSIQUE* (1753): A–ALLE(R)

Ab / Abaque [2 entries] / Abscisse / Abeille / Aberration / Académie / Acampes / Acanthe / Accélééré / Accord / Achronique / Aclastes / Acoustique / Acronyches / Acutangle / Adalor / Adar / Addition / Adege / Aderaimin / Adhil / Aerométrie / Age / Aigle / Aigrettes / Aiguille aimantée / Aiguille hygrométrique / Aiman / Air / Aire / Ajutage / Alacha / Alalicht / Alamak / Albugine'e / Alcor / Aldebaran / Alezet / Algèbre / Algeneb / Algethi / Algol / Algorisme / Algorithme / Alhabor / Alhajath / Alidade (Alhidade) / Aliquante / Aliquotes (49)

* The thirty-one terms in grey are drawn/translated from the same alphabetical section in Wolff's *Vollständiges Mathematisches Lexicon*.

THE LATER MANUSCRIPTS: A–ABY

Pernety: Abaca / Abanchi / Abandonner / Abassis / Abatre / Abbatis / Abbecher / Abeille / Abeilleformes / Able / Abois / Aborder la remise / Abreuvoir /
NH-2: Abalzemar / Abbaisseur / Abdomen / Abducteur / Abduction / Abeille / Abelica / Abelmosch / Abies / Abiga / Able,-ette / Abricot / Abricotier / Abrotanoïdes / Abrotanum / Abscès / Absinthe /
NH-3: Abacatuaja / Abada /
MED-1: Abaisement / Abbaisseur / Abandonné / Abaptiston / Abarnabas / Abceder / Abdomen / Abducteur / Abduction / Ablation / Ablution / Abortif / Abracadabra / Abracalan / Abraison / Abreviation / Abscès / Absorbans / Abstème / Abstertif / Abstinence / Abstorger / Abstrait / Abus / Abutige / Abyssus /
AGR-1: Abreuver (59)

Doublets are marked in grey.

THE SECOND INVENTORY OF THE *DICTIONNAIRE DE TRÉVOUX*: AB–ABY
(BnF, MS f. fr. 16984, fol. 123^{r-v})

*ABA CATUAIA⁸⁶² (poisson), ABACO (table d'arithmétique), ABACOT (ancien ornement de Roy), ABADA (a[nim]al farouche), ABAJOUR (t. d'archit.), ABAISSE (t. de pâtissier), ABAISSÉ (t. de blason), ABAISSER (t. de musique, de fauconnerie, de jardinage), ABAISSEUR (t. d'anatomie), ABANDONNEMENT (t. de négoce), ABANDONNER (t. de fauconnerie), ABANDONNÉ (t. de médecine), ABAQUE (t. d'architect.), ABAREMO (arbre de Brésil), ABASSI (monnoye de Perse), ABATAGE (t. de marchand de bois), ABATTANT (t. de marchande de drap), ABATTÉE (t. de marine), ABATTEMENT (t. de blason), ABATTEUR (t. de bucheron), ABATTIS (t. de vénerie et d'ouvrier), ABBATRE (t. de marine et de fauconnerie, de différents arts), ABBATURE (t. de vénerie), ABAVENT (t. de charpente), **ABBOIS** (t. de chasse), **ABBREUVOIR** (t. de maçonnerie), ABSCES (t. d'anatomie), ABCÉDER (t. de chirurgie), ABDOMEN (t. d'anatomie), ABDUCTEUR (t. d'anatomie), ABDUCTION (t. d'anatomie), ABÉCHER (t. de fauconnerie), ABÉE (t. de meunier), ABEILLE (insecte, t. d'astronomie), ABLAB (arbrisseau), ABLE ou ABLET (poisson), ABLERET (sorte de filet de pêcheur), ABLUTION (t. de chirurgie), **ABOI** (t. de chasse), ABOYEMENT (t. de chasse), ABONDANCE (t. de peinture, de sculpture et d'architect.), ABONNÉ (t. de meunier), ABONNIR (t. de cabaretier, et de potier), ABORD (t. de marine et d'artillerie), ABORDAGE (t. de marine), ABORDER (t. de fauconnerie), ABORNER (t. de géométrie), ABORTIF (t. de médecine), ABOUCHEMENT (t. d'anatomie), ABOUGRI ou RABOUGRI (t. d'ouvrier), ABOUEMENT (t. de menuisier), ABOUQUEMENT (t. de saline), ABOUQUER (t. de saline), ABOUTE (t. de blason), ABOUTIR (t. de plombier, de médecine), ABOUTISSEMENT (t. de couture), ABOUTS (t. de charpenterie), ABRACADABRA (divination), ABRÉGÉ (t. d'organiste), ABREUVER (t. de vernisseur, et d'agriculture), **ABREUVOIR** (t. de maçonnerie), ARBIC (t. de chimie), ABRICOT (fruit), ABRICOTIER (arbre), ABRITÉ (t. de jardinage), ABROTONE (plante), ABROUTIE ou RABOUGRI, ABSIDE (t. d'astronomie et d'architecture), ABSINTE ou ABSINTHE (plante), ABSOLU (t. d'algèbre), ABSOLUMENT (t. de géométrie), ABSORBANT (t. de médecine), ABSORBER (t. de jardinage), ABSTERGER (t. de médecine et de chirurgie), ABSTERSIF (t. de médecine), ABSUS (herbe), ABUTILLON (plante), ABYME (t. de blason et de chandelier), ABISSINS (peuple) (79)

The classifications in parenthesis are the Maurists' own.
The terms in grey are doublets on alternative spellings.

⁸⁶² This term is not mentioned in the *Dictionnaire de Trévoux*, the *Encyclopédie*, or any of the previous French dictionaries of arts and sciences. Its origin has not been identified.

APPENDIX 2: WORKING LISTS

THE CONTENTS OF THE INDEX VOLUME

(BnF, MS f. fr. 16984)

Lists have been classified as ‘inventories of literature’ when either the source has been identified or when terms are followed by volume and page numbers. In the latter case, the source may still be unidentified. Lists without accompanying references have been classified as ‘thematic lists’ (which they always are).

Subject / Type of List	Title	Translation and/or Description	Range of Folios	Writer	Project
List of Illustrations	Indications des livres et planches y continues, où l'on doit prendre les figures dont on donne la description ou explication dans le <i>Dictionnaire universel des arts et métiers</i>	Indications of books and their plates, from where the figures described or explained in the <i>Universal Dictionary of Arts and Crafts</i> should be drawn Two alphabetical catalogues enumerating terms on natural history, crafts and arts (A–Z), followed by references to literature or instructions.	1–39	Pernety	2
List of Illustrations	Planche 1. de l'anatomie de Mr. Winslow	Description of anatomical plates (non-alphabetical), specification of figures. Winslow, <i>Exposition anatomique</i> (1732).	40–40	MED-1	2
List of Illustrations	Instruments de chirurgie de Mr. de Garangeot	Thematic list of surgical instruments, specification of plates and figures. Garengot, <i>Nouveau traité des instrumens de chirurgie les plus utiles</i> (1726).	41	MED-1	2
List of Illustrations	Alambics &c. de Charras	Thematic list of surgical instruments, specification of plates and figures, volumes and pages. Charas, <i>Pharmacopée royale</i> (1676)	41 ^v	MED-2, MED-3	2
List of illustrations	Instruments d'Ambroise Paré	Thematic list of technical apparatus and instruments, specification of plates, figures, and pages.	42–43	MED-2	2

Inventory of literature		Inventory of the <i>Dictionnaire de Trévoux</i> (1721) A–ANG, (1743) FER–PAR. Terms of interest	44–70	Brézillac	2
Inventory of literature		Continuation of the inventory of the <i>Trévoux</i> (1743), PAR–ZUN.	70–70 ^v 71–85 ^v	Pernety? MED-1, AGR-1	2
Thematic		Alphabetical list on exotic flora and fauna, A–Z.	86–122	NH-3	2
Inventory of literature		Second inventory of <i>Dictionnaire de Trévoux</i> (1743), A–EAU, FAB–M.	123–214	AGR-1, MED-1	2
Thematic		Medical terms on A.	215–215 ^v	MED-1	2
Inventory of literature		Medical terms with page references.	217–217 ^v	MED-1	2
Inventory of literature		Terms on crafts, arts and mathematics, A–Z, with references to works, volumes, and pages.	218–220	Pernety	1
Thematic	Agriculture	A.	222	Pernety	2
Thematic	Architecture	A–N.	223–225 ^v	AGR-1	2
Thematic	Architecture	N–P.	226–227 ^v	Pernety	2
Thematic	Médecine	R–Z.	228–230 ^v	Pernety	2
Thematic		Crafts, trades and different professions, A–V.	231–235	Pernety	2
Thematic	Boulangier	Bakery (non-alphabetical).	236	Pernety	2
Thematic	Ouvriers en fer et acier	Workers on iron and steel, A–B.	237	Pernety	2
Thematic	Ouvriers en fer	Workers on iron, A–M.	238–239 ^v	AGR-1	2
Thematic	Ouvriers en fer, cuivre, plomb, &c.	Workers on iron, copper and lead, etc, N–Y.	240–240 ^v	Pernety	2
Thematic	Termes de joailliers	Terms of jewelry makers (non-alphabetical).	242	Pernety	2
Thematic	Menuiserie et autres ouvrages en bois	Carpentry and other wood works, A.	243	Pernety	2
Inventory of literature	Bouguer, <i>Traité du navire</i> .	A–V. Pierre Bouguer, <i>Traité du navire</i> (1746)	244–246	Pernety	1
Drawings		Two astrological/alchemical tables	247 ^{r-v}	Pernety	?

