

UC San Diego

UC San Diego Electronic Theses and Dissertations

Title

Early enlightenment in Istanbul

Permalink

<https://escholarship.org/uc/item/13j1570s>

Author

Küççük, Bekir Harun

Publication Date

2012

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA, SAN DIEGO

Early Enlightenment in Istanbul

A dissertation submitted in partial satisfaction of the
requirements for the degree
Doctor of Philosophy

in

History and Science Studies

by

Bekir Harun Küçük

Committee in charge:

Professor Robert S. Westman, Chair
Professor Frank P. Biess
Professor Craig Callender
Professor Luce Giard
Professor Hasan Kayalı
Professor John A. Marino

2012

Copyright
Bekir Harun Küçük, 2012
All rights reserved.

The dissertation of Bekir Harun Küçük is approved, and it is acceptable in quality and form for publication on microfilm and electronically:

Chair

University of California, San Diego

2012

DEDICATION

To Merve

TABLE OF CONTENTS

Signature Page	iii
Dedication	iv
Table of Contents	v
List of Figures	vi
List of Tables	vii
Acknowledgements	viii
Vita and Publications	xi
Abstract of the Dissertation	xiii
Chapter 1 Early Enlightenment in Istanbul	1
Chapter 2 The Ahmedian Regime	42
Chapter 3 Ottoman Theology in the Early Eighteenth Century	77
Chapter 4 Natural Philosophy and Expertise: Convert Physicians and the Conversion of Ottoman Medicine	104
Chapter 5 Contemplation and Virtue: Greek Aristotelianism at the Ottoman Court	127
Chapter 6 The End of Aristotelianism: Upright Experience and the Printing Press	160
Chapter 7 <i>L'Homme Machine</i>	201
Bibliography	204

LIST OF FIGURES

Figure 1:	The title page of Cottunius's <i>Commentarii</i>	131
Figure 2:	Johannes Cottunius's portrait from the <i>Commentarii</i> (1648).	146
Figure 3:	Cottunius's titles according Matteo Bolzetta's preface to <i>Icones graecorum sapientium</i> (1657).	147
Figure 4:	A hand-drawn illustration comparing the Copernican and Tychonic models for the universe from <i>Mecmu'at-ı Hey 'etü'l-Ḳadīme ve el-Cedīde</i> . At the top center, Ibrahim Müteferrika gives instructions about the placement of the image in the printed version.	171
Figure 5:	Joseph André Jacques Aved's portrait of Mehmed Said Efendi (1742), Musée de Versailles	174
Figure 6:	The title page of Christoph Eberhard's <i>Specimen theoriae magneticae</i>	181
Figure 7:	Eberhard's engravings of a regular and an inclinatory compass.	184
Figure 8:	Eberhard's Compasses in the <i>Füyūḍāt-ı Mıknāṭısiyye</i>	185
Figure 9:	The first pages of a scholarly book, a presentation book and a Müteferrika print compared.	187
Figure 10:	The colophon of <i>Füyūḍāt</i> (Süleymaniye Library MS Laleli 2548) on the last page, showing hand-drawn rules. The last paragraph gives the date, the city, the press and the printer's name.	188
Figure 11:	Descartes' visuals regarding terrestrial magnetism and the Earth's crust from <i>Principia philosophiae</i> (1644)	192

LIST OF TABLES

Table 1:	The Ottoman Body Politic	66
Table 2:	Cottunius-Esad Correspondence	156
Table 3:	Editions of the Ottoman Printing Press	161

ACKNOWLEDGEMENTS

Writing this dissertation proved to be more of an adventure than I had initially anticipated. The volume that you are now holding would not have come into existence without the guidance and support of many people. It is a pleasure to acknowledge those who showed the way and kept me moving forward.

I have been deeply honored to have had an immensely resourceful committee. I cannot thank them enough for always being there. Bob Westman's astute observations, continued encouragement and astounding diligence steered me back into course countless times. He was at once the advisor and the editor of this twice-written dissertation, and much that is good in the following pages bears his mark. Without Hasan Kayalı's unflinching support, generosity and guidance, I would not have had the courage or the resources to write a dissertation on the Ottoman Empire. Without John Marino's mentorship and inventiveness, I would not have developed the mental toughness that was essential for setting up and maintaining the comparative framework of my thesis. Without Luce Giard's sagacity, encouragement and perseverance, I would not have had either the audacity or the intellectual flexibility to look at the Ottomans with fresh eyes. I am grateful to Craig Callender and Frank Biess for their support but also for some of my best class-hours at UCSD.

Two people are responsible for the initial inspiration behind this dissertation. It was Kasper Eskildsen who first brought the early Enlightenment to my attention, and introduced me to the individuals whose scholarship informs this dissertation. Şerif Mardin was the first to introduce me to the Islamic dimension of Ottoman modernity and to Esad of Ioannina. I cannot thank them enough.

Over the years, a number of other great teachers have generously shared their time and knowledge with me. I would also like to thank Tal Golan, Cynthia Truant, Nina Zhiri and Tom Gallant for their contributions to my education and research in San Diego.

Both prior to coming to UCSD and after I passed my qualifying exams, I have spent a number of pleasant and edifying years at Sabancı University in Istanbul. Tülay Artan's expertise, generous encouragement and feedback have kept me going in the right direction. I would like to thank Metin Kunt, Halil Berktaş and Hakan Erdem for their

mentorship during my formative years as a graduate student. I would also like to express my gratitude to Akşin Somel and Hülya Canbakal for their continued support over the years.

Research for this dissertation took me to a number of libraries in Turkey, Europe and the United States. I have appreciated the assistance that I received at UCSD's Geisel Library, the Süleymaniye Manuscript Library, the British Library, the History of Science Collections at the University of Oklahoma, Staatsbibliothek zu Berlin, Österreichische Nationalbibliothek, Sabancı University, Orientinstitut Istanbul and ISAM. I also owe an immense debt of gratitude to the ILL staff at many institutions. If it were not for them, I would have never had access to much of the rare material that was essential to my research. My gratitude goes particularly to the ILL staff at UCSD, at Sabancı University and the Max Planck Institute for the History of Science.

I am also proud to acknowledge the various fellowships and grants that supported my research. My main patrons during both research and writing have been the Department of History and the Science Studies Program at UCSD. A generous pre-dissertation research fellowship from the Council for European Studies has funded my early research at the British Library. A Mellon Fellowship took me to the University of Oklahoma's History of Science Collections for revisions. A "Writing-Up" fellowship at the Max Planck Institute for the History of Science saw me through the final months of writing. I am also grateful for a small grant from Orientinstitut Istanbul that helped me acquire an important eighteenth-century work.

As a traveller in strange lands, I have been the lucky recipient of kindness, friendship and advice from innumerable individuals. Raine Daston's generosity and support has been invaluable during my stay in Berlin. Khaled El-Rouayheb's company and advice has saved me from a number of errors. I would like to thank Edhem Eldem, Daniel Goffman and the participants at Max-Planck's pre-doctoral discussion seminar for their valuable encouragement and feedback. I would also like to thank Christine von Oertzen, Florence Hsia, Paul Erickson, Amrys O'Williams, Fernando Vidal, Han Vermeulen, Markus Friedrich, Dora Vargha, Ulla Kypta and Jenny Spinks for their warm and learned company. I owe a debt of gratitude to Steven Livesey, Peter Barker, Rienk Vermij, Kerry Magruder, Joann Palmeri and Margaret Gaida for a wonderful and pro-

ductive month at the University of Oklahoma's History of Science Collections.

During my doctoral journey, I also made many good friends. I would like to thank Alper and Becka Yalçinkaya for always being there. I cherish Cristina and Andrew Trecha's warmth and friendship. I am grateful to Zeynep Bulut for much needed camaraderie in San Diego and in Berlin. Fatma Ülgen's warm and wise company has been as enjoyable in Istanbul as it was in San Diego. I thank Kate McDonald for being a true friend and an excellent roommate. And, last but not least, I am grateful to Ayhan Ayteş, Benny Cohen, Aytek Soner Alpan and Matthew Shindell for making my days in San Diego much better than they would have been otherwise.

My parents, Ayfer and Özcan have always been unwavering in their support and watchful presence, although I spent the better half of my adult life thousands of miles away from home. I continue to owe them my most heartfelt gratitude. Finally, I want to thank my wife Merve for her love, support, bravery and perseverance. She was with me at every step of this journey. I humbly dedicate this work to her.

VITA

EDUCATION

2003	B. A. in Liberal Arts, St. John's College, Annapolis, Maryland
2004-2005	Graduate Teaching Assistant, Sabancı University, Istanbul, Turkey
2005	M. A. in History, Sabancı University, Istanbul, Turkey
2006-2008	Graduate Teaching Assistant, University of California, San Diego
2009-2011	Lecturer, Sabancı University, Istanbul, Turkey
2012	Ph. D. in History and Science Studies, University of California, San Diego

FELLOWSHIPS

2012	Max-Planck-Institut für Wissenschaftsgeschichte, Pre-doctoral Fellowship
2011	Melton Fellowship, Oklahoma University, History of Science Collections
2010-2011	Dissertation Research Fellowship, Science Studies Program, UCSD
2009-2010	Dissertation Research Fellowship, Science Studies Program, UCSD
2009	Pre-Dissertation Research Fellowship, Center for European Studies, Columbia University
2008-2009	UC Regents Fellowship, History and Science Studies, UCSD
2008-2009	Dissertation Research Fellowship, Science Studies Program, UCSD
2008	Conference Travel Grant, Institute for Advanced Study, Princeton
2007	Conference Travel Grant, University of Chicago
2007	Conference Travel Grant, British Society for the History of Science
2005-2006	UC Regents Fellowship, History and Science Studies, UCSD

PUBLICATIONS

Bekir Harun Küçük, "Islam, Christianity and the Conflict Thesis", in *Science and Religion: New Historical Perspectives*. Geoffrey Cantor, Thomas Dixon and Stephen Pumfrey, eds. Cambridge: Cambridge University Press, 2011

Bekir Harun Küçük. Review of *Cross-Cultural Scientific Exchanges in the Eastern Mediterranean, 1560-1660*, by Avner Ben Zaken. *Isis*, 103,1 2012.

Bekir Harun Küçük. Essay Review of *The Times of History: Universal Topics in Islamic Historiography*, by Aziz Al-Azmeh. *History of the Human Sciences*, 24, 2011

Arnold Reisman, Fatma Sarıkaya, Bekir Harun Küçük and Günay Çimen Erkol. *Refugees and Reforms: Turkey's Journey*. Charleston, SC: Booksurge, 2009

Bekir Harun Küçük, "Zwischen islamischen intellektueller Erneuerung und Verwestlichung: Kosmopolitische Gelehrsamkeit im Istanbul des frühen 18. Jahrhunderts," in *Wahrnehmung des Islam zwischen Reformation und Aufklärung*. Dietrich Klein and Birte Platos, eds. Munich: Wilhem Fink, 2008.

Bekir Harun Küçük. Review of *Turkey's Modernization: Refugees from Nazism and Atatürk's Vision*, by Arnold Reisman. *Isis*, 99/1, 2008.

ABSTRACT OF THE DISSERTATION

Early Enlightenment in Istanbul

by

Bekir Harun Küçük

Doctor of Philosophy in History and Science Studies

University of California, San Diego, 2012

Professor Robert S. Westman, Chair

This dissertation treats the reign of the Ottoman Sultan Ahmed III (1703-1730) in the context of the European early enlightenment. Intellectual historians have generally placed the Ottoman Empire outside the Enlightenment movement, while Ottoman historians have viewed the early eighteenth century as a transitional period between the crisis of the seventeenth century and the reformist movements of the late eighteenth century. The research presented in this work seeks to call these interpretations into question and suggests that the defining features of Ahmed III's regime were similar to those of the early enlightenment: cosmopolitanism, sociability, religious tolerance and, the valorization of philosophy and of social mobility.

It was in this enlightened atmosphere that natural philosophy became a contested space where different parties negotiated their new social status: What was the function

of natural philosophy? Who could legitimately speak about nature? The Greek commercial elite argued that the Aristotelian universe was an orderly whole and claimed that the rational contemplation of natural order engendered virtue. And virtue legitimized social status. Ottoman physicians, a second group aspiring to high office, contended that their empirical philosophy was superior to Aristotelianism. They believed that their innovative approach to nature was the right one because it yielded effective results. It was experience and effectiveness that entitled them to social and political recognition. Thus, moral virtue and technical expertise became competing values that represented different upwardly mobile groups in Ahmed III's Istanbul.

The Ottomans had no experimentalist tradition that could accommodate both logical methods and novel empirical knowledge. A young Ottoman bureaucrat, a Socinian convert to Islam and a Polish Pietist finally presented systematic experimentation as a possible solution to the Empire's social and epistemic problems. Their goal was to reconcile the two competing views of nature and to cultivate solidarity among the new elite. The Ottoman imperial printing press, which was established in 1729, served to disseminate the new experimental knowledge. The founding documents of the press drew an explicit connection between knowledge and political power, and showed that the Sultan intended to offer widespread access to both.

Chapter 1

Early Enlightenment in Istanbul

The Enlightenment was a western European phenomenon. Enlightenment ideas and ideals were a response to a wide array of earlier western European developments, such as the Renaissance, the Protestant and the Catholic Reformations, the rise of new philosophies in the seventeenth century, and the early modern wars of religion. The Enlightenment movement antagonized, above all else, Europe's absolutism and its oppressive Christian order. While scholars have generally disagreed about what constitutes this movement, everyone currently agrees that it was distinctly European. Some, like Larry Wolff, have gone so far as to claim that the Enlightenment was responsible for the very idea of western Europe.¹

The Enlightenment becomes an intractable problem once we cross to the east of the Rhine. Because there were substantial social, political and cultural differences between Western and Eastern Europe, what constituted an "enlightened" individual or society was radically different in the two settings. The Duchy of Muscovy, the Polish Commonwealth and the Ottoman Empire were significantly poorer and more feudal than their Western neighbors. The stretch of land between Greece and the Ukraine was a political periphery for much of the seventeenth century, and served as borderlands between the four major powers: the Hapsburgs, the Venetians, the Russians and the Ottomans.

Yet, it is also clear that there was noticeable intellectual interaction in the eigh-

¹Larry Wolff. *Inventing Eastern Europe: The Map of Civilization in the Mind of the Enlightenment*. Stanford: Stanford University Press, 1994.

teenth century between Western and Eastern Europe, more than there had been at any other point in history. Scholars seeking to explain the spread of the Enlightenment eastward have utilized two methods in particular. One approach was to identify actors and networks that carried the ideas and ideals of the Enlightenment east, west and south. We may identify a still-coherent western European movement expanding beyond its core area by studying intellectual confraternization between the insiders, and the outsiders. The alternative was to follow the movement of texts expounding Enlightenment ideas and ideals across linguistic, cultural, religious and political boundaries. One significant shortcoming common to both approaches is the double standard by which they approach the available evidence. When we leave the core area, the fine-grained analysis of individual actors in Western Europe turns into a study of intellectual emissaries of the Enlightenment who come to stand for entire countries.²

I will also be speaking of confraternization between Ottoman thinkers and Westerners. And the Turkish texts that I study are mostly translations from European languages. However, I will also be investigating the complex interaction between European ideas and, Ottoman religious and scholarly culture. I will observe the practice of religious tolerance, the emergence of new means of sociability, and the valorization of philosophy in the early eighteenth century Istanbul. This alternative strategy gives me an enlightenment movement with a small “e” but still retains enough family resemblance to the original movement to provide more than a mechanical transmission of ideas and ideals. I will not be speaking of the Ottoman early enlightenment in a way that works equally well for, say, a medieval Arabic “enlightenment” or Japanese Buddhist “enlightenment”.

In making my case, I will be following Jonathan Israel’s analysis of the early Enlightenment. In his *Enlightenment Contested*, Israel argues that there were always two

²The best case of this weaker sort of Enlightenment is Halle pietism, where a robust religious movement encouraged the practical applications of natural knowledge. See Johanna Geyer-Kordesch. *Pietismus, Medizin und Aufklärung in Preussen im 18. Jahrhundert: das Leben und Werk Georg Ernst Stahls*. Tübingen: Niemeyer, 2000. While Jonathan Israel’s work has inspired my research, not all geographical zones he honors with the epithet “enlightened” live up to the standards he himself sets. Russia is an excellent example where enlightenment means nothing more than a rejuvenation of learning, which, as far as I can tell, is not constitutive of Israel-style Enlightenment. See Jonathan Israel. *Enlightenment Contested: Philosophy, Modernity and the Emancipation of Man, 1670-1752*. Oxford: Oxford UP, 2006; pp.309-317. The section on Russia is followed by an equally weak overview of intellectual revitalization in eighteenth century Greece.

concurrent Enlightenment movements that took place against an unenlightened backdrop. The most significant of these movements, which is what Israel focuses on, is the “radical” Enlightenment. The radical movement was fully committed to the idea that reason was the sole judge of truth and pursued thoroughly natural explanations in all intellectual fields. The fountainhead of this movement was Spinoza, who, in his *Theologico-Political Treatise* openly called into question the foundations of both revealed religion and monarchy. However, Spinozism did not merely mean rejecting the institutions of *ancien régime*, but also tasked philosophy and philosophy alone with finding new alternatives. Therefore, Israel’s new thesis excludes a broad constellation of ideas that used to belong with the Enlightenment: Cartesian dualism, Lockean empiricism, Voltaire’s “enlightened” monarchy, Leibnizian monads, Malebranche’s occasionalism, the philosophy of Christian Wolff, all types of fideism, puritanism and pietism. These alternatives to radicalism constitute a second type of enlightenment, the “moderate” or mainstream enlightenment. The moderately enlightened views assigned a limited role to philosophy and sought to reconcile rationalism with faith and tradition. Consequently, Israel contends, they were all contradictory exercises in accommodation and compromise, and, ultimately failed to lead to modernity. Enlightenment in this second sense is what we find in the Ottoman intellectual mainstream, represented by the Sultan’s court, but a certain measure of radicalism, albeit without explicit reference to Spinoza, was not completely absent on Ottoman soil.

One salient feature of Israel’s argument is the historiographical stance that he packages with his thesis. Israel, as someone who has spent a considerable part of his career as a social and economic historian, voices his disappointment with the contextualist readings of the Enlightenment.³ He considers that the attempts at offering cultural, social, political and economic explanations for the Enlightenment failed. According to Israel, ideas carry the total weight of the Enlightenment and, indeed, he believes that context does not function in any meaningful way. He calls his enterprise “the new intellectual history”, by which he means a “controversialist approach.” By focusing on broad controversies rather than individual authors and social settings, he means to un-

³Israel’s first earlier books include *The Dutch Republic: Its Rise, Greatness and Fall, 1477-1806* Oxford: Oxford UP, 1998; *Dutch Primacy in World Trade, 1585-1740*. Oxford: Oxford UP, 1989; *Race, Class and Politics in Colonial Mexico, 1610-1670* Oxford: Oxford UP, 1975.

earth what I consider to be the intellectual mood of the Enlightenment. Israel himself admits that his approach is similar to and a subversion of *mentalités*, which was coined by Annales historians to mean lasting intellectual patterns. His method is different from theirs, however, because he does not bring social and economic conjuncture to bear on ideas. My dissertation builds on the success of Israel's approach. However, my analysis is situated in Istanbul and I study a relatively short and well-defined period. Consequently, I engage in thicker descriptions when I frame the central controversy informing this dissertation, namely problem of the disciplinary place of natural philosophy. I will follow his methods when I use Turkish texts, often translations from European languages, as reflections of an ongoing debate rather than as products of social and cultural dynamics alone.

What I have also borrowed from Israel in conceiving this thesis is the vision of a well-rounded and familiar understanding of the Enlightenment. It seems right, and viscerally so, to see the Enlightenment as an era when reason won over revelation, toleration over intolerance, republicanism and democracy over monarchy, openness and cosmopolitanism over parochialism, egalitarianism over social hierarchy, the party of humanity over political factions, and philosophy over theology. This robust definition, which I am keeping at the horizon of this thesis, is not applicable to the Ottoman Empire without contextual modification. The Ottoman early enlightenment was different from the European enlightenment in one very important sense. The original skeptical impetus that informed the two most important Europe thinkers of the seventeenth century, Baruch Spinoza and Pierre Bayle, was completely absent in the Ottoman Empire. In Istanbul, skepticism towards established religion and learning came from religious movements, not philosophers.

Of course, there are alternatives to Israel's view. Especially in recent decades, there has been a veritable surge in Enlightenment studies. Among the authors who represent these newer approaches, I will single out two. One is John Robertson, the other is Laurence Brockliss. Robertson's thesis is based on two seemingly very disparate figures, Giambattista Vico of Naples and David Hume of Edinburgh.⁴ His choice is quite deliberate. He takes what seems to be fringe or unique cases of the Enlighten-

⁴John Robertson. *The Case for the Enlightenment: Scotland and Naples, 1680-1760*. Cambridge: Cambridge UP, 2005.

ment or the criticism thereof to show that Epicureanism was the common denominator of the entire movement. Enlightened writers believed that human beings were essentially weak and that the best one could do to emancipate his fellow men was to provide for them. Robertson identifies the enlightenment as three different veins of inquiry that collectively aimed at “human betterment” or “sociability”: the study of the relationship between moral philosophy with the philosophy of the mind to produce a “science of man”; the study of the material conditions of man, which culminated in political economy; and the study of social and political structures, such as the sexes, property rights and moral relations. My research suggests that the enlightened Ottomans valued sociability and human betterment, but, at the same time, there were no Epicurean inquiries in Turkish. Nevertheless, I cherish the fact that enlightened ideas that emerged in eighteenth century Istanbul speak to both theses, as it strengthens the very notion that the Ottomans were part of the Enlightenment world.

One decisive difference between Israel and Robertson relates to revealed religion. Israel argues that radical thinkers of the Enlightenment opposed the very idea of revelation, while Robertson contends that revealed religion and even piety were not incompatible with enlightened ideas and ideals. The status of revealed religion in the Ottoman Empire is a problem that I can not resolve easily. Ahmed seems to have preferred naturalism over supernaturalism. While Ahmed’s father and brother, Mehmed IV (r.1648-1687) and Mustafa II (r.1695-1703), sought to enhance their power and legitimacy through religious charisma, Ahmed invested most of his time in rectifying the Empire’s finances and building a robust central administration. Ahmed was also remarkably different from his predecessors because he did not patronize a single volume of religious scholarship. Despite his otherwise naturalistic perspective on politics, Ahmed also patronized the expansion of scripturalist movements in the capital. As a result, the religious landscape of Istanbul was complex. The enlightenment movement that I describe adds indeterminacy to complexity. The chief actors in my story were converts to Islam and we do not know what conversion meant to them. It would be cynical to suggest that being a Muslim meant little more to the convert than gaining membership to a privileged class of individuals in the Ottoman Empire. At the same time, it would be naive to suggest that the converts were convinced of the veracity of Islam, because

many of them were forced into conversion before 1703.

Laurence Brockliss's approach to the Enlightenment is historiographically unorthodox, but possesses certain virtues.⁵ His basic claim is that there was no such thing as the Enlightenment. Here, Brockliss builds on the brewing sentiment among other eighteenth-century scholars such as J.G.A. Pocock of the Cambridge School and Ulrich Im Hof. If Jonathan Israel follows intellectual controversy and continuities between controversies, and John Robertson seeks to find the common Epicurean denominator, then Brockliss seeks to understand what was intellectually normal in the eighteenth century. According to Brockliss, the so-called radical thinkers were an intellectual minority who wrought chaos, destruction and confusion, whereas mainstream scholarship continued to build on the constructive efforts of the seventeenth-century Republic of Letters. The true Enlightenment was the consummation and institutionalization of this Republic. Thus, most eighteenth-century thinkers valued self-improvement over human betterment and useful knowledge over critical opinion. The scholars and antiquarians who constituted this intellectual mainstream were far more numerous than the *philosophes*; they were better organized and most importantly, more influential. While Brockliss's claims ring true, what is questionable is the relation between antiquarianism and the Enlightenment, because when we look at the antiquarians, they do not seem as "enlightened" as some other eighteenth century writers. They might serve as a useful backdrop to the Enlightenment, which was after all an intellectual movement, but the absence of visibly enlightened ideas among antiquarians suggests that perhaps not everyone in the eighteenth century was part of this movement.

Why am I writing about an early Enlightenment movement in Istanbul? What is my investment in a debate that is specific to what happened in Europe and not the Ottoman Empire in the eighteenth century? The short answer to that question is simple: I think that there is no other convincing way to characterize the intellectual developments in the early eighteenth century Istanbul than as a kind of enlightenment movement. Among the phenomena I collect under this rubric are: deconfessionalization and revalorization of philosophy, the rise of naturalism, the Sultan's worldly and enterprising efforts to seek public recognition and support for his mandate in a way that teetered on

⁵Laurence Brockliss. *Calvet's Web: Enlightenment and the Republic of Letters in Eighteenth-Century France*. Oxford: Oxford UP, 2002.

republicanism, new and more rational interpretations and practices of Islam, the deliberate exercise of religious tolerance and the re-alignment of court practices along more civil – as opposed to military or religious - lines, which collectively amount to cultural openness and to the erosion of the old order. The Ottomans themselves did not have a name for these developments, and I doubt any of them explicitly tallied all the features of the environment in which they lived and breathed. However, my view is that this environment sounds, smells and tastes like what Jonathan Israel has called the moderate Enlightenment, the pursuit to reconcile a new secular and philosophical outlook on the world with existing social institutions.

Deism and Religious Tolerance in Ottoman Istanbul in the Early eighteenth Century

Religious dissidence and deism are well-known aspects of the Enlightenment movement. Two groups in particular, the Socinians, who denied the Holy Trinity, and the Huguenots, who defied Louis XIV's catholicizing tendencies, often appear as key players in the early eighteenth century European philosophical underground. These groups as well as the Deists, who believed in God but refused to believe in revealed religion, also serve as key actors in our understanding of Christian irreligiosity in the early Enlightenment.⁶ These groups formed well-networked diasporas who lived in various pockets of refuge, such as Geneva, Prussian Berlin or the Dutch Republic. Still another haven for religious dissidents in Europe was the Ottoman Empire, a little-known fact that presently remains unrecognized in our understanding of early eighteenth century Ottoman Empire.⁷

⁶The most famous Huguenot of the early Enlightenment, without doubt is Pierre Bayle. On Huguenots, see: Martin Mulsow. *Die drei Ringe: Toleranz und clandestine Gelehrsamkeit bei Mathurin Veyssière La Croze (1661-1739)*. Tübingen: Max Niemeyer, 2001. The three rings are the three monotheistic religions and refers to the story of Nathan the Wise. Only one of the three rings was the real ring, but no one knew which ring. Sandra Pott, Martin Mulsow and Lutz Danneberg, eds. *The Berlin Refuge, 1680-1780: Learning and Science in European Context*. Leiden: Brill, 2003. On French "ex-Catholics," see Israel, *Radical Enlightenment*, pp. 575-591. On Socinianism, see Martin Mulsow and Jan Rohls, eds. *Socinianism and Arminianism: Anti-Trinitarians, Calvinists and Cultural Exchange in Seventeenth-Century Europe*. Leiden: Brill, 2005.

⁷For an insider account of Huguenots in the Ottoman Empire, see Aubry de la Mottraye. *A. de la Mottraye's Travels through Europe, Asia, and into Part of Africa with Proper Cuts and Maps. Containing a Great Variety of Geographical, Topographical, and Political Observations*. London: Printed for the

The Ottoman Empire was an appealing destination to practically anyone who fled any kind of persecution or threat in Europe because the Sultan, the titular protector of the world (*‘ālempenāh*), often displayed his superiority over European monarchs by admitting refugees and representing these gestures as acts of paternal clemency and protection.⁸ During Ahmed III’s reign (1703-1730), no less than three very high profile European figures took refuge in the Ottoman Empire: The first was the Jansenist Hungarian prince Rákóczi Ferenc II (1676-1735), who was plotting a revolt against the Habsburgs. Charles XII (1682-1718) of Sweden became the second nobleman to seek asylum from the Ottoman Empire when he was fleeing before the armies Peter the Great in 1710. The third was the French general Alexander Comte de Bonneval (1675-1747), who had fought side by side with Eugene of Savoy against the Ottomans until he fell out of favor at all major courts in Europe.⁹

The business of protecting the world was not limited, however, to the Sultan’s interest in hosting elite outcasts. There were also others whose numbers we simply cannot estimate. The Huguenots were the largest group among the European refugees. The Sultan kept some of them outside the capital, at Tekirdağ, a town that lies less than a hundred miles northwest of Istanbul. Such precautions prevented potential diplomatic crises. Those who were able to find employment could make the Galata district of Is-

Author, 1723. See for an account that does not address these religious diasporas in the treatment of Ottoman Christianity, see Bruce Masters, “Christians in a Changing World,” in *The Cambridge History of Turkey*, vol. 3, *The Later Ottoman Empire*. ed. Suraiya Faroqhi. Cambridge: Cambridge UP, 2006; pp.272-280. This is all the more interesting because the late seventeenth and early eighteenth centuries were a period of upheaval and crisis in the Orthodox Church as well, mostly as a consequence of its interaction with European Protestant movements. For example, Methodios Anthrakitis a professor at the Patriarchal Academy from 1723 onwards said: “The bishops and the leaders of the churches, who are elected by vote, tend to their flock in such a manner . . . not a single instructive word comes out of their mouths to address and teach the flock. The bishops lie in slumber and in the depths of ignorance and, through neglect, let savage wolves invade the flock of Christ, for whose well-being they are responsible.” *Christianikai theoriai*. 1699; p.209; translated and cited in Vasileos Tsakiris. *Die gedruckten griechischen Beitbücher zur Zeit der Türkenherrschaft*. Berlin: De Gruyter, 2009; p.146.

⁸Suraiya Faroqhi. *Another Mirror for the Princes: The Public Image of the Sultan and Its Reception*. Istanbul: Isis, 2009; p.30

⁹On Rákóczi, see M. Tayyip Gökbilgin, ed. *Türk-Macar kültür Münasebetleri Işığında II. Rákóczi Ferenc ve Macar Mültecileri Sempozyumu İstanbul, 31 Mayıs - 3 Haziran 1976*. Ankara: TTK, 1981. On Bonneval, see Hermann Stockinger, “Die Apostasie des Pascha-Grafen Alexander von Bonneval (1675-1747) und europäische Stimmen zum ‘Fall’ Bonneval” in *Wahrnehmung des Islam zwischen Reformation und Aufklärung*. eds. Birte Platow and Dietrich Klein. Munich: Wilhelm Fink, 2008; pp.111-139. There are many works on Charles XII, but a good period rendition is Voltaire’s *Histoire de Charles XII, Roi de Suede*. 2 vols. Basel: Christophe Revis, 1731.

tanbul their home. Isaac Rousseau, Jean-Jacques Rousseau's father, was a resident of Galata, as was Aubry de la Mottraye, a French refugee who has left a monographic record of his experiences in the Ottoman Empire.¹⁰ Baron de Rochefort, a Huguenot renegade, even had the audacity to approach the court in 1717 with a project to establish both an engineering school and a permanent Huguenot colony.¹¹ However, the Sultan was fully aware that he was acting in defiance of the complex web of domestic and diplomatic relations when he granted asylum to such figures, and he was only occasionally willing to suffer the consequences of such actions. Both the Holy Roman Emperor and the King of France acted as the protectors of the populations that the Ottomans called "Frenk" — an ethnic and religious designation for non-Ottoman Catholics and Protestants, which had come to include everyone of European extraction. When the Sultan ventured to protect or to punish Frenks, he was infringing upon the authority of the other two monarchs. De la Mottraye reports that, in the absence of the Ottoman court's heroic intervention, which could not be absolutely relied upon, the only option left to the Huguenots was to seek protection either from Geneva or the Dutch Republic, that is, to change their citizenship in order to avoid the wrath of the Catholic king.¹²

¹⁰On Isaac Rousseau, see Rémy Hildebrand, "Isaac Rousseau à Péra: heurs et malheurs d'un compagnon horloger," in *L'Horloger du Sérail: aux sources de fantasme oriental chez Jean-Jacques Rousseau*. eds. Paul Dumont and Rémy Hildebrand. Paris: Maisonneuve & Larose, 2005; pp.28-47.

¹¹Niyazi Berkes. *The Development of Secularism in Turkey*. Montreal: McGill UP, 1964; p.31. There is also an imaginary dialogue that scholars often attribute to La Rochefort. The friendly conversation had two interlocutors, a Muslim and a Christian. The two were debating the reasons for the Ottoman defeats on the Western front. The Christian wanted to see the Ottomans subdue the Habsburgs, whom he identified as an enemy of non-Catholics in central and eastern Europe. He professed to wanting to help the Ottomans gain victory. For a transcription, see Faik Reşit Unat, "Ahmet III. Devrine Ait Bir Islahat Takriri: Muhayyel Bir Mülakatın Zabıtları," *Tarih Vesikaları*, 1, 1941: 107-121.

¹²"This French Watch-maker that I have mention'd was one of the Protestant Subjects of France, and he told me that he was settled at Constantinople, before the Persecution that was raised against them by the Jesuits for they will have it, that the Fathers of the Order are the Authors of all Evils which they have suffer'd for their Religion and he affirm'd they had blown several Years before the Flames of the Persecution as far as Turkey against him and his Brethren. He added this Circumstance, that upon Letters which they had written to the King of France, importing, that many of his Huguenot Subjects, without regarding his Majesty's Prohibition of their Worship, continued in the publick Profession of it, even under the Protection of the Ambassador, then Monsieur Girardin, who permitted them to go for it to the English Palace, that the Ambassador receiv'd on that Account abundance of Reprimands, with orders to put on Shipboard all the French Huguenots who were at Constantinople and send them back to France; and that his Excellency had already shipped off several, of which Number he himself was one, but that the Visier, who was inform'd of it by some of his Friends, and was provok'd at the Violence exercis'd on the Account of Religion, even in the Grand Seignior's Dominions, who grants such a general Liberty to all the World in that Respect, sent to reclaim him as a Watch-maker, who was in his Service; and that some other Ministers

There was still a third option, and I believe possibly a popular one, that assured lifelong protection from persecution: converting to Islam while remaining a crypto-Christian.¹³ Naturally, not all European emigres in Istanbul became Muslims. Those who still enjoyed good standing as subjects of European kingdoms retained their religious identity and their Christian name. And, of course, not all converts were crypto-Christians or crypto-Jews. At least some must have been convinced of the truth of the Islamic faith, but the prevalence of conversion to Islam in a period of religious upheaval in Europe still deserves to be flagged for further inquiry.¹⁴

of the Porte having done the same by the others, Monsieur Girardin durst not refuse them; but contented himself to send Word to the Court of France how few there were, what had happen'd and to desire new Orders what he shou'd do; and that the Court wrote back that he shou'd continue his Protection of them in Temporal Affairs, without taking Notice of their Spirituals; and far from being troubled since on that Account, Monsieur Girardin's Successor to the Embassy, would have them declare themselves Subjects of Geneva, that they might be protected as such, the King of France being acknowledged as Protector of that small Republick; my Lord Paget had forbidden them their English Chappel a Year before my Arrival, but the Dutch Ambassador, Count Colyear, gave them leave to build one in his Garden." La Mottraye, *Travels*, Vol.1, p.173.