Thematic	[Ouvriers] en or et bijouterie	[Workers] on gold and costume jewelry, N–Z.	248 ^v –255 ^v	Pernety	2
Thematic	Noms des parties d’une tour à tourner et de plusieurs outils qui lui sont propres	Name of the parts of a lathe and of many other tools belonging to it (non-alphabetical)	250	Pernety	2
Thematic	Ouvriers en soye et en laine et toile	Workers on silk, wool and weaving, A–B.	251 ^{r-v}	Pernety	2
Thematic	Histoire [naturelle]	[Natural] history, C–M.	252–253 ^v	AGR-1	2
Thematic	Animaux	Animals, N–Z.	254–255 ^v	Pernety	2
Inventory of literature	Table alphabétique de la plus grande partie des noms arbitraires, françois ou francisez, donnés aux coquillages par les curieux	Alphabetical list over the largest part of the arbitrary names, French or frenchified, given to shells by <i>les curieux</i> , A–Z. <i>Copied from Gersaint, Catalogue raisonné de coquilles et autres curiosités naturelles</i> (1736), pp. 162–167.	256–257	Pernety	2
Thematic	Noms de coquillages	Name of shells (non-alphabetical)	258	Pernety	2
Thematic	Minéraux	Minerals, A–M.	259 ^{r-v}	AGR-1	2
Thematic	Minéraux et métaux; pierres, minéraux et métaux	Stones, minerals and metals, N–Z.	260 ^v –261	Pernety	2
Bibliography		(non-alphabetical)	263–266	Pernety	1 & 2

For full references to mentioned works, see the bibliography.

APPENDIX 3: ILLUSTRATIONS

THE PRESERVED FIGURES AND THEIR SOURCES

Abbreviations:

A	Agricola, <i>De re metallica</i> (1621)
B	Barba, <i>Traité de l'art métallique</i> (1730)
GO	Goulard, 'Sur quelques nouveaux instruments de chirurgie' (1742)
GU	Guélard, <i>Description abrégée des principaux arts et métiers</i> (c. 1743)
JE	Jeffries, <i>Traité des diamants et des perles</i> (1753)
LB	Le Blond, <i>Essai sur la castramétation</i> (1748)
LI	Liger, <i>Le nouveau théâtre d'agriculture</i> (1723)
MA	Martin, <i>Explication des divers monumens singuliers</i> (1739)
ME	Mersenne, <i>Harmonie universelle</i> vol. II. (1636)
MO	Montfaucon, <i>L'antiquité expliquée</i> vol. III. 1st part (1719), 2nd part (1722)
R	Réaumur, <i>L'art de convertir le fer forgé en acier</i> (1722)
?	Unknown
*	Plausible source

For full references, see the bibliography.

	Labeled Figures (in order of appearance)	BnF, MS f. fr. 16980, fol.	Corresponding Article	Source
1	Aiguille, instrument de chirurgie	20	fr. 16980, fol. 20	GO, pp. 631–632
2	Outil à épreuve	204	fr. 16980, fol. 204	JE, pl. 6
3	Tourillon	265	fr. 16980, fol. 265	?
4	Figures en papier de serpent	283	–	MA, pl. 7, p. 294
5	Basson ou Tarot ou Fagot, nr. 1	284	fr. 16980, fols. 39, 126, 256	ME, liv. 5, p. 298
6	Basson, nr. 2	284	fr. 16980, fol. 39	ME, liv. 5, p. 302
7	Castagnettes	284	fr. 16980, fol. 58	ME, liv. 7, p. 48
8	Cervelat	284	fr. 16980, fol. 61	ME, liv. 5, p. 302
9	Chelys	284	fr. 16980, fol. 68	ME, liv. 3, p. 173
10	Claquebois et une de ses marches	284	fr. 16980, fol. 82	ME, liv. 3, p. 175
11	Colachon turque	285	fr. 16980, fol. 86	ME, liv. 5, p. 228
12	Cor de chasse, avec son enguichure	285	fr. 16980, fols. 89, 155	ME, liv. 5, p. 245
13	Cors de chasse [3 fig.]	285	fr. 16980, fol. 89	ME, liv. 5, p. 245
14	Cornemuse	286	fr. 16980, fol. 90, 91	ME, liv. 5, p. 283
15	Cornets à bouquin [2 fig.]	286	fr. 16980, fol. 90	ME, liv. 5, p. 273
16	Courgues	286	fr. 16980, fol. 94	ME, liv. 5, p. 228
17	Courtaut [2 fig.]	286	fr. 16980, fol. 95	ME, liv. 5, p. 298
18	Cymbales, nr. 1, nr. 2, nr. 3 [3 fig.]	287	fr. 16980, fol. 103	ME, liv. 7, p. 49
19	Echelle	287	fr. 16980, fol. 113	ME, liv. 3, p. 176
20	Fifre	287	fr. 16980, fol. 128	ME, liv. 5, p. 243
21	Flageolet	287	fr. 16980, fol. 129	ME, liv. 5, p. 232

22	Flûtes des anciens [2 fig.]	287	fr. 16980, fol. 130	?
23	Flûtes anciennes	288	fr. 16980, fol. 130	?
24	Flûte de Pan	288	fr. 16980, fol. 130	ME, liv. 4, p. 228
25	Flûte eunuque	288	fr. 16980, fol. 132	ME, liv. 5, p. 229
26	Chalumeaux [3 fig.]	288	fr. 16980, fol. 63	ME, liv. 5, p. 229
27	Flûte nr. 1 [2 fig.]	288	fr. 16980, fol. 130	ME, liv. 5, p. 229
28	Flûte à trois trous	288	fr. 16980, fol. 131	ME, liv. 5, p. 231
29	Flûtes douces ou angloises, grand et petit jeux [6 fig.]	289	fr. 16980, fol. 131	ME, liv. 5, p. 239
30	Flûtes traversières ou allemandes [2 fig.]	289	fr. 16980, fol. 131	ME, liv. 5, p. 241 (Pernety has added a second figure where the pieces are dismantled)
31	Haut-bois [3 fig.]	290	fr. 16980, fol. 160	ME, liv. 5, p. 302
32	Haut-bois de Poitou [2 fig. and parts]	290	fr. 16980, fol. 160	ME, liv. 5, p. 306
33	Saquebute	291	fr. 16980, fol. 242	ME, liv. 5, p. 271
34	Psalterion	291	fr. 16980, fol. 229	ME, liv. 3, p. 174
35	Sautereau de Manichordion	292	fr. 16980, fol. 245	*ME, liv. 3, p. 115 (Pernety has changed the perspective)
36	Sautereau d'épinette	292	fr. 16980, fol. 244	ME, liv. 3, p. 111
37	Marteau d'épinette	292	fr. 16980, fol. 185	ME, liv. 3, p. 111
38	Serpent et son bocal [2 fig.]	292	fr. 16980, fol. 247 ^{r-v}	ME, liv. 5, p. 279
39	Sourdine de trompette	292	fr. 16980, fol. 251	ME, liv. 5, p. 260
40	Tortue	292	fr. 16980, fol. 264	ME, liv. 3, p. 173
41	Plectre	292	fr. 16980, fol. 218	ME, liv. 3, p. 173
42	Phorminx	292	–	ME, liv. 3, p. 173
43	Tournebout	292	fr. 16980, fol. 264	ME, liv. 5, p. 290
44	Trompe	292	fr. 16980, fol. 267	ME, liv. 7, p. 50
45	Trompette	293	fr. 16980, fol. 268–269	ME, liv. 5, p. 267
46	Trompette marine moderne	293	fr. 16980, fol. 268	ME, liv. 4, p. 218
47	Trompette marine ancienne	293	?	ME, liv. 4, p. 218
48	Vielle	293	fr. 16980, fol. 275	ME, liv. 4, p. 212
49	Vielle toute montée [print]	293	?	?
50	Violon	294	fr. 16980, fol. 277	ME, liv. 4, p. 184
51	Archet de violon	294	fr. 16980, fol. 30	ME, liv. 4, p. 184
52	[Unspecified string instrument]	294	?	ME, liv. 4, p. 184
53	Anneau d'essay	295	fr. 16980, fol. 27	R, fig. 14, pl. 9, p. 30
54	Asne ou Estau [print]	295	–	GU, fig. II, p. 111
55	Auget de mine	295	fr. 16980, fol. 34	A, p. 114
56	Broüette à tombereau	295	fr. 16979, fol. 6	A, p. 112
57	Canonière, son plan, son profil, sa perspective [3 fig.]	295	fr. 16980, fol. 56	LB, fig. 1, 2, 3, pl. 2
58	Casse-motte	295	fr. 16979, fol. 6	*LI, p. 324, pl. VII, f. 18
59	Chien de mine [2 fig.]	296	fr. 16980, fol. 79, 'Chien en terme de mineurs'	A, p. 113
60	Ciseau de sculpteur [print]	296	–	GU, pl. XLVIII
61	Conge	296	fr. 16980, fol. 87	MO, part 1, pl. 85
62	Coupelle [6 fig.]	296	fr. 16980, fol. 94	B, p. 216
63	Couteaux de raffineurs de metal [3	297	fr. 16980, fol. 97	*A, pp. 80, 375

	fig.]			
64	Navette de mine [2 fig.]	297	fr. 16980, fol. 199	*A, p. 255
65	Pincette de raffineur	297	fr. 16980, fol. 217	*A, pp. 390, 424
66	Grille de raffineur	297	fr. 16980, fol. 152	*A, p. 353
67	Bloc de raffineur avec sa planche de cuivre	297	fr. 16980, fol. 45	*A, p. 390 (Pernety has added a part)
68	Creusets pour l'acier [4 fig.]	297	fr. 16980, fol. 98	R, pl. 1, p. 78
69	Serrefeux [2 fig.]	297	fr. 16980, fol. 248	R, pl. 2, p. 80
70	Crible de mine	297	fr. 16980, fol. 100	A, p. 225
71	Croc de raffineur	298	fr. 16980, fol. 100	*A, p. 321
72	Ceùiller de raffineurs	298	fr. 16980, fol. 61	*A, pp. 304, 333
73	Marteaux de raffineurs de cuivre [3 fig.]	298	fr. 16980, fol. 185	*A, pp. 271, 333, 405
74	Bident	298	fr. 16980, fol. 44	*A, pp. 308, 319
75	Pannier à charbon	298	?	*A, pp. 308, 319
76	Cuisinier, marmite avec son couvercle [2 fig.]	298	*fr. 16980, fol. 101, 'Cuisine, terme de guerre'	?
77	Fichoir	298	–	?
78	Fourchette de mine [2 fig.]	298	fr. 16980, fol. 137	A, pp. 317, 321
79	Croc de fonderie	298	fr. 16980, fol. 100	*A, p. 336
80	Ceùiller de fonderie	298	fr. 16980, fol. 61	*A, p. 336
81	Souflet des Portugais	298	fr. 16980, fol. 250	*A, p. 337
82	Pilon dentelé	298	fr. 16980, fol. 216	*A, p. 384
83	Fourneau à adoucir le fer fondu [4 fig.]	298	fr. 16980, fol. 142	R, pl. 15, p. 494
84	Fourneau à bénéfice [2 fig.]	299	fr. 16980, fol. 138	B, p. 92
85	Fourneau d'acierie en fer forgé auquel il ne manque que le couvercle	299	fr. 16980, fol. 139–140	R, pl. 4, p. 150
86	Tampons ou bouchons des fenêtres [5 fig.]	299	–	R, pl. 4, p. 150
87	Fourneau d'acierie tout monté	299	fr. 16980, fol. 139–140	R, pl. 5, p. 152
88	Fourneau de réverbère pour la fonte des métaux [2 fig.]	299	fr. 16980, fol. 141	B, p. 92.
89	Fourneau des fondeurs de cuivre pour les menus ouvrages [3 fig.]	299	fr. 16980, fol. 138	R, pl. 2, p. 80
90	Fourneau portatif [assembled and dismantled in parts]	299	fr. 16980, fol. 142	R, pl. 12, p. 442
91	Plan du fourneau à convertir le fer forgé en acier	300	fr. 16980, fols. 139–140?	R, pl. 3, p. 146
92	Coupe du fourneau à convertir le fer en acier	300	fr. 16980, fols. 139–140?	R, pl. 3, p. 146
93	Bandes de fer du grand couvercle et ses tourillons	300	?	R, pl. 4, p. 150
94	Grand couvercle du fourneau renversé	300	?	R, pl. 4, p. 150
95	Bouchons du grand couvercle [3 fig.]	300	?	R, pl. 4, p. 150
96	Couvercles des creusets [3 fig.]	300	?	R, pl. 4, p. 150
97	Fourneaux castillans [2 fig.]	300	fr. 16980, fol. 141	B, p. 143
98	Guaïra	300	fr. 16980, fol. 154	B, p. 143
99	Hâche ancienne	300	fr. 16980, fol. 159	MO, part 2, pl. 188
100	Hâche ancienne [another model]	300	fr. 16980, fol. 159	MO, part 2, pl. 188

101	Hoüe	301	fr. 16980, fol. 162, 'Hoyau'	*A, p. 110
102	Hoyau	301	fr. 16980, fol. 162	*A, p. 110
103	Machine d'essay pour les corps des aciers	301	fr. 16980, fol. 180	R, pl. 10, p. 308
104	Grelets ou marteaux de mineurs en métaux [3 fig.]	301	fr. 16980, fol. 151	*A, p. 108
105	Manche des marteaux	301	?	?
106	Masses de mineurs [2 fig.]	301	fr. 16980, fol. 185	A, p. 109
107	Pince à sonde	301	?	?
108	Coins de fer [3 fig.]	301	?	*A, p. 108
109	Pince ronde	301	?	A, p. 109
110	Pince quarrée	301	?	A, p. 109
111	Pince à pied de chèvre	301	?	A, p. 109
112	Masse [print]	301	fr. 16980, fol. 185	GU, pl. XLVIII
113	Molette de peintre	301	–	?
114	Moules pour mailler les filets [2 fig.]	301	fr. 16980, fol. 195	?
115	Tocochimbo	301	fr. 16980, fol. 263	B, p. 143
116	Moufle [2 fig.]	301	fr. 16980, fol. 188	B, p. 143
117	Moulinet à bénéficier les métaux	302	fr. 16980, fol. 196	*B, ch. 20, p. 88 (Pernety has assembled the pieces)
118	Pilons de mineurs [4 fig.]	302	fr. 16980, fol. 216	A, p. 308
119	Espatules de mines [3 fig.]	302	fr. 16980, fol. 123, 'Espatule, terme de founaliste'	A, p. 308
120	Espatules d'apotichaire [2 fig.]	302	fr. 16983, fol. 203	?
121	Palette à courroyer la terre	302	–	A, p. 308
122	Pince avec sa loupe	302	fr. 16980, fol. 216	?
123	Poche, fourneau à la poche [dismantled in parts]	302	fr. 16980, fol. 219	R, pl. 13, p. 446
124	Poinçons de serruriers [print]	302	–	GU, pl. XXXVIII
125	Râteaux de mine [2. fig]	302	–	*A, pp. 281, 282
126	Ringard	303	fr. 16980, fol. 239	A, p. 186
127	Pincettes d'essay	303	fr. 16980, fol. 217	A, p. 188
128	Ripe [print]	303	?	G, pl. XLIX
129	Rôtissoir	303	fr. 16980, fol. 240	A, p. 353
130	Sac de mines	303	fr. 16980, fol. 242	*A, p. 111
131	Scie de marqueterie [print]	303	?	*GU ?
132	Seau de mines	303	fr. 16980, fol. 246	A, p. 111
133	Seau de mineur	303	fr. 16980, fol. 246	A, p. 115
134	Sestier d'armée Romaine	304	fr. 16980, fol. 248	MO, 1st part, pl. 84
135	Strigiles [2 fig.]	304	fr. 16980, fol. 253	MO, 2nd part, pl. 126
136	Vase à bénéfice	304	fr. 16980, fol. 272	B, ch. 20, p. 88
137	Volselles	304	fr. 16980, fol. 278	MO, 2nd part, pl. 126
		fr. 16984		
138	Riflard bretelé	35 ^v	–	GU, pl. X, p. 29

THE PLANNED ILLUSTRATIONS

Number of References	Copy Sources Indicated in Pernety's Illustration Catalogues BnF, MS f. fr. 16984, fols. 1–39 ^v
119	Réaumur, <i>Mémoires pour servir à l'histoire des insectes</i> (1734–1742)
46	*Merian, <i>Insectes de Surinam</i> [<i>Metamorphosis insectorum surinamensium</i>] (1705)
40	Fortin, <i>Délices de la campagne</i> (1732)
34	Pluche, <i>Spectacle de la nature</i> , vol. II (1746)
34	Bruyn, <i>Voyages</i> (1718)
32	Careri, <i>Voyage du tour du monde</i> (1719)
12	Mersenne, <i>Harmonie universelle</i> (1636)
8	Réaumur, <i>L'art de convertir le fer forgé en acier</i> (1722)
2	*La Loubère, <i>Voyage de Siam</i> (1691)
2	Anson, <i>Voyage autour du monde</i> (1749)
2	*Merian, <i>Insectes de l'Europe</i> (1730)
1	*Needham, <i>Observations microscopiques</i> (1750)

The dates next to the titles designate the first year of publication and do not necessarily correspond to the editions used by the Maurists. For full references, see the bibliography. Titles marked * have not been consulted and are therefore absent from the bibliography.

For the thematic illustration lists written by the medical writers, see table in Appendix 2: Working Lists.

APPENDIX 4: FIELDS OF KNOWLEDGE

While most volumes have thematic contents, volume two (BnF, MS f. fr. 16980) is more heterogenous. Below are some examples of articles within various fields of knowledge. The accompanying classifications are based on the ones indicated in the manuscripts.