¹³Julia Landweber, "Fashioning Nationality and Identity in the Eighteenth Century: The Comte de Bonneval in the Ottoman Empire," *The International History Review*, XXX/1, 2008: 1-31; pp. 20-1. Clearly, one of the greatest challenges of honest adult conversion to Islam was circumcision. This procedure was not only physically intrusive, but was also humiliating, as Bonneval said, "to a man of his moral fibre." Voltaire, one of Bonneval's regular correspondents, who frequently joked about him said in 1738: "I am only surprised that, having been exiled to Asia Minor, he did not then go serve the Sophy of Persia, Thamas Kouli-Khan; he could have had the pleasure of continuing straight on to China, quarreling successively with all the ministers of state along the way. His head appears to me to have had more need of brains than of a turban." (Quoted from Sainte Beuve, *Le Comte Basha de Bonneval* in *ibid.*, p. 30)

¹⁴For a good survey of conversions to Islam, see Tijana Krstić, "Illuminated by the Light of Islam and the Glory of the Ottoman Sultanate: Self-Narratives of Conversion to Islam in the Age of Confessionalization," *Comparative Studies in Society and History*, 51/1, 2009: 35-63. I can summon at least two pieces of key evidence that attest to just how widespread crypto-Christianity was, and ironically served as a mechanism of religious tolerance: One of them is a very well-known set of legal judgments passed by Ahmed III's last Sheik al-Islam Abdullah of Larissa (in office 1718-1730) suggest that facilitating conversion as a mechanism of tolerance was a key concern in the early eighteenth century. In the context of his extensive treatment of the Muslim faith, Abdullah also decreed that: "Question: If Zayd and Amr testify before a *kadi* (Muslim judge) court that Bekir the Christian has turned from his superstitious religion and has born witness to the unity of God and the prophethood of Muhammed ten days before the hearing, and if Bekir denies (*inkār*) that he has converted, but Zayd and Amr insist that they testify to his conversion, is their testimony admissible and sufficient to judge Bekir a Muslim? Answer: Yes." Yenişehirli Abdullah. *Behçetü'l-Fetavā*. Istanbul: Matbaa-i Amire, 1872; p.14. By converting to Islam, Bekir automatically became a member of the nation of Muhammed (*millet-i Muhammediyye*) and hence was absolved of his former political allegiance to a European sovereign. There are a few interesting features of this *fetvā* (legal opinion) that we should observe: First and foremost, conversions to Islam previously took place before a *kadi* court and involved both the testimony of the convert and a record thereof. This means that Bekir's alleged and private conversion in the company of Muslim friends made him a Muslim without

Crypto-Christianity as well as Crypto-Judaism in the Ottoman Empire are well-established areas of inquiry in modern scholarship, but these phenomena are usually studied in a seventeenth century context, which, unlike the reign of Ahmed, is a period justifiably characterized as the century of Ottoman intolerance. Some of the well-known seventeenth century crypto-Christian communities included Albanian enclaves as well as land-owning Cretan Greeks who had converted to retain their property after the Ottoman conquest in 1669. The remarkably more unfortunate crypto-Jews were frequently former members of the Sabbetaean movement of the 1660s, and had converted *en masse* either at sword point or willingly. Clearly, the forced conversions that both the Christians and the Jews have suffered had very long lasting effects, but the early eighteenth century phenomenon seems to have been of a qualitatively different nature.¹⁵

Indeed, we find a large number of ex-Christians at the Ottoman court during Ahmed's reign as well as numerous French *mühtedīs* (converts) among the chemical

any further qualifications. The relative timing of the testimony and the hearing also suggests a sense of urgency, which suggests that the issue was brought before the court in a situation where being considered a Muslim would offer immediate and valuable benefit. Secondly, the denial of Bekir the Christian seems to add an odd twist to the act of conversion, and I cannot think of any other reason than the fact that such conflicting testimony would give Bekir plausible deniability. This was a loophole that he could use if and when he decided to return to Europe as a Christian, since the punishment for converting out of Islam was the death penalty. A second example of the European crypto-Christian appears in Nicholas Mavrocordato's dialogue on intellectual life in Istanbul, *Parerga Philotheou* (1716). Mavrocordato, who styled this work after Plato's *Symposium*, places a crypto-Christian, alongside a Catholic, a Jew, a Muslim and a Greek, as an Ottoman type. The crypto-Christian from Europe arrives half-way into the dialogue and Mavrocordato introduces him with the following words: "At this point in the narrative, which we will continue. . . arrived a new-comer, one of our acquaintances, who is among those who practice the religion of the Turks and assume their name and habit, but secretly honor, as much as is possible, the cult of their fathers; who, for the love of life and out of fear, renounce their faith as inferior. Our acquaintance was coming from Smyrna, and possessed as much knowledge about foreigners as he did about the natives, and who, over the course of a long voyage had visited the cities and knew the mores of a great many peoples. After being subject to an inconstant fortune, he had earned the graces of Ottoman magistrates because of his knowledge and experience." (Nicholas Mavrocordato. *Parerga Philotheou / Les loisirs de Philothée*. trans. and ed. Jacques Bouchard. Athens/Montreal: Association pour l'étude des Lumières en Grece, 1989; pp.82-3) Here, Mavrocordato is alluding to the peregrinations that was so common among Europe's religious refugees, which ended only once the Christian dissidents found not only asylum but also employment. The number of intellectually well-endowed European adult converts that we find at and around the Ottoman court supports my interpretation.

¹⁵For a good account of Jewish conversions, see Marc Baer. *The Dönme: Jewish Converts, Muslim Revolutionaries and Secular Turks*. Stanford: Stanford UP, 2010. For an excellent overview of the literature on Ottoman crypto-Christianity and Crypto-Judaism, see Maurus Reinkowski, "Hidden Believers, Hidden Apostates: The Phenomenon of Crypto-Jews and Crypto-Christians in the Middle East," in *Converting Cultures: Religion, Ideology of Transformations and Modernity*. eds. Dennis Washburn et al. Leiden: Brill, 2007; pp. 409-433.

practitioners. Ahmed's personal astrologer, Mehmed Efendi was of Huguenot descent; his first Chief Physician, who by office had to be not only Muslim but also a member of the Islamic scholarly establishment, was Nuh of Venetian Crete; his printer, Ibrahim Müteferrika, was a Socinian monk from Transylvania who had converted in 1710, and had jumpstarted his career with a short treatise on the compatibility of unitarian Christianity with Islam.¹⁶ Opportunistic conversions had been part and parcel of Ottoman statecraft since the late seventeenth century. Conversion was a potent tool that the elite households used to gain immediate access to the language, customs and the people of newly conquered territories.¹⁷ The converts, once part of the provincial apparatus of military households, worked their way to the center in the early eighteenth century. Once they received sultan's patronage, they could follow bureaucratic and diplomatic careers in the central administration, and some of them even acquired positions as *'ulemā'* (Muslim scholars).

Christian Perspectives on Ottoman Islam in the 1710s

The social environment of Istanbul reflected both the city's cosmopolitanism and the tolerant policies of Ahmed III. Urban sociability transcended religious, confessional and gender divisions.¹⁸ Cosmopolitanism was even more visible among the elite. Intellectual celebrities like Esad of Ioannina made appearances at dinner parties involving musical performances and wine, or at leisurely summer excursions to Chalcedon, usually in the mixed company of Jews, Orthodox Greeks, Catholics and Protestants.¹⁹ It was not unusual for Damad Ibrahim Paşa to host cosmopolitan gatherings at his own palace and the non-Muslim elites usually occupied some of the protocol seats and pavil-

¹⁶Halil Necatioğlu. *MatbaacıIbrahim-i Müteferrika ve Risale-i Islamiye AdlıEserin Tenkidli Metni*. Ankara: Elif, 1982. All studies to date of *Risāle-i Islāmiye* have mistakenly claimed that the occasional Latin passages are yet-to-be-identified quotations from Michael Servetus (1511-1553), a well known non-trinitarian. The passages are actually from the Vulgate version of the Gospel of Matthew.

¹⁷Faroqhi, *Another Mirror*, pp.189-218.

¹⁸Shirine Hamadeh, "Public Spaces and Garden Culture of Istanbul in the Eighteenth Century," in *The Early Modern Ottomans: Remapping the Empire* eds. Virginia Aksan and Daniel Goffman. Cambridge: Cambridge UP, 2007

¹⁹Emile Legrand. *Bibliothèque Grecque Vulgaire*. vol 4: *Epistolaire Grec (ou recueil de lettres adressées pour la plupart à Chrysanthé Notaras)* Paris: Maisonneuve, 1888; pp. 117, 237.

ions in close proximity to the Sultan at imperial festivals.²⁰

Even mid-level elites, such as the various *‘ulemā* and pashas, freely interacted with Europeans, and were aware of, if not altogether enthusiastic about intellectual exchange. For example, Lady Mary Wortley Montagu (1689-1762), the spouse of the English Ambassador to the Ottoman court between 1716 and 1718, related a conversation with a certain Ahmed Bey, a high-ranking Ottoman dignitary whose full identity Montagu does not disclose, about John Toland’s religious views. A series of exchanges with Ahmed convinced Lady Montagu that: “The *effendis* [*‘ulemā*] (that is to say, the learned) do very well deserve this name: they have no more faith in the inspiration of Mahomet, than in the infallibility of the Pope. They make a frank profession of deism among themselves, or to those they can trust, and never speak of their law but as of a politic institution, fit now to be observed by wise men, however at first introduced by politicians and enthusiasts.”²¹

In Lady Montagu’s letters, Ottomans often appeared to be deists. However, deism as a movement was not native to the Ottoman Empire, it was simply the natural state of an Empire that had merged its bureaucracy with its clergy. The *‘ulemā* simply applied the religious laws to others as part of their duty without, at the same time, feeling subject to the same:

There are very few amongst them (Achmet-Bey denied there were any) so absurd, as to set up for wit by declaring they believe no God at all. And Sir Paul Rycaut is mistaken (as he commonly is) in calling the sect *muterin* (i.e. the secret with us) atheists, they being deists, whose impiety consists in making a jest of their prophet. Achmet-Bey did not own to me that he was of this opinion; but made scruple of deviating from some part of Mahomet’s law, by drinking wine with the same freedom we did. When I asked him how he came to allow himself that liberty; he made answer, that all creatures of God are good, and designated for the use of man; however, that the prohibition of wine was a very wise maxim, and meant for the common people, being the source of all disorders among them; but that the prophet never designed to confine those that knew how to use it with moderation: nevertheless, he said, that scandal ought to be avoided, and that he never drank it in public. This is the general way of thinking amongst them, and

²⁰Faroqhi, *Another Mirror*, p.152.

²¹Lady Mary Wortley Montagu. *The Letters and Works of Lady Mary Wortley Montagu*. 3 vols. ed. Lord Wharnccliffe. London: Richard Bentley, 1887; v.1, p.360.

very few forbear drinking wine that are able to afford it.²²

Franciscus Dadich, the Venetian interpreter of the Habsburg embassy, noted in 1710 that the *‘ulemā’* were fully aware of the man-made nature of religion, professionally exercised their roles as religious judges and as professors of theology, and hardly harbored any feeling of religious devotion:

They consequently confuse religion, regarding which they have an extravagant and confused understanding, with their civil and official duties. Some of them are simply trying to satisfy their minds, for which they might abandon all common sense, and fall into a complete denial of God and have no scruples about being atheists. I see no reason to decide here whether their atheism is practical or theoretical. Of the remaining [*‘ulemā’*], some place their faith in a God who rules the world. Others laugh at the wonderful system that man makes out of religion, and believe the people to be weak. Others still adhere to virtue, which is indeed necessary for leading an orderly life, and thus break free of pain and worry. Others believe that they are fulfilling all their duties, whereas they are simply following what would be proper for a prudent Christian, when they follow a middle road between evil and debauchery in the absence of the good. Others apply their natural virtues, because of which they feel apprehensive towards great protests and injustices, but do not make it their business to exercise [this virtue] too regularly. The majority of them think in these ways, and each directs his opinion in a manner suited to the situation and for his personal benefit.²³

Neither Dadich, nor Lady Montagu painted flattering pictures of this well-defined social class, the *‘ulemā’*, who were theoretically the guardians of Islamic orthodoxy.

²²*ibid.*, p.369.

²³“Auf diese Weise vermengen sie die Religion, von welcher sie eine Menge ausschweifender Begriffe haben, mit ihren andern Bürgerlichen und Staatspflichten. Einige sind, um ihre Gedanken zu befriedigen und sich ganz der Sinnlichkeit überlassen zu können, auf eine gänzliche Gottesverleugnung verfallen, und machen sich kein Bedenken, Atheisten zu seyn. Ich habe nicht nöthig, zu entscheiden, ob ihre Atheisterey mehr theoretisch oder practisch sey. Andere hingegen setzen ihr Vertrauen auf eine Gottheit, welche die Welt regiert. Andere lachen über die wunderbare Systeme, die man sich von der Religion macht, und sehen sie alle als schwach an. Andere erdichten eine Einige Tugend, welche zwar zur ordentlichen Führung des menschlichen Lebens nöthig ist, die aber weder Pein noch Scrupel hervorbringt. Andere glauben alle Pflichten zu erfüllen, wenn sie nur eine gewisse Christlichkeit befolgen, welche die wahre Mittelstrasse zwischen Ausschweifung im Bösen und zwischen dem Mangel des Guten ist. Andere befließen sich einer natürlichen Tugend, wodurch sie sich vor schreyenden und grosen Ungerechtigkeiten hüten, aber ohne sich aus der allzu regelmäßigen Ausübung derselben ein besonderes Geschäft zu machen. Dieser Gedenkungsart bedienen sie sich zu ihrem größten Vorteil, und ein jeder richtet seine eigene Meinung in dieser Sache nach dem Umständen und nach seinem Nutzen ein.” Franciscus Dadich. “Denkwürdigkeiten von Constantinopel vom Jahr 1710,” *Allgemeine historische Bibliothek*, 9, 1769: 278-88.

However, modern historians of the Ottoman Empire generally assume that there existed a cultural barrier between Christianity and Islam. They have generally disregarded these “outsider accounts” as misunderstandings or misconstruals of the intentions of “the insiders.” The absence of orthodoxy and orthopraxis among the Muslims seemed to Paul Rycaut, the British Huguenot consul who was in Smyrna during the 1660s, as outright atheism.²⁴ Neo-Platonic mysticism of the Sufis, who did not accept either the word of the Koran, nor the basic elements of the Islamic faith as truths, naturally seemed to defy all European notions of revealed religion.²⁵

European observers repeatedly testified that Ottoman Islam was corrupt and lacked both the doctrinal and the practical backbone that made a religion. While we do not know whether a Muslim observer would reveal as much or speak about Ottoman Islam in the same manner, there were, nevertheless, elements of Islam that gave the Europeans good reason to think the way they did. The conflict between the *‘ulemā* and the Sufis, where the latter employed a wide variety of unorthodox practices in their pursuit of union with God, had become part of Ottoman daily life. The fact that many *‘ulemā* also socialized as members of Sufi orders made the religious landscape confusing to insiders as well as outsiders.²⁶ However, these impressions did not simply stem from the contradictory religious beliefs and practices that were at the heart of the Ottoman culture of devotion. Acting in direct and explicit defiance of Islam served as the ethos of at least one secret but fairly widespread religious order, the *Melāmetiye*, which was popular among the Janissaries. Melametism had emerged in medieval Konya, and advocated that worshipping in secret while seeking public humiliation and infamy, even seeking to make others believe of a Melameti practitioner’s irreligion, strengthened the

²⁴Paul Rycaut. *The Present State of the Ottoman Empire*. London: C. Brome, 1665, p. 130: “Until now, I never could believe that there was a formal Atheism in the world, concluding that the principle [of the Existence of God] was demonstrable by the light of nature, but it is evident now how far some men have extinguished this light and lamp in their souls.” Humberto Garcia argues that both Montagu’s letters and Rycaut’s *Present State* were typical specimens of English political discourse. They were more about England than they were about the Ottoman Empire. I do not agree with his interpretation, since similar discursive patterns are apparent in Dadich’s account as well. Humberto Garcia. *Islam and the English Enlightenment, 1670-1840*. Baltimore: Johns Hopkins UP, 2012.

²⁵Fazlur Rahman. *Revival and Reform in Islam: A Study of Islamic Fundamentalism*. Oxford: One World, 2000; pp.132-166.

²⁶Madeline Zilfi, “The Kadızadelis: Discordant Revivalism in Seventeenth-Century Istanbul,” *Journal of Near Eastern Studies*, 45/4, 1986: 251-269.

inner faith.²⁷

The *kuṭb* (pole or beacon) of the Melameti order, that is its highest Sheik, was none other than Ahmed's son in law and Grand Vizier, Şehid Ali Paşa (in office 1713-1716). Among the acts that disguised his adherence to Islam and earned him widespread recognition as a true master of the *Melāmetiye*, were his frequent verbal skirmishes with the Sheik al-Islams. Ali Paşa managed to get no less than three Sheik al-Islams ousted from office, and, among his other Melameti exploits, amassed a vast library of philosophical and astrological works, which were later integrated into Ahmed III's palace library.²⁸ Between the corrupt *‘ulemā*, the unorthodox Sufis, the casually observant elite and the defiant Melametis, foreigners could witness plenty of Ottoman deism.

From Deism to Pluralism: Damad Ibrahim Paşa, the *Millet* System and the Rationalization of Islam

The religious landscape of the city would begin to change after Damad Ibrahim Paşa, Ahmed's childhood friend, son in-law and the former Exchequer, became the Grand Vizier in 1718. Damad Ibrahim is by far the most important figure in this dissertation, and I will come back to him time and again, as an entrepreneur and financial speculator, as a conniving statesman who filled Ahmed's coffers and enhanced sultanic legitimacy, as a patron of philosophy and naturalism, as a supporter of the printing press, and finally as the man who paid for the successes and failures of Ahmed's regime with his life during the Janissary uprising in 1730. Here, by way of introduction, I will restrict myself to the issue of religion.

Ottoman Islam had gained not only better definition under Damad Ibrahim's grand vizierate, but there was also a surge in daily acts of devotion. Foreign travelers from the 1720s often remark, in sharp contrast to what we hear in the 1710s, that Istanbul had become a positively pious city where Islam truly flourished in all aspects of daily life.²⁹ A major development came in 1718, when Damad Ibrahim invited to the

²⁷On the *Melāmetiye*, see Abdülbaki Gölpınarlı. *Melamilik ve Melamiler*. Istanbul: Devlet Matbaası, 1931.

²⁸Ahmed Refik. *Onikinci Asr-ıHicride İstanbul Hayatı*. Istanbul: Enderun, 1988 [1921]; pp. 87-8. This volume is a collection of archival documents from the period. The document Refik reproduces is about the confiscation of Ali Paşa's library after his death.

²⁹Luigi Ferdinando Marsigli. *L'Etat militaire de l'Empire Ottoman*. Amsterdam: Pierre Gosse, 1732.

court a certain Murad Al-Bukhari (d.1720), one of the spiritual descendants of Ahmed Sirhindi (1564-1624), the Indian founder of the Naqshbandiyya-Mujaddidiyya Sufi Order.³⁰ Naqshbandiyya was the name of an old Sufi order that ostensibly eschewed the unorthodox beliefs of other orders, and pursued asceticism within the confines of conventional strictures of Islamic law. The "mujaddidiyya" qualification had been invented by Sirhindi, and literally meant "renewalist." The Naqshbandiyya-Mujaddidiyya identified Sirhindi as the "renewer of the second millennium," addressing the wide-spread belief that Islam underwent a necessary regeneration at the turn of every century and millennium. The order sought to reinstitute the religious practices of the original Islamic community of the seventh century. Al-Bukhari had been an itinerant proselytizer of the renewalist thought of his master. He had established himself in Damascus over the 1670s, but his goal was to reach Istanbul and there to spread Sirhindi's teachings. His first visit to the Ottoman capital was in 1681 and he settled in the city in 1708.³¹

Sirhindi's message was quite inimical to the traditional practices of the *‘ulemā*. What had turned Sirhindi from the traditional ways of his order was what he observed in India, which the historian Fazlur Rahman described as:

At the center of it all stood popular Sufism, latitudinarianism, and quasi-pantheistic Sufi beliefs and practices (which became mixed with similar Hindu trends) advocated by spiritual developments in India under the impact of Ibn Arabi's teachings... Akbar had legislated against the slaughter of cows, presumably to satisfy the Hindus. He had adopted certain clearly old Zoroastrian practices such as the veneration of the sun and fire. He flirted with Catholic emissaries of the Pope, and in fact left them with the impression that his conversion to Christianity was imminent.³²

While the circumstances that Sirhindi responded to were specific to India, they were broadly characteristic of Ottoman Islam as well.

See below for an analysis of Johann Friedrich Bachstrom. *Das Bey zwey hundert Jahr lang unbekannte, nunmehr aber entdeckte vortreffliche Land der Inqviraner*. Frankfurt and Leipzig: n.p. 1737.

³⁰Itzhak Weissmann. *The Naqshbandiyya: Revival and Activism in a Worldwide Sufi Tradition*. London: Routledge, 2007; p. 75.

³¹Karl Barbir, "All in the Family: the Muradis of Damascus," in *Third Congress on the Social and Economic History of Turkey (Princeton University, 24-26 August 1983)*. eds. Heath W. Lowry and Ralph S. Hattox. Istanbul: Isis Press, 1990; pp. 327-355. Also see Butrus Abu-Manneh's forthcoming "Conquering Sultan to Sultan-Caliph: Sunni-Orthodox Islam and the State in Istanbul in the eighteenth-Century."

³²Rahman, *Revival and Reform*, p. 167.

The practice of Islam stood at the core of Sirhindi's thought. In rejecting the mysticism of Ibn Arabi and the theology of the Indian *‘ulemā*, Sirhindi had embraced the Koran and the *ḥadīth* (prophetic tradition) as his guide. While traditional Sufism usually sought inner union with God, Sirhindi claimed that there was no way to communicate with God except through the prophet. And, achieving unity with Muhammed, unlike achieving unity with God, was within the realm of the humanly possible. The process of spiritual maturation was simple and started with observance of Koranic laws (*ṣerī‘at*). Following the law of the prophet was the outer ring that every spiritual traveller had to pass through. Only after having a full practical mastery of the law could the traveller begin to understand the inner wisdom of Islam.³³

Sirhindi's emphasis on scripture and on early Islamic traditions places him within a broader tradition of salafism. Salafi literally means "the ancestors," and refers to Islamic movements that seek to imitate the practices of the original community of Muhammed. Sirhindi's emphasis on seventh-century practices has won him the title of the Islamic Ur-fundamentalist. The renewalist movement is contiguous with the Wahhabism of Saudi Arabia and with the current-day Muslim Brotherhood. However, it is clear that Sirhindi was responding to a far more complex challenge, which had as much to do with the absence of well-defined Islamic practices as it did with the heavily intellectualized religious thought of the Sufis. According to him, it was in fact intellectualism that had stretched Islam beyond recognition. It was counter-productive, even for the *‘ulemā*, to engage with the problem intellectually. The best one could do, he maintained, was to follow the same spiritual path through which all Muslims had to walk.

Sirhindi's message was powerful, but his social reach was weak and the prospects of the renewalist movement were uncertain. There was no Islamic inquisition to ascertain doctrinal compliance, and no authority who held the power to decide who could interpret the sharia and who could not. Besides, we do not really know what this new spiritual movement meant in practice, since the early eighteenth century reaction to the renewalist way was not the immediate adoption of a prophetic lifestyle, but rather the

³³ Arthur F. Buehler, "Shariat and Ulama in Ahmad Sirhindi's Collected Letters," *Die Welt des Islams*, 43/3, 2003: 309-320.

rejuvenation of exegetical and *ḥadīth* scholarship.³⁴

In observing the Ottoman reception of Naqshbandiyya-Mujaddidiyya, it is important to note that this Islamic movement took place in the context of the court's foreign and domestic policies. Not only did Ahmed prevent French or Habsburg persecutions around the Empire, but also adopted an actively anti-Catholic stance for economic and political reasons. Widespread Catholic proselytizing pushed the Sultan to protect the Empire from missionary incursions.³⁵ This protectionist attitude stood in sharp contrast to the earlier relations between missionaries and the court. The Jesuits were on particularly good terms with the Sultan in the last quarter of the seventeenth century, and there is evidence that suggests that the court even collaborated with the Jesuits on a number of occasions: One source is the court-patronized Turkish translation of Jan Bleau's *Atlas major* (1665), attributed to Ebubekir Behram el-Dimaşki. Ottoman sources tell us that a "wise French priest" was responsible for the translation in one way or another, and Johann Christian Kundmann, who left a short but clear account of experimental practice at the Ottoman court, identifies this priest as Père Robnier, about whom we know virtually nothing.³⁶ Pierre Besnier (?-1705) was another Jesuit who had stellar relations with the Ottoman elite. The embassy report of Sieur de la Croix portrays Besnier as a friend of Feyzullah Efendi, who was the Sheik al-Islam between 1695 and 1703. Among the favors Besnier received from his friend was permission to set up a small observatory on the hills of Tophane, close to the Jesuit mission (now the Lycée St.Benoît). Since education had offered the Jesuits a way to gain converts among the Ottoman Christians, he also drew up a project to set up a school offering training in languages and the natural sciences (*sciences naturelles*) for Turkish children. As far as I can tell, Besnier's Muslim school never came to pass, but it clearly attests to a promising intimacy between the Jesuits and the Ottoman authorities.³⁷

³⁴John O. Voll, "Abdallah ibn Salim al-Basri and Eighteenth-Century Hadith Scholarship," *Die Welt des Islams*, 42/3, 2002; 356-372

³⁵Marquis de Bonnac. *Mémoire historique sur l'ambassade de France a Constantinople*. ed. Charles Shefer. Paris: Leroux, 1894; *in passim*. In fact, Ahmed's anti-Catholicism is the centerpiece not only of Bonnac's diplomatic correspondence but also that of his successor, Marquis de Villeneuve. See Albert Vandal. *Une ambassade française en Orient sous Louis XV: La mission de Marquis de Villeneuve, 1728-1741*. Paris: Plon, Nourriet et Cie., 1887.

³⁶Adnan Adıvar. *OsmanlıTürklerinde İlim*. Istanbul: Remzi, 2000 [1937]; p.154. Johann Christian Kundmann. *Rariora naturae et artis, item in re medica*. Breslau and Leipzig: Hubert, 1737; p. 711.

³⁷Petis de la Croix. *La Turquie chrétienne sous la puissante protection de Louis le Grand*. Paris: Pierre

In the early 1720s, we find a set of circumstances that suggest the Ottoman-Catholic relations had rapidly deteriorated after Damad Ibrahim took the helm: In 1722, Ahmed issued an edict that forbade Jesuits from converting Ottoman Christians who were not already Latins (that is, non-Orthodox and non-Armenian Christians). He was responding to a complaint from Armenian Patriarch of Istanbul regarding the widespread conversion of children to Catholicism at schools.³⁸ In 1723, Ahmed handed over custody of the Church of the Holy Sepulcher in Jerusalem to the Orthodox Greeks, which was as damning for the missionaries as it was for Louis XIV. Top-ranking Greek Orthodox dignitaries serving the Sultan were the products of an Italian education and over the course of their years in Italy had acquired a distaste for the Papacy. As I will discuss in Chapter 4, this was in no little measure due to the pressure Greek Orthodox students faced to convert to Catholicism, especially if they studied at either at St. Athanasius, also known as the Greek College in Rome, or at the University of Bologna. First-hand reports indicate that Notaras was also engaged in the small-scale persecution of Catholics in Jerusalem, by means of denying them entry to the Church of the Holy Sepulcher and by trying to oust the various Catholic orders from the city. Louis XV, or rather his Regent, the Duke of Orleans, was able to change this otherwise very bleak picture for Catholics in the Ottoman Empire only in the early 1730s. A number of intellectual, cultural and economic factors counterbalanced the court's reasons for taking an anti-Catholic stance, to which I will return in Chapter 5.

The Greek and the Armenian Churches, both of which were under the protection of the Ottoman Sultan, had also been at the center of broader European political dynamics since the late seventeenth century. Peter the Great and the Vatican had an ongoing conflict regarding the fate of the Orthodox Church. Popes patronized a series of exceptionally erudite works ranging from Byzantine embassy reports to histories of the Great Schism, which called the very notion of the separation of the Orthodox and Roman Catholic churches into question. The Greek proponents of the Uniate Church helped with, or at the very least vocally responded to, the Vatican's efforts. Greek clergy who were interested in retaining their independence from the Pope often sought Peter

Herissant, 1695; pp.403-11.

³⁸Charles Frazee. *Catholics and Sultans: The Church and the Ottoman Empire, 1453-1923*. Cambridge: Cambridge UP, 1983; pp.155-6.

the Great's support and patronage of their cause.³⁹ The Armenian Patriarch also felt the pressure from the Catholics, especially after the establishment of the Arabic printing press of the *Congregatio de Propaganda Fide* in Aleppo in 1706. Combined with the active proselytizing of the Jesuits, the printing press proved to be a potent tool for converting Armenians, whose religious practices were already similar to those of Arab Catholics.

Because the Armenian and Orthodox dioceses in major cities like Istanbul, Jerusalem, Aleppo, Damascus and Smyrna operated independently of one another – smaller congregations were completely outside Istanbul's reach –, neither the patriarchs nor the sultan could do much legally to prevent conversions to Catholicism. In the early eighteenth century, there was only one centrally administered Christian community in the Ottoman Empire, and that was the Catholic Church. So, the sultan addressed his decrees to the Catholics, while working to build the Armenian and the Greek congregations into Ottoman churches. Louis XIV had gained the right to protect the Ottoman Catholics as part of the trade capitulations that the sultans had extended to the French. Marquis de Bonnac, who was the French ambassador in the 1710s, believed that the Jesuits were exploiting French protection by aggressive proselytizing and, sooner or later, they would have to face the negative consequences of their success.⁴⁰

After 1718, the Ottoman court actively supported the Orthodox and Armenian Patriarchs in their efforts to centralize their church organizations.⁴¹ While all religious communities, called *millets* (nations) had had judicial autonomy in the Empire since the fifteenth century, the weaknesses and limits of this autonomy became clear when faced with the Catholic challenge. In the 1720s, Ahmed consolidated the *millets*, as a result of which the Christian spiritual leaderships grew stronger, closer to the palace, and further away from Catholicism — to the point that a few scholars even place the true schism between the Orthodox and the Catholic churches at 1755, when the Greek Orthodox

³⁹Gerhard Podskalsky. *Griechische Theologie in der Zeit der Türkenherrschaft, 1453-1821*. Munich: C.H. Beck, 1988; pp.270-321

⁴⁰Bonnac, *Mémoires*, p.180

⁴¹The classic account of the development of the millet system is Victor Roudometof, "From Rum Millet to Greek Nation: Enlightenment, Secularization, and National Identity in Ottoman Balkan Society, 1453–1821," *Journal of Modern Greek Studies*, 16, 1998, 11–48. Also see Masters, "Christians in a Changing World," p. 267.

clergy began to question the validity of Catholic baptism.⁴²

Ahmed's policies regarding the Christians stood at the heart of Ottoman religious pluralism. The consolidation of the *millet* system also had reverberations for Islam. Strengthening the non-Muslim confessions needed legislative support. The only office that was capable of facilitating Ahmed's church-building efforts was that of the Sheik al-Islam (Chief Islamic Jurisprudent). Damad Ibrahim appointed a fitting man for this office, Abdullah of Larissa, to support his reforms. Abdullah remained in office until the very end of Ahmed's reign in 1730, whereas the Sultan had changed six or seven Sheik al-Islams in the preceding decade and a half of his reign. Very early on, Abdullah was compliant and even supportive towards the remarkable shift in the court's presentation of Islam: The Muslims, Abdullah decreed, properly belonged to the *millet* of Muhammed, whereas the traditional designation for Islam was *millet* of Abraham. Islam's traditional claim to uncorrupted Abrahamic lineage was an indication of Islamic universalism, one that assigned an inferior status to Christianity and Judaism. For example, there used to be no Ottoman laws against verbally humiliating non-Muslims on account of their faith, while swearing against Muhammed was punishable by death. At least from an administrative and legal perspective, this was no longer the case after Ahmed III's reign. The entirety of the pious populations of the Ottoman Empire, whether Christian, Jewish, Shiite or Sunni were the true *millet* of Abraham.⁴³

Johann Friedrich Bachstrom (1688-1742), a naturalist at the Ottoman court and a Halle pietist with a Turkish mother, provides a unique perspective on Ibrahim's religious reforms. Bachstrom himself had run into trouble with the Catholics while teaching at the gymnasium at Thorn and had returned to Halle in 1724. His friends and colleagues encouraged him to go to the Ottoman Empire as a missionary because not only did he know Turkish, but he was also the grandson of a captive Ottoman noble lady. He finally travelled to Istanbul in 1728, where he would stay for three years. I will speak at length about his naturalistic pursuits in Istanbul in Chapter 5, but here, I will focus on his views

⁴²Frazee, *Catholics and Sultans*, p.159; Podskalsky, *Griechische Theologie* p. 353-5.

⁴³The *millet* of Abraham became a thorny issue during the first half of the seventeenth century. Muslim scripturalist movements problematized the practices that had been traditionally adopted from Abraham and other Biblical prophets. This is one of the central themes of Yenişehirli Abdullah's *Behçetü'l-Fetavā*. For a summary of earlier debates, see Katip Çelebi. *The Balance of Truth*. trans. and ed. Geoffrey L. Lewis. London: Allen and Unwin, 1957; pp.110-123

on Damad Ibrahim's piety.

After Ibrahim was killed and Ahmed was dethroned in 1730 after a conservative backlash, Bachstrom left the city for Poland, where he penned a robinsonade that was broadly inspired by his visit to Istanbul. The religious utopia that he wrote appeared in 1737 under the title *Land der Inqviraner*, meaning 'the land of those who were fleeing the Inquisition'. The hero of Bachstrom's story was Charles V's (r.1519-1556) court apothecary, a Protestant, who had just been consigned to the galleys. He and his fellow galley slaves began to plot a mutiny, and soon after got ship-wrecked and landed on an island where they discovered or invented the tools that they need to stay alive. After spending a long period on this island, they set sail to a new land. This new land was the Ottoman Empire, a projection of the ideal society. The townsfolk worked together to make sure that everyone was well-fed, healthy and cared for. The adults were divided among four functional classes: hunters, fishermen, fruit-gatherers, and the shepherds who were also responsible for building huts. This small self-governing town was remarkably similar to the Ottoman Empire, because it had a predominantly Greek, Jewish and Muslim population.