Mechanical Arts, Crafts, and Commerce

SCORIE ‘t. de mineurs & de fondeurs’ (fol. 246), BEDA, ‘t. de mineurs en métaux’ (fol. 42), CHEF D’OEUVRE ‘t. d’artisan’ (fol. 66), CIEL, ‘t. de tireurs d’ardoise’ (fol. 79), TERNE ‘t. de tireurs d’ardoise’ (fol. 261), BUELTA ‘t. de raffineurs de métaux’ (fol. 52), SOUDER, ‘t. d’ouvriers en fer’ (fol. 250), STRIES ‘t. de forge’ (fol. 253), TOUR ‘t. de lapidaires’ (fol. 264), FICHE ‘t. de lapidaire’ (fol. 128), LAYE ‘t. de carriers, tailleurs de pierres’ (fol. 172), CATIN ‘t. d’ouvriers qui tirent l’aloi des pierres métalliques’ (fol. 58), COUP DE FEU ‘t. de manufacture de fayence, de porcelaine, etc.’ (fol. 93), TOURNEUSE ‘t. d’ouvriers en soye’ (fol. 265), CUILLIÈRE À JETER LA CIRE ‘t. de manufacture des cierges’ (fol. 101), TOURILLON ‘t. de blanchissage de la cire’ (fol. 265), DÉGROSSIR ‘t. de papetterie’ (fol. 106), OUVRER LA PÂTE ‘t. de papetterie’ (fol. 204), ‘POLI, t. de manufacture des glaces’ (fol. 220), POINTIL ‘instrument de verrier’ (fol. 226), COUTEAU ‘t. d’horlogerie’ (fol. 97), ÉCHAPPEMENT ‘t. d’horlogerie’ (fol. 112), GOUVERNAIL, t. de manufacture des orgues’ (fol. 153), SECRET ‘t. de facteur d’orgues’ (fol. 247), QUEUE ‘t. de luthier’ (fol. 234), TETINES ‘t. de faiseurs d’instruments de musique’ (fol. 262), ENFER ‘t. de tireurs d’huile d’olives’ (fol. 115), PRESSEUR À HUILE (fol. 227), CERCEAU ‘t. de marchands épiciers-ciriers’ (fol. 60), ENFÉRAGE ‘t. de marchands épiciers-ciriers’ (fol. 115), ROULER ‘t. de marchands épiciers-ciriers’ (fol. 240), TOUR ‘instrument de marchands ciriers’ (fol. 264), FOURGONNER ‘t. de boulangers, pâtisseries’ (fol. 137), PÂTE ‘t. de vente’ (fol. 214), CHEMIN ‘t. de courtiers et tonneliers’ (fol. 66), CHEVALET ‘t. de charpentier’ (fol. 66), ‘PIEU ‘outil de bucheron’ (fol. 216), RIORTE ‘t. de bûcheron’ (fol. 239), APPROBATION ‘t. d’imprimerie’ (fol. 14), SOMMIER D’EN HAUT ‘t. d’imprimerie’ (fol. 249), POUSSIÈRE ‘t. d’écrivain’ (fol. 225), MAROUFLE ‘t. de peinture’ (fol. 184)

Physics, Pure and Applied Mathematics

CALCUL DIFFÉRENTIEL (fol. 53), CALCUL INTÉGRAL (fol. 54), CAUSTIGE ‘géométrie’ (fol. 59), COURBE and COURBURE ‘géométrie, mécanique’ (fol. 94), CYCLOÏDAL ‘géométrie’ (fols. 102–103), DÉVELOPPÉ ‘géométrie’ (fol. 108), FOYER ‘géométrie’ (fol. 143), GÉOMÉTRIE (fol. 150), LOGARITHMIQUE ‘géométrie’ (fol. 176), LUNULE ‘géométrie’ (fol. 177), QUADRATURE DES COURBES ‘géométrie’ and QUANTITÉS INTÉGRALES (fol. 233), RECTIFICATION DES COURBES ‘géométrie’ (fol. 236), SPIRALE LOGARITHMIQUE ‘arithmétique’ (fol. 252), CENTRE DE GRAVITÉ and CENTRAL ‘physique’ (fol. 60), CYLINDRE ‘optique’ (fol. 103), CÔTÉ ‘physique’ (fol. 92), COULEUR ‘physique’ (fol. 93), ÉBULLITION ‘physique’ (fol. 112), FROID and FROTTEMENT ‘physique, mécanique’ (fol. 144), MASSULE ‘physique’ (fol. 185), MATIÈRE (fol. 186), RÉFRACTIVE ‘physique’ (fol. 236), RÉSISTANCE ABSOLUE D’UN CORPS (fol. 237), SON (fol. 250), RECTIFIER ‘nivellement’ (fol. 236), EPTAMÉRIDE, ‘acoustique’ (fol. 120), ONDULATION ‘acoustique’ (fol. 203), EFFET ‘mécanique hydraulique’ (fol. 113), ÉTANG ‘hydraulique’ (fol. 123), PENDULE COMPOSÉ (fol. 214^{r-v}), ASTROLABE (fol. 33), ELLIPSE ‘astronomie’ (fol. 114), LATITUDE ‘astronomie’ (fol. 172), PLAN DE PROJECTION ‘astronomie’ (fol. 217), RÉTICULE ‘instruments d’astronomie’ (fol. 238), HAYM ‘astrologie’ (fol. 161).

Navigation

CHAPEAU ‘t. de marine’ (fol. 64), PALADE ‘t. de marine’ (fol. 205), VOLAGE ‘t. de marine’ (fol. 277), COURIR ‘t. de géographie’ (fol. 94), PORTULAN ‘t. de géographes et hydrographes’ (fol. 224).

Military Arts

CAMPEMENT ‘t. de guerre’ (fol. 56), ESCADRON ‘guerre’ (fol. 121), GARDES DU CAMP (fol. 149), PARC D’ARTILLERIE (fol. 213), PIQUET ‘infanterie’ (fol. 217), SENTINELLE ‘militaire’ (fol. 247).

Architecture

CHEVALEMENT ‘t. d’architecture’ (fol. 66), POUSSÉE D’UNE VOÛTE ‘t. d’architecture’ (fol. 225), RETOMBÉE DU CINTRE ‘t. d’architecture’ (fol. 238).

Medical Arts

ATÉRIOLE ‘t. d’anatomie’ (fol. 32), CIRCULATION DU SANG (fol. 81), CHIMIE (fol. 79), ENTRECOUPÉES ‘chirurgie’ and ÉPANCHEMENT ‘t. de médecine’ (fol. 116), ESPRIT ARDENT ‘t. de chymie’ (fol. 123), ‘GLANDULEUSE ‘chirurgie’ (fol. 150), GRAISSE ‘t. d’anatomie’ (fol. 151), IRIS ‘anatomie’ (fol. 166), OMPHALOMÉSÉNTÉRIQUE, ‘t. d’anatomie’ (fol. 202), PRINCIPES ‘t. de chymie’ (fol. 227), SÈCHE ‘t. de chirurgie’ (fol. 247).

Natural History and Curiosities

ABEILLE (fols. 4–10), BEJUCO ‘plante de l’Orinoque’ (fol. 42), BORAX ‘sel minéral aux Indes orientales’ (fol. 46), BOBAS ‘serpent des isles Philippines’ (fol. 46), CHIAMPIM ‘fleur de la Chine’ (fol. 78), CHIOKIACCOS ‘fruit de Mexique’ (fol. 79), CONQUE PERSIQUE ‘coquillage’ (fol. 79), CORNALINE ‘pierre précieuse’ (fol. 90), ÉPHÉMÈRES ‘mouches’ (fol. 118), FOSSILE (fol. 137), GALLINSECTES (fol. 148), GERBO ‘petit animal de Barbarie’ (fol. 150), JAMBOLEIRA ‘arbre sauvage de l’Indostan’ (fol. 167), JAUNES ‘maladie des vers à soye’ (fol. 167), LION MARINE ‘animal amphibie’ (fol. 175), LITOPHYTON ‘plante marine’ (fol. 175), MAMMUR ‘animal de la Sibire’ (fol. 182), MOFÈTE ‘vapeur dangereuse’ (fol. 188), MUMIE ‘corps humain embaumé’ (fol. 197), NICOTIANE ‘herbe de Surinam’ (fol. 200), PERLES (fol. 215), YORO ‘espèce de palmier’ (fol. 280).

Botany, Agriculture, Householding, Hunting, Fishing, and Falconry

CALICE ‘t. de botanique’ (fol. 54), POUSSIÈRE ‘t. de botanique’ (fol. 225), CARRIÈRE ‘t. de jardinage’ (fol. 57), CHÂTRER UNE RUCHE ‘t. de ménage’ (fol. 62), ERGOT ou ARGOT ‘t. de laboureur’ (fol. 120^{r-v}), FLÈCHE ‘t. d’agriculture’ (fol. 130), PIERRÉE ‘jardinage’ (fol. 216), VASÉ ‘t. d’agriculture’ (fol. 273), HALLE ‘t. de vénerie’ (fol. 159), PINSONNÉE ‘t. d’oiseleurs’ (fol. 217), RIDÉE ‘t. d’oiseliers’ (fol. 238^{r-v}); ATTAQUER ‘t. de fauconnerie’ (fol. 34), RÉVELER LA PERDRIX ‘t. de fauconnerie’ (fol. 237), HARY-HARY ‘t. de chasse’ (fol. 159), ENLARMER ‘t. de faiseurs de filets’ (fol. 116), ÉPERVIER ‘filet pour prendre du poisson’ (fol. 117^{r-v}), TRAMAIL ‘filet de pêcheurs’ (fol. 265).

Ancient Currencies, Measurements, and Practices

AS ‘monnoye ancienne’ (fol. 32), CYATHE ‘mesure ancienne’ (fol. 102), DANSE (fol. 104^{r-v}), MESURE (fol. 186^{r-v}), NABLE ‘instrument inventé par les Phéniciens’ (fol. 199), PESCHE ‘pesche des anciens’ (fol. 215), PHAETON ‘les anciens appelloient ainsi la planète que nous nommons Jupiter’ (fol. 215), POIDS (fol. 226), ROTONDE ‘bâtiment des Gaulois’ (fol. 240).

APPENDIX 5: ARTICLES

The transcriptions reproduce the orthography of the sources, but accents and capitalization have been modernized.

THE DRAFT BASED ON WOLFF

ABSCISSE in Wolff's *Vollständiges Mathematisches Lexicon* (1734), the Maurist draft (c. 1747), and Saverien's *Dictionnaire universel de mathématique et de physique* (1753). See Figure 35.

[Wolff]: ABSCISSE, abscissa, heisset den einer krummen Linie das Stück von dem Diameter oder der Axe, welches zwischen dem Scheitel-Punct und der Ordinate innen lieget.

Es sey Tab. II Fig. 3, in der krummen Linie OAR, die Axe AX, die Ordinate OR; so ist AB die Abscisse. Diese Linie hat den Nutzen, daß man in der höhern Geometrie durch die Relation derselben zu der halben Ordinate OB die krummen Linien von einander unterscheiden kan. Unter allen nur erdencklichen Arten der krummen Linien hat der Circul Tab. II Fig 4, diese besondere Eigenschafft vor sich allein, daß das Quadrat der halben Ordinate OB dem Rectangulo aus der Abscisse AB und dem übrigen Theil des Diameters BX gleich; folglich ist einem Circul die halbe Ordinate OB iedesmal die mittlere Proportional-Linie zwischen der Abscisse AB und dem übrigen Theil des Diameters BX.⁸⁶³

[Maurist draft]: ABSCISSE, abscissa, est dans une ligne courbe la portion du diamètre ou de l'axe, intercepté entre le sommet et l'ordonnée.

Soit pl. __ fig. __ dans la ligne courbe OAR, AX l'axe OR l'ordonnée; AB sera pour lors l'abscisse. Cette ligne sert dans la géométrie à distinguer les lignes courbes par la raison dans laquelle elle est avec la demi-ordonnée OB. Parmi toutes les lignes courbes qu'on peut imaginer, le cercle seul a cette propriété particulière, que le quarré de la demi-ordonnée OB est égal au rectangle de l'abscisse AB et du reste du diamètre BX: conséquemment dans un cercle la demi-ordonnée est toujours la moyenne proportionnelle entre l'abscisse AB et le reste du diamètre BX. Wolf.⁸⁶⁴

[Saverien]: ABCISSE. Partie d'une ligne interceptée dans une courbe, ou entre l'*origine* de la courbe & l'ordonnée, comme dans la parabole; ou entre les ordonnées, comme dans l'ellipse.

Soit dans la ligne courbe (*Planche I. Figure 213*) AM, l'Axe OR l'ordonnée, alors AB fera l'*abscisse*. Cette ligne sert, dans la géométrie, à distinguer les lignes courbes, par la raison dans laquelle elle est avec la demi-ordonnée OB. Parmi toutes les lignes courbes, qu'on peut imaginer, il n'y a que le cercle qui ait cette propriété particulière, que le quarré de la demi-ordonnée OB est égal au rectangle de l'*abscisse* AB, & du reste du diamètre BX. Conséquemment dans un cercle, la demi-ordonnée est toujours la moienne proportionnelle entre l'*abscisse* AB et le reste du diamètre BX.

⁸⁶³ Wolff, *Vollständiges*, p. 9.

⁸⁶⁴ BnF, MS f. fr. 16982, fol. 12.

Les géomètres divisent les *abscisses* à leur fantaisie. Les unes sont une progression arithmétique, & ont une différence constante. D'autres ont toute autre progression. Les premières sont plus commodes, & par conséquent les plus communes. Suivant les cas, les *abscisses* deviennent des ordonnées, & les ordonnées des *abscisses*. On peut prendre les *abscisses* sur une ligne droite, ou sur un cercle, ou sur toute autre courbe. Le mot de *coupée* est quelquefois employé pour *abscisse*. L'un et l'autre terme ont la même signification.⁸⁶⁵

[*Trévoux*]: –

AIGUILLE HYGROMÉTRIQUE (Acus hygrometra) in Wolff's *Vollständiges Mathematisches Lexicon* (1734), the Maurist draft, and Saverien's *Dictionnaire universel de mathématique et de physique* (1753). See Figure 35.

[Wolff]: ACUS HYGROMETRA, ist eine Art eines Hygrometri oder vielmehr Hygroskopii da man vermittelst einer Nadel die Abwechslung der Feuchtigkeit und Trockne der Luft wahrnehmen kan. Es ist diese vor denen übrigen eine der allersinnreichsten, so man ausgedacht, dannenhero man kein Bedencken gehabt, sie mit ihrer völligen Beschreibung und der darzu gehörigen Figur an diesem Orte anzuführen.

Tab. II. Fig. 5 ist AB eine Röhre, so voll Löcher, daß die Luft ungehindert durchstreichen kan, welche oben einen Stöpfel D hat, woran die Saite CB befestiget ist. Diese Saite, so 1½ Fuß lang genommen, gehet mit ihrem untern Ende E etwas über die Röhre hervor, und an selbiger hanget daselbst eine runde bleyerne Scheibe ETG deren Stärcke nach der Saite proportioniret seyn muß. Auf dieser Scheibe befindet sich ein Fuß F, an welchem der Zeiger HK um seine Axe beweglich. Bey diesem Zeiger hält der kurze Theil wegen der daran befindlichen Kugel a bey nahe dem langen Theil HI, die Gleichwaage. An der Röhre AB ist von B bis E eine elffenbeinerne Schnecke oder Schraube, darein das kurze Theil des Zeigers IK mit seinem Ende greiffet, daher die Spitze des Zeigers, nachdem die Schnecke sich drehet, unter und über sich beweget wird, und an der aussern Wand LMNO, eine Schnecken-Linie beschreibt, welche Linie alsdenn in gewisse Theile, wie die Figur ausweist, abgetheilet werden kan. Über die bleyerne Scheibe mag man auch eine halbe Kugel PO, doch also befestigen, daß sie nirgend anstreiche und Hinderniß mache, noch auch den Zeiger selbst von seiner Bewegung abhalte. Der Maschine ein besseres Ansehen zu geben, und auch den einfallenden Staub in etwas abzuhalten, wird noch eine Hülle in der Forme, wie die Figur zeigt, oder wie es einem ieden selbst beliebt, iedoch ebenfalls wegen des Ein-und Ausgangs der Luft durchlöchert darüber gesetzt und aufgeschraubet. Wenn nun alles in gehörigen Stand gebracht, wird dieses Hygroskopium an einen temperirten Ort gestellt und die Saite EC durch den Stöpfel D so lange umgedrehet, bis der Zeiger die punctirte Linie Z, welche die Tafel in zwey gleiche Theile theilet, berührt, immassen diese Linie den temperirten Zustand der Luft anweist. Die Theile über dieser Linie bemerken demnach die Trockne, und die unter derselben die Feuchtigkeit der Luft. Und hierinnen beruhet eben das ganze Kunst-Stück, daß man so beqvem durch Umdrehung des Stöpfels die accurate Länge der Saite treffen kan, daß sie nicht mehr noch weniger Revolutiones mache, als verlangt wird. Die Saite aber machet hier 5 Revolutiones, und ist so empfindlich, daß sie auch nur vom Anhauchen sich andrehet. Der Erfinder dieses beschriebenen Hygroskopii, war der ehemalige Hof-Prediger zu Zeits Gottfried

⁸⁶⁵ Saverien, *Dictionnaire*, I, 2–3.

Teubert, der wegen vielerley artigen mathematischen und mechanischen Erfindungen berühmt geworden, und auch diese damalen denen *Actis. Eruditor. Lips.* im Jahr 1688 einverleiben lassen.⁸⁶⁶

[Maurist draft]: AIGUILLE HYGROMÉTRIQUE, acus hygrometra, est dans l'airométrie une espèce d'hygroscope, qui indique, au moyen d'une aiguille, les variations qui arrivent dans l'humidité et la sécheresse de l'air. Elle est une des plus ingénieuse qu'on aît inventé jusqu'à présent. C'est pourquoi j'en donnerai ici la description et la figure. Pl. __ fig. __ [in the margin]

AB est un tuyau percé de plusieurs petits trous pour laisser un libre passage à l'air. D est une espèce de bouchon, auquel est attachée la corde CB. Cette corde, qui à la longueur d'un pied $\frac{1}{2}$ sort un peu du tuyau en E, et y soutient un disque de plomb en équilibre ETG, dont la masse ou poids doit être proportionnée à la corde qui le soutient. Ce disque porte la pièce F qui porte l'aiguille HIK mobile sur son axe I, et ayant en K une petite boule, qui par son poids tient le bras de l'aiguille IK à peu près en équilibre avec le bras le plus long HI. Le tuyau AB est garni depuis B jusques en E d'une vis d'yvoire dans le pas de la quelle s'insère le bout du bras KI de l'aiguille, ce qui fait monter ou descendre la pointe opposée H à mesure que la sécheresse ou l'humidité de l'air fait tourner la vis, et oblige la pointe H de l'aiguille de décrire sur le parois LMNO une spirale qu'on divise en plusieurs parties, comme on le voit dans la figure. Pour cacher l'artifice de la machine et la garantir de la poussière, on enveloppe la vis et le disque de plomb d'un globe BFTG, ou autre figure de carton bien suspendue et attachée en équilibre au disque de plomb par ses côtés FG de manière néanmoins que ce globe suive librement tous les mouvemens du disque de plomb. On couvre aussi le haut du tuyau avec une espèce de cloche de carton RVS fixée sur la table PQ par des cloux à vis RS, et percée de petits trous comme la figure le représente. Cette table est soutenue par des pieds LMNO, auxquels est attachée [sic] le carton ou cylindre de verre ou de bois sur la surface intérieure duquel sont marquées les divisions de la spirale que l'aiguille décrit.