In this setting, Damad Ibrahim starred as a well-known shepherd and hut-builder speaking before a Muslim audience. Ibrahim protested that most people focus on the lower, more ceremonial aspects of religion (*Neben-Dingen*) rather than on the cultivation of faith (*Haupt-Wercke*). He began his monologue by claiming that circumcision was not decreed in the Koran, and its observance was nothing more than a tradition left over from Abraham and Islam.⁴⁴ While Ibrahim saw value in ablution, he did not like that it had turned into a ceremony and lost its original function of keeping people clean and healthy in hot climates. Ibrahim described the practice of fasting as a false imitation of the prophet, as Muhammed did not so much fast as grieve for his lost camel for thirty days. Since modern Muslims had not lost their camels, he added, there was no need for them to fast. Ibrahim also protested against the public performance of prayer, which he thought was not an act of devotion but an external display of piety. Before Ibrahim

⁴⁴When Ibrahim was lynched, the rebels found it appalling that he had not been circumcised and doubted that the person that they killed was Damad Ibrahim. The Turkish account of the rebellion has been translated into French and published anonymously as *Relation des deux rebellions arrivées à Constantinople en M.DCC.XXX. et XXXI., dans la déposition d'Achmet III...composée sur des Mémoires originaux reçus de Constantinople* The Hague: chez Jean Neaulme, 1737.

finished his speech, both the religious conservatives, who did not hear half of what he said because they were praying with their hands stretched to the sky, and the Sufis, who heard almost nothing because of their loud chanting, chased him out of the mosque, swearing that they would kill him and all of his followers.⁴⁵ The conversation between our hero and Ibrahim continued as they left the Muslim temple. Ibrahim continued to expand on his interpretation of Islam until he reached the crux of his argument: “‘When we think about the [Koran] in the right way, everything [said therein] is correct’, said good Ibrahim. ‘True, there is almost nothing to be said against the Koran, except, when we ask for an explanation [of religious practices], the answers that we get are based on tradition, and not on reason or on the contents [of the Koran].’”⁴⁶

It is difficult to establish how well Bachstrom’s account represented Ibrahim’s own religious beliefs, but Ibrahim the Shepherd’s desire to imitate the prophet surely signals the fictive character’s affinity with the Naqshbandi-Mujaddidi way, which focused on precisely such an imitation. Ibrahim’s way of interpreting the Koran also seems to be in line with Reinhard Schulze’s interpretation of Arabic Naqshbandi literature, which he claimed was the basis of an “autochthonous Islamic Enlightenment.” I will discuss the scholarly reaction against Schulze’s thesis below, but here, I would like to highlight certain features of his thesis that lend veracity to Bachstrom’s understanding of Ibrahim’s beliefs. Schulze’s seminal essay put forward a very broad pattern in eighteenth-century Naqshbandi literature, where the individual exercise of reason replaced scholastic logic. He also observed that reformist Sufis prized new interpretations of Islam more than they did well-established practices. He broadly called this new Sufism anthropocentric and emancipatory, that is, it offered a way to break free of the established patterns of social order.⁴⁷ While historians have generally—and rightly—interpreted Sirhindi’s thought as a precursor to fundamentalism, Schulze’s reading highlights the enlightened potential that the ethos of imitating the prophet involved. Here, Bachstrom gives us a possible way to understand how Sirhindi’s dictum could give rise to an enlightened interpretation of religion. This rationalistic reinterpretation of Islam also seems to be in line with the court’s pursuit of a pious natural philosophy that could supplant both clandes-

⁴⁵Bachstrom, *Land der Inqviraner*, pp.173-7.

⁴⁶*ibid.*, p.179

⁴⁷Reinhard Schulze, “Was ist die Islamische Aufklärung?,” *Die Welt des Islams*, 36/3, 1996: 276-325.

tine alchemy, whose practitioners more often than not were also Sufis, and traditional Islamic theology.

Chemical Medicine and the Rebirth of Philosophy

It would be overstating the case to claim that there were any theoretical breakthroughs or innovations of global import in the Ottoman Empire in the late seventeenth and early eighteenth centuries; but it would be understating to deny that the very nature of Ottoman naturalism underwent a fundamental and irreversible transformation during the reign of Ahmed III. This transformation was fueled by a great controversy about the proper disciplinary place of natural philosophy and its methods of speculation.

Three distinct communities mark Ottoman naturalistic thought in the early eighteenth century. First, there were the clandestine alchemists and practitioners of chemical medicine, a group that included Europeans as well as Sufis. Second, at the opposite end of the spectrum stood the *‘ulemā*, who advocated an Avicennian interpretation of Aristotelian philosophy—high-handed, sophisticated, logical but ultimately metaphysical and religious. And finally, Greek and Muslim court philosophers, representing a third way or the *via media*, seeking to embrace various Continental empiricist and rationalist philosophies while remaining conscious of their responsibility to oversee both naturalistic approaches and religion. The net result was the liberation of natural philosophy from theology and a new regulatory regime that sought to direct and confine naturalistic pursuits. This transformation of Ottoman naturalism in the eighteenth century also reflected religious dynamics: when court philosophers cleared out the reigning theological orthodoxy, they also sought to establish a sound empirical philosophy.

As I discuss in Chapter 3, the Ottoman interest in both ancient Greek and medieval Arabic naturalism reached its nadir in the seventeenth century. However, the first Ottoman public libraries that housed Greek and Arabic works also emerged during the same period. In the closing decades of the seventeenth century, students and calligraphers once again copied the long forgotten “greats” of early Arabic thought, such as Al-Kindi (801-873).⁴⁸ These early Islamic thinkers were different from the thirteenth

⁴⁸There are a few modern editions of seventeenth and early-eighteenth century library catalogues. See, for example, *Defter-i Kütübkhāne-i Çorlulu Ali Paşa*. Istanbul: Matbaa-i Amire, 1885; *Defter-i*

century theologians who had dominated Ottoman philosophical discourse until the seventeenth century. They were philosophers, not theologians, and they were aware of the distinction between the two intellectual pursuits. The classical authors gained new prestige, first and foremost among the learned Ottoman physicians. As it stands, it is difficult to establish a precise timeline of the various factors responsible for this intellectual renewal, but there is a cluster of parallel developments that give us a fairly sharp silhouette.

The most important cultural context for this rise in the status of philosophy was the slow and natural demise of Islamic systematic theology over the course of the seventeenth century. Systematic theology or *kelām* was a fully articulated philosophical system based on Avicenna's writings. It had developed into an academic discipline during the thirteenth century and constituted the core of Islamic higher education in the centuries that followed. Behind theology's decline was an escalating revulsion against the *‘ulemā* from both puritanical and Sufi quarters. The political factors, which I believe were specific to the Ottoman Empire, concerned the relationship between the administration and the scholarly establishment. Since the *medreses* or Islamic colleges were chiefly responsible for training the legal and administrative personnel of the empire, not only theology, but also other Islamic disciplines fell into disuse in the curricula. While the sixteenth-century *‘ālim* (singular of *‘ulemā*) was, or aspired to be, a polymath, the scholars of the seventeenth and eighteenth centuries were little more than legal experts.

The crisis of *kelām* was a universal phenomenon that covered all Islamic geographies. In stripping *kelām* of its former dignity, the critics also destroyed the late-medieval intellectual order. If the study of Islam and the study of philosophy no longer went together, what was philosophy's proper place? The epistemic vacuum left in the wake of *kelām* constituted a space that was open for negotiation. And I believe there were different answers to these questions in different geographies. While I will be investigating the Ottoman views of philosophy throughout this dissertation, it is useful to take note of the alternatives that the Ottoman court did not follow.

The first contender for the place of the weakening systematic theology was Mulla Sadra (1572-1640), the chief Iranian representative of illuminationist thought in the sev-

enteenth century. He was openly critical of *kelām*'s logical methodology, and instead advocated a philosophy based on intuition. Sadra's philosophy was more of a spiritual practice than an academic discipline, as he built his ideas on the claim that revelation and philosophical knowledge were fundamentally similar. If one reached a level of purity similar to those of the prophets, they would also find prophetic certainty. Illuminationist philosophy became exceptionally popular in Safavid Iran and in the seventeenth-century Ottoman Empire.⁴⁹

A second alternative was to defend and rejuvenate *kelām*. The Mughal Emperor Aurangzeb Alamgir established the Indian school known as Farangi Mahall in the early eighteenth century for Islamic scholarship. Scholars from Hyderabad and Lucknow wrote fresh commentaries on canonical texts of theology and became the agents of Mughal legal and educational reforms. The Kurdish territories of the Ottoman Empire also were home to similar attempts to revitalize the old traditions of learning.⁵⁰

Only Ahmed's court responded to the challenge in an enlightened way. What set apart the major Ottoman cities such as Istanbul, Smyrna or Jerusalem from the rest of the Islamic world was their exposure to European thought and to ex-Christian converts to Islam. The Ottoman conquest of Venetian Crete (1669) and the Empire's highly volatile Central European borderlands had not only transformed the Empire's ethnic constitution, but had also drawn former Christians to major commercial and administrative centers. It was during the crisis of *kelām* that European texts and intellectual currents began to appear for the first time in the landscape of Ottoman learning.

The clearest and the best known consequence of this intellectual encounter with Europe was the introduction of European medicine into Ottoman medical practice, which is the subject of Chapter 3. Medicine was one of the very few disciplines over which the *‘ulemā* did not exercise monopoly, and university-trained Ottoman Christians and Jews

⁴⁹Henri Corbin (1903-1978) was a French scholar who had a life-long philosophical interest in Sadra's thought. His main work that deals with the historical continuity between illuminationism and modern Iranian thought is *En Islam Iranien: Aspects spirituels et philosophiques*. 4 vols. Paris: Galimard, 1971-3. Seyyed Hossein Nasr, a contemporary philosopher and historian, is actively engaged in vivifying Sadra's thought as a viable Muslim approach to modern science. He argues that the separation of faith and philosophy is what is wrong with the modern West in his *A Young Muslim's Guide to the Modern World*. Chicago: Kazi, 1994.

⁵⁰Francis Robinson. *‘Ulama of Farangi Mahall and Islamic Culture in South Asia*. London: C. Hurst & Co., 2001. Also see Chapter 2.

who did not desire to pursue a religious career often preferred the medical profession. Most of these non-Muslims were the sons of wealthy merchants or land-owners, and the best among them vied for high office in the Ottoman administration where they sought to improve their family's standing.

Because many Ottoman doctors were Paduan-trained Greeks and Jews, the emergence of Ottoman medical humanism and the reinvigoration of Galenism were among the first signs of Europe's arrival at the Ottoman medical marketplace. Consequently, the Ottoman Muslims' first sustained exposure to European naturalism was through the familiar humoralist ideas and theories. Europe's Galenic orthodoxy carried over well into the Ottoman medical profession. There were also a few Paracelsian works in tow, but chemical medicine was not yet a serious alternative to prevailing Ottoman practices in the seventeenth century.

The baseline for eighteenth century Ottoman natural philosophy was the creolized, semi-materialistic Aristotelianism and Galenism of the seventeenth-century. Natural philosophy had been the exclusive domain of philosophical theology in the late medieval Islamic disciplinary arrangement because of the influential treatises of Nasr al-Din Tusi and Ali Kushji, but the demise of theology had created an environment where the physicians could speak about their discipline's foundations in physics. Eighteenth-century Ottoman physicians refashioned medicine as a type of philosophy, whereas sixteenth and seventeenth century Ottoman medicine was deliberately unphilosophical. One of the first works that transgressed the well-defined boundary between medicine and philosophy was Ömer b. Sinan el-Izniki's (?-1704) *Ḳunūẓ-ıḤayāt-i İnsān ve Ḳavānīn-i Eṭbbā-i Feyleşofān* (Treasures of Human Life and the Canons of the Philosopher-Physicians), an anatomical work that took ancient philosophical works of Aristotle as its starting point in the same way William Harvey (1578-1657) had done in his *On the Motion of Heart and Blood*.⁵¹ While this treatise featured a reiteration of Galenic medicine as well as Aristotelian philosophy, what was novel about Ömer's work was the appearance of the new type of physician, one who was also a philosopher.

Ottoman manuscripts from the early 1720s suggest that the philosophizing ten-

⁵¹Charles Schmitt, "William Harvey and Renaissance Aristotelianism: a Consideration of Praefatio to *De generatione animalium* (1651)," in *Humanismus und Medizin*. eds. Rudolf Schmitz and Gundolf Keil. Weinheim: Acta Humaniora, 1984; pp. 117-38.

dencies of the physicians escalated into a controversy regarding chemical or Paracelsian medicine. Paracelsus, a sixteenth-century autodidact and physician, had developed a new system of medicine that borrowed heavily from alchemy. He had suggested that the Aristotelian theory of elements and the Galenic theory of the four humors were ineffective. While classical medicine used food and herbs as remedies, Paracelsus found inorganic or mineral replacements to be much more potent. What recommended Paracelsus's methods were their effectiveness, and his recipes had reached the Ottoman medical market through Muslim translators and European practitioners. In 1704, Ahmed III had banished practicing Paracelsians from Istanbul, who regrouped in the Bursa and composed practical manuals in the hope of reversing the edict.⁵² A few of them targeted the Aristotelians at the Ottoman court, but their most effective defense was to produce and implement good medical recipes. Consequently, the compendia of recipes also known as *materia medica* books became their primary venue of self-expression. Physicians such as Ömer Şifai (d.1747) and Hafız Hasan (fl.1720) declaimed against the ongoing ban on chemical medicine in treatises dedicated to Damad Ibrahim. They upheld their right to philosophize and often brought up a dubious saying of the prophet to lend a religious authority to their pursuits: "Science is twofold. First comes the science of bodies, then comes the science of religions." Ömer, a towering figure among Bursa physicians, even went so far as to claim that natural philosophy was part of chemical medicine and not the other way around because chemical practitioners were the only people who possessed hands-on experience (*tecrübe*) of nature.

⁵² As one of the European travellers who passed through Bursa, Sieur Paul Lucas, personal physician to Louis XIV, seems to be correct when he compared Istanbul to Paris and Bursa to Leiden: "De même chez le Mahometans (les Dogmes de l'Alcoran { de leur tradition à part) on se permet une liberté entiere, soit de lire, soit de penser, soit de publier ses imaginations; { puisque l'esprit humain a toujours aimé la diversité d'occupations { le changement, on peut croire, sans apprehender de se tromper, qu'ils ne s'appliquent pas tous à la même chose: d'où conclut que les Sciences, à Stamboul comme à Paris, à Brousse comme à Leide, ou fleurissent de la même maniere, ou sont seulement poussées à divers degres" *Voyage du Sieur Paul Lucas, fait par ordre du Roi, dans La Grece, L'Asie Mineure, Macedonie et l'Afrique*. 2 vols. Amsterdam: aux dépens de la Compagnie, 1724; vol. 1, n.p. [Preface]. For Lucas's conversation with an alchemist-Sufi, which is probably Ömer, regarding the philosopher's stone, see *ibid*, 79-87. See Henri Omont. *Missions archéologiques françaises en Orient aux XVIIe et XVIIIe siècles*. Paris: Imprimerie nationale, 1902; p.345.

Aristotelian Orthodoxy and Regulating Naturalism

It was in this environment that Esad of Ioannina, a court philosopher, prepared his Arabic translation of Johannes Cottunius's *Commentarii lucidissimi in octo libros de physico auditu Aristotelis*, which is the focus of Chapter 4. Cottunius was a seventeenth-century descendant of the Aristotelians of Padua; and this translation was a defense of the new Ottoman and Hellenic philosophical orthodoxy, which was Aristotelianism. Cottunius as the author and Esad as his translator emphasized that natural philosophy was a speculative, not practical discipline. The majority of the commentary was devoted to Aristotle's refutation of the Eleatic philosophers, the Pythagoreans and the atomists. Both Esad and Cottunius sought to show that the so-called new philosophies that drew from these pre-Aristotelian opinions had already been refuted by Aristotle, who was "the best philosopher of the greatest empire in world history."

Esad's translation occupied a middle ground between Islamic theology and experimental philosophy. In a manner true to his Paduan predecessors, Esad argued that natural philosophy was a discipline that was independent of metaphysics. On the one hand, this was a liberating move; on the other, it excluded chemical medicine from legitimate philosophical discourse. There were two additional and equally relevant contexts that explain Esad's effort. First and foremost, it was a clear recognition of the Greek cultural and intellectual presence in Istanbul and even in the palace itself. Esad also presented Aristotle's own natural philosophy to be in clear conflict with the theologians' metaphysical reading of Aristotelian thought.

It is still impossible to say exactly what role the translation played in the broader Ottoman intellectual landscape beyond Esad's own lukewarm, but ultimately correct, identification of his effort to create a "union of modern Greek and Islamic learning," and "to mend for our ignorance of Aristotle's own ideas. . . and even those of Averroës." The translation seemed to be the Ottoman court's version of European *prisca philosophia* or perennial philosophy. It was a pious philosophy that emphasized the continuity and harmony of ancient and modern philosophical views.

The court disseminated this new Aristotelian philosophy among its Muslim and Christian subjects. In 1725, Methodios Anthrakites (1660-1736), a Cartesian and a professor of philosophy at the Patriarchal Academy, was excommunicated and replaced

by Jacob Manas, an Aristotelian. Esad's translations were taught at the elite Medrese of the Eight Courtyards. Spreading Aristotelian philosophy was what motivated the establishment of the first sultanic printing press in Ottoman history, which is the subject of Chapter 5.

An alliance of calligraphers and *‘ulemā* halted the preparations of the press before the first book was released in 1727. Ahmed's original intention was to publish works of philosophy, astronomy, logic, history and geography; but in 1729 the refounded press instead produced works of history and geography. Because philosophy, astronomy and logic were disciplines that traditionally fell into the *‘ulemā*'s domain, it is likely that the animosity towards the printing press was extension of a broader reaction to the palace's incursion into the realm of scholarship.

Between 1727 and 1729, Damad Ibrahim and Ahmed also pursued other venues of natural inquiry, and began to perform experiments from *Journal des Sçavans* at the palace. It seems that, at first, the experimental gatherings were completely private and exploratory. There was no clear motivation attached to them beyond the court's amusement. Johann Christian Kundmann, a doctor from Breslau who has left the only reasonably detailed account of the palace experimental society, had received a report of these gatherings from Johann Friedrich Bachstrom.

Bachstrom had arrived in 1728 with a copy of Christoph Eberhard's *Specimen theoriae magneticae* (1721) and gave experiments a new philosophical weight. The palace seems to have pursued experimental knowledge in secret. There are very few testimonies regarding the palace experiments, but I follow the paper trail to its chief product, a heavily doctored Turkish translation of *Specimen theoriae magneticae*. Terrestrial magnetism was one of the most controversial subjects in seventeenth century European science. Aristotle had believed that objects were drawn to the earth because of their weight. Physical objects had an inherent tendency to fall to the center of the universe, that is, the Earth, where all the heaviest elements were gathered. Magnetism was a curious property of certain rare, naturally magnetized pieces of iron ore. While William Gilbert's *De Magnete* (1600) had launched the European debate on "magnetic philosophy," the Ottomans had never been exposed to the literature. Furthermore, one could not experience, much less know, terrestrial magnetism without an instrument. It

was a theoretical entity that Aristotelian philosophy simply could not explain. However, what changed the courtiers' minds was their extended exposure to the inclinatory compass that had travelled with Eberhard's book. The instrument clearly pointed to the source of magnetic pull, which suggested that there actually was a vastly powerful lodestone buried inside the earth.

The magnet also served as a conduit for presenting a new way of assessing the philosophical weight of experience. It taught the courtiers' the discipline of taking repeated measurements with instruments. What distinguished this new type of experimental knowledge from the alchemists' experience (*tecrübe*) was its upright or solid (*berr*) quality. The translation of the *Specimen* contained a new, composite term that distinguished philosophically reliable experience (*berr tecrübe*) from simple experience.⁵³

Cartesianism and the Trade Winds of Philosophy

Ottoman Aristotelianism began to unravel with the introduction of reliable experience. It was around 1729 that Cartesian philosophy made a slow entry into the court through the mediation of Jean-Baptiste Holdermann, SJ (1694-1730). Holdermann landed in Istanbul in early 1729, soon after the arrival of the new French ambassador, Louis Saveur de Villeneuve (1675-1745). A professor of oriental languages at the Collège Louis-le-Grand, Holdermann was just finishing what would become the first Turkish grammar in a European language. After the decade-long détente between France and the Ottoman Empire, Villeneuve had arrived to restore the ties between the

⁵³Nicholas Mavrocordato, one of Esad's students remarked in 1716 that: "One must denounce the erroneous opinion of those who suppose that the Ottomans are strangers to all that is fine and noble; without doubt, the Ottomans are well-versed in the valuable works of modern authors, which in itself is very remarkable, but they can they can also find guides that will initiate them into the very secrets of nature and to the arcane knowledge of chemistry, not the kind that is fallacious, but the kind that enriches life with a thousand blessings. It is with an immense love for knowledge and for work, and with a willingness to pay the great price, that they commit themselves to their studies, drawing strength from their souls' thirst for knowledge. However, what holds them back is the shortage of modern works [available to them] and their ignorance of a solid philosophy that is founded on the senses (aisthēsis), which would help consummate their promising nature, which already thrives in a state of natural fecundity similar to that of the ancient Greeks. As it stands, they are consumed in vainly and interminably working through Aristotelian logical tracts, in practicing the alchemical tricks of the Arab charlatans (the result of which is counterfeit money and condemnation from qadis), all the while preferring to live in an epicurean manner, hidden under Platonic mysticism, which they openly avow." Mavrocordato, *Parerga Philotheou*, pp.86-7.

two nations. French trade had grown exponentially since Louis XV assumed power but the Ottoman Empire's protection of domestic merchants had shaved off a considerable amount of potential French income. In addition, the Russo-Habsburg alliance of 1726 and the deteriorating economy of France had made the restitution of the French-Ottoman military and commercial alliance desirable for France's economic and political well-being.

Damad Ibrahim was initially unwilling to grant what the ambassador. One of the very few trump cards that Villeneuve had against this ambivalent attitude was to mobilize the Jesuits, together with considerable French financial resources, to support the sultanic press. Thus, the second attempt at establishing a press received intense support from the French crown. Not only were Villeneuve and Louis XV willing to shoulder the prohibitive high cost of transporting paper to Istanbul, but they also dispatched journeymen printers from Marseilles to help with the technical preparations at the court.⁵⁴

The French involvement with the press also gave the Ottoman publishing enterprise a new direction. The books were chosen by Mehmed Said Efendi (?-1761) with the help of Abbé Sevin of the Bibliothèque du Roi, and were addressed to both European and domestic readers. *The History of Tamerlane* (Tāriḥ-i Tīmūr, 1730) as well the *History of Ancient and Modern Egypt* (Tāriḥ-i Mıṣru'l-Cedīd ve'l-Ḳadīm, 1730) were published at Sevin's request. Holdermann's *Grammaire turque* (1730) also made its debut in Istanbul, not in Paris, with a letter of dedication addressed to Cardinal Fleury.

The Cartesian philosophy of Edmond Pourchot that had come to define philosophical orthodoxy in France in the 1720s came to the court as part of this French initiative. Pourchot's *Institutiones philosophicae* (1690) enjoyed a long and fruitful career among Ottoman scholars after the violent end of Ahmed III's reign and the murder of Damad Ibrahim. A short passage from the four-volume compendium served as the introduction to the Turkish translation of *Specimen theoriae magneticae* (1732), Pourchot's brief treatment of Cartesian vortices appeared in the preface of the printed *Atlas* (Cihānnümā) of Katip Çelebi (1732) and selections from the volume on politics and the duties of the ruler appeared in a Turkish political tract. Soon after, Methodios An-

⁵⁴Johann Heinrich Gottfried Ernesti. *Die Wol-eingerichtete Buchdruckerey*. Nuremberg: Endters, 1733; n.p.

thrakites (1669-1736), then an exile in Ioannina, prepared a vernacular Greek rendition of the entire third volume of the *Institutiones*, which concerned the rights and duties of the sovereign.

The Ottoman scholars' extended exposure to Cartesian philosophy also served as the basis of a new radicalism among Ottoman chemical practitioners in the 1730s, which I discuss in the Epilogue. After Ahmed was dethroned during the popular uprising of 1730, the intellectual endeavors at the court also came to a halt. It took more than a full year for Mahmud I, Ahmed's cousin and successor, to stabilize the administration. Within a few years, many of the important naturalists of the 1720s moved up to positions of administrative power: In 1736, Ali Munşi of Bursa, a practicing alchemist and a translator of Rhazes's case histories, became the Chief Physician. Hayatzade Mustafa Feyzi the Younger, an ex-Jewish convert physician, secured the position of the Sheik al-Islam. Hekimoğlu Ali Paşa, the son of Nuh of Venetian Crete, had grown up in the philosophical setting of the court, and became the Grand Vizier in the late 1730s. The liberal atmosphere that obtained under these philosophical-minded administrators gave the physician Abbas Vesim (d.1767) the courage to express his materialistic sentiments.

Abbas Vesim had trained under Esad of Ioannina and Ali Munşi and had witnessed the controversy between the physicians and the court philosophers first hand. He had also read the Turkish *Specimen*. His main work, *The Judgements of Vesim* was a milestone in the history of Ottoman science, not because of its revolutionary content, but because it wove together a quarter century of controversy and ended where many seventeenth century scientific controversies did: in thorough-going materialism. Abbas Vesim argued against Aristotle's four elements. He based himself on Boyle's experiments (berr tecrûbe), which had clearly (belli) shown that water and fire did not mix. He also claimed that besides philosophy the aspiring doctor now had to master mechanics and chemistry because the human body worked like a "recirculating fountain." Abbas Vesim also denied the existence of a soul beyond the body, supporting his claim with the example of a snake that continued to writhe even after being cut in half.

This Ottoman La Mettrie marks the end of my inquiry. But I am certain that Abbas Vesim is not the end of the road for the Ottoman naturalistic movement. Throughout the eighteenth century, European mathematical and philosophical works continued to

flow with ever-increasing ease to Turkish and Greek readers. In the late eighteenth century, the first private academy of sciences was established in Istanbul's Beşiktaş district, as were the two sultanic colleges of engineering. Newtonianism emerged as a philosophical option in the 1750s, a phenomenon that is yet to be studied. Meanwhile, the palace missed no opportunity to import European technical knowledge and experts that could help make their cannons more accurate and their ships more durable.

The Neo-Hellenic Enlightenment, the *autochthone islamische Aufklärung*, and the Ottoman "Non-Enlightenment"

No understanding of the early enlightenment movement in Istanbul would be complete without addressing two existing historiographical traditions that at first glance seem only barely relevant to my thesis. A group of Greek scholars make the case that there was a "Neo-Hellenic Enlightenment" in the eighteenth century. This movement had developed in response to the proliferation of European philosophical and medical texts in the Greek-speaking regions of the Ottoman Empire.

Another group of scholars, who work on Sufism, make the case that there was an "autochthonous" Islamic enlightenment from the year 1700 onwards. Its chief proponent, Reinhart Schulze argued that mystical literature of the eighteenth century was increasingly anthropocentric, rationalistic and politically emancipatory. For good reasons, the theoretical literature that treats both phenomena has considerable overlap with Ottoman history. Greek thought flourished in the Ottoman Empire throughout most of the seventeenth and eighteenth centuries. Most of the Muslim literature that served as the empirical basis of the Islamic Enlightenment thesis was also produced in the Ottoman Empire. However, neither scholarly tradition makes much of the shared Ottoman context.

Historiographical traditions deliberately separate the Turkish-speaking parts of the Ottoman Empire from the Arab heartlands and from the so-called "Greek-speaking" regions. Surely there are linguistic divisions between the scholarly communities that investigate these different geographical areas, but these divisions defy historical realities. Most Ottoman scholars read and wrote in Arabic as a matter of course, while many Arabs and Greeks spoke Turkish as a natural consequence of living in an empire run

by Turkish-speaking administrators. Knowing Arabic was a sign of scholarly accomplishment among Greek thinkers of the eighteenth century. Not a few Ottoman writers transcended the Greek/Ottoman/Islamic divide, among whom I will only mention the most well-known who lived and worked between 1650 and 1750—Esad of Ioannina, Nuh of Crete, Isa of Chios, Hezarfenn of Cos, all Greek-speaking Turkish-writing Ottoman luminaries. The Ottomans clearly enjoyed a more polyglot lifestyle than do the intellectuals of the modern nation-state. This alone should give us sufficient reason to doubt that different languages automatically signify different traditions. The intellectual traditions and movements that manifested themselves in one language probably had more of a bearing on similar traditions in other languages than we traditionally assume.

The main evidence that Kostas Gavroglou and Efthymios Nicolaidis, two chief proponents of a Greek philosophical enlightenment, present suggests that Paduan Aristotelianism played an important in Greek intellectual life. Cartesian philosophy, which the Greeks read through Pourchot's *Institutiones* appears as another Greek movement associated with Methodios Anthrakites. A third part of the Greek naturalistic pursuits was chemical medicine, where Oswald Croll, Daniel Sennert and Nicholas Lemery were the most popular authors – incidentally, we find the same authors in Turkish translation as well.⁵⁵ They associated the Westernizing tendencies of Greek philosophical literature with the Greek independence movement in the 1800s.

However, the Greek historians never looked at the relevant Turkish literature from the eighteenth century, which is the subject matter of this dissertation. Otherwise, they would have noticed that Paduan Aristotelianism, Cartesianism and chemical philosophy were Ottoman movements, and had Turkish-speaking and Greek-speaking proponents. What constituted “European” literature for eighteenth century Turkish and Greek writers was one and the same. The patrons of both groups of writers were mem-

⁵⁵Dimitris Dialetis, Kostas Gavroglou and Manolis Patiniotis, “The Sciences in the Greek-Speaking Regions during the Seventeenth and Eighteenth Centuries”, in *The Sciences in the European Periphery during the Enlightenment*. 2 vols. Kostas Gavroglou, ed. Dordrecht: Kluwer, 1999; vol. 2, pp.41-71. Efthymios P. Boukaris and Vangelis Koutalis, “The ‘System of Chymists’ and the ‘Newtonian Dream’ in Greek-Speaking Communities in the Seventeenth-Eighteenth Centuries” *Science and Education*, 15, 2006: 780-800. Manolis Patiniotis, “Textbooks at the Crossroads: Scientific and Philosophical Textbooks in Eighteenth-Century Greek Education,” *Science and Education*, 15, 2006: 801-822. Manolis Patiniotis, “Eclecticism and Appropriation of the New Scientific Methods by the Greek-Speaking Scholars in the Ottoman Empire,” in *Science between Europe and Asia*. ed. Feza Günergun. New York: Springer, 2011; pp. 193-206.

bers of the Ottoman court. For example, the Sultan patronized the Mavrocordato family, who in turn patronized both Turkish and Greek writers. Esad was part of the Greek patronage networks.⁵⁶ The teachers of the Patriarchal Academy received tax exemptions from the Sultan. The national divisions that they read into the Greek literature has more to do with the modern idea of the nation-state than it does with eighteenth century Ottoman realities.

Surely, living in modern nation-states also determines one's linguistic competences. Knowing Greek and not Turkish, or vice versa, makes scholars partial to their national literature. However, contemporary linguistic divisions are not always the sole reason for our misunderstanding of the Ottoman heritage. There are also explicitly ideological motivations: For example, the well-known series of bio-bibliographies of "Ottoman" scientific literature prepared by Ekmeleddin Ihsanoglu and his colleagues listed only the works written in Turkish, Persian and Arabic; but this listing suffers from the exclusion of Hebrew, Greek and Armenian as Ottoman languages.⁵⁷ While the Jewish writers were an integral part of the European intellectual landscape and might merit an independent category, one can scarcely think of any place other than the Ottoman Empire where vernacular Greek and Armenian were spoken. A contemporary source estimated that Istanbul was a city of about 400,000 inhabitants in the early eighteenth century, and about half of this population was non-Muslim. I am sure the numbers would be even more revealing for cosmopolitan Jerusalem than for Istanbul. The 2002 conference Multicultural Science in the Ottoman Empire, co-organized by Turkish and Greek scholars, offered a prime opportunity to unearth, at least in part, the complexity of the Ottoman intellectual life. Unfortunately, all the contributions assumed that Greek and Turkish thinkers did not talk to one another. Consequently, the picture that emerged from the publication was neither multicultural, nor Ottoman, nor even all that scientific – because like the Turks, the Greeks preferred to translate innovative European works

⁵⁶Nicolae Iorga, ed. *Documente privitoare la istoria romanilor: volumul XIV al colectiei Hurmuzaki*. Bucharest: Romanian Academy, 1917; pp.824-6 includes a letter that Esad wrote regarding his old student Nicholas Mavrocordato.

⁵⁷Ekmeleddin Ihsanoğlu et al., eds. *OsmanlıAstronomi Literatürü Tarihi*. 2 vols. Istanbul: IRCICA, 1997. Ekmeleddin Ihsanoğlu et al., eds. *OsmanlıTabii ve Tatbiki Bilimler Literatürü Tarihi*. 2 vols. Istanbul: IRCICA, 2006. Ekmeleddin Ihsanoğlu et al., eds. *OsmanlıTıbbi Bilimler Literatürü Tarihi*. 4 vols. Istanbul: ISAR, 2008.

rather than write their own.

A natural extension of this vexing historiographical problem is the question of the Enlightenment. The idea of a Greek enlightenment emerged as a modest historiographical challenge to the prevailing narratives of the European Enlightenment when Raphael Demos published his seminal article, "The Neo-Hellenic Enlightenment, 1750-1821"⁵⁸ Demos argued that Greek thought, as well as Greek political and church culture went through a remarkable awakening in the eighteenth century. Greek scholars emphasized that "sound philosophy" played a central role in all human affairs, the Orthodox Church opened new schools for training clergy and the merchants of the Istanbul enhanced the political standing of Ottoman Greeks. The outcome this movement was the foundation of an independent Greece in 1821.

In the last two decades, especially Paschalis Kitromilides and the Greek historians of science have done commendable work that adds not only empirical depth to Demos's work, but also a broader temporal range.⁵⁹ In a well-known and oft-cited article, Kostas Gavroglu, Manolis Patiniotis and Efthymios Nicolaidis showed that Greek natural philosophical literature grew exponentially from 1650 onwards. In later articles, they embellished this basic narrative framework by showing that, after 1750, Greek scholars also read and translated Descartes, Newton and Locke. In further support of their argument, I have found a reference to a Greek rendition of Fenelon's *Télémaque* by an Istanbul apothecary, which, until now, has been unknown.⁶⁰

⁵⁸Raphael Demos, "Neo-Hellenic Enlightenment, 1750-1821," *Journal of the History of Ideas*, 19/4, 1958: 523-541.

⁵⁹Paschalis Kitromilides, "The Enlightenment and the Greek Cultural Tradition," *History of European Ideas*, 36, 2010: 39-46. idem, *Enlightenment as Social Criticism*. Princeton: Princeton UP, 1992. Manolis Patiniotis, "Travels of the Greek Scholars in the Eighteenth Century," in *Travels of Learning: A Geography of Science in Europe*. eds. Ana Simões, Ana Carneiro and Maria Paula Diogo. Dordrecht: Kluwer, 2003; pp. 49-77.

⁶⁰"Es wurde auch Herrn Benisch, einem gewesenen Apotheker, der uns den Telemac in vulgair griechischer Sprache zeigte, von dem Bachstrohm geredet, der vormals hier gewesen und verursacht hat, dass hier eine Druckerey angeleget worden ist. Er hat damals mit dem Grosshern und dem Grossvezier incognito manche wichtige Unterredungen gehabt, und ist auch von hier mit der Ordre weggegangen einige Gelehrte aus der evangelischen Kirche zu verschreiben, damit hier eine Academia scientiarum möchte errichtet werden. Er kömmt bis nach Warschau, wird aber daselbst als ein Verräther des Landes angeben und wäre beynahe auf gehänget worden. Indessen hat man hier lange aber vergeblich auf Briefe von dem Bachstrohm gewartet, mithin ist aus der Academie nichts geworden. Die Druckerey ward aber doch angelegt, aus etliche Bücher in türkischer Sprache gedruckt; nun aber ist sie ganz eingegangen." Stephan Schultz. *Die Leitungen des Höchsten nach seinem Rath auf den Reisen durch Europa*. 4 vols.