Cet hygroscope étant construit dans sa perfection, doit être suspendu ou posé dans un lieu tempéré. On tourne ensuite la corde au moyen du bouchon D, jusqu'à ce que la pointe de l'aiguille H touche la ligne ponctuée YZ au point d'intersection O, qui divise la table en deux parties égales, et qui indique l'état tempéré de l'air. Les divisions qui sont marquées au dessus de la ligne ponctuée indiquent les degrés de sécheresse et celles de dessous montrent les degrés d'humidité. L'adresse de cette machine consiste à tourner le bouchon de manière qu'on puisse donner à la corde la longueur précise qu'elle doit avoir pour qu'elle ne fasse ni plus ni moins de révolutions qu'il ne faut. La machine étant donc montée, on la laissera immobile dans la situation où on l'aura mise, et dans les changemens de température de l'air, on examinera les divisions qu'indique la pointe H de l'aiguille, pour reconnoître les degrés du changement qui arrivera, et que l'on commencera à compter de part et d'autre du point O.

Mr. Godefroy Teuber, Chapellain du Duc de Saxe Zeitz, inventeur de cette machine, et qui s'est rendu célèbre par plusieurs autres inventions curieuses dans les mathématiques et surtout dans la mécanique, donnoit un demi-pied de longueur à la corde CE de cet instrument, et lui faisoit faire environ cinq révolutions. Son mouvement étoit si sensible que l'haleine seule y produisoit un changement considérable. C'est des *Acta érud.* de Leipseike de l'an 1688 que j'ai tiré la figure et la description de cette machine, telle qu'il l'y avoit fait insérer au mois d'avril de la même année.⁸⁶⁷

⁸⁶⁶ Wolff, *Vollständiges*, pp. 21–22.

⁸⁶⁷ BnF, MS f. fr. 16982, fols. 76^v–77.

[Saverien]: AIGUILLE HYGROMÉTRIQUE. M. Wolf nomme ainsi une sorte d'hygromètre, qui sert à déterminer, moyennant une *aiguille*, la variation de l'humidité & de la sécheresse de l'air. Celle dont il s'agit ici est une des plus ingénieuses qu'on ait inventées jusques à présent. C'est pourquoi j'en donnerai la description & la figure (*planche XXVII. fig. 214*).

AB est un tuyau percé en plusieurs endroits, pour que l'air y puisse passer librement; il a un bouchon en D, où pend la corde CB. Cette corde, longue d'un demi pied, sortant un peu du tuyau en E, y soutient un disque de plomb ETG, dont la masse est proportionnée à la corde. Ce disque porte la pièce F, à laquelle se trouve l'*aiguille* HK mobile sur son axe. La boule *a* tient le bras le plus court de l'*aiguille* à peu près en équilibre avec le plus long HI. Le tuyau AB est garni depuis B jusques en E d'une vis d'ivoire, qui reçoit le bout du bras, ou le plus court de l'*aiguille* IK, ce qui fait monter, ou descendre la pointe de l'*aiguille* à mesure que la vis tourne d'un côté ou d'autre, & qui, par-là, fait décrire dans le parois opposé LMNO une spirale, qu'on peut diviser en plusieurs parties, comme on voit dans la figure. Au-dessus du disque de plomb, on affermit un hémisphère MO, mais de telle façon qu'il ne gêne point le jeu de la machine, que l'on redouble en dehors pour la garantir de la poussière, sans cependant empêcher l'accès de l'air.

Cet hygroscope étant construit dans sa perfection, doit être mis dans un endroit tempéré. On tourne la corde EC, moyennant le bouchon D, jusqu'à ce que l'*aiguille* touche la ligne ponctuée Z, qui divise la table en deux parties égales, & qui indique l'état tempéré de l'air. Les parties, qui se trouvent au-dessus de cette ligne, en marquent la sécheresse; & celles de dessous l'humidité. Tout l'artifice de la machine consiste, en ce qu'en tournant le bouchon, on sçache donner à la corde la longueur précise, pour qu'elle ne fasse ni plus ni moins de révolutions qu'il ne faut. Celle d'un bon instrument en fait cinq; & elle est si sensible, qu'elle tourne lorsqu'on y porte l'haleine.

L'auteur de cet hygromètre est M. Teubert, Chapelain du Duc de Saxe, qui s'est rendu fort célèbre par plusieurs inventions curieuses dans les mathématiques et surtout dans la mécanique, & qui a publié celle-ci dans les *Acta. Erudit*, de l'an 1688. Je donne au mot HYGROMÈTRE la description de plusieurs autres *aiguilles hygrométriques*.⁸⁶⁸

[Trévoux]: –

⁸⁶⁸ Saverien, *Dictionnaire*, I, 8.

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Figure 35: The abscissa (fig. 3) and the hygrometric needle (fig. 5) in Wolff's *Vollständiges Mathematisches Lexicon* (1734), pl. II.
(Google Books)

AIGUILLER in the *Dictionnaire de Trévoux* (1743, 1752), the *Encyclopédie* (1751), and the manuscripts of Pernety.

[*Trévoux*]: AIGUILLIER, s. m. Ouvrier qui fait des aiguilles. *Acuum artifex*.⁸⁶⁹

[*Pernety*]: AIGUILLIERS ou EGUILLIERS, *acuum fabri*, artisan qui fait et qui vend des eguilles, des alesnes &c.

Les statuts de la communauté qu'ils forment à Paris, sont du 15 septembre 1599. Ils y sont qualifiés maîtres aiguilliers, alesniers, faiseurs de burins, carrelets, et autres petits outils servant aux orfèvres, cordonniers, boureliers, imprimeurs et autres.

L'apprentissage est de cinq ans, le service de maître de trois ans après l'apprentissage, et enfin le chef-d'oeuvre. Il faut avoir 20 ans pour être reçu maître. Ces formalités ne sont point requises pour les enfans de maîtres, la simple expérience suffit.

Chaque maître doit avoir sa marque distinctive dont l'empreint mise sur une table de plomb se garde dans la Chambre du Procureur du Roi du Châtelet. Par lettres patentes de Louis XVI en datte du mois d'octob[re] 1695, la communauté des aiguilliers a été réunie avec celle des epingliers, et n'ont depuis ce tems que trois jurés, deux epingliers et un aiguillier.⁸⁷⁰

[*Encyclopédie*]: AIGUILLIER, artisan qui fait & qui vend des aiguilles, des alènes, &c.

Les aiguilliers forment à Paris une communauté, dont les statuts sont du 15 Septembre 1599. Par ces statuts ils sont qualifiés maîtres aiguilliers-alèniers, & faiseurs de burins, carrelets & autres petits outils servant aux orfèvres, cordonniers, bourreliers & autres, &c. Suivant ces statuts, aucun ne peut être reçu maître qu'il n'ait atteint l'âge de vingt ans, qu'il n'ait été en apprentissage pendant cinq ans, & ensuite servi les maîtres trois années en qualité de compagnon, & qu'il n'ait fait chef-d'oeuvre: il faut pourtant en excepter les fils de maîtres qui sont reçus après un seul examen.

Chaque maître est obligé d'avoir sa marque particulière, dont l'empreinte soit mise sur une table déposée chez le Procureur du Roi au Châtelet.

Vers la fin du XVII siècle, la communauté des aiguilliers ayant de la peine à subsister, fut réunie à celle des maîtres epingliers par lettres patentes de l'année 1695. Les jurés des deux communautés réunies furent réduits au nombre de trois; savoir, deux aiguilliers & un epinglier. On fit quelques changemens dans les statuts, qui pour le surplus restèrent en vigueur. Voyez l'article EPINGLIER.⁸⁷¹

TÉRÉBRATION in the *Dictionnaire de Trévoux* (1743, 1752), the *Encyclopédie* (1765), and the manuscripts of Pernety.

[*Trévoux*]: TÉRÉBRATION, s. f. L'action de percer avec une tarière. C'est ainsi que Danet dans ses Racines Latines explique le mot *terebratio* sous celui de *tero*, & cette explication est bien plus françoise que celle qu'il a donné depuis dans son Dict. Latin

⁸⁶⁹ *Dictionnaire de Trévoux* (1743), I, 255; (1752), I, 344.

⁸⁷⁰ BnF, MS f. fr. 16980, fol. 21.

⁸⁷¹ *Encyclopédie*, I (1751), 210.

& François, où *terebratio* est rendu par *percement avec la tarière*. On tire des branches du cocotier, par la *térébration*, une liqueur agréable comme le vin, qu'on peut conserver par la cuisson ou convertir en vinaigre. *Spect. de la Nat. to. 2. p. 428.*⁸⁷²

[Pernety]: TÉRÉBRATION, terme de physique qui signifie l'action de percer un corps avec un tarière. Il est particulièrement consacré pour exprimer l'action que l'on fait quand on perce un arbre avec un tarière ou autre instrument lorsque la sève commence à monter, pour en en [sic] extraire le suc, et l'avoir plus naturel que par la trituration. Mr. Bacon, Chancelier d'Angleterre, parle de la térébration, mais il ne la propose que comme un remède propre à décharger les arbres du superflux de la sève, et à les faire mieux fructifier. La Société royale de Londres a bien enchéri sur Mr. Bacon: elle a tellement perfectionné cette térébration qu'elle n'a presque rien laissé à faire là-dessus aux autres physiiciens. Elle l'a mise en règle, et réduit en méthode. Le Docteur Tonge dit qu'il faut percer l'arbre du côté du midi, traverser la moëlle et pousser la tarière jusqu'à un pouce près de l'écorce qui est du côté du septentrion, et conduire le trou de bas en haut. Il faut que le trou soit fait près de la terre. *acta philosoph. aprilis 1669, pag. 51.* Le tems propre à cela est depuis le mois de janvier jusqu'à la mi-mai, et à midi.⁸⁷³

[Encyclopédie]: TÉRÉBRATION, s. f. (*Botan.*) art de tirer le suc des arbres en les perçant. Il y a dans les plantes des sucres aqueux, vineux, oléagineux, gommeux, résineux, bitumineux; il y en a de toutes sortes de couleurs & de qualités. Ces sucres sortent quelquefois d'eux-mêmes & se coagulent en gomme. Quelquefois ils sortent par incision de leur écorce, comme sont les sucres de la scamonée, du pavot, &c. qu'on fait ensuite dessécher au soleil. On tire des sucres par contusion, par expression ou par la distillation.

Mais il y a une nouvelle manière de tirer des sucres, particulièrement les sucres des arbres. Elle se fait par la *térébration*; c'est-à-dire en perçant le tronc d'un arbre avec une tarière, lorsque la sève vers le commencement du printemps commence à monter. Cette manière a été inconnue aux anciens, du-moins on ne sache pas qu'aucun en ait fait mention; nous tenons cette invention des Anglois. L'immortel Bacon, chancelier d'Angleterre, parle de cette *térébration*; mais il ne la propose que comme un remède pour faire mieux fructifier les arbres: c'est pour cela qu'il la compare à la saignée. On a bien enchéri sur les premières vues de Bacon. Les Anglois ont mis la *térébration* en règle & l'ont réduite en méthode. Ensuite ils ont trouvé que ces sucres tirés par cette *térébration* méthodique pouvoit avoir de grandes utilités.

Voici l'ordre qu'il y faut garder, selon le docteur Tonge: Il y a, dit-il, différentes manières de tirer le suc d'un arbre. Pour en avoir beaucoup, il ne suffit pas d'entamer l'arbre légèrement avec un couteau. Il faut percer le tronc du côté du midi, passer au-delà de la moëlle, & ne s'arrêter qu'à un pouce près de l'écorce, qui est du côté du septentrion. On doit conduire la tarière de telle sorte que le trou monte toujours, afin de donner lieu à l'écoulement de la sève.

Il est bon d'observer que le trou doit être fait proche de la terre [...] (D.J.)⁸⁷⁴

⁸⁷² Dictionnaire de Trévoux (1743), VI, 139; Supplément (1752), II, 2212.

⁸⁷³ BnF, MS f. fr. 16980, fol. 261.

⁸⁷⁴ Encyclopédie, XVI (1765), 152–153.

CASTRAMÉTATION in the *Dictionnaire de Trévoux* (1743, 1752), the *Encyclopédie* (1752), and the manuscripts of Pernety.

[*Trévoux*]: CASTRAMÉTATION, s. f. Art de bien placer un camp, une armée. *Castrorum metatio*. Un Maréchal de Camp doit bien savoir la *castramétation*. On ne se sert guère de ce mot pour les campemens modernes. Il est plutôt Latin que François.⁸⁷⁵

[Pernety]: CASTRAMÉTATION, c'est proprement l'art de mesurer & de tracer les camps. On lui donne quelquefois une signification plus étendue, en y renfermant tout ce qui peut rendre un camp avantageux relativement aux vûes du Général. La castramétation est une des plus importantes et des plus difficiles opérations de l'art militaire. Il s'agit de bien choisir le lieu où l'armée doit camper, et il faut que le lieu soit commode et à couvert de toute insulte de la part de l'ennemi. Les loix générales sont d'avoir suffisamment du terrain pour placer l'infanterie, la cavalerie, l'artillerie, les vivres & les officiers de chaque corps avec tout le bagage, et que l'armée puisse sortir commodément du camp, et avoir devant elle une place suffisante pour se ranger en bataille à la vûe des ennemis.

Polybe et Végèce sont entrés dans un grand détail sur celle des Romains, & l'on regarde le fameux Maurice Prince d'Orange comme le premier qui l'ait rétablie, ou imitée vers la fin du XVI^e siècle.

Stevin a écrit un traité de la castramétation. On en trouve quelque chose dans *La doctrine militaire* du Sieur de la Fontaine, ingénieur du Roi, & dans les *Travaux de Mars* d'Allain Manesson Mallet. Mr. Le Blond, Professeur de mathématique des Pages de la grande écurie du Roi &c, vient de donner sur cette matière un ouvrage qui a pour titre *Essai sur la castramétation &c.*, chez Charles Ant. Jombert, 1748.⁸⁷⁶

[*Encyclopédie*]: CASTRAMÉTATION, s. f. c'est proprement l'art de marquer le camp & d'en déterminer toutes les différentes proportions. Ce mot vient du latin *castrum*, camp, & de *metiri*, mesurer. Voyez CAMP.

La *Castramétation*, est une partie si importante de l'art militaire, qu'il doit paroître assez étonnant qu'elle ait été absolument négligée dans les auteurs modernes qui ont écrit sur la guerre.

Polybe & Végèce sont entrés dans un grand détail sur celle des Romains; & leurs écrits ont beaucoup servi à l'établissement de l'ordre & de l'arrangement de nos camps, quoiqu'ils diffèrent à plusieurs égards de ceux des Romains. [...]

Cette police des Romains étoit oubliée en Europe, lorsque le fameux Maurice, Prince d'Orange, songea à la rétablir, ou plutôt à l'imiter vers la fin du XVI^e & le commencement du XVII^e siècle. [...]

Son camp, tel que le décrit Stevin dans sa *Castramétation* [...]

Cette disposition ou formation de camp passa ensuite dans la plupart des autres états de l'Europe; elle a sans doute été observée en France, car on la trouve décrite dans plusieurs auteurs, notamment dans le livre *de la Doctrine militaire*, donné en 1667 par le sieur de la Fontaine, ingénieur du Roi; & dans les *Travaux de Mars* par Alain Manesson Mallet. [...]

Préface des essais sur la Castramétation, par M. le Blond. (Q).⁸⁷⁷

⁸⁷⁵ *Dictionnaire de Trévoux* (1743), I, 1788; *Supplément* (1752), I (no addition).

⁸⁷⁶ BnF, MS f. fr. 16980, fol. 58.

⁸⁷⁷ *Encyclopédie*, II (1752), 754–755.

CANONIERE in the *Dictionnaire de Trévoux* (1743, 1752), the *Encyclopédie* (1752), and the manuscripts of Pernety.

[*Trevoux*]: CANONIERE, ou CANONNIERE, s. f., se dit d'une sorte de tente de toile à deux mâts pour reposer les canoniers. *Tentorium libratoribus tormentorum assignatum*. C'est encore une petite tente qui est faite en forme de toit, & qui n'a point de murailles comme les autres tentes ordinaires. Elles servent pour les soldats & pour tous les officiers de la maison du Roi. Il y a deux officiers dans chaque *canonière*, ou sept soldats.⁸⁷⁸

[*Pernety*]: CANONIERE en termes de guerre est le nom que l'on donne aux tentes des soldats. Leur plan est composé d'un quarré ABCD, dont chaque côté est de six pieds, sur l'un desquels est construit une espèce de demi-cercle CBE de 3 pieds de rayon. Ce demi-cercle se nomme cul-de-lampe de la tente. L'ouverture est le côté AD opposé au cul-de-lampe. La tente est soutenue en l'air par 2 bâtons HF, LG, qu'on nomme fourches. Ils sont posés perpendiculairement au terrain & ils ont environ 6 pieds de hauteur. Ces fourches soutiennent un troisième bâton FG, posé horizontalement ou parallèlement au terrain, et on donne à ce bâton le nom de Traverse. Les canonnières n'ont point de largeur par en haut, de sorte qu'on ne peut y être debout que sous la traverse. Elles ont en bas tout autour de la toile des espèces d'anneaux ou boucles de corde, dans lesquels on passe des piquets qu'on enfonce en terre, et qui tiennent la toile de la tente bien tendue, pour que la pluie coule plus aisément dessus. Pl. — fig. —

On place les canonnières de manière que les premières de chaque rang sont à la tête du camp, & comme elles sont égales les unes aux autres, elles font ensemble des espèces de rues égales et semblables. L'usage ordinaire est d'en former autant de perpendiculaires au front du camp, ou de rangs de tentes qu'il y a de compagnies dans le bataillon.

Pour rendre les rues du camp plus larges et plus commodes, on a coutume d'adosser ensemble deux rangs de tentes, qui se touchent ou qui s'approchent de fort près par leur cul-de-lampe. Leurs ouvertures qui sont opposées l'une à l'autre, donnent dans des rues différentes, à l'exception de la première tente de chaque compagnie, qui a son ouverture placée vis-à-vis la tête du camp, et de celle de la dernière qui l'a vers la queue. Le Blond. Voyez CAMP et sa figure.⁸⁷⁹

[*Encyclopédie*]: CANONIERES, s. f. pl., sont les tentes des soldats & cavaliers. Une *canonière* doit contenir sept soldats. (Q).⁸⁸⁰

⁸⁷⁸ *Dictionnaire de Trévoux* (1743), I, 1665; *Supplément* (1752), I (no addition).

⁸⁷⁹ BnF, MS f. fr. 16980, fol. 56.

⁸⁸⁰ *Encyclopédie*, II (1752), 619.

ALUCO in the *Dictionnaire de Trévoux* (1743, 1752), the *Encyclopédie* (1751), and the manuscripts of Pernetty.