The work of Greek historians of science do is often of very high quality, and the recent academic alliance they formed with Scandinavian, Eastern European and Spanish scholars has materialized into an organization called Science in the European Periphery or STEP. However, in the course of my own investigations for this dissertation, I have grown mildly apprehensive of the overall naivete of national categories that underlie narrative framework. I find it surprising that they completely disregard the pre-national context of the Neo-Hellenic Enlightenment: For example Evgenios Boulgaris, a chief figure of in their enlightenment narrative, was actually a Bulgarian who spent most of his life in Ottoman lands. He taught at the Patriarchal Academy in Istanbul. He was an Aristotelian like many of his Greek- and Turkish-speaking contemporaries. Was he neo-Hellenic or was he Ottoman? In many cases like that of Boulgaris, it is simply an anachronism to read the modern nation-state into an imperial past.

Unlike the Neo-Hellenic Enlightenment, the Islamic Enlightenment was a still-born historiographical project. About 20 years ago, Reinhard Schulze argued that the eighteenth century represented a rupture in the world of Islam.⁶¹ While reformist ideas, most notably among Sufi circles, had been a well-known phenomenon for some time, no one prior to Schulze had advanced bold claim that there was an “autochthonous Islamic enlightenment” in the eighteenth century.⁶² Schulze identified a series of new discursive elements in eighteenth-century Sufi literature of the eighteenth century. The first was the emphasis on the subjectivity of religious experience, as opposed to the scholastic and objective understanding of religion propounded by the ulema. He also observed that eighteenth-century Sufis began to emphasize newness and novelty as being superior to the old and the traditional. The new literature was also emancipatory. The urban Sufi networks essentially became civic associations, and sought to steer imperial politics.

Schulze’s exploration of the eighteenth century Sufi literature was met with almost unanimous rejection. The most potent critique came from Bernd Radtke, who accused Schulze of having merely a superficial command of the sources and philology. According to Radtke, the eighteenth century presented little that was new into Sufi lit-

Magdeburg: Hemmerde, 1771-1774; vol.4, p.115.

⁶¹ Reinhard Schulze, “Das islamische achtzehnte Jahrhundert: Versuch einer historiographischen Kritik,” *Die Welt des Islams*, 30, 1990: 140-159.

⁶² Fazlur Rahman, *Revival and Reform*. Albert Hourani, “Changing Face of the Fertile Crescent in the Eighteenth Century,” *Studia Islamica*, 8, 1957: 89-122

erature. What dealt Schulze's Enlightenment the death blow was this linguistic attack, which showed, more or less conclusively, that the vast majority of the Sufis continued in the established tradition.⁶³

While historians have mostly cast Schulze's thesis aside, they agree that eighteenth century scholars generally rejected traditional religious law (*fiqh*) as the standard of Islamic moral rectitude, and that Koranic exegesis and *ḥadīth* came to replace legal scholarship. This scholarly movement had humanistic overtones because it involved a reconsideration of the scripture and of the traditional exegetical literature. The disciplinary rearrangement of Islamic scholarship, to which Schulze himself alluded, created the setting for Islamic renewal and reform, but it was not by itself modern.

One very conspicuous aspect of the rise and fall of Schulze's thesis is the complete absence from the debate of Ottoman Istanbul. Schulze and his critics draw exclusively from religious literature composed in the Arabic heartlands – Aleppo, Syria, Cairo, Mecca and Medina. I think that the intellectual and political dynamism of the Ottoman Empire, especially in the early eighteenth century, has to occupy a central place in our understanding of Islam's transformation, if for no other reason than the fact that Istanbul was the largest and the most important city of Islam, the administrative and cultural center of the largest early modern Muslim empire.

In a recent contribution to the ongoing debate on the autochthonous Islamic Enlightenment, Christoph Herzog has pointed out, using mostly well-known sources, that we cannot simply discard the idea of an Islamic enlightenment.⁶⁴ He was, in many ways, the first scholar to confront the work of philologists with the Ottoman Empire's historical realities. In an important, unpublished paper Albrecht Hofheinz has observed that Schulze's goal was to present an Islamic path to modernity, a path formerly considered to be a function of European colonization and its cultural reverberations.⁶⁵ Hofheinz

⁶³A summary list of the literature that is critical of Schulze's thesis would include: Bernd Radtke, "Erleuchtung und Aufklärung: islamische Mystik und europäischer Rationalismus," *Die Welt des Islams*, 34/1, 1994: 48-66. R.S. O'Fahey and Bernd Radtke, "Neo-Sufism Reconsidered," *Islam*, 70, 1993: 52-87. Gottfried Hagen and Tilman Seidensticker, "Reinhard Schulzes Hypothese einer islamischen Aufklärung. Kritik einer historiographischen Kritik," *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, 148, 1998: 83-110.

⁶⁴Christoph Herzog, "Aufklärung und Osmanisches Reich: Annäherung an ein historiographisches Problem," *Geschichte und Gesellschaft*, 23, 2010: 291-321.

⁶⁵"Pietism and the Roots of Islamic Modernity." I would like to thank Albrecht Hofheinz for giving me permission to cite his paper.

thought that Pietism might serve as a hypothetical model that can be used to revise Schulze's suggestive thesis. In this dissertation, I hope to take this point beyond mere hypothesis. Bachstrom, who was an enlightened Pietist, had viewed Damad Ibrahim as someone who shared the same sentiments as he did. Rationalism, sociability and faith were not only compatible, but mutually reinforcing in early eighteenth-century Istanbul.

Chapter 2

The Ahmedian Regime

The Ottoman early enlightenment began during the reign of Ahmed III (r.1703-1730). Intellectually and politically, the Ahmedian regime was a response to the seventeenth-century crisis and a reaction against the way in which the previous sultans handled this crisis. The sultan's policies, like the ideas that it engendered, were innovative. In this chapter, I will be presenting how the early eighteenth century was remarkably different from the late seventeenth century, and how the political changes facilitated intellectual renewal and reform.

The distinctive features of Ahmed's reign fall under four headings: naturalism, reason of state thinking, innovation and sociability. Naturalism meant, quite simply, that philosophers and political writers adopted a naturalistic and deterministic view of causality. Ahmed's reign saw the retirement of scholastic metaphysics from philosophical discourse and the end of the "holy war" with Europe, which his predecessors believed was the *raison d'être* of the Ottoman state.¹ Reason of state thinking went hand in hand with naturalism. Instead of addressing the ancient and supernatural foundations of dynastic legitimacy, Ahmed focused on preserving the present state – a functional administration was better at maintaining order than were waging holy war and enforcing Islamic discipline. Damad Ibrahim, who was Ahmed's grand vizier in 1718 onwards, sought to break former social divisions and recast state policy in an idiom of common

¹See Chapter 3 on scholasticism. Regarding the peace of Karlowitz(1699), which marked the end of holy war against Europe, see Rifaat Abou El-Haj, "Ottoman Diplomacy at Karlowitz," *Journal of the American Oriental Society*, 87/4, 1967: 498-512; p. 498.

interest. In the seventeenth century, innovation (*bid'at*) had meant any and all deviations from the practices of the original followers of Muhammed and had a distinctly negative connotation. During Ahmed's reign, novelty took on a positive meaning and was celebrated in philosophy, medicine, architecture and even in religion.² Ahmed's father and brother implemented exclusionary policies at all levels. He barred Christians, Jews, Sufis and political dissidents from the realm of politics. Discipline and punishment were the most important tools of state control in the seventeenth century. Mehmed IV (r.1648-1687) attached himself to a single political faction and sought to suppress all others. His older son, Mustafa II (r.1695-1703), followed in his father's footsteps. Ahmed, on the other hand, formed strong bonds with Istanbul's Muslim and non-Muslim populations, forged alliances with multiple powerful families, and offered greater opportunities for social mobility.

These features give the Ahmedian regime its distinctly modern flavor. I am not the first to associate Ahmed III with modernity.³ However, the previous iterations of the modernization or secularization thesis have carried the taint of teleology and Eurocentrism.⁴ Their starting point was the backwards and traditional society and the final destination was modern Turkey.⁵ As a natural consequence, modernity has previously meant westernization. And, Ahmed III had the honor of being the first protagonist because he could be portrayed, anachronistically but also quite easily, as a westernizing sultan. Fatma Müge Göçek recently breathed new life into this thesis by implementing a Weberian framework on the development of the Ottoman bourgeoisie.⁶ However,

²On innovation in architecture, poetry and the arts, see Shirine Hamadeh, "Ottoman Expressions of Early Modernity and the Inevitable Question of 'Westernization'," *Journal of the Society of Architectural Historians*, 63/1, 2004: 32-51. On philosophy and medicine, see Chapters 4 and 6. On religion, see Tülay Artan, "Forms and Forums of Expression: Istanbul and Beyond, 1600-1800" in *The Ottoman World* ed. Christine Woodhead. London: Routledge, 2012; pp. 378-405.

³Ahmed Refik(1881-1937) was the first historian to argue that the Ahmedian regime was modern. His innumerable articles and books often revolve around the theme of modernity, hedonism and secularism. For a later, more sober articulation of a similar thesis, see Niyazi Berkes, *Secularism in Turkey*. Fatma Müge Göçek elaborates on Berkes's thesis in her *East Encounters West: France and the Ottoman Empire in the Eighteenth Century*. New York: Oxford University Press, 1987.

⁴See Dana Sajdi's excellent "Decline, its Discontents and Ottoman Cultural History: by Way of Introduction" in *Ottoman Tulips, Ottoman Coffee* ed. Dana Sajdi. London: Tauris, 2007; pp.1-40.

⁵For a historiographical overview of the period, see Can Erimtan. *Ottomans Looking West? The Origins of the Tulip Age and Its Development in Modern Turkey*. London: Tauris, 2008

⁶Fatma Müge Göçek *Rise of the Bourgeoisie, Demise of Empire: Ottoman Westernization and Social Change*. New York: Oxford University Press, 1996.

the reception of her work has been mixed, because she also associated modernization with westernization and thus committed what many Ottomanists consider a cardinal sin, Eurocentrism.⁷

I believe the cardinal sin of the modernization thesis is neither teleological thinking nor Eurocentrism, but anachronism. After all, Ahmed was a westernizing and modernizing sultan, but only when we compare him to Mehmed IV, who sought to Islamize and medievalize the Empire. Innovative thinkers, good scholars and translators had also been an important part of the Ottoman intellectual life in seventeenth century, but they never received recognition or generous patronage from the palace. As I hope to demonstrate in the following chapters, Westernization was not the cause but a manifestation of Ottoman early enlightenment. What actually took place was a far deeper social transformation that allowed new types of thinking and of thinkers to step into the limelight. All that Ahmed had to do was to recognize that he was no longer ruling over a medieval kingdom, something that Mustafa II had famously and deliberately failed to do.

In this social context, even Aristotle's *Physics* was an enlightenment text, as it did not serve to strengthen scholasticism but rather promoted naturalism. Eighteenth-century Aristotelian orthodoxy also had a shallow pedigree, since its purveyors were not the Muslim scholastics but the Padua-trained Greeks, who had assumed a more prominent political role in the empire in the early eighteenth century.⁸

Another problem that critics see in the previous accounts of Ottoman modernization is the standard by which to judge modernity.⁹ It is not a wonder that Ahmed falls below the bar set by the French Revolution, the Industrial Revolution or by nineteenth-century secularism. What he does meet, however, are the late seventeenth and early eighteenth century standards of European early modernity. Indeed, the Ottomans were neither more religious, nor more traditional, nor yet "backwards" when compared to

⁷See, for example, Roger Owen in *Journal of Interdisciplinary History*, 28/2, 1997:333-4; Christoph Herzog in *Die Welt des Islams*, 42/1, 2002: 127-9; Donald Quataert in *Journal of Social History*, 30/3, 1997: 758-9.

⁸On the relationship between the European early enlightenment and classical scholarship, see René Pintard. *Le libertinage érudit dans la première moitié du XVIIe siècle: La Mothe Le Vayer, Gassendi, Guy Patin*. Paris: Boivin, 1943.

⁹Rhoads Murphey, "Westernisation in the Eighteenth-Century Ottoman Empire: How Far, How Fast?" *Byzantine and Modern Greek Studies*, 23, 1999:116-139.

their European contemporaries.¹⁰ One might profitably write the parallel lives of Ahmed and Louis XIV, or grand vizier Damad Ibrahim and Colbert.¹¹ Ahmed's political practices, patronage and sociable attitude merits comparison with Charles II's reign.¹² It is, therefore, not the least bit unusual that Ottoman writers and translators of the early eighteenth century found themselves drawn to contemporary or near-contemporary writers who shared the same concerns and faced the same problems that they did. Placing the Ahmedian regime in the early modern European context works, as does placing Ottoman writings from the early eighteenth century in the early enlightenment setting.

However, Ottoman sources take us only so far and the historian has to traverse a broad geography to find the proper interpretive framework. Early modern categories do not map neatly onto our own. However, categories that are specific to a particular time and place, in their majestic complexity, are also of little help if we are to place the Ottomans in the broader context of the early Enlightenment. Spatial differences are easier to forgive than temporal ones, especially in the connected world of the early eighteenth century. Consequently, the concepts used in this dissertation seek to moderate between European and Ottoman historiography by adopting and adapting existing analytic and actor's categories. This moderation involves appropriating concepts that serve to group together generally similar but narrowly different clusters of ideas. It also involves importing prêt-à-porter discursive elements from European history and historiography. I hope that the sartorial imperfections will be negligible.

At the very least, such an exercise will be more useful than trying to dress Ahmed in the nineteenth-century modernist's starched shirt or in medieval armor. For example, secularism is a nineteenth-century term meaning the separation of church and state, but the Ottoman Empire had no church, properly speaking, and calling Ahmed's administration a modern state would be little more than flattery.¹³ Naturalism and reason of

¹⁰Daniel Goffman. *The Ottoman Empire and Early Modern Europe*. Cambridge: Cambridge UP, 2002.

¹¹While I will discuss this in depth later, one might easily draw a parallel between the "fabrication" of Louis XIV and the "fabrication" of Ahmed III. A good example is Babak Rahimi's "*Nahils*, Circumcision Rituals and the Theatre State," in Sajdi, *Ottoman Tulips*, pp. 90-116.

¹²There have been no such comparisons before, but a future study might draw on Steven Shapin and Simon Shaffer. *Leviathan and the Air: Hobbes, Boyle, and the Experimental Life* Princeton: Princeton UP, 1989[1985].

¹³Carter V. Findley, "Political Culture and the Great Households" in *The Later Ottoman Empire*; pp. 65-80.

state, on the other hand, are perfectly proper terms in discussion early modern Ottoman thought and politics.¹⁴ In Europe, early modern political discourse evolved around the problem of reconciling virtue with interest.¹⁵ A similar problem is also central to late seventeenth and early eighteenth century Ottoman political thought. As I discuss below, both Katip Çelebi's *Düstūr'l-Amel* (d.1657) and Mustafa Naima's (1655-1716) history of the seventeenth-century struggled with the tension between authority and the exercise of justice. Reason of state was a hotly debated issue in early modern Europe and had evolved out of Machiavelli's writings. In the Ottoman Empire, the historian Naima commended the use of any and all "possible means" (*esbāb-ı mümkin*) to make the people willingly obedient.¹⁶ The Ottoman understanding of innovation is not as rigorous as Turgotian progress, but surely implies that advancement is both desirable and certain under the right conditions.¹⁷ It also means that the ancients, whether Aristotle and Muhammed, did not necessarily lead the best lives and think the best thoughts. The moderns, the polymath Katip Çelebi joked, at least had the advantage of having spoons and trousers.¹⁸ Sociability, too, is a fitting period concept for the Ahmadian regime and overlaps with Norbert Elias's understanding of early modern civility and John Robertson's analysis of the Enlightenment.¹⁹

The Ottoman Empire before the Seventeenth Century

Naturally, understanding the Ahmadian innovations requires us to understand the particular conditions of the Ottoman Empire. What were the original aspirations of the dynasty? How did these aspirations shape the Ottoman polity? How did the seventeenth-century crisis challenge these aspirations? And, finally, what were the possible and the actual responses?

The Fortune of the House of Osman (Devlet-i ʿĀlī-i ʿOthmān) is the official

¹⁴Here, I have largely followed Richard Tuck's *Philosophy and Government, 1572-1651*. Cambridge: Cambridge UP, 1993.

¹⁵Peter N. Miller, "Statecraft and Culture in Early Modern Europe [Review Essay]," *The Historical Journal*, 38/1, 1995: 161-173

¹⁶Mustafa Naima, *Tarih-i Naima*. 6 vols. ed. Mehmed İpşirli. Ankara: TTK, 2007. vol.1, p.3.

¹⁷Adil Şen. *İbrahim Müteferrika ve Usulü'l-Hikem fi Nizamü'l-Ümem*. Istanbul: Diyanet Vakfı, 1995.

¹⁸Katip Çelebi, *Balance of Truth*, pp.89-92

¹⁹Norbert Elias. *The Civilizing Process*. 2 vols. trans. Edmund Jephcott. New York: Pantheon, 1978 [1939] Robertson, *The Case for the Enlightenment*.

name of what we call the Ottoman Empire. By 1700, Osman's descendants ruled over a territory that was as vast as its immediate neighbor, Europe, almost twice over. As the early modern enemy of Christendom and the "sick man" of nineteenth century Europe, the Ottoman Empire (c.1300-1923) had always been one of the major element in European politics. On former Ottoman territory now sit Greece, Bulgaria, Romania, Macedonia, Hungary, Serbia, Bosnia, Turkey, Syria, Iraq, Saudi Arabia, Israel and Palestine, Yemen, Egypt, Tunisia, Algeria, Ethiopia and Cyprus, as well as parts of modern day Iran, Poland and the Ukraine.

The Ottomans, once a roving band of nomads, seized control of the city of Bursa in 1326 and took their first step towards a sedentary lifestyle. Bursa was on the famous Silk Road that channeled eastern goods to the west and conquering the city gave them access to the income from one of the most major routes of commerce between Asia and Europe. Securing other key locations on the Silk Road gave the Ottomans control over northwestern Anatolia and later enabled them to clear out neighboring principalities.²⁰

The House of Osman became an empire in 1453, when Mehmed II conquered Constantinople. After the fall of Byzantine capital, the Sultan became the Emperor of Rome. The new conquest meant not only new territory and abundant wealth, but also a new title and a broader horizon of ambitions. In his attempts to consolidate his power, Mehmed cut ties with his nomadic past and formed new alliances with the Sunni scholars and the Byzantine nobility. The Grand Seigneur, as the Europeans called the Ottoman sultan, was no longer the first among equals but a prince-maker. During Mehmed II's reign between 1451 and 1481, the house of Osman also developed into a super-household. The palace began to train and appoint most of its high-ranking military personnel internally. Janissaries were the palace's slave-troops and now outnumbered the feudal armies of the sultan's vassals.²¹

²⁰Elizabeth A. Zachariadou has done remarkable work on the maritime expansion of the Ottoman Empire. For a good overview, see her *Studies in Pre-Ottoman Turkey and the Ottomans* Aldershot: Ashgate, 2007. On the medieval history of Turkey, see Claude Cahen. *Pre-Ottoman Turkey: a General Survey of the Material and Spiritual Culture and History, c. 1071-1330*. J. trans. Jones-Williams. London: Sidgwick and Jackson, 1968. The most recent work on the Seljuq dynasty is Aziz Başan. *The Great Seljuqs: A History*. London: Routledge, 2010

²¹The *History* (Tevāriḥ-i ʿĀlī Osmān) of Aşıkpaşazade is the classic account of this transformation from a contemporary perspective. The classic biography of Mehmed is Franz Babinger. *Mehmed the Conqueror and His Time*. Ralph Mannheim, trans., William C. Hickman, ed. Princeton: Princeton UP, 1992. [Originally published as *Mehmed der Eroberer und seine Zeit* in 1953]

From 1453 to 1567, when Süleyman the Magnificent died, was a period of seemingly endless conquest, so much so that the continued expansion of taxable land constituted an important source of the imperial revenue throughout the sixteenth century.²² Until the end of the sixteenth century, the sultans' directed their efforts towards rendering continued expansion a permanent feature of Ottoman power. As *gāzīs* (holy warriors), they sought to conquer Europe and to seize control of Islamdom. Selim the Grim (r.1512-1520) conquered the Mamluk Egypt alongside the holy cities of Mecca and Medina, and Süleyman the Magnificent (r.1520-1566) pushed the European border as far as Hungary. By 1550, the Ottoman sultans had annexed enough titles and territory that they were at once a European superpower and the rightful caliphs of Islam.²³

The century following 1453 was also a period of political centralization and institution building. The sultans created administrative careers to encourage loyalty to the Ottoman dynasty. As the two crucial duties of the feudal Sultan were to fight against Christendom and to uphold justice, the army and the Muslim judiciary were the two most important Ottoman institutions in the early modern era.²⁴ Consequently, the main options for upward mobility in the empire were the military (*seyfiyye*) and the scholarly establishments (*‘ilmiyye*), which together constituted the non-tax-paying classes. Men on both career tracks drew cash salaries from the palace.²⁵ Only the Muslims who had trained at *medreses* could become establishment scholars. The members of the *‘ilmiyye* climbed a ladder that wove together legal, notarial and professorial posts. The career zenith of those who followed the scholarly profession was the post of the Sheik al-Islam. He served as the jurisprudent to the Sultan and his position placed him somewhere between a confessor and a Pope. His main duty was to issue religious fiats based on the sharia and in support of the sultans' military and administrative decisions. Various

²²For an overview, see Halil Inalcık and Donald Quataert, eds. *An Economic and Social History of the Ottoman Empire*. 2 vols. Cambridge: Cambridge University Press, 1994. Vol.1.

²³For a synoptic overview of Süleyman's reign, see Metin Kunt and Christine Woodhead, eds. *Süleyman the Magnificent and His Age: The Ottoman Empire in the Early Modern World*. New York: Longman, 1995.

²⁴Colin Imber. *The Ottoman Empire, 1300-1650: The Structure of Power*. New York: Palgrave, 2002. Rhoads Murphey. "Continuity and Discontinuity in Ottoman Administrative Theory and Practice during the Late Seventeenth Century" *Poetics Today*, 14/2, 1993: 419-443

²⁵Metin Kunt, "Siyasal Tarih (1300-1600)" in *Osmanlı Devleti, 1300-1600*. vol. 2 of *Türkiye Tarihi*. eds. Metin Kunt, Hüseyin Yurdaydın and Ayla Ödekan. Istanbul: Cem, 1987; pp. 15-144; see. pp. 130-143.

called the Grand Mufti or the Mufti of Istanbul, the Sheik al-Islam was also the religious leader of the Empire. From the perspective of *realpolitik*, what he actually did was to reiterate and legitimize the Sultan's claims to being the guardian of Islam.²⁶

Aside from its most obvious functions, the military was also essential to upholding the Sultan's image as the holy warrior of Islam. The viziers (advisors) or pashas stood at the top of the *seyfiyye* hierarchy. The Janissaries, a large standing army, laid at the heart of the Ottoman military enterprise and was the training ground for the empire's future generals and political dignitaries. The palace filled the Janissary ranks by drafting intellectually acute and physically fit young Christian boys, forcing them into conversion and arguably severing them from their families.²⁷ These draftees later trained at imperial barracks and schools and were later routed to either clerical or military duties. The social reproduction of imperial power rested on this method of recruitment, called the *devşirme* system. The Empire also had a feudal army called the *sipāhīs*. These vassals raised troops in return for conditional land grants from the Sultan.²⁸ As the Janissaries grew in number in the sixteenth century, the feudal lords from the provinces came to occupy a less significant role in the military operations. By the eighteenth century, the *sipāhīs* were little more than an anachronism.²⁹

The Crisis of the Seventeenth Century

When viewed from a distance, the problems of the seventeenth-century Ottoman Empire resembled those of other European monarchies. Some years ago, Jack Goldstone made the case that there was a strong affinity between the crises that Europe, the Ottoman Empire and China suffered in the seventeenth century.³⁰ While this disserta-

²⁶On the office of the Sheik al-Islam, see Richard C. Repp. *The Mufti of Istanbul: A Study in the Development of the Ottoman Learned Hierarchy*. London: Ithaca Press, 1986.

²⁷Metin Kunt, "Ethnic-Regional (Cins) Solidarity in the Seventeenth-Century Ottoman Establishment," *International Journal of Middle East Studies*, 5, 1974: 233–39

²⁸The two main feudal armies were the actual fief-holders (*sipahis*) and the local militia (*levends*). The classic work on the latter is Mustafa Cezar. *Osmanlı Tarihinde Levendler*. Istanbul: Çelikkilt, 1965. Also see Virginia Aksan's work on the transformation of the Ottoman military.

²⁹For a synoptic overview of the Ottoman provincial government in the sixteenth and seventeenth centuries, see Metin Kunt. *The Sultan's Servants: The Transformation of Ottoman Provincial Government, 1550-1650*. New York: Columbia University Press, 1983

³⁰Jack A. Goldstone, "East and West in the Seventeenth Century: Political Crises in Stuart England, Ottoman Turkey and Ming China," *Comparative Studies in Society and History*, 30/1, 1988: 103-142.

tion is not the right venue for a rigorous discussion of the parallels between the Ottoman and the European crises of the seventeenth century, a soft comparison of certain overt similarities will be helpful in placing the Ahmadian regime in perspective.

The seventeenth century was a period of war, famine, disease and insurrection for the entire northern hemisphere. What constituted the long seventeenth century of crisis was a severe change in climate, not unlike the one we anticipate today. According to Geoffrey Parker, the anomalous weather set off a scramble for resources at national and international scales, thus giving rise to the particular mood of seventeenth-century political literature.

Disaster, disorder and death...demoralized even the most resilient survivors. In *Leviathan*, a treatise on political obedience published in 1651, Thomas Hobbes claimed that 'There is no place for industry, because the fruit thereof is uncertain, and consequently, no culture of the earth; no navigation, nor use of the commodities that may be imported by sea; no commodious building;...no arts; no letters; no society. And, which is worst of all, continual fear and danger of violent death; and the life of man, solitary, poor, nasty, brutish and short.'³¹

Hobbes's observations were as true for the Ottoman Empire as they were for England. As Sam White observes:

Following the Celali Rebellion[1591-6], another century of natural and human disasters prolonged Ottoman troubles and derailed the empire's recovery. Little Ice Age climate fluctuations brought recurring extremes of temperature and precipitation through the mid-1600s, playing a major role in the empire's chronic political instability and rural disorder. Then in the last decades of the seventeenth century, the Ottoman Empire underwent another conjuncture of severe weather, military setbacks, and internal disorder. By around 1710, once the worst of the Little Ice Age had passed, Istanbul had witnessed the deposition of five sultans, and many of the core provinces were left in much the same poor condition as a century before, in the wake of the Celali Rebellion.³²

The crisis was not only natural, but also social. Hugh Trevor-Roper has argued that the seventeenth century was a time when the old relations between the state and society, be-

³¹Geoffrey Parker, "Crisis and Catastrophe: The Global Crisis of the Seventeenth Century Reconsidered," *American Historical Review*, 113/4, 2008: 1053-1079; p.1057

³²Sam White. *The Climate of Rebellion in the Early Modern Ottoman Empire*. Cambridge: Cambridge UP, 2011; p.187

tween the center and periphery, between the ruler and the elite had turned into contested areas and structural tensions.³³

In his recent book, Baki Tezcan echoed Trevor-Roper's analysis when he argued that "limited government" characterized the seventeenth century Ottoman administration.³⁴ In his view, Ottoman administration was no longer a site where the sultan exercised his personal power. Aside from the urban and provincial strongmen who frequently diminished the ruler's authority, the organs of the central administration were also slowly turning a fatal liability for the dynasty. A key political problem of the seventeenth century was the alliance between the powerful *‘ulemā* and the chronically underpaid Janissaries. As the work these two parties accounted for the total sum of the sultan's claim to legitimate rule as the defender of Islam and as a holy warrior, a two pronged-attack from them could and did destroy any individual ruler. As the *‘ulemā* and the Janissaries enjoyed an ever-increasing measure of autonomy, there emerged a rift between the office of the sultan and the incumbent ruler. The individuals were disposable, but the office was not. Tezcan's analysis brings the Ottoman political regime closer to European "mixed monarchies," which was composed of the Crown and the Estates. According to Trevor-Roper, the tension between the two loci of power was responsible for the "revolutionary" trajectory of the seventeenth century. It is difficult to make a hard case for the "estatification" of Ottoman government in the seventeenth century, but the period is rife with some very tempting and quite strong soft cases where we can easily observe what Halil İnalcık has long ago defined as a tension between the centralizing tendencies of the Sultan and the decentralizing tendencies of the elites. Goldstone's analysis, namely that the Ottoman Empire's troubles were "fiscal deterioration", "elite factionalism," "deterioration of living standards," also seems to be correct, at least on the surface.

If we read the climatological and the political interpretations of the seventeenth century, as Sam White has done, then the crisis acquires a much more robust meaning. Between 1591 and 1595, severe droughts ravaged the Ottoman lands. This was the

³³Hugh Trevor-Roper. *The Crisis of the Seventeenth Century: Religion, the Reformation and Social Change*. New York: Harper & Row, 1967.

³⁴Baki Tezcan. *The Second Ottoman Empire: Political and Social Transformation in the Early Modern World*. Cambridge: Cambridge University Press, 2010.

beginning of the “Little Ice Age” of the seventeenth century.³⁵ The millenarian leader Sheik Celal incited the unemployed *medrese* students to rebellion in 1591. This initial uprising set off a chain of similar incidents in the starving countryside.

The shift in the physical climate portended a brewing political storm. From the perspective of the Ottoman center, it was the economic pressure that precipitated unrest. Maintaining a strong central administration had a cash price, which the sixteenth-century sultans were able to pay with the help of the abundant revenue that they drew from successful military campaigns. Imperial expansion came to a halt in the last quarter of the sixteenth century and warfare was no longer easy or profitable.³⁶ This undesirable stasis did not only dry up the empire’s coffers, but also pushed the sultans into making a series of risky policy decisions. The difficult task was to divide up the Empire’s decreasing revenues between the two armies: The sultans could either draw the taxes to the center and pay the Janissaries, or leave the land and its revenues to the *sipāhīs*. Tezcan’s study shows that the feudal overlords ultimately proved to be more disposable than the Sultan’s own slaves.

The arid climate and the sting of abandonment pushed disgruntled groups of ex-soldiers to brigandry. Over the following decades, bandits plundered the withered countryside, drastically reducing imperial revenue from farmlands. As a countermeasure, the Sultan instituted emergency taxes. These were called *avārız* or “accidental” taxes, which the sultans levied in substantial amounts on an ad hoc basis but with increasing frequency.³⁷ The Janissaries took a hefty portion of the palace’s cash, leaving the Ottoman treasury practically empty throughout the seventeenth century. Reducing the amount of precious metal in coins served as a temporary stopgap, but Ottoman currency lost so much value over the seventeenth century that, beginning in the 1650s, European thalers and florins were the only coins that the urban shopkeepers accepted.³⁸

The dynamics of Ottoman economy paved the way to further social unrest and

³⁵ Sam White, *Climate of Rebellion*, pp.126-40.

³⁶ For a good overview of Ottoman warfare, see Virginia Aksan. “War and Peace” in *The Later Ottoman Empire*, pp. 81-117.

³⁷ Halil İnalcık. “Military and Fiscal Transformation in the Ottoman Empire,” *Archivum Ottomanicum*, 6, 1980: 283-337

³⁸ On the devaluation of the Ottoman coins, see Şevket Pamuk. *A Monetary History of the Ottoman Empire*. Cambridge: Cambridge University Press, 2000; pp.131-155. Suraiya Faroqhi, “Crisis and Change, 1500-1699” in İnalcık and Quataert, *Economic and Social History*; vol.2, pp.411-635.

eventually to the rise of mercenaries as keepers of order. Between the droughts, the accidental taxes and the bandits that frequented the peasants, farming became an unseasonable occupation. As the tillers of the land retreated to the safety of citadels, famine became the rule rather than the exception in the seventeenth century. Basic functions of the Ottoman administration, such as collecting taxes and provisioning the cities required the use of force. Since the palace was no longer able to levy enough taxes to pay the Janissaries or to retain a robust body of landed army officers, what came to supplement the weak center were the new military households, which commanded hundreds and sometimes thousands of mercenaries.³⁹ By the mid-seventeenth century, the sultans were no longer able to contain the widespread violence either in the cities or in the countryside. They frequently stepped down to quell rebellions. Brokering power among the strongmen was key to keep Ottoman politics stable.⁴⁰

The Warrior-Sultan Returns

If such was the crisis, how was the response? The first attempted solution came in the form of an unsociable regime that rested on supernatural foundations. The moralizing sultans, first Ahmed's father and then his brother, sought to curry divine favor by restoring what they imagined was the empire's former piety. Through holy war abroad and violent zeal at home, Mehmed IV (r.1648-1687), Ahmed's father, sought to reclaim

³⁹Ariel Salzmann. *Tocqueville in the Ottoman Empire: Rival Paths to the Modern State*. Leiden: Brill, 2004. ; p. 57. Virginia H. Aksan, "Locating the Ottomans among Early Modern Empires," *Journal of Early Modern History*, 3/2, 1999: 103-134.

⁴⁰See Metin Kunt. *Bir Osmanlı Valisinin Yıllık Gelir-Gideri: Diyarbekir, 1670-1671*. Istanbul: Boğaziçi Üniversitesi Yayınları, 1981. The list of young Sultans who came to power as a result of deposition include Osman II (Osman the Young, 1604-1622) who assumed the throne at the age of 14 and was violently murdered at the age of 18. Mehmed IV (1648-1687) came to power at the age of six and his mother was the actual ruler until his majority. For a good study of the office of the Grand Vizier in the second half of the seventeenth century, see Rifaat Ali Abou-El-Haj's "The Ottoman Vezir and Pasa Households 1683-1703: A Preliminary Report," *Journal of the American Oriental Society*, 94/4, 1974: 438-447. On p.443, Abou-El-Haj notes: "The growing preponderance of the vezir and paşa households and their graduates indicate the decline in the personal rule of the sultans, a trend which had its beginnings in the end of Süleyman Kanuni's reign. Parallel to this decline was the down-grading of the palace as the sole training ground for public administrative experience...The enhanced position of the households was recognized existentially and only de facto by the sultans. The denial of de jure and therefore institutional recognition of the growing preeminent position of the vezir and pasa kapılar [households] kept the men and the institution in a precarious position and predisposed the internal political history of the state to potentially violent struggles for ascendancy during political crises."

the title of *ghazi*. He lent one ear to signs and portents, and the other to the salafi preachers whose large following helped restore confidence in the dynasty. Between 1648 and 1703, the image that the Sultans sought to maintain rested on the Ottoman version of divine right. It was an image that clearly excluded large swathes of the Ottoman population. The Jews, the Christians and large parts of the Muslim population fell short of the standards of the preachers, who had taken it upon themselves to discipline the Ottoman population. When the final holy war came to a disastrous end at the Peace of Carlowitz (1699), it was clear that the sultans had run out of divine credit.

A half century of forced piety and social exclusion preceded Ahmedian sociability and naturalism. There was a clear contrast between how Mehmed IV handled the empire's problems and how Ahmed addressed them. However, the contrast did not also mean discontinuity. Ahmed III inherited a mixed legacy of successful and failed responses to the crises. Empire's chronically acute problems gave rise to two types of reformism during Mehmed's reign. "The men of the pen" or the bureaucrats emphasized the economic roots of the problem. A second group, the provincial salafi preachers known as Kadizadelis, thought that the causes behind the empire's corruption were primarily moral. The Kadizadelis believed that widespread disregard for proper Islamic practices were responsible for the apparent absence of solidarity. While the bureaucrats thought of the empire as a body politic, the preachers' viewed the Ottomans primarily as a Muslim polity. While the former usually found an audience in the grand vizier, the latter appealed to the sultans who tried to enhance their prestige through charismatic leadership. From roughly 1650 to 1703, the rift between the grand vizier's agenda and the sultan's desire for glory grew wider. As the bureaucrats gained greater power within the administration, the sultans' attempts to exercise personal rule became increasingly unrealistic. When Ahmed came to power, the "men of the pen" gained the upper hand, as did their naturalistic interpretation of politics.

In mid-seventeenth century, both the salafis and the proponents of bureaucratic reform found a place in the administration, a place that they would retain for the next half century. What made their contributions to a possible solution not only expedient but also necessary were the events that transpired between 1648 and 1656. Mehmed IV (r.1648-1687) ascended to the throne as a 6 year-old Sultan after the rebels had executed his

father, Ibrahim I (r.1640-8). His mother and grandmother shared the dynastic authority and navigated the treacherous, janissary-dominated politics of the empire. Mehmed's early years were replete with memories of disaster and defeat. The army was losing abroad as fires and famine ravaged Istanbul and the Ottoman countryside. Janissaries, the very soldiers who refused to put up a decent fight against the Venetians in Candia or against the Cossacks inching down the Bosphorus, frequently deposed Ottoman officials.⁴¹ However, the worst came at the cusp of Mehmed's majority.

Salafi groups had been a part of the empire's Muslim polity since the sixteenth century. What empowered them over the 1650s was political expediency. The impenetrable elite networks that formed the high administration tended to be highly sympathetic towards the Sufis, as Sufism was the bedrock on which Ottoman religiosity rested. Lodges were sites of conversation and socialization, while the pursuit of ecstasy through ritual dancing and, the consumption of tobacco, opium and coffee gave the members a much needed respite from unsavory realities. The Ottoman dignitaries, the Janissary officers and the *‘ulemā’* who frequented these lodges were the very same people who weakened the Sultan. Thus, the salafi preachers who targeted the Sufis and the imperial household who sought to reclaim its authority became natural bedfellows.

The religious reform that the Kadızadeli preachers envisioned became a very attractive and quite obvious option for Mehmed IV during the Ottoman-Venetian War between 1646 until 1669. In 1656, the Venetians had the Dardanelles, and had successfully prevented vital supplies – including food - from reaching Istanbul through the sea route. This siege starved and demoralized the city's residents. The people, including the young sultan, were rightfully afraid for their lives. Some of them even fled the city. The culprit for military defeat and economic troubles, the preachers pointed out, were moral and religious laxity, and the general lack of discipline among the elite. By siding with the Kadızadelis, Mehmed assumed the roles of the charismatic ruler and the champion of Islam.⁴²

The Kadızadelis' prescription was simple. The Sultan had to follow the precepts

⁴¹Marc Baer. *Honored by the Glory of Islam*. Oxford: Oxford University Press, 2007; pp.51-3

⁴²For a synoptic overview of these crucial years, see Marc Baer, "The Great Fire of 1660 and the Islamization of Christian and Jewish Space in Istanbul," *International Journal of Middle East Studies*, 36/2, 2004: 159-181; esp. pp.141-3.

of the original Islamic community. They suggested that the main pillar of Ottoman rule had to be “commending good and forbidding wrong,” and highlighted the Sultan’s power to forbid and punish. While the sultans were always willing to support righteous behavior, they had not been very keen to take the role of Islamic disciplinarians in the preceding century. The dictum that the earlier rulers followed was “there is no compulsion in religion,” while Mehmed often compelled other Muslims to behave piously.⁴³ He turned his holy warrior’s gaze not only to the Western frontier but to the Empire itself. True jihad had as much to do with the Muslim’s battle with his base desires as it did with driving out the infidels. Consequently, one of the most notable outcomes of his policies were the forced mass conversions to Islam.⁴⁴

Following the Kadizadeli interpretation of Islamic community also implied renouncing and weeding out *bid‘at* (innovation). The term originally had a faintly negative connotation and meant passing legal judgments without precedent. However, during Mehmed’s reign it acquired a more general meaning and often served as a pretext for the suppression of Sufis. After all, there were no mystics among the early Muslims. Furthermore, even the mainstays of Istanbul’s social life like coffee came under criticism as an innovation that prevented sleep, dulled the reproductive powers, and encouraged sedition.⁴⁵ Katip Çelebi remarked as a contemporary observer who was alarmed by the new and oppressive exploitation of *bid‘at*: “Once an innovation has taken root and become established in a community, it is the height of stupidity and ignorance to invoke the principle of ‘enjoining right and forbidding wrong’ and to hope to constrain the people to abandon it. People will not give up anything to which they have grown accustomed, whether it be Sunna or innovation, unless some man of blood massacre them all.” Indeed, both the sultan and the preachers proved willing and able to unleash violence against the innovators. Sufi lodges were raided, tombs of saints desecrated and

⁴³Baer, *Glory of Islam*, p.65.

⁴⁴Madeline C. Zilfi, “The Kadizadelis: Discordant Revivalism in Seventeenth-Century Istanbul,” *Journal of Near Eastern Studies*, 45/4, 1986: 251-269. Zilfi’s thesis is influenced by Halil Inalcik’s characterization of the period as the “triumph of fanaticism.” Also see Zilfi. *The Politics of Piety: The Ottoman Ulema in the Postclassical Age*. Minneapolis: Bibliotheca Islamica, 1988. Cf. Khaled El-Rouayheb, “The Myth of ‘The Triumph of Fanaticism’ in the Seventeenth-Century Ottoman Empire,” *Die Welt des Islams*, 48, 2008: 196-221.

⁴⁵Baer, *Glory of Islam*, p.68

even relatively innocent pleasure gardens were razed to the ground.⁴⁶

Retrogression in social norms went hand in hand with nostalgia for the glory days of the Ottoman Empire. Mehmed sought to reinvent the sultan's office when he relocated his court to Edirne, which was an old capital and a warrior's citadel. In Ottoman memory, it was home to the medieval warrior-sultans and, exuded masculinity and vigor. Edirne did not share the languor of Istanbul's sedentary lifestyle. Abdi Pasha, an Albanian general, encouraged Mehmed's nomadic aspirations and saw value in a sultan "whose footstep covered the world from end to end."⁴⁷ Mehmed left the old lifestyle behind Topkapi's shuttered doors, where the Enderün, the palace school, once trained the sultans and the palace pages into educated and sophisticated politicians. Vigorous physical activity replaced pen-fiddling and paper-shuffling. The thick woods surrounding Edirne offered ideal opportunities for hunting, and Mehmed's frequent forays into the forest in large companies of dignitaries bolstered his masculine image. Converting infidels and chastising lax Muslims was the new standard of zeal, and served as a suitable substitute for the ecstasy of dancing or the torpor of opium. Since many of the empire's Christian subjects resided in the Balkans, it was now easier for Mehmed to go on conversion campaigns to their villages and towns. Last but not least, Mehmed's army, when stationed in Edirne rather than Istanbul, could reach the European battlefield faster.⁴⁸

What lent credibility to Mehmed's grand gestures was his highly functional administration. The sultan did not have the necessary resources single-handedly to exercise control over public behavior and to strengthen the sultan's public image. His power rose on the shoulders of the grand viziers from the Köprülü family. Since mercenary households had proven troublesome earlier in the century, Sultan Mother Turhan did not hesitate to invest Köprülü Mehmed Paşa "with full powers over policy and high appointments, which the sultans had normally controlled."⁴⁹ This executive decision aimed to use one great household to suppress all others.

In a manner of speaking, instating Köprülü Mehmed as the executive plenipotentiary meant subcontracting state authority, including coercion.⁵⁰ The new policy proved

⁴⁶Baer, *Glory of Islam*, p.72

⁴⁷Baer, *Glory of Islam*, p.221

⁴⁸Baer, *Glory of Islam*, p.207

⁴⁹Carter V. Findley, "Great Households," p. 78

⁵⁰Naima, vol.6, p.XX

to be effective in taming insubordinate local lords, suppressing rebellions and bringing stragglers into line. Scholars generally agree that the Köprülü dynasty elevated the status of the grand vizier above his traditional advisory role. From 1656 onwards, the grand vizier held much of the real power in his hands.⁵¹ Before the rebellion of 1703, five members of this family served as grand viziers. Mehmet, Fazıl Ahmed and Kara Mustafa ruled consecutively for thirty years until the failed Siege of Vienna in 1683; Fazıl Mustafa served between 1689 and 1691, and Mehmed's nephew, Hüseyin, occupied the same position between 1697 and 1702.

Combining the appearance of zeal and masculinity with the Köprülü might seemed to work for Mehmed IV for almost a quarter century. His concerted efforts to entrench Islam at home and to expand the borders abroad made him relatively popular. He could proudly carry the title of holy warrior after bringing large expanses of Hungary and the Ukraine under Ottoman rule. The hunting parties, the conversion campaigns and the holy war mutually reinforced and sublimated one another. Everything Mehmed did was a literal or symbolic expression of jihad. Until the failed siege of Vienna in 1683, Mehmed's deviations from established Ottoman practices seemed justified. However, he humiliating and costly defeat at Vienna inverted Mehmed's image. While the hunt was a metaphor for war, war became an extension of Mehmed's irresponsible hunting habits. He was no longer a glorious sultan fulfilling his destiny, but an unrealistic, childish and cruel ruler driving the empire to the ground. The janissaries wanted the Sultan to give up his dream and to return to Istanbul. Mehmed refused to heed the call.

An Impossible Office

In the closing decade of the seventeenth century, the Ottoman dynasty detached itself from the Köprülüs. In 1687, rebels once again conspired to oust Mehmed from the

⁵¹“Ottoman historiography has by and large regarded the thirty years of political tranquility from the mid-1650s to the mid-1680s as an era of recovery. However, it was a time of autocratic rule by the Köprülü family of grand viziers. There was not much room for dissent. Mehmed Paşa, the patriarch of the family, established close ties with the palace and managed to sustain a strong alliance with the court that survived a revolt of the imperial cavalry troops stationed in Anatolia under the leadership of Abaza Hasan Paşa in 1658. The political protests led by Abaza Hasan Paşa could have brought about a deposition or at least a change of grand viziers, but the iron fist of Köprülü managed to disperse his manpower by massacring around 1,000 cavalry troops who had come to Istanbul to claim their salaries.” Tezcan, *Second Empire*, p.215

Ottoman throne. Mehmed had tried to exert his authority and failed. And, in the process, he had created the Köprülü dynasty. This family proved to be a lasting and ultimately undesirable element in the Ottoman administration until early eighteenth century. When Mustafa II (r.1695-1703) came to power, he could identify the Köprülüs as his chief adversaries. He sought to imitate Mehmed in restoring charisma to the office of the sultan, but, this time, the grand viziers were the enemy, not the ally. After four days on the throne, Mustafa expressed his intention to go to battle in person. He accused his uncles, Suleyman II (r.1687-1691) and Ahmed II (r.1691-1695), for sending Köprülüs to battle rather than riding out to the field themselves. In 1697, Mustafa II lost a series of battles against the Holy League composed of the Habsburgs, Venice and Poland. The Treaty of Karlowitz (1699), which followed the defeat, dealt a serious blow to the domestic prestige of the Sultan. With this treaty, Venice acquired the Western strip of the Peloponnese; the Habsburgs regained Hungary and Transylvania; and the Poles received Podolia (part of Ukraine). After such a tremendous failure, Mustafa reluctantly appointed yet another Köprülü as his grand vizier.⁵² At the same time, though, he also imparted unprecedented authority to Sheik al-Islam Feyzullah as a countermeasure against his adversary. Mustafa's goal was to channel popular anger towards the Köprülüs. Since Feyzullah was part of the Kadızadeli networks, he had both the rhetorical skill and the political wherewithal to confront the grand vizier.

What Mustafa actually achieved by his strategy was to replace one liability for another. Feyzullah became the Ottoman equivalent of the French Cardinal Richelieu, and served at once as the head of the secular and the religious wings of the Ottoman administration. By 1703, he had thoroughly infiltrated the ranks of the *‘ulemā’* and had the last word on political appointments. One of his thirteen sons became the Chief Judge of Anatolia – a very high-level appointment – at the age of 27, another was the Judge of Mecca (fifth most prestigious judicial post) at 23. Ibrahim, his youngest son surely presented the most extravagant case, as he was the Judge of Larissa at 17 and became the tutor to Mustafa's son Mahmud (r.1730-1754) at 18. Those who came into office because of non-familial links to Feyzullah were beyond count.⁵³

⁵²Rifaat Ali Abou-El-Haj. "The Narcissism of Mustafa II (1695-1703): A Psychohistorical Study," *Studia Islamica*, 40, 1974: 115-131.

⁵³Michael Nizri, "The Memoirs of Şeyhlislam Feyzullah Efendi," in *Many Ways of Speaking about*

Mustafa's short reign had proven that the very office of the sultan had entered a downward spiral. There was no way to hold on to the throne without investing executive authority in those who were bound to become a liability. The only way to weaken a political behemoth was to support a goliath. Underneath the politically bankrupt regime of Mustafa was also an economic problem: the imperial household was insolvent. Mustafa had instituted a new mechanism to generate revenue, and sold life-long land tenure (*malikâne*) in return for cash payments from 1695 onwards. To many, including Ahmed's court historian Raşid, selling land damaged the social hierarchy of the Ottoman Empire: now those "who lacked even a trace of nobility – a common porter or boatswain –, could obtain a contract."⁵⁴ Ariel Salzmann has identified Mustafa's new policy as an early modern version of the privatization of public debt. The Sultans were formerly able to dispense land in return for political loyalty and to retain at least the appearance of a well-ordered hierarchical society. These were no longer the case.⁵⁵ Mustafa hid in the palace because the Janissary salaries were in arrears by almost a whole year in 1702. A revolt broke in 1703 in Istanbul and it took Mustafa's and the Sheik al-Islam's life. During 1703, the Janissaries also set up a temporary government in Istanbul and formally recognized that the very office Sultan was no longer needed.⁵⁶

Restoration of the Ottoman Dynasty

Ahmed III thus began his reign as one of the weakest Ottoman sultans in history. His very office was suspect. His coffers were empty. He had come to power on the heels of the Treaty of Karlowitz (1699), which most Europeans saw as the end of the Ottoman threat. In 1703, the rebels did not care who the next Sultan was or whether there was a Sultan. If it was not for the negotiating skills of Gülnuş, Ahmed's Cretan mother, the Empire could have possibly turned into a Janissary republic. When Ahmed became the new sultan at the palace in Edirne, he already owed many favors to commanders

the Self: Middle Eastern Ego-Documents in Arabic, Persian and Turkish (14th-20th Century). eds. Ralf Elger and Yavuz Köse. Wiesbaden: Harrassowitz, 2010; pp. 27-37.

⁵⁴Salzmann, *Tocqueville*, p.96.

⁵⁵Ariel Salzmann, "Ancien Régime Revisited: 'Privatization' and Political Economy in the Eighteenth Century Ottoman Empire," *Politics & Society*, 21, 1993: 393-423

⁵⁶Rifaat Abou-El-Haj. *The 1703 Rebellion and the Structure of Ottoman Politics*. Istanbul: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1984.

and officers who had helped him quell the rebellion. However, the Feyzullahs and the Köprülüs had also destroyed one another, which proved to be Ahmed's single most important advantage.

According to the famous chronicler Naima (1655-1716), Ahmed had a fighting chance at restoring unity in the administration. It was clear from Mustafa's career that no one stood to benefit from a weak ruler. Even those who thrived on usurped power, such as Feyzullah, would ultimately fall victim to political instability. Naima extolled the virtues of a strong rule, most notably the iron fist of Murad IV (r.1612-1640), while openly criticizing Feyzullah Efendi for making Mustafa look weak. He suggested that the Ahmed III had to take a more pragmatic to politics approach than his delusional brother Mustafa had. Ahmed took his advice.⁵⁷

Ahmed was born in 1674 as the son of Mehmed IV. He had had the benefit or the misfortune of having witnessed the violent history of the dynasty. The unsavory circumstances that he was used to living under were no different than what he faced after he assumed the throne. His coronation ceremony took place on August 22, 1703 in Edirne and the imperial household permanently moved back to Istanbul soon after. One of the first things Ahmed did as the 29-year-old ruler of the Empire was to make use of factional strife within and around the palace to restore his authority. His first target was the leader of the 1703 rebellion who had reluctantly brought him to power.⁵⁸

He also dealt the final blow to the expiring Köprülü and Feyzullah households. This was a far more daunting task and required an indirect approach. Thus, what Ahmed did was to keep them occupied with offices away from the capital – a form of political exile all but in name. Consequently, he appointed Abdullah, Köprülü Kara Mustafa's son as the Governor of Chania (in Crete) in 1703 and kept him "governing" townships in the distant provinces from Hungary to Yemen until 1730. Ahmed confiscated Feyzullah's property and "promoted" those who were associated with the Sheik al-Islam to judicial and professorial positions in Bursa. Throughout his reign, Ahmed also worked, albeit with limited success, to end the political reign of the handful of scholarly families who

⁵⁷Naima Mustafa Efendi. *Feyzullah Efendi Vakasi* [appended to the Mtefferrika edition of 1734] in *Tarih-i Naima*. 6 vols. ed. Mehmed Ipsirli. Ankara: TTK, 2007; vol.6, pp. 1857-1892. Also see Lewis V. Thomas. *A Study of Naima*. Chicago: Chicago University Press, 1972.

⁵⁸Ismail Hakkı Danişmend. *İzahlıOsmanlı Tarihi Kronolojisi*. 4 volumes. Istanbul: Türkiye, 1971; vol. 4, pp. 1-2.

had come to occupy the top rungs of the *‘ilmiyye* in the seventeenth century.

What helped Ahmed commandeer the old gentry out of Istanbul were the resources at his disposal: the loyal members of the extended imperial family, the bureaucrats and the Greeks of Istanbul. Major merchant families of Crete, which used to be Venetian territory before 1669, lived in the Phanar district of the city. The Phanariots financed the *malikāne* purchases and facilitated cash flow to the palace. In return, Ahmed offered them political power. From 1710 onwards, a few of these families became the hereditary rulers of the Ottoman principalities on the Danube: most notably Wallachia and Moldavia. The Grand Dragomanate (a transliteration of the Turkish *tercüman*, which meant interpreter) was also reserved for the Greeks. This office placed the Phanariots in charge of the Empire's foreign affairs. Throughout the eighteenth century, the Grand Vizier was the only official who outranked the Grand Dragoman in the bureaucracy.⁵⁹

Ahmed also employed a number of other strategies to strengthen his authority: Marriage proved to be an especially important tool in Ahmed's political arsenal. Many grand viziers who served Ahmed ended up marrying into the dynasty. The first groom was Hasan, a Greek commander who married Ahmed's sister soon after he replaced Ahmed Paşa "the Jar", who had both led and quelled the rebellion in 1703. Hasan's appointment was a step towards political normalcy, where the dynastic family could, once again, assert its power. Ahmed later married his daughters to various incumbent grand viziers to assure that he was at least aware of their political allegiances and plans. Ahmed's final countermeasure against powerful families was to change his viziers frequently. Baltacı Mehmed occupied the post merely a year after Hasan's appointment, and served for two years until the appointment of Çorlulu Ali. Two years after Ali became the grand vizier in 1706, he married Emine, Ahmed's niece, to whom he had been engaged for the past seven years. He did not last very long in office, either. The appointments were often the result of court intrigues, but they were also a means to delegate responsibility – and sometimes blame – in the face of the many economic and military challenges that the Empire faced.⁶⁰

⁵⁹Christine Philliou, "Communities on the verge: Unraveling the Phanariot ascendancy in Ottoman governance," *Comparative Studies in Society and History*, 51, 2009: 151-181.

⁶⁰For example, Silahdar Ali, another one of Ahmed's viziers was well aware of this strategy and had

Although the first decade of the eighteenth century was a period of peaceful restoration of the dynasty, Ahmed was not immune to warfare and rebellion in the provinces. The empire fought three essentially defensive wars against the Russians, the Venetians and the Habsburgs during the 1710s. With these wars, the Ottomans would be able to retain and, to a certain extent, reconquer some of its European territories. The centerpiece of the first half of Ahmed's reign was the extended war against Russia that lasted four years (1710-1714). Peter the Great had defeated Charles XII of Sweden near Moscow. Charles saved himself and a small entourage of guards and headed south to the Moldavian town of Bender, which was under Ottoman rule. Ahmed III gave Charles asylum, and Çorlulu Ali thought, perhaps rightly, that a confrontation with Russia would be necessary in the short term. Ali hence secretly encouraged the Khan of Crimea to help Charles XII against Peter, a move that would cost him his vizierate. At this juncture, Dimitri Cantemir, who grew up and lived as a Moldavian nobleman at the Ottoman Palace formed a secret alliance with Peter the Great. Forced to finish up what Ali had started, Ahmed once again appointed Baltacı Mehmed, who led the Ottoman forces to the battlefield in Pruth, where he won the Ottomans a decisive victory. However, even this notable success was not enough to keep Baltacı in office. It was clear that his opponents at the court expected a harsher treaty, perhaps even Peter's head after a victory like the one Baltacı had won. Three Grand Viziers followed Baltacı in rapid succession.⁶¹

While the war against Peter was going on, Venice incited a rebellion in Bosnia in 1712. After Ali quelled the rebellion, Ahmed decided to organize a military campaign against the Venetians. The war lasted a year and won the Ottomans significant parts of the Greek peninsula, as well as a number of Greek islands, including Corfu. However, the maritime Venetians were considerably less formidable than their allies, the Habsburgs. The Habsburgs refused to let the Ottomans keep the islands they had taken from the Venetians. Ali offered to support the Hungarian leader Ferenc Rakoczy II, who had rebelled against the Habsburgs. In the meantime, Prince Eugene of Savoy, the Habsburg field marshal, learnt that Ahmed's armies were already marching towards

turned down a vizierial appointment when Baltacı Mehmed was away on the Russian campaign. See Akdes Nimet Kurat. *Prut Seferi ve Barışı*. 2 vols. Ankara: TTK, 1953; vol. 2, p.634.

⁶¹Peter Topping, "Venice's Last Imperial Venture," *Proceedings of the American Philosophical Society*, 120/3, 1976: 159-165.

Belgrade, which was the last remaining Ottoman stronghold in central Europe. He was able to capture the citadel before the Ottomans arrived.

The developments on the Western front finally reached their conclusion in 1718 with the treaty signed at Passarowitz, a town in modern Serbia. With this peace, the Ottoman Empire lost most of its holdings in Serbia and Hungary alongside a strip of land in Bosnia and on the Danubian coast. In return, the Ottomans finally ruled over the entirety of the Peloponnese as well as Crete, which had been under Venetian rule since 1699. The Treaty of Passarowitz marked the end of Ottoman expansion in the West, but also ushered in the first extended period of peace since the year 1500.⁶²

Astrology, the Body Politic and early Ahmedian Reforms

In the midst of the political turmoil that culminated in the rebellion of 1703, another power was on the rise: the bureaucrats. As the Köprülü's autocratic machinery built up its strength, it also grew more sophisticated. The bureaucrats facilitated the exercise of the replenished central authority. They kept the records, levied the taxes and, distributed the land and the titles. Ahmed's pursuit of lasting peace with Europe made the bureaucrats positively indispensable, as the empire's success no longer rested on military might, but on diplomatic savvy, effective micro-management, and financial acumen. However, the religious and military preoccupations of the Sultans curtailed their visibility and influence. Ahmed's desire to uphold peace, albeit unsuccessfully, gave the bureaucrats a new mandate in restoring or regenerating the dynasty.⁶³

Naturalism was an essential part of bureaucratic reform. The bureaucrats did not see the empire primarily as a Muslim polity. Their understanding was both physical and Galenic. The empire was a body politic composed of four humors. The "sickness" was an imbalance of these humors. The remedy was not Mehmed's amputative policies of exclusion, nor was it suppression, piety and discipline. The empire needed a new diet. The bureaucrats did not look down from the high pulpits, as the Kadizadelis did, but from the darker rooms of the imperial treasury, the belly of the empire. Their advice,

⁶²Charles Ingrao and Jovan Pesalij, eds. *The Peace of Passarowitz, 1718*. West Lafayette: Indiana, 2011.

⁶³Rhoads Murphey, "Continuity and Discontinuity in Ottoman Administrative Theory and Practice during the Late Seventeenth Century," *Poetics Today*, 14/2, 1993:419-443

consequently, was both down-to-earth and materialistic.

Ahmed was the first sultan to implement the reforms that many bureaucrats mustered the courage to voice in the late seventeenth century. The chief spokesperson for the bureaucratic interpretation of the Ottoman body politic was Naima, the first court chronicler in Ottoman history. While his main work was historical in nature, he was also an accomplished astrologer. Unlike Katip Çelebi, whose reform agenda was fully reproduced in Naima's history, Naima was also a determinist. As he read Ottoman politics by reference to the physical body, he believed that the practice of history and astrology or the science of judgments (*‘ilm-i aḥkām*) were deeply intertwined.

If they [historians] are competent in the science of judgements, they should determine the judgements of the yearly revolutions [taḥvīl-i sinīn], eclipses [küşūfāt] and other fateful occurrences according to the methods of this art. The activities of the celestial bodies convey the orders of the guardians who rule over them. If the historians are able to inquire into the changes these produce in the lower bodies and manifest in the social configurations of states, they can produce evidence of their visible effects. Then they will have shown their mastery.⁶⁴

Naima did not doubt the veracity of stellar influences, nor did he doubt that the only way to heal the Ottoman body politic, which had grown old and infirm, was to address its constitutional weaknesses.

The bureaucrats' idea of corruption was likewise Aristotelian, not moral. Consequently, the agenda of reform focused on balancing (*mūvāzenet*) the four humors that sustained the Ottoman body politic.⁶⁵ Heavy taxes, often inequitably levied, never made it to the imperial treasury since intervening dignitaries and vassals took a cut. The empire was malnourished, the soldiers – the phlegm -, dominated over all others.⁶⁶

⁶⁴Naima, 1, 5

⁶⁵W.F.A. Behrnauer, "Hagi Chalfas Dusturu'l-Amel: ein Beitrag zur osmanischen Finanzgeschichte," *Zeitschrift der deutschen morgenländischen Gesellschaft*, 11, 1847:111-132.

⁶⁶Cf. Yazıcıoğlu Salih's rhymed almanac from the early seventeenth century, where the Sultan is not responsible for the regulation of the humors, but a humor himself: "In time this [January] is the central month of winter / Of days there are 31 without doubt / Dominance [rulership] comes from phlegm, that is clear / The stomach is opened and hunts for food /... So do not eat garlic o eminent [reader]." Cited in Jan Schmidt, "The Occult Sciences and Their Importance in Ottoman Culture: Evidence from Turkish Manuscripts in Dutch Public Collections," *Osmanlı Araştırmaları*, XXIII, 2003: 219-254, p. 234.

Table 1: The Ottoman Body Politic

Humor	Class	Quality
Blood	‘ <i>Ulemā</i> ’	Hot and wet
Phlegm	Military/Aristocracy	Cold and wet
Yellow bile	Merchants	Hot and dry
Black bile	Peasants	Cold and dry

Bribery was rampant, as were simony and the sale of administrative offices. Many of these political thinkers believed that the derelict empire urgently needed the Sultan to restore balance and equity within the administration. The stagnant emph‘ulemā’ needed to flow, while the merchants and the peasants needed a break from excessive taxation for military purposes.

The humoralist interpretation of the body polity was the extension of an even older pseudo-Aristotelian political ideal: equity. Equity meant the diligent application of the law, fair taxation, distribution of offices to competent men, and, above all a return to the circle of justice. The circle, according to popular belief, was the advice that Aristotle gave to Alexander. Karaelebizade Abdülaziz Efendi, who chronicled the regency of Mehmed IV’s (r. 1648-1687) mother in the 1650s, was among the many authors who invoked ancient peripatetic wisdom.⁶⁷

There is no land without an army
 There is no army without wealth
 Wealth is amassed with the help of the subjects
 People are turned into subjects by the king’s justice
 Justice is the cause of peace around the world
 World is but a garden whose walls are the state
 The State is ordered by laws
 Laws cannot be upheld without land⁶⁸

The more proximate source for this formula was Ibn Khaldun (d.1405), whose writings were popular among Ottoman bureaucrats over the sixteenth and seventeenth

⁶⁷ Koçi Bey (fl.1640) is perhaps another well-known example. See Yılmaz Kurt, ed. *Koçi Bey Risalesi: Eski ve Yeni Harflerle*. Ankara: Ecdad, 1994.

⁶⁸ Karaelebizade cited in Baer, *Glory of Islam*, p.44. My translation is a slightly modified version.

centuries.⁶⁹ The defenders of the circle of justice invariably defined the problem within the broader context of Ottoman history. Namely, they viewed the empire as an organic polity with a certain life-cycle. The empire was past its youth and perhaps even maturity, corruption, in both the political and the Aristotelian sense, was driving the Ottomans to disintegration.⁷⁰ According to Katip Çelebi, excessive phlegm was the problem, and coldness and wetness was the essence both of old age and of corruption.⁷¹

Early in his reign, Ahmed addressed these naturalistic and deterministic ideas of corruption and reform. He sought to rectify the finances by selling land, which introduced members of the peasantry and the merchants into the landed aristocratic class. From Katip Çelebi's and Naima's perspective, such a move would introduce dry elements into the administration and subdue the phlegm. He also sought to introduce the lower classes into the *‘ulemā’*, largely an aristocratic institution in the wake of Mehmed's reign, by instituting state examination (*rü’us*). Such a move was also fundamentally compatible with seeking humoral balance. The *‘ulemā’* were responsible for exercising justice and since justice and blood were essential to the reinvigoration of the empire. Consequently, breathing new life into the judiciary would counterbalance the excess of phlegm, and bring back youth.

Fabrication of Ahmed III

Shortly before the Treaty of Passarowitz, Damad Ibrahim became a serious contender for the grand vizierate. However, he was not yet quite willing to assume the office: He had observed that further war with the Habsburgs, who now possessed Belgrade, effectively risked the Ottoman lands to the west of Istanbul. If the treaty proved

⁶⁹Linda T. Darling, "Social Cohesion (‘Asabiyya) and Justice in the Late Medieval Middle East," *Comparative Studies in Society and History*, 49/2, 2007: 329-357. Regarding Ibn Khaldun's popularity, see Cornell H. Fleischer. *Bureaucrat and Intellectual in the Ottoman Empire: the Historian Mustafa Ali (1541-1600)* Princeton: Princeton UP, 1986.

⁷⁰Cemal Kafadar, "The Myth of the Golden Age: Ottoman Historical Consciousness in the Post-Süleymanic Era" in *Süleyman the Second and His Time*. eds. Halil İnalcık and Cemal Kafadar. Istanbul: Isis, 1993; pp.37-48. Pál Fodor, "15.-17. Yüzyıl Osmanlı Hükümdar Aynalarında Devlet ve Toplum, Kriz ve Reform." *Ege Üniversitesi Tarih İncelemeleri Dergisi*, XIV, 1999: 281-302. Cornell H. Fleischer, "Royal Authority, Dynastic Cyclism and 'Ibn Khaldunianism' in Sixteenth-Century Ottoman Letters," *Journal of Asian and African Studies*, 18/3-4, 1983: 198-220.

⁷¹See Behrnauer, "Finanzgeschichte,"

to be inconclusive, the incumbent grand vizier was likely to take a blow to his career. Thus, he was part of Ottoman delegation at the peace negotiations at Passarowitz as the plenipotentiary, but not as the grand vizier. Only after having brought the conference to a successful conclusion did he take office.⁷² This marked the beginnings of the Ottoman policy to maintain rather than expand the Western borders. And just as the defeat in Vienna in 1683 had ended Mehmed IV's claims to ghazi-hood, the peace of Passarowitz put a conclusive end to the holy war against Christendom.

Ibrahim had begun serving the palace as a young accountant. During the dozen years leading up to his vizierate, he was responsible for keeping the books of the holy cities of Mecca and Medina, and had travelled with the army during the Venetian campaign as a land surveyor. He had first hand experience of the financial troubles of the imperial household, but he was also aware of the way out. Even before 1718, he was serving as one of Ahmed's top advisors, and he believed that his skills as a former financial officer were precisely what the empire needed in this period of recuperation. Unlike many of the former grand viziers, Ibrahim also came from a modest background. He had spent his career in the service of the palace, whereas many other top officials had been graduates of other vizier households – hence parts of power networks that the Sultan sought to weaken.⁷³

Damad Ibrahim sought peaceful means to legitimize and strengthen the central administration.⁷⁴ Most scholars have noted that it was Ibrahim's policies that gave this era its unique and innovative character. Ibrahim's first innovative policy was to sell life-long land contracts aggressively, and thus to increase the short-term cash income of the palace. Putting an end to war on the western front meant giving the farmers at least a temporary break on the emergency taxes, which would allow the peasants to recuperate and shoulder the 60% tax increase Ibrahim almost simultaneously introduced. Ibrahim increased the taxes on commerce, manufactures and charitable endowments to balance

⁷²Rhoads Murphey, "Twists and Turns in Diplomatic Dialogue: the Politics of Peacemaking in the Early Eighteenth Century," in *Passarowitz*, pp.73-93

⁷³Münir Aktepe, "Nevşehirli Damad Ibrahim," *Diyanet Vakfı İslam Ansiklopedisi*. 40 vols. Istanbul: IRCICA, 1988-; vol 29, pp. 292-3.

⁷⁴Ahmed Refik coined the term "age of tulips" for Damad Ibrahim's Grand Vizierate in his classic, passionately-written work, *Lale Devri*. (Istanbul: Ibrahim Hilmi, 1915). Also see Wilhelm Heinz. "Die Kultur der Tulpenzeit des Osmanischen Reiches," *Wiener Zeitschrift für die Kunde des Morgenlandes*, 61, 1962: 62-118.

the books. He managed to stabilize the value of the Ottoman currency by minting new, more valuable coins.⁷⁵ The year 1720 marks the first time in decades when the Ottoman treasury could finally show a surplus rather than a huge deficit. This did not mean that Ibrahim had successfully stopped the accumulation of debt, but rather that he gave a respite to the central administration to reestablish its power.