[*Trévoux*]: ALUCO, BELL. JONST. C'est une espèce de hibou, & oiseau nocturne; il y en a de plusieurs sortes; les uns sont gros comme un chapon, & les autres comme un pigeon. Leur couleur est plombée, & marquée de blanc. Leur tête est grosse, sans oreilles, couronnée de plumes; leur bec est blanc; leurs yeux sont grands, noirs, paroissant enfoncés à cause de beaucoup de petites plumes qui les environnent; leurs jambes sont toutes couvertes de plumes jaunes; leurs pieds sont velus, avec des ongles longs & aigus. Ils habitent les édifices ruinés, les tours & cavernes. Ils vivent de rats & de petits oiseaux; leur cri est effroyable. Leur sang séché & mis en poudre depuis dix jusqu'à vingt grains est bon pour l'asthme.⁸⁸¹

[NH-3]: ALUCO, espèce de hibou ou oiseau de rapine nocturne dont il y a deux espèces. Celui de la première est de la grosseur d'un chapon, la couleur est plombée et marquée de blanc. La teste est grosse, sans oreilles, couronnée de plumes; il a le bec blanc, les yeux grands et noirs, paroissant enfoncés à cause de beaucoup de petites plumes qui les environnent. Les jambes sont couvertes de petites plumes blanches, les pieds sont velus et armés d'ongles longs, gros, et crochus. Il habite les édifices ruinés, les tours et les cavernes, les creux des vieux chênes. Il rôde la nuit dans les champs, il vit des rats et de petits oiseaux. La gueule est si grande qu'il avale des morceaux gros comme un oeuf après cependant en avoir ôté les os, les poils ou plumes.

Celui de la 2^e espèce n'est gueres plus gros qu'un pigeon; le derrière de sa teste, son col, son dos, ses ailes, son plumage jusqu'à la racine est moucheté de noir obscure et la teste de grise-fer. Le devant de sa teste paroît entouré de petites plumes blanches et de couleur de feu, avec un cercle de couleur brune. Les yeux qui sont très noirs vers les coins intérieurs sont garnis de brun obscur. Il a les jambes et les pieds rougeâtres tout hérissés de poils, et armés devant et derrière d'ongles longs, forts extrêmement aigus, très noirs. Son cri pendant la nuit est si effroyable que les femmes est les enfans en sont épouvantés. Cette espèce est beaucoup plus rare que la première. L'une et l'autre contiennent beaucoup de sel volatil et d'huile. Leur sang est très bon pour l'asthme l'étant desséché, pulvérisé, et pris par la bouche. La dose est depuis demi-scrupule jusqu'à deux. On estime son cerveau propre pour aglutiner les plaïes. Bellon, Cap. 32., Aldov. Lib. 8 & 5., Arist. Lib 8. Cap. 3., Jonst. Pag. 32. Tab. 19. Pl. __fig.__⁸⁸²

[*Encyclopédie*]: ALUCO, nom d'un oiseau dont il est parlé dans Belloni, Aldrovande, & Jonston. C'est une espèce de hibou dont la grandeur varie; il est gros, tantôt comme un chapon, tantôt comme un pigeon; son plumage est plombé & marqué de blanc; il a la tête grosse, couronnée de plumes, & sans oreilles apparentes; son bec est blanc, ses yeux grands, noirs, & couverts de plumes qui les renfoncent; ses pattes velues & armées de serres longues & crochues. Il habite les ruines, les cavernes, le creux des chênes; il rôde la nuit dans les champs; il vit de rats & d'oiseaux; il a le gosier très-large, & son cri est lugubre; sa chair contient beaucoup de sel volatil & d'huile; son sang desséché & pulvérisé, est bon dans l'asthme; sa cervelle fait agglutiner les plaïes. La dose de sang pulvérisé est depuis un demi-scrupule jusqu'à deux scrupules.⁸⁸³

⁸⁸¹ *Dictionnaire de Trévoux* (1743), I, 353; (1752), I, 476.

⁸⁸² BnF, MS f. fr. 16981, fols. 4–5.

⁸⁸³ *Encyclopédie*, I (1751), 305.

APPENDIX 6: THE LETTER OF JOMBERT

À Monseigneur le Chancelier
Monseigneur,

Charles Antoine Jombert, libraire de l'artillerie et du génie, a l'honneur de représenter à votre grandeur qu'ayant fait travailler depuis plusieurs années à un ouvrage considérable en forme de Dictionnaire sur les mathématiques, la physique et toutes les sciences et arts qui en dépendent, et qui à proprement parler est un Dictionnaire Universel, cette entreprise lui a déjà causé de grandes dépenses tant par rapport aux auteurs qui travaillent depuis près de trois ans à rassembler tous les matériaux nécessaires pour remplir ce vaste projet, qu'à cause des traductions qu'il a fait faire de plusieurs excellens ouvrages imprimés en différentes langues dans les pays étrangers, pour être incorporés dans ce grand Cours de science universelle, tels sont, par exemple, le Dictionnaire de mathématique et des arts qui y ont rapport, par le célèbre M. Wolffius, traduit de l'allemand, ouvrage excellent dont on a suivi le plan et la méthode, et qui sert de base et de fondement à celui-ci, les Éléments de la physique mathématique et de la philosophie de Newton, par 's Gravesande, traduit du latin, la Géographie Physique ou Introduction à la connoissance générale de l'Univers, traduit de hollandois de Mr. Struyck, le traité curieux de la Physique expérimentale du docteur Desaguliers, traduit de l'anglois, le grand Cours de sciences mathématiques de Mr. Wolffius, traduit du latin et revu sur l'édition allemande, sans parler de plusieurs autres livres sur les sciences, les arts et les métiers.

Le suppliant continuait d'y faire travailler à ce Dictionnaire Universel avec d'autant plus de sécurité que votre grandeur lui a fait la grâce de lui accorder il y a trois ans un privilège général pour chaquun [chacun] de ces ouvrages afin que personne ne fût en droit de s'opposer à leur traductions ou aux extraits qu'on en devoit faire pour former le grand ouvrage dont il est question, ni de réclamer en aucune façon ces différents traités. Présentement qu'il est fort avancé et qu'il s'agit d'en annoncer l'objet au public, le suppliant a le chagrin de voir que non seulement quelqu'uns de ses confrères viennent d'obtenir un privilège pour un Dictionnaire à peu près dans le même goût que le sien, quoiqu'il ne dût être d'abord qu'une simple traduction de l'Encyclopédie de Chambers, mais encore que ces mêmes libraires ayans eu avis de son projet veulent s'opposer à la publication de son prospectus, et se proposent de passer les bornes qu'ils s'étoient prescrites eux mêmes dans le plan qu'ils en ont publié, et d'augmenter considérablement leur traduction dans le dessein de faire tomber l'ouvrage entrepris par le suppliant, et de rendre toutes ses dépenses inutiles.

Ces circonstances fâcheuses obligent le suppliant d'avoir recours à la protection de votre grandeur, pour le prier d'avoir égard à la justice de sa cause, et lui représenter qu'ayant obtenu depuis plus de trois ans un privilège pour les ouvrages ci-dessus qui doivent composer son dictionnaire et ayant fait en conséquence toutes les dépenses et les recherches nécessaires pour le rendre le plus complet et le plus instructif qu'il étoit possible, il seroit ruiné totalement si cet ouvrage lui étoit enlevé ou rendu inutile par la concurrence de ses confrères. En conséquence il ose espérer que vous voudrez bien, Monseigneur, lui accorder la permission d'en publier le projet sous le titre de Dictionnaire universel, mathématique et physique, des sciences et des arts, et qu'en même temps votre grandeur aura la bonté de prescrire des bornes aux augmentations que les traducteurs de Chambers se proposent d'ajouter à leur Dictionnaire. Le suppliant est d'autant mieux fondé dans sa demande que tout son fonds ne consiste qu'en livres de mathématiques, de sciences et d'arts (commerce qu'il fait de père et fils depuis plus d'un siècle, quoique le plus difficile et le moins lucratif de la librairie). Or ces augmentations ne pouvant être tirées d'ailleurs que de ces mêmes livres dont il est en possession depuis si long temps, elles ne manqueroient point de faire un tort considérable au début de ses impressions et de rendre inutiles la plus grande partie de son fonds, ce qui entraineroit infailliblement sa ruine et celle d'une grosse famille dont il est chargé.

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In mid-eighteenth-century Paris, two young monks from the Benedictine Congregation of Saint-Maur – also known as the Maurists – started compiling a universal dictionary of arts, crafts, and sciences. The work was initiated simultaneously with what would become one of the most famous literary enterprises in Western intellectual history: the *Encyclopédie* of Diderot and d'Alembert. While the dictionary of the *philosophes* eventually turned into a controversial but successful best-seller, considered as the most important medium of Enlightenment thought, the Benedictines never finished or published their work. After almost a decade, the manuscripts were put aside in the monastery library, and were soon forgotten.

This dissertation explores the history and contents of the Maurists' enterprise. The project is situated within its monastic environment of production, the history of the encyclopedic dictionary, and the Enlightenment culture. The study shows that the Maurists early found themselves in a rival situation with the embryonic *Encyclopédie*, and that the two projects had several common denominators that distinguished them from the predecessors within the genre. At the same time, the Maurists were making a dictionary unique in the eighteenth century.

The study provides new perspectives on the *Encyclopédie* of Diderot and d'Alembert, the intellectual activities of the Congregation of Saint-Maur, as well as the editor in charge of the Maurist dictionary: Dom Antoine-Joseph Pernety, otherwise known for his alchemical writings.

Linn Holmberg is a historian of science and ideas at Umeå University. This is her doctoral dissertation.