Implementing these policies required a large number of trained personnel and therefore, a larger space. Hence, Damad Ibrahim relocated his offices to Bab-ı Ali (Sublime Porte), and thus left the palace. He separated the operational budget of the Empire from the palace treasury. He established a separate office for records. He took the palace's book-keepers and secretaries with him. In no ambiguous terms, he became the founder of the Ottoman bureaucracy. There had been Ottoman bureaucrats for as long as there was an Ottoman state, but they existed within the general household framework – and had trained either at the palace or within the major political households. However, a "bureaucracy" had not materialized into a separate political institution until Damad Ibrahim's Grand Vizierate.⁷⁶

Ibrahim's new policies also turned the Sultan into more of a figurehead than an administrator. Thus, the palace kept a separate budget exclusively for pomp and ceremony. According to Marquis de Bonnac, who was the French ambassador during the crucial years between 1718 and 1724, Ibrahim had told Ahmed that unless he was willing to spend his money for show, no amount would suffice to save either the Sultan or the Grand Vizier in the event of a rebellion.⁷⁷

It was during this period that Ahmed spent a considerable portion of the palace's resources to refurbish the city, to dot its shores with magnificent residences, and to patronize poets and philosophers that would contribute to the Empire's prestige at home and abroad. Ahmed was initially uneasy with these new spending habits. He had seen immense value to keep money in the palace's coffers – saving for a possible Janissary revolt or a war -, and hence liked to save rather than spend money. He had significantly reduced palace expenditure between 1703 and 1718. However, Damad Ibrahim believed that spending money, lots of it and in the right way, was essential to keeping the Sultan

⁷⁵ İsmail Hakkı Uzunarşılı. *Osmanlı Tarihi*. 4 vols. Ankara: TTK, 1983; vol 4/1, p. 321

⁷⁶ Murphey, "Continuity and Discontinuity"

⁷⁷ Salzmann, *Tocqueville*; pp. 75-121.

popular among the people.

Istanbul was an immensely wealthy city and the crowd that Ahmed had to please were not simple peasants and artisans. The city housed not only the top administrative officials, but also the empire's wealthiest families. Tax farmers, who subcontracted the farmlands to provincial clients also resided in Istanbul. The Greeks of Phanar, who were officially barred from land contracts, often served as financiers and drew an indirect but remarkable benefit from Ibrahim's economic policies.⁷⁸

After 1718, Ahmed was not simply displaying his personal power, but was encouraging other members of the dynasty and his top officials to do so as well. While the famous and grand Kiosk of Sadabad, a building that was finished in 1722, served as the Sultan's new court, other prominent buildings, such as the ırağan Palace, became the residences of the viziers and pashas that served him.⁷⁹ Even the lesser officials and the *ulemā* were involved in the new construction boom and sought to place their names in the city's many squares and street corners. The construction efforts and the cooperation were meant to create the appearance that all was well at the top rungs of the society. While provincial power struggles, factionalism and strife had been explicit features of Ottoman politics in the preceding century, now, outside observers could only see the Ottoman elite working in solidarity to turn Istanbul into the true center of the Empire.⁸⁰ The body politic, once again, was healthy.

Historians have tended to associate Damad Ibrahim's absolutism with French influence. And there are certain similarities between Louis XIV and Ahmed. When Mehmed elebi went to the Versailles as the Ottoman ambassador in 1720, he truly was keen to learn from the French political model. Indeed, Damad Ibrahim had asked him to learn as much about French industry and trade so that the court could later see whether they were applicable. Jean Baptiste Colbert was responsible for making Louis XIV into the most illustrious ruler in Europe. How could Damad Ibrahim do the same?⁸¹

⁷⁸Şevket Pamuk. "Institutional Change and the Longevity of the Ottoman Empire, 1500-1800," *Journal of Interdisciplinary History*, 35/2, 2004: 225-247; see esp. p. 241.

⁷⁹Sedad Hakkı Eldem. *Sadabad*. Ankara: Kültür Bakanlığı, 1977. Shirine Hamadeh, "Ottoman Expressions of Early Modernity"

⁸⁰Tülay Artan. "18. Yüzyıl Başlarında Yönetici Elitin Saltanatın Meşruiyet Arayışına Katılımı" *Toplum ve Bilim*, 83, 1999: 292-322.

⁸¹Peter Burke. *The Fabrication of Louis XIV*. New Haven: Yale University Press, 1994.

Colbert had built French industry to reduce reliance on Venetian and Flemish imports. He had strengthened the French trade companies and regulated the guilds to improve the quality of French manufactures. One of the most astute observations of Mehmed Celebi, the Ottoman ambassador to the Versailles in 1721, was that Louis had made a large sums of money from the crown's non-feudal economic ventures: Louis owned manufacturing workshops and reaped handsome profits from trade, whereas the Sultan had hitherto owned a handful of mines and mainly drew his revenues from farmlands.

Ibrahim proved willing and, to a certain extent, able to take on European industrial and commercial practices when he built a porcelain factory in the Tekfur Palace in Istanbul. By this point, he was aware of Augustus II's porcelain factory in Meissen and, it appears, he wanted to beat his Habsburg competitor to producing white porcelain in Europe.⁸² He also patronized the establishment of cotton and paper factories around Istanbul in an attempt to reduce the Empire's reliance on foreign imports. Furthermore, he engaged in the quite un-Ottoman practice of financial speculation. He created a speculative tulip market in the Ottoman Empire, and partook of the European "futures" trading when he purchased French bonds through the Jesuits.⁸³ Ibrahim also adopted a series of mercantilist policies and refused to renew France's time-honored trade capitulations. This way, the Empire would draw more profit from Mediterranean trade.⁸⁴

Naturalism and the Ottoman Court

Sociability and philosophical naturalism developed in tandem during Ahmed's reign. Philosophy served as diversion and consolation for the elite, while naturalistic pursuits helped one control fortune, or at least improve his physical conditions. A crucial element in fabricating the sultan's awe-inspiring image was the Kiosk of Sadabad, which

⁸²Tülay Artan, "Eighteenth Century Ottoman Princesses as Collectors: from Chinese to European Porcelain," *Ars Orientalis*, 29, 2011: 113-146. Zeki Sönmez. *Türk Çiniciliğinde Tekfur Sarayı İmalatı Çiniler*. Istanbul: n.p., 1987.

⁸³Alexandru Sturdza. *L'Europe orientale et le rôle historique des Maurocordato, 1660-1830*. Paris: Plon, 1913, p. 376.

⁸⁴See Edhem Eldem. *French Trade in Istanbul in the Eighteenth Century*. Leiden: Brill, 1999.

had opened its doors to the Ottoman elite in 1722.⁸⁵ This new court would be the Ottoman equivalent of the Versailles. Sultans and governors had held courts where they dispensed judgment or brokered power since time immemorial. However, the Sadabad was ruled by a different set of values than the feudal ones. The site served to make sure that all administrative elites were in Ahmed's company. Such cohabitation further bolstered the perception that the Sultan and the Ottoman elite were one and the same.⁸⁶

The creation of the court ushered in a new type of elite sociability that initially proved to be quite difficult and expensive to sustain. How did Ibrahim and Ahmed facilitate sociability among the Ottoman "political elite," which included prominent corsairs, brutal field marshals, highly successful bandits, but also shrewd accountants, wealthy merchants, sophisticated secretaries, diplomats and high-ranking religious scholars? By resorting to entertainment and diversion: Hence the best-known characteristics of Ahmed III's court: soothing gardens, good music, excellent poetry and copious amounts of wine.⁸⁷ Despite this new sociability and the seeming lightness of the courtly environment, Ottoman politics remained as depressing as ever at one level. The Sultan had kept his useful habit of keeping certain offices on a short schedule. Consequently, it took exceptional fortitude to retain one's calm in the Ottoman court when a simple error or a successful plot could lead to one's exile, imprisonment or even execution. Power rapidly changed hands and political fortunes for certain high-level elites were highly inconstant. A tempestuous six-month term as a lower vizier, a year-long underpaid but prestigious appointment as a judge in a remote corner of the empire (which one simply had to accept), front-line duty as the Sultan's lieutenant at a highly risky battle – all very real possibilities for the Ottoman elite - could well be the reward one received in return

⁸⁵"Sadabad's principal novelty lay in the fact that the ruler's palace was surrounded by some 200 private kiosks belonging to high dignitaries and placed on the hillocks overlooking the Kağıthane stream. Landholdings on the latter's banks stretching from Sultaniye to Karaağa were distributed to dignitaries as freehold property on the condition that they erect buildings in due taste and grandeur. Changes in the Ottoman elite's attitude towards nature were noteworthy in this context as well: for the sultan and his entourage accepted that man could and should modify nature, rather than adjusting to it; in due course even simple habits such as strolling were to change as a result." Tülay Artan, "Arts and Architecture," p.467

⁸⁶Hatice Aynur and Hakan Karateke. *III. Ahmed Devri İstanbul Çeşmeleri*. İstanbul: IBB, 1995. Esin Atıl. *Levni and the Surname: the Story of an Eighteenth Century Ottoman Festival*. İstanbul: Koçbank, 1999.

⁸⁷Ahmed Refik. *Lale Devri*.

for lifelong service to the Sultan. It was, therefore, not without reason that Moshe ben Abravanel's late seventeenth-century Turkish treatise on melancholy (*sevda*) and anxiety (*merak*) was staggeringly popular among the elite, with more than a hundred manuscript copies still extant.

Especially the secretaries, the diplomats and financial officers stood to benefit from the new courtly lifestyle. They occupied the middle cadres and enjoyed relatively stable careers. Poets, polite *‘ulemā’* and the bureaucrats had the easiest time mastering the new sociability, where there was a high premium on literary finesse, wit, erudition and sophistication.⁸⁸ The fortunes of these middling intellectuals clearly depended on those of their patrons, but the courtly environment also brought a new fluidity to patron-client relations. A talented young scholar or a shrewd poet could always find a new patron in Istanbul, if he fell out of his patron's favor or if the patron fell out of the sultan's favor. Esad of Ioannina (d.1731), a court scholar whom I will treat extensively in Chapter 4, illustrates this new fluidity exceptionally well. He had acquired a teaching position with the help of the controversial Sheik al-Islam Feyzullah. After Feyzullah was deposed and killed during the rebellion of 1703, his patrons were the Grand Dragoman Alexander Mavrocordato, and later, Chrsanthos Notaras, the Orthodox Patriarch of Jerusalem. Ahmed later appointed Esad as his personal librarian in 1719. Esad died in obscurity soon after the rebellion of 1730, when Ahmed lost the throne and Damad Ibrahim, his life. Men like Esad had risen in their careers because of their intellectual qualifications, and they moved from patron to patron whenever fortune compelled them. And, ultimately, they also fared much better at the court than the valorous but crude-mannered commanders ever could.

History was one of the most popular pursuits among court intellectuals. The efflorescence of comparative political history in this era was the result of what many observers believed was the natural decline and the miraculous rebirth of the Ottoman Empire.⁸⁹ The very idea of natural political decline went back to Ibn Khaldun's (fl.1390)

⁸⁸For a list of bureaucrats who became Grand Viziers in the 1730s and 40s because of their intellectual qualifications, see the contemporary account of Ta'ibzade Osman et al. *Hadikatü'l-Vüzerā*. Istanbul: Ceride-i Havadis, 1854; pp. 34, 41, 43, 84: Mehmed Said was appointed to the Grand Vizier's secretariat because he was talented in geography, mathematics and physical experiments. Hekimoglu Ali was a philosophical-minded and witty individual. Ragıp Paşa was likewise characterized as a philosopher.

⁸⁹For a synoptic overview of the decline literature, see Cemal Kafadar, "The Question of Ottoman De-

Muqaddimah, which had become popular in Istanbul in the late seventeenth century.⁹⁰

Dimitri Cantemir, who lived at the Ottoman palace until 1711 had penned the prime example of this new view of history. This book, which would later inspire Edward Gibbon was *Incrementorum atque decrementorum aulae Othomanicae* (Rise and Decline of the Ottoman Court).⁹¹ Ottoman writers of the eighteenth century generally transcended the Islamic concerns that had occupied earlier historians. The secular turn in historiography found its clearest articulation in the publications of the sultanic printing press, which was founded in 1729. The West Indies, Ancient Egypt and the Ottoman past drew more attention than did the life of the Prophet or the deeds of the Caliphs. A group of court scholars led by Kkelebizade Asım (1685-1760) also wrote a universal history. What gave structure to this scholarly project was *İkḍ al-Jumān fī Tārīḥ ahl al-Zamān* (The Pearl Necklace on the History of the Masters of their Times), a fifteenth century work written in Arabic by the Mamluk scholar Badr al-Din Ayni.⁹²

Philosophy, especially ethics, was also a budding intellectual endeavor among the court's elite. Şehid Ali Paşa, one of Ahmed's sons-in-law, was a great patron of philosophers and frequently commissioned quality copies and Turkish translations of Arabic astrological and philosophical works. Ömer Ta'ibzade (d.1724), who had earned the epithet Head Poet (Reis'ş-şuara) of the court wrote a work on princely virtues and called it Ahmedian Ethics (Aḥlāk-i Ahmedī). He commended a mix of religious and social virtues as founts of constancy to the Sultan. Dimitri Cantemir, who had studied with Esad, presented wisdom as the key to man's victory over the inconstancy of the world in his *Salvation of the Wise Man and the Ruin of the Sinful World*.⁹³ The Grand Dragoman Alexander Mavrocordato expressed the same sentiments in his *On Duties*,

cline," *Harvard Middle Eastern and Islamic Review*, 4, 1998: 30-76. The idea that the empire experienced a rebirth is a persistent theme in the court-patronized official history written by Raşid.

⁹⁰Bernard Lewis. "Ibn Khaldun in Turkey", in *Ibn Khaldun: The Mediterranean in the 14th Century: Rise and Fall of Empires*. Seville: Foundation El Legado Andalusi, 2006; pp. 376-380

⁹¹On the naturalism inherent in Cantemir's understanding of history, and on his Ottoman sources, see Johann Strauss, "The Rise of Non-Muslim Historiography in the Eighteenth Century," *Oriente Moderno*, Nuova serie, 18/1, 1999; 217-232. On the reception of Cantemir's work in Europe, see Hugh Trevor-Roper. *History and the Enlightenment*. New Haven: Yale University Press, 2010; Chapter 2.

⁹²Adile Abidin, "Ayni'nin İkdü'l-Cuman'ında Osmanlılar'a Ait Verilen Malumatın Tetkiki," *Tarih Semineri Dergisi*, II, 1938: 134-215. Also see Cengiz Tomar, "İkdü'l-cuman", *İslam Ansiklopedisi*, vol. 22, pp. 25-26. Also see Uzunarsılı, *Osmanlı Tarihi*. vol.4/1, pp. 152-5.

⁹³Dimitrie Cantemir. *The Salvation of the Wise Man and the Ruin of the Sinful World = Salah al-hakim wa fasad al-'alam al-zamim*. Bucharest: Editura Academiei Romane, 2006.

which his son and successor, Nicholas Mavrocordato translated into Latin and published as *Liber de officiis*.⁹⁴

Esad of Ioannina believed that understanding nature was essential to the cultivation of virtue. Esad's works contended that ordering one's mind, or contemplating the existing order in the universe was a sure way to attain virtue. Nicholas, who was Esad's student and Alexander Mavrocordato's son extolled the virtues of this new approach to philosophy. The emphasis on reason and experience distinguished the new Ottoman philosophy from the old theology. Court philosophy transcended both the "logical works of the Arab scholastics," and the "alchemy of the Arab charlatans."⁹⁵

However, there were also tensions within Ottoman naturalism, one that is familiar to the students of the Enlightenment: Should one improve the self and abandon the world? Or could the world itself admit of improvement? John Robertson has aptly described this tension as one between Stoical and Epicurean views of the world. One member of the court, Mehmed elebi, was of the former conviction he called the many fine buildings and curious artifices he found at the Versailles "a heaven for the unbeliever and hell for the devout." On the other hand, the wealth of gardening literature from the period, books on recirculating fountains, works classifying the many types of tulips, medical treatises focusing on effective remedies for common diseases suggested the rise of Epicurean sentiments. One of the functions of building so many lavish palaces and gardens around the city was to offer employment to the poor, who also frequently received cash handouts and gifts from Damad Ibrahim. Alongside the new small-scale industrial ventures of Ahmed, these developments ushered in Ottoman Epicureanism and reformism – and the end of old static view of the world, social classes and political humoralism.

The trajectory of Ottoman naturalistic literature reflects the values and tensions that this new courtly environment marshaled: from a feudal to a bureaucratic order, from solitary fiefdoms to a sociable court, from religious monopoly over knowledge to lay involvement. On the one end stood wisdom and virtue, which the individual elites wanted to cultivate or at least wanted to seem like they did. On the other end was *hazakat* or expertise, which was necessary in order to make knowledge that yielded

⁹⁴Alexander Mavrocordato. *Peri kathekonton=Liber de Officiis*. London: Samuel Palmer, 1726.

⁹⁵Nicholas Mavrocordato, *Parerga Philotheou*, pp.78-9.

practical benefits. The middle road, which emerged at the very end of Ahmed's regime, seemed to bring together the two values in the concept of experiment, or *berr tecrbe*, meaning upright or morally reliable experience.

Chapter 3

Ottoman Theology in the Early Eighteenth Century

Abdüllatif Harputi(1842-1916), a prominent nineteenth-century Ottoman theologian, claimed that the early eighteenth century had annihilated systematic theology (*kelām*):

After the 1730s (1150 H.), the Ottoman scholarly establishment began its journey towards disintegration after the ruling and the military institutions suffered a similar fate. As a consequence, it has become difficult to follow the advances [terakki] in knowledge and learning, and, alas, let alone advancement, we rather see diminution and retrogression in this era. The classical works of Islamic philosophy laid forgotten in the messy and tattered pages of worm-eaten books as if in a undifferentiated mass [heyula=hule] with a vanishing form [suret=eidos] that could only sustain a knowledge of the once-current philosophical vocabulary. In the West, the advancement of philosophy and learning continues even to this day, and fills the world with bizarre arts and industries springing therefrom. Experiments, experience and investigation became the preferred method in teaching and improving philosophy and learning, which gave rise to materialistic thought. Consequently, a new philosophy, completely distinct from ancient contemplative philosophy, was born, and there was a complete revision of the subject matter of both philosophy and theology... It is incumbent upon the religious scholars of our age, upon those who are up to the task, to address this completely new philosophy, just as Islamic scholars of yore did with ancient philosophers, to take the articles that are compatible with the Islamic faith, to reject and philosophically refute those that are not, and to institute a new

systematic theology.¹

Harputi was right. The early eighteenth century truly was a period when the scholars of Istanbul broke not only with theology, but also with Islamic philosophy in general. Neo-Platonist philosophy of Mulla Sadra and Suhrawardi, which had been exceptionally popular in Istanbul for much of the seventeenth century was discarded. Avicenna, who had been *the* commentator on Aristotle for Muslim readers went out of fashion.² The demise of systematic theology and of Avicennism were related, because late medieval Muslim theologians had built their systems on Avicenna's writings. To replace these more traditional schools of thought were the philosophies that never were a part of Eastern Islam, including un-Platonized Aristotle, Stoicism, chemical medicine and Cartesianism.

Subsequent efforts to revive systematic theology also illustrate that this academic discipline, once the cornerstone of Ottoman scholasticism, had fallen into severe disuse by the early eighteenth century. The revivalists Muhammed Saçaklızade (1679-1732) and Muhammed Akkirmani (d.1761) reacted against Ahmedian innovations and advocated traditionalism. While the former proposed a return to the scholasticism of the sixteenth century, the latter translated the most popular work of systematic theology from Arabic to Turkish in an effort to bring traditional scholarship back into fashion.

Of the two, Muhammed Saçaklızade is surely the more prominent scholar.³ In his *Tertibü'l-ʿUlūm* (The Order of the Sciences), Saçaklızade extolled the virtues of the sixteenth century curriculum.⁴ He argued that *kelām* was the linchpin of Islamic scholarship and that the scholastic manuals had to be reintroduced into the curriculum.

¹ Abdüllatif Harputi. *Tārīh-i ʿIlm-i Kelām*. Istanbul: Necm-i Istikbal, 1914, p.87

² Grand Vizier Köprülü Mehmed established the first public library in Ottoman history in 1661. Suhrawardi and Sadra filled most of the *hikmet* shelves. Avicenna's *Remarks and Admonitions*, also a neo-Platonist work, and its commentaries were a distant second. The library did not carry any volumes of Aristotle, Al-Farabi and Averroes. Ramazan Şeşen et al., eds. *Fihris Mahtūṭāt Maktabat Köprülü = Catalogue of Manuscripts in the Koprulu Library*. 3 vols. Istanbul: Research Center for Islamic History, Art and Culture, 1986; vol.1, pp.422-447

³ Stefan Reichmuth, "Bildungskanon und Bildungsreform aus der Sicht eines islamischen Gelehrten der anatolischen Provinz: Muhammad al-Sajaqli (Saçaqli-zade, gest. um 1147/1733) und Sein *Tartib al-'Ulum*," in *Words, Texts and Concepts Cruising the Mediterranean Sea: Studies on the Sources, Contents and Influences of Islamic Civilization and Arabic Philosophy and Science*. eds. R. Arnzen and J. Thielmann. Leuven: Peeters, 2004; pp. 494-520

⁴ On the sixteenth century curriculum, see Cevat İzgi. *Osmanlı Medreselerinde İlim*. 2 vols. Istanbul: İz, 1997; p.97

Unlike the shorter summaries that had gained popularity in the seventeenth century, what he envisioned was a return to the heftier tomes of the sixteenth century – “not the kind that simply expounds the tenets of faith, but the kind that also treats the essences, accidents and similar matters.”⁵ Unsurprisingly, Saçaklızade was also critical of the philosophical pursuits at the Ottoman court:

Philosophy has become widespread in the Ottoman lands in our times, the year 1130/1717. Before that by some eighty years or more the Christians conquered many of the Ottoman lands and defeated the soldiers of the Sovereign (mālik) of Islam several times and took countless Muslims and their families captive. It is now feared that there will be a general conquest of the Christians, and so we ask of God that He remove this cause from [the realm of] the Sovereign of Islam and his viceroys, and thus that the scholars desist from teaching philosophy and that those who do not desist are punished.⁶

Akkirmani's *Iklîlû'l-Terâcim* (The Bejeweled Crown of [All] Translations) was a translation of *Hidāyetü'l-ḥikmet* (Uprightness of Philosophy) into Turkish. The translated work was Kadı Mir's (d.150?) fifteenth century commentary on Abhari's short scholastic manual of theology.⁷ According to Akkirmani, language was the greatest obstacle that theologians faced. Thus, his goal was to render this work “accessible to commoners.” By calling his translation a bejeweled crown, the author was also disparaging the Ahmadian translations.⁸

Many of the religious scholars attending the court did not even study systematic theology. Feyzullah Efendi, who would become the Sheik al-Islam at the relatively young age of forty, had an early start in the scholarly career with the help of his scripturalist patron. His autobiography shows that he had not studied any of the canonical compendia of theology.⁹ Mahmud Efendi, the author of the first Turkish history of

⁵For a summary and partial transcription of the original text see, Reichmuth, "Bildungskanon," pp. 511-6. Ali Suavi, a well-known nineteenth-century Ottoman intellectual, even rendered Saçaklızade's work into contemporary Turkish.

⁶Quoted in Rouayheb, "Myth," p.205

⁷Critical edition: Abdullah Yormaz, "*Hidayetü'l-Hikme*'nin Tenkitli Neşri," *Marmara Üniversitesi İlahiyat Fakültesi Dergisi*, 34/1, 2008:145-202

⁸The book was published during Abdülhamid II's reign: Muhammed b. Mustafa Akkirmani. *Iklîlû'l-Terâcim*. Istanbul: Matbaa-i Osmaniye, 1900

⁹What he had instead studied was Taftazani's commentary on Nasafi's *ʿAḳaʿid*, not Tusi's *Elucidation*. See Michael Nizri. "Şeyhülislam Feyzullah" Many seventeenth century Europeans translated sections of

Athens, and a man who was very interested in ancient philosophy, stood on the opposite end of the spectrum. He had a mediocre scholarly career and only modest patronage. He was the judge of Athens, a poor town with only a few thousand inhabitants, at the height of his career. As a student, he had studied logic, exegesis and mathematics, but no theology at all.¹⁰ Ahmed's court historian, Küçük Çelebizade Asım likewise studied exegesis, logic and arithmetic, but held no license in theology. Esad of Ioannina and the Ahmed's Sheik al-Islam Abdullah Efendi of Larissa became high profile *‘ulemā’* because of Damad Ibrahim's express patronage. Both men had studied with distinguished teachers and had well-documented academic pedigrees, but theology was simply not a part of their studies.¹¹ In fact, Ahmed's Imperial Edict of 1715 suggests that the majority of the establishment scholars hardly did any scholarship at all: "The practice of appointing *‘ulemā’* without regard for their competence has rendered the scholarship an unattractive pursuit. There will henceforth be no unfounded appointments. The decisions will be made by the Sheik al-Islam after he has considered the reputation of the student's family, his age, his home town and what, with whom and for how long he has studied..."¹²

Clearly, Islamic theology was past its peak in the early eighteenth century. Telling the story of its violent death would add depth to and nourish my argument. However, the sources fail to give us any graphic detail and whether Ahmed had an active role in this process remains a mystery. The difficulty does not lie in the immense wealth and the labyrinthine complexity of theological scholarship, which, by all estimates, should have grown very sophisticated after a history that spanned nearly a thousand years. It is precisely the dearth of such literature, the silence, that prevents me from telling a captivating tale of a battle between Islam and philosophy. Carl Brockelmann's authoritative catalogue of Islamic manuscripts lists sixteenth-century scholastic Taşköprüzade as the

this book as the theology book that the Turkish scholars used. André du Ryer's *L'Alcoran de Mahomet* (Paris: Antoine de Sommerville, 1647) included a summary of the book in the introduction. Heinrich Hottinger, the Calvinist theologian, excerpted parts of the books for his *Historia orientalis*. A full Latin rendition came out in 1665: Andreas Müller. *Excerpta manuscripti cujusdam Turcici, quod de cognitione DEI & hominis ipsum, à quodam Azizo Nesephaeo Tataro scriptum est*. Cologne: Georg Schulz, 1665.

¹⁰Cengiz Orhonlu, "Bir Türk Kadısının Yazdığı Atina Tarihi (Tarih-i Medinetü'l-Hükema)", *İstanbul Üniversitesi Edebiyat Fakültesi Güney-Doğu Avrupa Araştırmaları Dergisi*, 2-3, 1973-4: 119-136.

¹¹See Chapter 4. For other autobiographical sources that illustrate the demise of *kel=am*, see Izgi, *Ilim*, vol.1, 99-103.

¹²*Tarih-i Râşid*. IV, 48.

last active Ottoman theologian, whereas Ottoman authors were quite widely read in the world of Islam at large in the fifteenth century.¹³

The tale that I recount is not the heroic epic of a revolution but the drama of old age and death. And what I rather suggest is that theology met a natural, not violent, death in the early eighteenth century. I argue that Kadızadeli scripturalism actually paved the way to the Ottoman early enlightenment movement by weakening systematic theology. Consequently, the scholarly reaction against the Ahmedian early enlightenment was modest at best. New ideas prevailed because of their overwhelming prevalence, not because they confronted and defeated theology in *mêlée*. Sheer numbers had a role to play. The court established a printing press and patronized innovative scholarship, while the scholastics did too little too late to respond to the challenge. While the court did not patronize any theological works, it did not explicitly target theology, either. There are no known scholastic works from the period in general, and the attacks against scholasticism are oblique at best.

The Youth of Islamic Theology

Until the thirteenth century, there was a clear line of demarcation that separated philosophy from Islamic theology. *Kelām* was the youngest among a series of religious sciences. It was a side-product of the Graeco-Arabic translation movement, where Aristotelian philosophy had emerged as the first intellectual challenge to the Muslim faith. The most ancient ones were *ḥadīth*, the study of prophet's deeds and sayings, *tefsīr*, or Koranic exegesis, and *fiqh*, or the legal interpretation of the Koran. While the old sciences served to guide and regulate the Islamic community, young *kelām* served to defend it from outside challenges.

The Islamic Empire under the Abbasid caliphs took over a highly developed, considerably altered and somewhat institutionalized version of Aristotelian thought during the eighth and ninth centuries. The appropriation of natural philosophy, which was attractive for its cosmology, also took place in this context. The first translations of Hellenistic philosophical commentaries into Arabic date to Caliph Harun al-Rashid's reign (786-803). The Caliph's engagement with natural philosophy satisfied the newest Mus-

¹³Carl Brockelmann. *Geschichte der arabischen Litteratur*. 5 vols. Leiden: Brill, 1943.

lim polity, the Persians, and helped him adopt Sassanid political values, where patronage of learning was of utmost importance. Aristotle's *Physics* had an especially important place in the caucus of political, intellectual and religious interests of the early Abbasid court, since astrology was an important element in Muslim statecraft. Aristotelian natural philosophy legitimized prognosticatory practices. It is not at all coincidental that Mashaallah (742-815), the famous Persian-Jewish astrologer, worked for the Abbasid court during the Graeco-Arabic translation movement.¹⁴

In the eighth century, philosophy and *kelām* were competitors. Early Muslim naturalists like Al-Kindi or Mashaallah worked within the confines of the Aristotelian tradition and did not necessarily have any pious concerns.¹⁵ In their view, there was an ordinary course of nature and God worked within the confines of this natural order. The heavens were both the vehicle and the messenger of his will. The first ascetic theologians, known as the Mutazilites, devised an alternative approach to the world that could provide the Islamic community with a pious cosmology. For them, the world was composed of atoms and God intervened directly and without the mediation of the heavens.¹⁶

¹⁴Dimitri Gutas. *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early Abbasid Society*. London: Routledge, 1998; pp.72-3. Also see Paul Lettinck. *Aristotle's Physics and Its Reception in the Arabic World*. Leiden: Brill, 1994; pp.1-30.

¹⁵Marwan Rashed, "Natural Philosophy," in *The Cambridge Companion to Arabic Philosophy*. eds. Peter Adamson and Richard C. Taylor. Cambridge: Cambridge UP, 2005; pp. 287-307. Rashed also highlights the dependence of Islamic natural philosophy on the developments in metaphysics, and identifies the two core issues up to Avicenna as "the status of minima and the distinction between actuality and potentiality."

¹⁶Shlomo Pines. *Studies in Islamic Atomism*. Jerusalem: Magnes, 1997; p.2. The most important work on the physical theories of Muslim theologians is Harry Austryn Wolfson's *The Philosophy of the Kalam*. Cambridge, MA: Harvard UP, 1976. Moses Maimonides's *Guide for the Perplexed* (the first edition of which was prepared by Salomon Munk) is, to this day, considered the best doxographical source for the atomism of the Muslim theologians. Other classic articles on atomism are: D.B. Macdonald, "Continuous Re-creation and Atomic Time," *Isis*, 9, 1927. Otto Pretzl, "Die frühislamische Atomenlehre," *Der Islam*, 19, 1931: 117-130. For a recent and detailed account of Muslim atomism, see: Alnoor Dhahani. *The Physical Theory of Kalam: Atoms, Space and Void in Basrian Mu'tazili Cosmology*. Leiden: Brill, 1994. Sarah Stroumsa, "The Beginnings of the Mutazila Reconsidered," *Jerusalem Studies in Arabic and Islam*, 13, 1990: 265-293; p.271. What distinguished the Mutazilites from other groups interested in the defense of Islam was that they believed that the Koran was created, while the others believed it to be God's word. The rationalism of the Mutazilites has turned them into a symbol. For Mutazilites and the new iterations of the movement in the nineteenth and twentieth centuries, see Richard C. Martin, Mark R. Woodward and Dwi S. Atmaja. *Defenders of Reason in Islam: Mu'tazilism from Medieval School to Modern Symbol*. Oxford: Oneworld, 2003.

During the ninth and tenth centuries, Asharite theologians, named after the eponymous head of the movement, Abu'l-Hasan Al-Ashari (873-941) systematized the Mutazilite view. They argued that the physical world was composed of atoms, qualities, space and time. Both atoms and qualities existed for a single instant, and God recreated the world constantly in order to sustain the perceived continuity of human experience. What appeared as regularities in nature were actually God's habits. Thus, Asharite *kelām* served to demonstrate God's presence and omnipotence in the physical world, while nature as an ordered, self-regulating whole played little part in their philosophy.

Asharite theology separated the creator from the creation. God was so unlike his creation that it was not possible to understand him by studying nature – although there indeed was a Creator.¹⁷ There were no natural laws or rules beyond the principle of non-contradiction. God was free to create, alter and destroy physical beings without needing the mediation of the heavens. Sensate reality, including causality, was ephemeral. Although we lived in a world that seemed to be governed by natural laws, these laws were neither binding, nor necessary nor yet certain.¹⁸ From the Asharite perspective, studying nature could not teach us anything about God, and did not even lead to certain knowledge about the physical universe – certainty belonged to God alone.¹⁹ The result was a uniquely potent synthesis of theology and the other religious sciences that remained the exclusive framework for the interpretation of Islam for at least two centuries and stayed on for another five centuries as a respected but obsolete theological position.

¹⁷Marie Bernard, "La critique de la notion de nature (Tab') par le *kelām*," *Studia Islamica*, 51, 1980: 59-105; p.79-81: "Le tab' n'est pas objet d'expérience. Il ne peut être saisi ni par les sens ni par l'intuition immédiate. Tout ce que l'expérience nous livre c'est une modification des états du corps; mais on ne peut savoir ni par évidence immédiate, ni par expérience, que ces modifications sont produites par une 'nature'. D'ailleurs, ce qui est connu de manière immédiate devrait faire l'unanimité... Cette manière d'expliquer le devenir de l'univers qu'est le 'naturalisme', revêt, aux yeux du mutakallim, une allure d'explication animiste qui va à l'encontre du sentiment qu'il a d'une cause transcendante, mais vivante, et dont l'efficacité s'exerce en connaissance de cause." Here, Bernard is offering a synopsis of Abu Bakr al-Baqillani's (d.1012) opinions.

¹⁸Pines, *Atomism*; p.7.

¹⁹Jon McGinnis, "Scientific Methodologies in Medieval Islam," *Journal of the History of Philosophy*, 41/3, 2003: 307-327; see esp. pp.326-7 for a summary of Avicenna's criticism of Aristotelian induction.

Kelām's Maturity

Systematic theology reached maturity after Avicenna. Just as Christian scholasticism developed as a reaction to Averroism, Muslim scholasticism was a response to Avicennism. In this mature stage, theology severed its commitment to atomism and sought legitimation in a neo-Platonist interpretation of Aristotle. Avicenna had criticized Asharite atomism and succeeded.²⁰

²⁰Peter Adamson and Richard C. Taylor, "Introduction" in *The Cambridge Companion to Arabic Philosophy*. eds. Peter Adamson and Richard C. Taylor. Cambridge: Cambridge UP, 2005; pp. pp.1-9; p.5. Robert Wisnovsky, "One Aspect of the Avicennian Turn in Sunni Theology", *Arabic Sciences and Philosophy*, 14/1, 2004: 65-100. If later *kelām* scholars adopted Avicenna's natural philosophy, then the obvious question becomes what the differences between Avicenna's and Aristotle's natural philosophy were. The long answer would be complex and take us out of the domain of *kelām*, since most of Avicenna's innovation in physics proper falls under his study of motion, which, for the most part, did not form an important part of theology texts. I will restrict myself to one example from Avicenna's *Physics*, which is a part of The Healing (*Shifa*, known as *Sufficientia* in the Latin West). My intention is to offer some clue to the reader as to how Avicenna reconciled neo-Platonist commentaries with Aristotle's own writings and what that precisely means, since saying "reconciliation of Plato with Aristotle" does not readily move the imagination in the right direction. The most salient distinction between Avicenna's and Aristotle's *Physics* as it pertains to this project of reconciliation were the substantial forms. Aristotle had argued that forms were universals, whereas substance was a "this here" (*tode ti*) or a means to differentiate individual things, hence a particular. This left Aristotle's commentators in disarray, since the so-called substantial form posed an impasse as something that was both universal and particular. Qualities, which were also means to differentiate individual objects require the prior existence of substance, and hence were not part of substantial forms. In this case, a red apple and a green apple are made of different matter, but share the same form. However, without the attribution of qualities like redness, greenness or sourness, we cannot fully differentiate between the two, which means that substantial forms were an inadequate means to achieve full individuation of natural objects. Avicenna addressed this question on the issue of substantial change, which Aristotle treated in his *Generation and Corruption*. According to Avicenna: "natural efficient causes, such as the elements' own primary qualities, can affect the qualities of the matter and so prepare the matter for a new substantial form. They cannot, however, educe that form from the previously existing matter otherwise it would again make substantial forms dependent upon accidental qualities, where in fact, maintains Avicenna, just the reverse is the case. Since natural efficient causes, which affect only a natural substance's accidental features, cannot bestow a new substantial form on the prepared matter, there must be something outside of the natural order of the four elements that does so, an entity that Avicenna dubs the Giver of Forms. The Giver of Forms...is not God, but the lowest of the immaterial Intellects in Avicenna's spiritual hierarchy. The Giver of Forms, as well as the immaterial intellects are important examples where neo-Platonist notions are brought to bear on Aristotelian thought, including *Physics*. The so-called immaterial intellects were the products of the Plotinian effort to reconcile the multiplicity evident in the world with the higher unity of existence, which itself was based on Plato's *Parmenides*. According to Avicenna's *Metaphysics*, everything that existed in the world was an emanation from God as a necessary consequence of his self knowledge. God himself was the necessary existent, and his self knowledge as the eternal and necessary being gave rise to the first intellect, which, in contemplation of itself and of God, conceived the possibility of self-knowledge, which gave rise to the outermost sphere of the heavens. The dialectical process of the intellects trickled down to the earth through the planets, themselves intellects, and the final link in the chains is the active intellect, also known

We know Avicenna mostly because of his philosophical legacy in Latin Christendom, but his writings also served as a turning point in Islamic theology. Medieval Muslim thinkers themselves expressed this rupture by calling theologians who lived before Avicenna the ancients (*müteḳaddimîn*) and those who came after, the moderns (*müteahḥirîn*). With the exception of a few essentially metaphysical issues, the natural philosophy expounded by the *müteahḥirîn* was Aristotelian. The most remarkable aspect of this transformation was the unification of theology and philosophy under a single intellectual system.²¹

The unlikely agent who first used Avicenna's philosophy in the theological context was Fakhr Al-Din Razi (1149-1209). In his *Muḥaṣṣal al-Afkār al-Mutaḳaddimîn wa al-Mutaahḥirîn* (Harvest of the Thoughts of the Ancients and the Moderns), he attempted to produce a theological criticism of philosophy. While he was no friend of Avicennist thought, he nevertheless shaped his criticism of unbridled philosophical speculation as a point-by-point treatment of key issues, such as the immortality of the soul, the eternity of the world and God's knowledge of particulars.²² Razi, even though

as the Giver of Forms, which was the cause of all change in the terrestrial world. Avicenna's contribution here comes from his ability to bring the Plotinian intellects to bear on particular problems in Aristotle's *Physics*. In the study of motion, Avicenna is credited with an elementary theory of impetus and supplying a solution to the problem of circular motion. The latter problem can be summarized as follows: If the outer heavens have a place (outer extremity of a body), then there must be something beyond the heavens; and if they don't, their diurnal motion is impossible. Avicenna addresses this question by drawing a sharp distinction between rectilinear and circular motion, where the former is a change of place whereas the latter a change in position, which does not require a place, in or to which it moves." Jon McGinnis, *Avicenna*. Oxford: Oxford UP, 2010; pp.87-88. Also see Ibn Sina. *Kitābu'ş-Şifā: Fizik* [Parallel Turkish-Arabic text]. ed and trans. Muhittin Macit and Ferruh Özpilavcı. Istanbul: Litera, 2004; pp.29-33. For a concise account of Avicenna's views on motion, see Michael E. Marmura, "Some Questions Regarding Avicenna's theory of the Temporal Origination of the Human Rational Soul," *Arabic Sciences and Philosophy*, 18, 2008: 121-138. For a more detailed account, see Herbert A. Davidson. *Alfarabi, Avicenna and Averroes on Intellect: Their Cosmologies, Theories of the Active Intellect and Theories of the Human Intellect*. New York: Oxford UP, 1993. Michael Marmura has also produced a critical edition and translation of Avicenna's Metaphysics: Avicenna. *The Metaphysics of the Healing: A Parallel English-Arabic Text*. Provo, UT: Brigham Young UP, 2005.

²¹Avicenna used Aristotle's *reductio* argument against atomism and claimed that it was impossible for atoms to give rise to an aggregate without being divisible (e.g., the right and the left of the atom have to be different if the atoms form a line). He also posed a Pythagorean problem, where the hypotenuse of a right triangle with unit-long sides are not all commensurable, and the same indivisible quantities cannot compose both a unit-length line and the line the size of which is the square root of two units. See McGinnis, *Avicenna*, 75-79.

²²M.W.F. Stone and Robert Wisnovsky, "Philosophy and Theology," in *Cambridge History of Medieval Philosophy*. 2 vols. eds. Robert Pasnau and Christina van Dyke. Cambridge: Cambridge UP, 2009;

he was a theologian, found some of Avicenna's claims appealing. One of his key concessions to philosophy was that he attributed great dignity to contemplation, not merely as a means to defending Islam but as a good in and of itself. In the *Harvest*, he stated that human perfection had an intellectual component, and that metaphysical reflection inspired piety.²³

A good way to conceptualize this turn in Islamic theology is to think of it in terms of the role *kelām* played before and after. Early *kelām* was essentially a defensive effort with a clear anti-philosophical bias. After the thirteenth century, the theologians' did not seek to destroy but to regulate and govern the different non-religious branches of learning. Over the next two generations, Razi's religious assessment of philosophy evolved into constructive efforts to reach a rigorous synthesis of Aristotle and the tenets of Islam. The thirteenth and fourteenth-century theological writers helped fashion metaphysical speculation as a devotional activity. Hence, by the end of the fourteenth-century theology was no longer simply a rational defense of revealed truths, but also a system of philosophy.

Nasir al-Din Tusi was the ideal intellectual type who epitomized this transformation. Tusi's well-known mathematical pursuits, sixteenth-century Ottoman scholastic Taşköprüzade believed, were part and parcel of the modern theologian's intellectual character. The ideal scholar had to master all two hundred fifty sciences rather than specializing in a few.²⁴ His astronomical works were important to his legacy in the Islamic world, if also overshadowed by his philosophical system. Tusi's *Tajrīd al-Aḳā'id* (The Elucidation of the Articles of Faith) was one of the best examples of the new, contemplative theology of the Avicennist polymath. The historical importance of the *Elucidation* is enormous, since it constituted the fifteenth-century Islamic equivalent of the European liberal arts curriculum. Tusi's treatise, along with its commentaries and other works that imitated its content and organization, became the learned catechism in Mughal India, Safavid Iran and the Ottoman Empire.²⁵

One of the crucial features of the book was its Late Antique pedagogical struc-

pp.689-706.

²³Ayman Shihadeh, "From Al-Ghazali to Al-Razi: 6th/12th Century Developments in Muslim Philosophical Theology," *Arabic Sciences and Philosophy*, 15, 2005: 141-179; p.173.

²⁴Taşköprüzade. *Mevzū'ātü'l-'Ulūm*. [Lithograph] Istanbul: Asitane, 2000; p.629

²⁵Francis Robinson, *Ulama of Farangi Mahall*; p.211-31

ture, which prioritized philosophy: It was necessary to master logic, physics and metaphysics before embarking on the study of the Islamic faith.²⁶ Tusi began his work by arguing that all parts of theoretical philosophy belonged under the domain of *kelām*. Logic came first in the order of studies, metaphysics (existence and non-existence, whole and its parts, etc.) was the second, and the metaphysical aspects of physics (substance, matter, form, accidents, qualities, etc) was the last. After covering the three parts of theoretical philosophy, he turned to a discussion of the soul. He concluded the book by outlining God's attributes, the Muslim creed, prophethood and revelation.

The discipline's mandate was clear to Taşköprüzade (d.1555): "no religious discipline should have to depend on a non-religious discipline."²⁷ Since the religious disciplines also included the rational articulation of Islamic faith and of religious law, they depended on philosophy and logic. Metaphysics, physics, theories of the soul, the arrangement of the heavens were all part and parcel of the late medieval Islamic theological manual, which claimed to prove the veracity of Islam by rational argumentation.

Tusi based his work on Avicenna's *Shifā'* (The Cure), and was likewise critical of the atomism that *kelām* scholars had hitherto espoused.²⁸ However, he also adopted their key theological ideas to formulate a plausible explanation for why the universe was not eternal but created. He adapted the Asharite doctrine of the continuous recreation and sustenance of the world by express divine will. He still used the Aristotelian understanding of causality, but he considered the four causes – efficient, formal and material - as secondary to the final cause of everything, which was God. According to Tusi, this was the only way to bring together an omnipotent creator and a natural world

²⁶ Baydāwī, another thirteenth-century theologian, reproduced the same order in his *Ṭawālī' al-Anwār*. Both the *Al-Ḥaṣhiyyā 'alā Sharḥ al-Tajrīd* and *Ṭawālī'* went through a number of lithograph editions in the 1860s and 1870s. See *The Cambridge Companion to Classical Islamic Theology*.

²⁷ *Al-Ḥaṣhiyyā 'alā Sharḥ al-Tajrīd*. Manisa II Halk MS 5388, 6r

²⁸ Nasir al-Din Tusi. *Tajrīd al-Itikād*. ed. Muhammad Cawad Husayni Jalali. Qom: Maktabatu'l-Ilami'l-Islami, 1986; p.151-2. Tusi's *Talhīs al-Muḥaṣṣāl* (The Conclusion of [Razi's] Epitome [of *Kelām*]) contains a more detailed treatment of natural philosophy. Tusi's *Tajrīd* was notoriously terse and, as far as I know, was never read by itself. It was often studied through the mediation of a commentary or a super-commentary. To give the reader a sense of the narrative, I quote from Tusi's treatment of the soul: (pp.106-107): "And regarding this [the soul]: A composite substance. Independent of its [own] accidents. And lacking in parts...Its opposite does not exist." Cf. Jamil Ragep, *Nasir Al-Din Al-Tusi's Memoir on Astronomy =: Al-Tadhkira Fi 'Ilm Al-Hay'a*. 2 vols. New York: Springer, 1993; vol. 1, pp.90-1. Here, Ragep clearly shows that Tusi held natural philosophy to be a demonstrative and independent science, but this belief is not always reflected in his theological work.

governed by law. He granted that the world was composed of Aristotelian elements, but he added that the forms were ephemeral and were manifestations of God's will.²⁹

Formalization of *Kelām* Training at the Ottoman *Medreses*

Mature Islamic theology was little more than the Islamization and domestication of Avicennism.³⁰ Consequently, Islamic and Christian scholasticism were comparable. Muslim scholars diligently commented on and glossed theological manuals generation after generation and thus, maintained a well-polished scholastic order at the *medrese* (Islamic college). The students' universe was geocentric and was composed of four elements. Substances were made up of form and matter; qualities were real; the rules that applied to the Earth did not work in the heavens; the terrestrial realm was one of generation and corruption. And, finally, philosophy was a purely speculative enterprise whose rules mainly drew on Aristotelian logic. One key difference was that Ottoman students never read Aristotle himself, and what they did not strictly study philosophy at the *medrese*. They also had no knowledge of Averroes. What they rather encountered was some renovated and expanded version of Nasir al-Din Tusi's *Elucidation*, which was the first text in the curriculum throughout the fifteenth and sixteenth centuries.

Mehmed II (r.1451-81) was responsible for the widespread adoption of *kelām* texts at Ottoman *medreses* or Islamic colleges. His approach to education was part and parcel of his efforts to build his empire as the true and resplendent successor of Rome. Soon after the conquest of Istanbul in 1453, he built a very large *medrese*, known as Şaḥn-ı Semān or The Medrese of the Eight Courtyards, which, in the 1700s housed more than a thousand students. Among the scholars Mehmed was able to attract to this elite institution was the aging Ali Kushji (1403-1474), who had travelled as an envoy from Tabriz at the advanced age of 67.³¹

Prior to the Şaḥn, Ottoman learning did not have an overarching institutional structure, and Kushji was the first who devised what came to be known as the Ottoman *medrese* system. He was a student of Tusi's texts and shared his predecessor's intel-

²⁹Tusi, *Tajrīd*, pp.133-7.

³⁰Oliver Leaman and Sajjad Rizvi, "The Developed *Kalām* Tradition," in *The Cambridge Companion to Classical Islamic Theology*. ed. Tim Winter. Cambridge: Cambridge UP, 2008 pp.77-96.

³¹Süheyl Ünver. *Fatih Külliyesi ve Zamanı İlim Hayatı*. Istanbul, 1946.

lectual ideals. Kushji expected all teachers of this new college to become polymaths who could teach both demonstrative disciplines such as logic and arithmetic, and the various religious sciences, including *kelām*. In order to secure the quality of the training at the Şaḥn, he placed it at the very top of the *medrese* hierarchy. According to this system, career scholars would begin teaching for the lowly salary of 25 akche per diem at smaller *medreses*. These junior positions were reserved for *kelām* training, which, Mehmed envisioned, would serve as a universal foundation for the higher disciplines. Logic, rhetoric and legal methodology would form a second rung and, law, exegesis and prophetic lore would be the higher faculties. Career advancement rested on mastering a variety of disciplines, but it was *kelām* in particular that served as the entry way to the learned profession. Since every career scholar had to work their way through the low-ranking *medreses*, they all had to teach theology. And, in order to be a professor at the Şaḥn with a 70 akche per diem salary, one had to master each of these disciplines.³²

Kelām was a propaedeutic discipline in the Ottoman system, not a higher faculty. It prepared the students for the religious disciplines, especially law, in more or less the same way the arts faculties at European universities served as a preamble to medical, theological and legal studies. However, the students at European universities had to master philosophy as well as the liberal arts prior to matriculating at the theological faculty. At the *medrese*, where training culminated in titular expertise in matters of law and religion, students worked through a liberal arts curriculum that theological texts helped shape. Curricula from the fifteenth and sixteenth centuries show that the study of grammar, rhetoric, composition and logic was fairly universal at these Islamic colleges. The quadrivium (arithmetic, geometry, astronomy and music) was also fairly popular, but not an essential part of higher education. There was no additional training in philosophy beyond *kelām*. The institutional difference is subtle, but it nevertheless suggests that there was no separate course of philosophical study in the Ottoman Empire.³³

³²Ekmeleddin Ihsanoğlu, "Institutionalisation of Science in the Medreses of Pre-Ottoman and Ottoman Turkey" in *Turkish Studies in the History and Philosophy of Science*. eds. Gürol Irzık and Güven Güzeldere. New York: Springer, 2005; pp. 265-284. Also see *Fatih Sultan Mehmed Vakfiyeleri*. 3 vols. Ankara: Vakıflar Genel Müdürlüğü, 2003 [1938]; vol.1 230-5.

³³Edward Grant, the historian of medieval science, repeatedly emphasizes that one of innovations that the European universities introduced to scientific discourse as early as the fourteenth century was the "theologian-natural philosopher." He used the term to refer to particularly Jean Buridan and Nicole Oresme, but also argued that these authors usually approached nature with a logical methodology and

The rigorous dissemination and lasting popularity of Tusi's *Elucidation* in the *medrese* context owed to the parallel development of certain pedagogical practices. Until the seventeenth century, all Ottoman scholars who were employed as judges or professors, regardless of their specific fields of expertise, held a license in *kelām*. The long-standing Islamic licensing practices helped sustain the academic order at the *medrese*. Upon completing the course of studies with a certain teacher, students received a document called an *icāzet*.³⁴

The *icāzet* was literally a license to teach the very text the student studied with his master. Sometimes this was a loose sheet of paper outlining the student's scholarly lineage. At other times, it was merely an endorsement that the professor wrote on the copy or the gloss the student prepared as part of his study. The texts the students learnt also served as the boundary of their competence. The acquisition of a sufficient number of *icāzets* qualified the new graduate to pursue a teaching or a legal career.³⁵

The license also served to integrate the student into a scholarly lineage (*isnad*). One's pedigree, which assured the reliability of the content of the teaching, was first devised in the field of *ḥadīth*. Since knowledge about the prophet's life was a matter of transmitting reliable testimony, licenses also served to weed out fictional and erroneous information. Other religious disciplines, including theology, appropriated this tradition

hardly brought theological considerations to bear on their naturalistic inquiries. See Edward Grant, "What Was Natural Philosophy in the Late Middle Ages?" *History of Universities*, XX/2, 2005: 12-46. *idem.*, "How Theology, Imagination and the Spirit of Inquiry Shaped Natural Philosophy in the Late Middle Ages," *History of Science*, XLIX, 2011: 89-108.

³⁴For sample *icāzets*, see George Makdisi. *The Rise of Colleges: Institutions of Learning in Islam and the West*. Edinburgh: Edinburgh UP, 1982. "But beyond this narrow definition [of *ijaza*,] there is in fact involved the principle, fundamental in Islam, of the pre-eminent value attached to oral testimony, a principle which has been maintained through all the fictions to which *idjaza* and the other methods of transmission have given rise from a very early date and which still today continue to influence Muslim traditional thinking. It is this that gives its ideological and historical importance to the very full documentation contained in the *isnads* ("chaînes de témoignages fondamentales", L. Massignon), in the *sama*'s ("certificates of hearing") and in the *idjazas*—often having indications of dates and places and details of the names of the persons who formed links in the transmission—which precede, frame or follow not only the texts of *hadith*, of *fiqh* or of *tafsir*, but also theological, mystical, historical and philological works, and even literary collections, of both prose and poetry." G. Vajda "Idjaza," in *Encyclopaedia of Islam*. 2nd ed. Leiden: Brill; p.1020

³⁵See Gerhard Endress, "Reading Avicenna in the Madrasa: Intellectual Genealogies and Chains of Transmission of Philosophy and the Sciences in the Islamic East" in *Arabic Theology, Arabic Philosophy: From the Many to the One. Essays in Celebration of Richard M. Frank* Leuven: Peeters, 2006; pp.371-423; in *passim*.

as the *medrese* system developed in tandem with scholarly practices. Those who were privately competent in any discipline – even if they had greater mastery of certain texts than an *icāzet*-holder did – abstained from teaching without the proper license.³⁶

Since philosophy was part of *kelām*, it was also subject to the same licensing practices. Consequently, *medreses* controlled philosophical discourse in the Ottoman Empire. In this context, the ideas covered by canonical authors defined the limits of philosophical competence. It was relatively easy to study texts such as Tusi's *Elucidation*, as there were many teachers. In this highly regulated intellectual atmosphere, commentaries and glosses became the primary genre by which the scholars transmitted theological knowledge from generation to generation. It was neither necessary nor particularly desirable to write new texts in order to acquire a teaching license, and many scholars were comfortable with learning from and teaching well-established authors. Indeed, teaching from medieval texts or commentaries seems to have been the general rule in Islamic education well into the nineteenth century. As a consequence, philosophical conservatism was built into the *medrese*, through the mechanism of the *icāzet*. Scholars who belonged to the Ottoman educational establishment and who idealized their medieval predecessors exercised virtual monopoly over any given *medrese* field, including philosophy.³⁷

Natural Philosophy in the Sixteenth Century

Thus, natural philosophy existed only in name in the Ottoman context. The Turkish names for natural philosophy were *hikmet-i tab'iyye* or *ilm-i tabi'i*. *Ilm* is an Arabic word that broadly refers to knowledge and, in its deep history, had literally meant the interpretation of signs (*alāmet*). The word *hikmet* (wisdom) was a medieval Islamic substitute for the Greek loan-word *felṣefe*. While it is difficult to draw a de-

³⁶See Jane Murphy. "Ahmad al-Damanhuri (1689-1778) and the Utility of Expertise in Early Modern Ottoman Egypt," *Osiris*, 25, 2010: 85-103

³⁷It might be of interest to the reader that similar licensing practices still continue in the Islamic world at large. A controversy recently erupted in Turkey regarding whether the graduates of the theological faculties at the Turkish universities were qualified in the religious sciences. The challengers were the *medrese* graduates, who still hold *icāzets*. Although *medreses* have been officially banned during Atatürk's educational reforms, such institutions have led an almost clandestine existence in southeastern Anatolia. The Turkish government recently recognized the graduates of these religious institutions as formally-trained religious personnel.

cisive distinction between *ḥikmet* and *felṣefe*, one factor to keep in mind is that *felṣefe* invariably referred to foreign philosophies and *ḥikmet* could refer either to Islamic or Greek thought. Thus, the distinction between the two words was primarily religious. Philosophy was exclusively non-Muslim, but *ḥikmet* referred to pious wisdom. An ancient philosopher like Plato, Pythagoras, known as "the Monotheist", or Aristotle, whose work contributed to piety in some measure were also honored with the title *ḥakīm*, which meant "wise man".³⁸

Medieval Muslim thinkers generally attached a certain religious dignity to *ḥikmet*, but philosophy as such was associated with the illicit disciplines of judicial astrology and alchemy. This view was as old as the Graeco-Arabic translation movement of the eighth and ninth centuries and had survived until the twelfth century. However, the medieval distinction between philosophy and *ḥikmet* no longer seemed to apply after the Avicennian transformation in theology.

Thus, the word *felṣefe* was completely absent in Ottoman encyclopedias of the sixteenth century.³⁹ What happened was that the types of philosophical speculation that characterized *ḥikmet* became part of *kelām* and *ḥikmet* came to mean *felṣefe*. Consequently, there was a shift in the very meaning of philosophy during the sixteenth century. While scholastic manuals claimed pious parts of natural philosophy and metaphysics for *kelām*, *ḥikmet-i ṭabʿiyye* came to denote a range of naturalistic disciplines and included alchemy, magic, judicial astrology, ornithomancy, bibliomancy, the science of talismans, as well as medicine. Thus, if we were to provide a description of Aristotelian natural philosophy to an Ottoman reader in the sixteenth century, he would conclude that we were speaking of theology, but if we were to use the expression natural philosophy, it would bring to mind medicine or the occult disciplines.

Aristotle's subalternating sciences, namely astronomy, optics and music, belonged to a different category altogether called *riyāḍiyye*. This term literally meant practiced sciences – as opposed to the practical sciences, which referred to politics and

³⁸Hossein Ziai, "Islamic Philosophy (Falsafa)" in *Cambridge Companion to Classical Islamic Theology*. pp. 55-76.

³⁹Three sixteenth century Ottoman encyclopedias, including Taşköprüzade's *Mevzūʿāt*, used *ḥikmet* rather than philosophy for both alchemy and astrology. Ahmed Bican. *Dürr-i Mekkūn: kritische Edition mit Kommentar*. ed. Laban Kaptein. Asch: Kaptein, 2011. Nevi Efendi. *Ilmilerin Özü: Netayic el-Fünun*. ed. Ö.Tolgay. Istanbul: İnsan Yayınları, 1995.

ethics. *‘İlm-i hey’et*, which literally meant the science of configurations, dealt with the mathematical relations of heavenly bodies and was the practiced science par excellence. Squarely mathematical disciplines, such as arithmetic (*ḥisab*), geometry (*ḥendese*) were among the members of this group. Unlike philosophy, which referred to thinking, the practiced sciences referred to doing something: observation, recording or calculation. In the subalternating sciences, the differences between the philosophical and the mathematical also had religious overtones. David King has argued that *riyāḍiyye* helped determine prayer times, draw up religious calendars, and calculate inheritances. These practiced sciences belonged in the *medrese* curriculum, which partly explains the fact that most Muslim astronomers – and there were many – in the sixteenth and seventeenth centuries were also *‘ulemā’*.⁴⁰

Broadly speaking, *‘ilm-i nüccūm*, or the science of the stars, also belonged with the *riyāḍiyye* as long as it was not *‘ilm-i aḥkām-i nüccūm*, the science of the judgments of the stars, which belonged under philosophy.⁴¹ The literature on Ottoman astrology is extremely limited. There is surely no modern scholarship on the subject. Narrative accounts tell us that the Ottoman elite often resorted to astrologers’ services, but there is no corresponding paper trail. Some volumes remain anonymous and undated, and astrological works are not separately indexed in *Süleymaniye*. As far as I can tell, astrological knowledge was produced and consumed in extreme secrecy and only in private spaces.⁴²

⁴⁰David A. King. *Astronomy in the Service of Islam*. Aldershot: Ashgate, 1993.

⁴¹Cevat İzgi. *Osmanlı Medreselerinde İlim*. 2 vols. Istanbul: İz, 1997.

⁴²For an overview of the occult, see Jan Schmidt, “Occult Sciences”. Schmidt did not come across any astrological theorica in the Leiden’s Turkish collections. Yet, Paul Rycaut’s observations from 1660 suggest that there must be a wealth of astrological literature: “For other Sciences, as Logick, Physick, Metaphysick, Mathematicks, and other our University Learning, they are wholly ignorant; unless in the latter, as far as Musick is a part of Mathematicks, whereof there is a school apart in the Seraglio. Only some that live in Constantinople have learned some certain rules of Astrology, which they exercise upon all occasions and busie themselves in Propheties of future contingences of the Affairs of the Empire, and the inconstant estate of great Ministers, in which their predictions seldom divine grateful or pleasing stories. Neither have the wisest and most active Ministers or Souldiers amongst them, the least inspection of Geography...” The main source for the rebellion 1730, *Ayni Tarihi* begins by mentioning the sighting of a comet as a sign of the end of Damad Ibrahim’s rule. In the same history, Damad Ibrahim is depicted as disregarding the comet, who had been assured by his astrologer that the “stars showed” that he would reign for “many more years.” Another problem with astrological books was preservation. Such books were systematically barred from public libraries, nor could they be deposited in *medreses*. Both of these were religious endowments, and the *‘ulemā’* exercised control over which books could and could not

While natural philosophy existed in name, there were no naturalists who engaged directly with philosophical speculation as such. The theologians were responsible for the logical as well as dialectical treatment of nature, whereas most empirical pursuits did not bear on the speculative questions that the *‘ulemā* had claimed for themselves. Thus, Taşköprüzade remarked that the most important and the most relevant work on natural philosophy in the sixteenth century was Aristotle’s *Physics* and went on to identify Avicenna as the last “theoretician” (*nāzīr*) of nature.⁴³

What this meant for Ottoman naturalism prior to the eighteenth century was that there was a stark division between theory and practice. The general anti-theoretical bias in naturalistic disciplines is an important analytical tool for comparing the trajectories of science in early modern Europe and the Ottoman Empire. In fifteenth and sixteenth century Europe, both the science of the stars and medicine had theoretical components, which their respective practitioners had the authority to refine and, to a certain extent, to reformulate.⁴⁴ Whereas the famous fifteenth century Muslim astronomer and theologian Ali Kushji authoritatively declared that the mature tradition of mathematical astronomy no longer needed to address its physical foundations.⁴⁵ Muslim medical tracts written after Avicenna’s *Canon of Medicine* were devoid of the discussion of Aristotle’s theory of elements, which was the foundation of humoralist or Galenist medicine.

This division between theory and practice had other modalities as well: The *‘ulemā* were part of the ruling classes, whereas the astrologers, alchemists and physicians did not have regular access to political power in the sixteenth century, except in the context of elite households. Theology and the mathematical sciences made a natural pair, since both had primarily deductive methodologies and both were religiously permissible. Those disciplines that fell under natural philosophy were left to an unregulated marketplace and seemed to lack any uniting methodology whatsoever – what could an

enter these spaces. However, the religious adversity towards astrology was not indicative of a general apprehension of prognostication at large. Geomancy, for example, was exercised with great frequency. Fortune tellers of all kinds could open up shops.

⁴³Taşköprüzade. *Mevzū‘āt*, p. 349.

⁴⁴Robert S. Westman. *The Copernican Question: Prognostication, Skepticism and Celestial Order* Berkeley: UC Press, 2011; pp.31-33

⁴⁵F. Jamil Ragep. “Freeing Astronomy from Philosophy: An Aspect of Islamic Influence of Science,” *Osiris*, 16, 2001:49-64, 66-72. Regarding Kushji’s lasting influence, see Ihsan Fazlıoğlu, “The Samarqand Mathematical-Astronomical School: A Basis for Ottoman Philosophy and Science,” *Journal for the History of Arabic Science*, 14/3, 2008: 3-68.

ornithomancer share with a medical doctor, after all?

Prior to the eighteenth century, there were also no spaces – physical or otherwise – that could host and sustain non-academic naturalism in the Ottoman Empire. Mosques had time keepers, sultans had Head Astronomers, and hospitals had doctors, but they were all *medrese* graduates.⁴⁶ The court did not publicly patronize non-academic naturalists, except in rare cases such as that of Takiyüddin ibn Maruf (1521-1585), who had established the Istanbul observatory.⁴⁷ The dialogue between the courtly practitioners and the university professors was an important factor in the dissemination and widespread acceptance of the new philosophies of nature in Europe in the seventeenth century, whereas the court in Istanbul was not actively engaged in the process of knowledge production. Even in the eighteenth century, when the sultans were actively patronizing innovative naturalists, the interaction between the *medrese* and the courtiers remained limited and even antagonistic. The naturalistic works that emerged from the Ottoman court from the early eighteenth century onwards did not penetrate into education until mid-nineteenth century, and when it did, it was not through the established *medreses* but through new institutions.

The one significant exception to this hard and fast separation between early modern Ottoman naturalism and theology were the Ottoman physicians educated at one of the three very small sultanic medical *medreses* in the three imperial capitals: Bursa, Edirne and Istanbul. To make their statistical insignificance clear, it is worth noting that the medical *medreses* were small operations with less than twenty students each, whereas Istanbul housed at least two very large regular *medreses* with more than two thousand students between them.

The Head Physician to the Sultan acquired *‘ulemā’* status in the sixteenth century and had jurisdiction over the medical *medreses*. Furthermore, as the same individuals also resided at the Sultan’s court, they also enjoyed a certain level of intellectual freedom. This minuscule group of *‘ulemā’*-physicians in fact turned out to be important actors who brought experiential knowledge to bear on natural philosophy from the late

⁴⁶Salim Ayduz, “Osmanlı Devleti’nde Müneccimbaşılik Müessesesi,” *Belleten*, LXX/257, 2003: 167-264.

⁴⁷On Takiyüddin, see Avner Ben Zaken. *Cross-Cultural Scientific Exchanges in the Eastern Mediterranean, 1560–1660*. Baltimore: Johns Hopkins UP, 2010: pp.8-46.

seventeenth-century onwards, but even their privileged status did not spare them from active resistance – both from the *‘ulemā* and other conservative physicians. I will return to the dynamics of Ottoman medicine and the changing role of the physician in the next chapter.

The Old Age of *Kelām*: From Polymaths to Jurists

Kelām came to play a different role in Ottoman education as scholarly values began to change at the end of the sixteenth century. The Şahın had represented Mehmed’s commitment to intellectual excellence as well as his desire to control religious doctrine.⁴⁸ However, the growth of the Ottoman Empire charged the *medrese* with a different task. Süleyman the Magnificent, whose reign was a period of rapid territorial expansion, sought to train legal and religious experts who could support the Empire’s administrative practices.

The mutually reinforcing relationship between the scholarly establishment and the dynasty reached its pinnacle during the reign of Süleyman, aptly called "the Lawful" (Kanuni) in Turkish. His Sheik al-Islam, Ebussuud, was famous for providing legal legitimization for the Sultan’s actions and the Sultan was all too happy to abide by the rules and boundaries set for him by the law. This was, in the words of the Ottoman historian Nathalie Clayer, the "clericalization" of the state and the "functionarization" of the *‘ulemā*.⁴⁹ The mutual interdependence of the two loci of power helped create a mechanism of checks and balances, where neither the Sultan – and later, also the Grand Vizier-, as the representative(s) of political authority, nor the Sheik al-Islam, the representative of religious authority, could completely overpower one another.⁵⁰ This ideal separation of power was an established part of Ottoman statecraft in the seventeenth century: Rebels who reacted to Feyzullah Efendi (d.1703), the Sheik al-Islam who ex-

⁴⁸Selim the Grim’s (d.1520) brother Prince Korkut (1468-1513) had even written a *kelām* treatise on how to identify an apostate. See Nabil al-Tikriti, "Kalam in the Service of State: Apostasy and the Defining of Ottoman Islamic Identity," in *Legitimizing the Order: The Ottoman Rhetoric of State Power*. eds. Hakan Karateke and Maurus Reinkowski. Leiden: Brill, 2005; pp. 131-150.

⁴⁹Nathalie Clayer, "L’Autorite religieuse dans l’islam ottoman sous le contrôle de l’Etat?" *Archives de sciences sociales des religions*, 49/125, 2004:45-62.

⁵⁰Suraiya Faroqhi, "Guildsmen Complain to the Sultan: Artisans’ Disputes and the Ottoman Administration in the eighteenth Century," in *Legitimizing the Order*; pp. 177-194; see p. 181

exercised political rather than legal authority, viewed his extraordinary powers as a type of usurpation.⁵¹

Ottoman administrative practices in the provinces also strengthened the ties between the administration and the scholarly establishment.⁵² One important competence that the Ottoman Sultans developed over the sixteenth century was to franchise power effectively. During the reigns of Selim the Grim and Süleyman the Magnificent, Egypt, Mesopotamia, Hungary, much of Eastern Europe as well as the Red Sea came under Ottoman rule. New territories naturally came with existing power structures. It was both difficult and inexpedient to replace these with central administrators. What the Sultan rather did was to appoint a district judge, who was a member of the scholarly establishment, and thus imposed legal limits on the vassal's power.⁵³

Administrative needs shaped the *medrese* education in the sixteenth century.⁵⁴ Since the judges were crucial to upholding the dynasty's authority in the provinces, Süleyman took an active interest in what was taught at the Islamic colleges. One of his decrees clearly defined the course of study that each member of the scholarly establishment, whether professor or judge, had to go through before entering state service. This intrusive decree even outlined the particular texts that the students had to master. Süleyman's elite colleges sought to offer a comprehensive education in legal methodology and required the students to master a number of independent textual traditions.

However, an important aspect of Süleyman's reforms was the remarkable absence of *kelām*. One important testimony that supports this view comes from Katip Çelebi (also known as Hajji Khalifa, 1609-1657), who was an Ottoman historian and essayist.⁵⁵ In his *Mizānü'l-Haḳḳ* (The Balance of Truth), he took issue with the scholarly establishment at large, and voiced an important criticism of Süleyman's reforms:

⁵¹ See Abou El-Haj, *The 1703 Rebellion*.

⁵² Geza David, "Administration in Ottoman Europe" in *Süleyman the Magnificent and His Age*, p.84.

⁵³ Uriel Heyd, *Studies in Old Ottoman Criminal Law*. ed. Victor L. Ménage. Oxford: Clarendon, 1973; pp. 219-221.

⁵⁴ Shahab Ahmed and Nenad Filipovic. "The Sultan's Syllabus: A Curriculum for the Ottoman Imperial Medreses Prescribed in a Ferman of Qanuni I Süleyman, Dated 973 (1565)," *Studia Islamica*, 98/99, 2004: 183-218.

⁵⁵ Orhan Şaik Gökyay has published a number of studies on and excerpts from Katip Çelebi in modern Turkish. The best monograph on Katip Çelebi remains Gottfried Hagen's *Ein osmanischer Geograph bei der Arbeit. Entstehung und Gedankenwelt von Katib Celebis Gihannüma*. Berlin: Klaus Schwarz Verlag, 2003.

Lovers of truth who gathered the religious sciences and philosophy in their persons found fame in the Ottoman Empire since its foundation until the reign of Süleyman. Mehmed built the Madrasa of the Eight Courtyards and wrote down in its statutes that education would take place in accordance with his law, and decreed that all students had to study the *Gloss on the Elucidation* and the *Commentary on the Positions* [Theology manuals]. Those who succeeded him deemed these courses idle philosophizing and abolished them. They found the study of *Uprightness* and *Highest Perfection* [Legal manuals] to be acceptable substitutes. Since abbreviating medrese training in this manner was ill-advised, the students no longer had neither uprightness nor any kind of perfection.

Consequently, a drought fell on the life of learning in the lands of Rum [derivative of Rome, meaning Western Ottoman Empire] and masters of the various fields of learning almost completely disappeared. Even young beginners from Kurdistan who had been trained according to the tradition could boast of their learning once they came to Rum. Seeing how these show-offs trot around, some scholars in our times have undertaken the study of philosophy.⁵⁶

Katip Çelebi's criticism remains one of the most contentious passages in the assessment of the general decline of Ottoman power.⁵⁷ Scholars have variously read it as indicative of the general corruption of Ottoman institutions (which becomes viable only if we read a 1550-1750 continuum into the testimony), "the triumph of fanaticism," decline of "science," and the decline of philosophy. However, it seems, what he in fact said was something very specific: *Kelām* had lost its foundational role in education in Istanbul, hence provincial scholars were the only licentiates who could speak philosophically about the Muslim creed.

Salafism and the Shackles of Philosophy

Until about 1650, *kelām* was not a problematic discipline. Katip Çelebi had identified Süleyman's legalism as the culprit for the scarcity of theologians in the capital,

⁵⁶Katip Çelebi, "Mizanü'l-Hakk fi İhtiyarü'l-Ahakk," *Mecmua-i Ulum*, 2, 1297 [1880]:1-97; pp.3-4.

⁵⁷Key markers in this debate are Halil İnalcık, *Classical Age* and Abdülhak Adnan Adıvar. *Osmanlı Türklerinde İlim*. 7th ed. Istanbul: Remzi, 2000 [1937]. Many other authors have followed İnalcık's interpretation and Madeline Zilfi has devoted her career to the investigation of anti-intellectual puritanical movements in the seventeenth century. There is a newly emerging camp that suggests that the sweeping generalizations based on this short passage

but this was not an intellectual challenge to the discipline. Recent research even shows that systematic theology continued to be a lively tradition throughout the seventeenth in the Ottoman-Safavid borderlands, especially in the Empire's Kurdish provinces.⁵⁸ The *medreses* were not exposed to sceptical challenges that European universities had to endure and to address in the sixteenth and seventeenth centuries. While Lutheranism had divided the European universities, the Ottoman scholarly establishment, as a vertically integrated educational and legal institution, was united and strong. While humanistic alternatives to Aristotelian philosophy had taken hold of European scholars in and outside the universities from the fifteenth century onwards, there was no similar proliferation of alternative philosophies in the Ottoman Empire. Pyrrho's sceptical ideas came to define the intellectual agendas in Europe in the sixteenth and seventeenth centuries, but this author was unknown in the world of Islam. Muslim systematic theologians also never had to face humanistic or methodological challenges.⁵⁹ Even Averroës, whose ideas formed the main medieval Christian opposition to theology, was almost completely unknown in the Ottoman Empire, since he had left no legacy in the Arabic-speaking world.⁶⁰

Yet, there were quite a few seventeenth century thinkers who criticized, often in the same breath, both systematic theology and the *‘ulemā’*. Although there was no well-defined skeptical movement in the Ottoman Empire, there were religious movements that challenged the philosophical interpretation of religion. The key challenge came from quarters that we can broadly identify as the *Salafis*. The term literally meant the followers of the ancestors, and the ancestors referred to the early Islamic community. The *salafi* movements led by Birgili Mehmed (d.1573) and Ahmed Sirhindi (d.1653)

⁵⁸Florian Schwarz. "Writing in the Margins of Empires - The Husaynabadi Family of Scholiasts in the Ottoman-Safawid Borderlands," in *Buchkultur im Nahen Osten des 17. und 18. Jahrhunderts*. Bern: Peter Lang, 2010; pp. 151-198. Also see Khaled El-Rouayheb, "Opening the Gate of Verification: The Forgotten Arabic-Islamic Efflorescence of the Seventeenth Century," *International Journal of Middle East Studies*, 38, 2006: 263-81.

⁵⁹Richard Popkin. *The History of Scepticism from Savoranola to Bayle*. Oxford: Oxford UP, 2003. See esp. "Introduction" and "Chapter 1."

⁶⁰As early as 1852, Ernest Renan had pointed out that there was no Muslim Averroism. Anna Akasoy, whose work has focused on the Spanish mystic Ibn Sab'īn says: "Explicit mention of Ibn Rushd is rare in medieval Arabic literature and corresponds to the lack of transmission of his philosophical texts...The lack of transmission certainly had something to do with Ibn Rushd's position at the Almohad court. He was a member of a small intellectual elite, his works were commissioned by the Caliph, and we have no trace of a significant public diffusion." Anna Akasoy, "Ibn Sab'in's *Sicilian Questions*: The Text, Its Sources and Their Historical Context," *Al-Qantara*, XXIX/1, 2008:115-146; pp.135-6

reinforced one another and had a profound effect on Ottoman religion. Their followers believed that the religious establishment had grown too lax towards heresy and heterodoxy. The *‘ulemā’* were too rich and too close to political power to fulfill their function. Islam had become too intellectual because of the scholastic approach to *fiqh* and *kelām*. What the seventeenth century *salafis* attacked were the ties between philosophy and theology on the one hand, and the monopoly that the small circle of scholarly dynasties exercised on religious offices on the other.⁶¹

The *Salafis* favored positive theology over systematic theology. One of the books that became popular at the medreses in the late seventeenth century was Aziz Nasafi’s *‘Aḳa’id*, a concise work on the tenets of Islam and the attributes of God.⁶² Al-Taftazani, Nasafi’s fourteenth century Persian commentator claimed that the reader would not find

⁶¹The debate on the status of *kelām* goes back to the eleventh century. Al-Ghazali (1058-1111). For a succinct history of *kelām* until the fourteenth century, see Ibn Khaldun. *The Muqaddimah: An Introduction to History*. 3 vols. trans. Franz Rosenthal, ed N. J. Dawood. London: Routledge Kegan Paul, in association with Secker and Warburg, 1967; vol. 3, pp. 193-196: “If one considers how this discipline originated and how scholarly discussion was incorporated within it step by step, and how, during that process, scholars always assumed the correctness of the articles of faith and paraded proofs "and arguments (in their defense), one will realize that the character of the subject of this discipline is as we have established it, and one will realize that (the discipline) cannot go beyond it. However, the two approaches have been mixed up by recent scholars. The problems of theology have been confused with those of philosophy. This has gone so far that the one discipline is no longer distinguishable from the other. The student (of theology) cannot learn (theology) from the books of (the recent scholars, and the same situation also confronts the student of philosophy). Such (mixing of theology and philosophy) was done by al-Baydawi, in the Tawali, and by later, non-Arab scholars, in all their works. However, some students have occupied themselves with the (mixed) approach (in spite of its uselessness for the study of theology), in order to learn the different school opinions and to become versed in the knowledge of argumentation, which is amply represented in (the works which follow the mixed approach). The approach of the early Muslims can be reconciled with the beliefs of the science of speculative theology only if one follows the old approach of the theologians (and not the mixed approach of recent scholars). The basic work here is the Kitab al-Irshad, as well as works that follow its example. Those who want to inject a refutation of the philosophers into their dogmatic beliefs must use the books of al-Ghazzali and the imam Ibn al-Khatib. They do show some divergence from the old technique, but do not make such a confusion of problems and subjects as is found in the approach of the recent scholars who have come after them. In general, it must be known that this science – the science of speculative theology - is not something that is necessary to the contemporary student. Heretics and innovators have been destroyed. The orthodox religious leaders have given us protection against heretics and innovators in their systematic works and treatments. Logical arguments were needed only when they defended and supported (their own views with them). Now, all that remains of them is a certain amount of discussion, from most of whose ambiguities and inferences the Creator can be considered to be free.”

⁶²Mustafa Sait Yazıcıoğlu, "XV. ve XVI. Yüzyıllarda Osmanlı Medreselerinde İlm-i Kelam Öğretimi ve Genel Eğitim İçindeki Yeri," *İslam İlimleri Enstitüsü Dergisi*, 4, 1980: 273-283. For examples of individual courses of study in the seventeenth and eighteenth centuries, see İzgi, *İlim*, pp.99-102

the "tautologies and wearisomeness" of systematic theology in his commentary. Philosophizing on matters of faith was a poor way to address religious controversies, because all it did was to create further division and confusion.⁶³

Taftazani represented a minority in the fourteenth century, but he was the most popular theologian of the seventeenth century. *Salafism* and the reorganization of the medrese around the legal profession reinforced one another in ousting systematic theology out of the *medrese* curriculum. Birgili Mehmed Efendi (d.1573) laid the intellectual foundations of the first Ottoman *salafi* movement, which flourished during Mehmed IV's reign, especially after 1656. He had argued that the *‘ulemā’* of Istanbul were too philosophical in their approach to religion, too close to the Sufis, too rich and too conformist. They had grown soft and even sympathetic towards mysticism: The mystical Sufis pursued union with God through physical ecstasy. Dancing, chanting and smoking opium were essential means to lose one's sense of self and to be lost in the body of God. Sufi doctrines also tended to be pantheistic and corrupted the true message of Islam. Far from instating orthodoxy, theology often supported Sufi views of the world. And the efflorescence of Sufism among the *‘ulemā’* in the sixteenth century was a prime example of theology's inefficacy.⁶⁴

However, the problem was not just doctrinal lenience, it was also the philosophical interpretation of religion in general. Philosophy had proven to be a gateway to religious innovation. In his *Tarīkāt-ı Muḥammediyye* (The Muhammedan Path), Birgili contended that logic and dialectic were integral parts of the Muslim's training, since they served to extrapolate from old religious customs. However, physics and metaphysics had to be taken out of theology altogether because they introduced new principles and ideas into religion. His position, El-Rouayheb shows, was reiterated by his seventeenth century adherents, who admonished the *‘ulemā’*, who "bus[ied] themselves with the

⁶³Masud ibn Umar al-Taftazani. *A Commentary on the Creed of Islam: Sa'd al-Din al-Taftazani on the Creed of Najm al-Din al-Nasafi*. trans. Earl Edgar Elder. New York: Columbia University Press, 1950; pp.4, 6.

⁶⁴The literature on Birgili is vast, as his works enjoyed great popularity for at least two centuries. On the social aspects of the *salafi* movement, see Hans Georg Majer, "Sozialgeschichtliche Probleme um Ulema und Derwische im Osmanischen Reich," in *I. Milletlerarası Türkoloji Kongresi, Istanbul, 15-20.10.1973 Tebliğler 1: Türk Tarihi*. Istanbul: Tercüman, 1979; pp. 218-33. Michael A. Cook. *Commanding Right and Forbidding Wrong in Islamic Thought*. Cambridge: Cambridge UP, 2001; pp. 323-330.

ignorance of the philosophers.”⁶⁵

The reform movement initiated by Birgili sought to break the traditional structure of Muslim catechism for both the laity and the religious scholars. The *‘ulemā’* had nurtured and developed a theological framework for the interpretation of Islam. Birgili, however, proposed a new standard for "true" Islamic faith and practice: Instead of consulting the intricate theological and legal manuals that took years to master, one simply had to turn to the Koran and the prophetic tradition for religious guidance.⁶⁶

Birgili was the first scholar to level a specific type of skepticism towards the theological preoccupations of the *‘ulemā’*, and he was not the last. The intellectualism of systematic theology became the prime target of a second and more potent *salafi* movement initiated by Ahmed Sirhindi (1561-1624). Sirhindi spent his life in Mughal India, where he witnessed a religious atmosphere that was not too different from what Birgili had seen. Akbar’s court was brimming with yogis-turned-Sufis, and Indian Gods had been repurposed as Islamic saints. According to Sirhindi, the Indian faith was as far from true Islam as could be. He advised against the metaphysical speculation, and suggested that simple imitation of the Koranic lifestyle was a better guide for the devout.⁶⁷

For Sirhindi, abandoning theology in favor of Koranic interpretation was tantamount to Islamic renewal. The religious order he founded was aptly called *mujaddidiyya* or "the renewalists." One of Sirhindi followers, Abd Al-Ghani Al-Nabulsi (1641-1731), expressed his animosity towards systematic theology in a letter: "The deranged ones among the theologians bear similarities to the Jews, while the deranged ones among the Sufis bear similarities to the Christians. This is why the former were preoccupied with letters and the related outcomes of knowledge and belief, while the latter were

⁶⁵Khaled El-Rouayheb, "The Myth of 'The Triumph of Fanaticism' in the Seventeenth-Century Ottoman Empire," *Die Welt des Islams*, 48, 2008: 196-221. El-Rouayheb’s discussion is incisive and apt. Since his area of interest in Islamic logic, he focuses on whether Birgili condoned the study of logic – he did. However, he was inimical to the study of speculative philosophy and criticized the theologians’ systematizing efforts.

⁶⁶Ahmet Yaşar Ocak, "XVII. Yüzyılda Osmanlı İmparatorluğu’nda Dinde Tasfiye (Püritanizm) Teşebbüslerine Bir Bakış: Kadızadeliler Hareketi," *Türk Kültürü Araştırmaları*, XVII-XXI/1-2, 1983: 208-223.

⁶⁷For a succinct account of Sirhindi’s life and opinions, see Itzhak Weismann. *The Naqshbandiyya: Orthodoxy and Activism in a Worldwide Sufi Tradition*. London: Routledge, 2007; pp. 49-68. Most studies on Sirhindi’s influences focus on the nineteenth century. More recently, Arthur Buehler has published a series of articles on Sirhindi as well as Sirhindi’s own letters

preoccupied with sounds and the related effects of ecstasy and motion.” Nabulusi identified three fundamental types of Muslims: the theologians, the mystics and the “people of knowledge and faith.” Only the last group, that is, the renewalists, had the correct interpretation of Islam. Nabulusi lived and wrote in Ottoman Damascus and was an outspoken critic of the *‘ulemā’*. In fact, his family ties would have assured him a prestigious post in the Ottoman learned profession, but had refused to join the ranks of theologians on account of their corruption.⁶⁸

Modern scholarship attests to the success of these movements in Ottoman Istanbul. Yet, how the *Salafi* movements transformed the former disciplinary arrangement is not a part of this discussion. As I suggest in the following chapters, one consequence was intellectual disorder. Natural philosophy was no longer subalternated to *kelām* in the late seventeenth century. The demise of theology also meant the expiration of Avicennism. As I argue in the next chapter, the first group of naturalists to pose a philosophical challenge to Avicenna were the seventeenth-century Ottoman physicians. Furthermore, early eighteenth-century Arabic translations of Aristotle would have defied, not extended, the existing scholastic traditions. Yet, Esad’s defiance went unpunished because these traditions had already grown weak over the preceding century. By freeing Islam from the shackles of philosophy, the *Salafis* had also liberated the philosophers.

⁶⁸Samer Akkach. *Letters of a Sufi Scholar: The Correspondence of Abd al-Ghani al-Nabulusi (1643-1731)*. Leiden: Brill, 2010.

Chapter 4

Natural Philosophy and Expertise: Convert Physicians and the Conversion of Ottoman Medicine

Alternative philosophies began to proliferate over the 1660s, soon after Avicennism lost its grip on Ottoman education. Without the centripetal force of *kelām*, naturalists began to spin off their well-established course. The Ottoman physicians were the first to leave the intellectual orbit of the *medrese*. Medicine was the first naturalistic discipline that openly defied Avicenna's teachings. Palace physicians Nasrallah Ibn Sallum (d.1669) and Hayatizade Mustafa Feyzi (d.1693), both of whom had converted during Mehmed's campaign to islamize the Empire, became the first translators of European medical texts. Their works served to renegotiate both the theoretical foundations and the disciplinary boundaries of medicine.

As palace physicians, both Ibn Sallum and Hayatizade occupied positions of power within the medical profession. After their conversions, the Sultan christened them as *‘ulemā* and later, as Head Physicians (Hekimbaşı) of the Empire. They were only one step below the all-powerful Sheik al-Islam in administrative protocol. Since the mid-sixteenth century, the *Hekimbaşı*s oversaw the appointments at hospitals and at the three medical *medreses* in Edirne, Bursa and Istanbul. Consequently, Ibn Sallum and Hayatizade did not simply produce translations, but also disseminated them among medical students.

Turkish renditions of European medical tracts penetrated into the Ottoman practices in the late seventeenth and early eighteenth centuries. The translations also served to reframe medicine as a philosophical discipline – a development that broke with a centuries-old Islamic tradition. Mehmed IV's efforts to confessionalize the Empire brought with it the deconfessionalization of Ottoman medicine.¹ The traditional Muslim medical discourse now had to accommodate the new converts, who were the products of Jewish or Christian educations. Hence, the Ottoman interest in European medicine was not a deliberate adoption of Europe's arguably superior medical theories. It was part and parcel of what the converts did to find a place for themselves in their new confessional identity.

The most important outcome of the Muslim encounter with European medicine was the emergence of the philosopher-physician, a figure that explicitly challenged the authority of the philosopher-theologian. Clinical experience called established Avicennist theories into question. These developments were met with controversy once the philosopher-physicians claimed that their philosophy, which was completely Paracelsian by 1730, yielded better results than Muslim humoralism did.

The *ʿUlemā*-Physicians

While Ottoman medicine remained predominantly Galenic and humoralist until roughly 1730, it is still possible to observe certain important ruptures underneath the stable theoretical surface. Thus, we can roughly divide the history of Ottoman humoralism into three periods: 1450-1550, 1550-1650 and 1650-1715. The first was the medieval Islamic one, which remained current until the early sixteenth century. In this early phase, the physician was essentially a practitioner and often received little to no training in any discipline other than medicine.² Neither the palace nor the *ʿulemā* were responsible for regulating the medical marketplace. While the doctors at hospitals and similar charitable endowments were Muslims, both private practitioners and palace physicians were

¹On confessionalization in the seventeenth-century, see Derin Terzioğlu, "Sufis in the Age of State-Building and Confessionalization," in *The Ottoman World*, ed. Christine Woodhead. London: Routledge, 2012. 86-99. Tijana Krstić. *Contested Conversions to Islam*. Stanford: Stanford UP, 2011.

²Miri Shefer-Mosensohn. *Ottoman Medicine: Healing and Medical Institutions, 1500-1700*. Albany: SUNY Press, 2009; pp. 185-7.

frequently Sephardic Jews. Süleyman the Magnificent proposed a tighter integration of *medrese* education and practical training in medicine around 1550. His educational reforms gave birth to the ‘*ulemā*’-physicians, who would also serve as professors and judges and thus fit into the scholarly establishment. The last period, stretching from 1650 until roughly 1715, when Ahmed’s humoralist Head Physician passed away, is best characterized as a time of transition from Galenism to Paracelsianism, from ‘*ulemā*’-belonging to the formation of a disciplinary community.

Until 1550, aspiring doctors would train as apprentices at hospitals that offered practical as well as theoretical training.³ Muslim physicians, learned or not, did not always receive a medical license at the end of their training. Since they did not train at a *medrese* and held no licenses for teaching the religious sciences, they did not have ‘*ulemā*’ status. Strictly speaking, medicine was not a career; and most private practitioners were Jews. The *Hekimbaşı* or the Head Physician to the Sultan, more often of Jewish descent than not, had been an important figure in the palace since the early fifteenth century. Again, until about 1550, he also did not have ‘*ulemā*’ status. He also could not exercise administrative authority over the Ottoman medical profession. Rather, he served as the Sultan’s personal physician and was responsible for the health of the Ottoman household. He oversaw the medical corps at the palace and determined the dishes that the palace kitchens served to the palace residents. His chief duty was to keep the Sultan healthy. Whenever the Sultan apparently died of natural causes, the Chief Physician was relieved of his duties so as not to leave any suspicion that he was responsible for the Sultan’s death.

In the fifteenth century, it was popular to group the physicians and the astrologers together. As *hikmet-i tab’iyye* practitioners outsiders believed that their knowledge was patchy and their diagnoses and prognoses were unreliable. Sinan Paşa, in his book of counsels addressed to Sultan Bayezid II(r.1481-1512), spared an entire section to astrologers and physicians, where he said:

You should not believe the great majority of physicians and astrologers. You cannot rely on their statements. God is the source of all healing, so place your faith in him alone. The majority of those called physicians know the

³Esin Kahya and Ayşegül D. Erdemir. *Bilimin Işığında Osmanlı’dan Cumhuriyete Tıp ve Sağlık Kurumları*. Istanbul: Diyanet Vakfı, 2000; pp. 117-9.

symptoms, but no more. Those whom you deem astrologers, see a few signs but not the rest. Consequently, all physicians' prescriptions are mistaken, and the prognosis of the astrologers are outright lies. You cannot get treated by a physician and then pray to God for the best outcome. Perhaps, it is best not to get medications from the majority of physicians. It is best to leave those who are not severely ill to themselves.⁴

Süleyman's medical *medrese* completely transformed the medical profession, and the image of the physician along with it. These changes took place when Ottoman *kelām* was at its peak. The new medical *medrese* served to induct the students into the 'ulemā' class, but also committed sixteenth century physicians to Avicennism. New Süleymanic regulations also placed the Head Physician squarely among the high-ranking 'ulemā'. Graduates of the medical *medrese* were no longer frowned upon as an unreliable quacks but as practitioners of the noblest art (*fenn-i şerif*). Students who wanted to study medicine after 1550 first needed to acquire licenses in *kelām*, religious law, theology, exegesis, and the prophetic tradition.⁵ In terms of its place in the order of studies, medicine was a higher faculty. If the occasion called for it, Süleyman could repurpose the well-trained physician as a judge or a regular professor. And, indeed, many Muslim physicians took office as high-ranking judges and professors of theology over the sixteenth and seventeenth centuries.⁶

Previously, there were no Islamic institutions that merged theological and medical training.⁷ And, there were no set order of studies in the middle ages that would take an aspiring physician through the labyrinthine pages of theological manuals. Well known medieval doctors like Avicenna and Rhazes often had philosophical competence, while others, like Ibn al-Nafis, were self-taught theologians, but these skill sets often reflected the particular bent of mind of the individual.

What caused Süleyman to take the step of integrating medical training into the 'ilmiyye is not entirely clear, but his personal physician, Moses Hamon, might have

⁴Sinan Paşa *Ma'arifetnâme*, quoted in Izgi, *Ilim*; vol.2, p.35.

⁵Nil Sarı, "Educating the Ottoman Physician," *Yeni Tıp Tarihi Araştırmaları*, 1, 1995: 11-54

⁶See Ali Haydar Bayat. *Osmanlı Devletinde Hekimbaşılık Kurumu ve Hekimbaşılar*. Ankara: Atatürk Kültür Merkezi Başkanlığı Yayınları, 2000; *in passim*. Also see Shefer-Mosensohn, *Ottoman Medicine*, pp.143-4. Zohar Amar and Efraim Lev, "An Early Glimpse at Western Medicine in Jerusalem, 1700-1840," *Vesalius*, XI/11, 2005: 81-87, p. 85.

⁷Emilie Savage-Smith, "Medicine," in *Encyclopedia of the History of Arabic Science*. 3 vols. eds. Roshdi Rashed and Régis Morelon. London: Routledge, 1996; vol.3, pp. 903-62; see p. 939.

inspired him. Hamon was a Sephardic Jew whose father Joseph Hamon was both a renowned Jewish exegete and the physician to Bayezid II. The Hamon clan, as far as we know, continued to produce and publish religious works over the sixteenth century, and Moses Hamon himself had established a religious college as well as a Jewish printing press in Istanbul.⁸ Regardless of the precise source of the inspiration, Hamon had jurisdiction over Süleyman's medical *medrese*. He was responsible for appointing the medical instructors, overseeing the teaching, ratifying the diplomas and placing its graduates in the appropriate official positions available at the various hospitals or regular *medreses* in the Empire.

The members of the *‘ulemā* enjoyed highly prized privileges in the militaristic and feudal setting of the Ottoman Empire. Like the men of the sword and top administrators, they were exempt from paying taxes to the Sultan. They also enjoyed statutory immunity from capital punishment, a privilege that did not extend to unsuccessful or disobedient overlords. Unlike viziers and military officers, the *‘ulemā* could keep their property after they left an office, and their families were fully entitled to the scholar's estate. Over the late seventeenth century, scholarly dynasties had emerged and they commanded immense wealth and power. Training in a medical *medrese* meant potential entitlement to the same set of privileges and prospects.⁹

The medical *medrese* and the regulatory structures that developed around it collectively represent the Ottoman medical ancien régime that is immediately relevant to the seventeenth century developments. It is useful to note here that the sixteenth medical profession in the Ottoman Empire bore family resemblance to what we find sixteenth-century Catholic Europe. In European cities, various colleges of physicians, guilds and medical boards usually presided over the medical profession. Boards and colleges were responsible for examining, licensing and placing practicing English, Spanish or French physicians, just as it was the office of the Chief Physician who administered *medrese*-educated Ottoman doctors. Just as European medical boards often had confessional allegiances, the *‘ulemā*-physicians also upheld Sunni orthodoxy.¹⁰

⁸Uriel Heyd, "Moses Hamon: Chief Jewish Physician to Sultan Süleyman the Magnificent," *Oriens*, 16, 1963: 152-70; pp. 160-1.

⁹Bayat, *Hekimbaşılık*, pp.2-8.

¹⁰See, for example, José Maria Lopez-Piñero, "The Medical Profession in Sixteenth-Century Spain" in *The Town and State Physician in Europe from the Middle Ages to the Enlightenment*. ed. Andrew

What did the students learn at the medical medrese? Out of the 48 books listed in the Chief Physician's instructions, eighteen consisted of Avicenna's Canon of Medicine and its many epitomes and commentaries. The Aphorisms of Hippocrates was another book on the list. However, these two gatherings of works also defined the limits of the similarities between Renaissance Europe and the Ottoman Empire. The students of the medical medrese studied neither Galen nor medical astrology. Not all of the titles on the list were clearly spelled out. Rather, what we find is simply a summary designation that probably pointed to certain books available at the medical library: ophthalmology and surgery. Among the named books were *Mūjiz* of Ibn al-Nafis (d.1288), *Mufradāt* of Ibn al-Baytar (d.1248), *Manşūrī* and *al-Hawī* of Rhazes, *Shifā al-Aṣkām* of Hacı Paşa (d.1381), *Kitāb al-Taṣrīf* of Zahrawī (d.1013), *Ḥayāt al-Ḥayawān* of Demiri (1344-1405) and *Ādāb al-dTabīb* of Rahawī.¹¹

The medical degree was based on Avicennian theory and the aforementioned manuals, most of which fell under the domain of medical *practica*. A solid foundation on philosophical theology was a prerequisite to matriculation at the medical medrese. While the students read the *Canon of Medicine*, they did not have the solid theoretical background they could have learned from Avicenna's philosophical compendium, *Shifā*. Theological manuals included a religious version of certain parts of physical theory, but at no point were the students exposed to a full course of Aristotle's naturalistic works

W. Russell. Wolfenbüttel: HAB, 1981; pp. 85-98. Jonathan Israel, "Counter-Reformation, Economic decline, and the Delayed Impact of the Medical Revolution in Catholic Europe, 1550-1750" in *Health Care and Poor Relief in Counter-Reformation Europe*. eds. Ole Peter Grell, Andrew Cunningham and Jon Arrizabalaga. London: Routledge, 1999; pp. 40-55. Harold J. Cook. "Institutional Structures and Personal Belief in the London College of Physicians," in *Religio Medici: Medicine and Religion in seventeenth-Century England*. eds. Ole Peter Grell and Andrew Cunningham. Aldershot: Scolar Press, 1996; pp. 91-114.

¹¹ *Kitāb al-Mūjiz* (The Epitome) of Ibn al-Nafis was a well-known epitome of Avicenna's *Canon of Medicine* and was frequently commented on. (See Manfred Ullmann. *Islamic Medicine*. Edinburgh: Edinburgh UP, 1978, p.68). Ibn Baytar's *Mufradāt* (Simple Medicines) was a compendious work that listed herbal remedies and medicinal foods. (See *ibid.*, pp.48-9). Zahrawī's (Albucasis) *Kitāb al-Taṣrīf* (Book of Instructions) was likewise a practical manual that was best known for its detailed account of surgical procedures. (see *ibid.* pp.44-5) Razi's (Rhazes) *Kitāb al-Manşūrī* (named after Razi's patron, Abu Salih Mansur ibn Ishaq) and *Kitāb al-Hāwī* (The Book of Life) were both catalogues of illnesses and remedies (See Max Meyerhof, "Thirty-three Clinical Observations by Rhazes," *Isis*, 23, 1935: 321-72). *Ḥayāt al-Ḥayawān* was a veterinary manual whereas Rahawī's *Ādāb al-dTabīb* treated the patient-doctor relationship. For a photographic reproduction of the manuscript containing the list, see Nil Sarı, "Educating the Ottoman Physician."

either in translation or through glosses.¹²

Galen's humoral theory was built on the Aristotelian understanding of elements and qualities, and the relevance of Aristotelian natural philosophy in medical training was obvious to many medieval and early modern doctors in Europe. In the case of Islamic medicine, there was an additional layer of complexity because of the problematic standing of philosophy, let alone astrology, in relation to religion. While Ghazali as well as many other Muslim scholars in the twelfth and thirteenth centuries viewed medicine as an essential discipline for the well-being of the Muslim community, they were, at the same time, uncomfortable with the close relations of late antique medicine with astrology.¹³ The medical curriculum together with the known *medrese* curricula of the fifteenth and sixteenth centuries suggests a key difference between European and Ottoman medical practices. Medical students in Europe, especially in the sixteenth century, read Aristotle's own works, including his tracts on animals and the human body, as well as Galen's own writings. On the other hand, the anatomical theater, which was a key site for European medical education, had no place in the medical *medrese*, since Islamic law prohibited the dissection of cadavers.¹⁴

While a theologian could do without a working knowledge of classical naturalistic works, the physician was also deprived of an important practical component of the ancient craft when he did not study ancient philosophy: medical astrology. Medical astrology was an important part of university-trained doctors, but this was clearly not the case for the *ulemā*-physicians. Ironically, while contemporary Europeans frequently associated medical astrology with the writings of Abu Mashar, Arabic astrology had nearly disappeared in the lands of Islam.¹⁵

¹²Cf. Charles Schmitt, "Aristotle among the Physicians" in *The Medical Renaissance of the Sixteenth-Century*. eds. Andrew Wear, Roger French and Ian M. Lonie. Cambridge: Cambridge UP, 1985; pp. 1-15; see p.11. According to Schmitt, Mainetto Mainetti (1515-1572) captured the essence of medieval and Renaissance medical education in the following passage: "Medicine then coalesces from many sciences, since from the natural philosopher (physiology) indeed it has drawn anatomy itself, the elements and humors, as well as the knowledge and virtues of plants."

¹³Franz Rosenthal, "The Physician in Medieval Muslim Society" *Bulletin of the History of Medicine*, 52/4, 1978: 475-91. On the Ottoman ban on astrology, see Aydıöz, "Müneccimbaşılık."

¹⁴On the anatomical theater, see Mario Biagioli, "Scientific Revolution, Social Bricolage, and Etiquette" in *The Scientific Revolution in National Context*. Roy Porter and Mikulas Teich, eds. Cambridge: Cambridge UP, 1992; pp. 11-54.

¹⁵There are no copies of Abu Mashar or Mashaallah in Turkey. Also see Roger French. *Medicine before Science: The Business of Medicine from the Middle Ages to the Enlightenment*. Cambridge: Cambridge

Theology was, and had been since the tenth century, the chief opponent of philosophical medicine. *Kelām* did not attack medical practice, but Late Antique medical theory. The barrier Islam erected around natural philosophy had very practical consequences for the early modern Muslim physician. If European scholastic medicine had borrowed but an inkling of Arabic astrology, Ottoman physicians had borrowed none.¹⁶ In some ways, then, ancien régime Ottoman medicine was even more scholastic than European scholastic medicine.¹⁷ The seventeenth century Ottoman polymath Katip Celebi cited Ibn Abi Usaibi'a (1194-1270) as saying: "Among us, medicine is an art that God commends and glorifies, and that inspires men, as those who practice it understand it to be a sublime discipline. However, we prefer to find only a minimum of philosophy in medicine, since God inspires people to practice medicine so that they can leave other natural and supernatural matters to those who seek to glorify God."¹⁸

To further clarify the disciplinary position of Islamic medicine in context, it is useful to call to mind Avicenna's own dictum: "If a doctor undertakes the proofs of existence of the elements and the constitutions and their derivatives from medicine itself, he errs, for medicine cannot make these things clear, belonging as they do to the domain of natural philosophy."¹⁹ Avicenna's differentiation between the legitimate domains of inquiry was as useful for the European scholastic physician as it was for the Muslim one, but there was an important distinction: unlike European universities, the Ottoman medical *medreses* were completely monopolized by the *ilmiyye*.²⁰ That is to say, while scholasticism was one intellectual movement among many in Europe, a

UP, 2003; p.132.

¹⁶Ullmann, *Islamic Medicine*.; p.111. Avicenna himself was against using astrology for medical purposes: August Ferdinand Mehren, "Vues d'Avicenna sur l'astrologie," *Le Muséon*, 111, 1884: 383-403.

¹⁷Roger French, "Astrology in Medical Practice," in *Practical Medicine from Salerno to the Black Death*. eds. L. García Ballester, R. French, J. Arrizabagala and A. Cunningham. Cambridge: Cambridge UP, 1994; pp. 30-59; see p. 55 ff. for Pietro d'Abano's sympathetic views on astrology, which he voiced in his *Conciliator*.

¹⁸Katip Çelebi. *Lexicon bibliographicum et encyclopaedicum*. ed. and trans. Gustav Flügel. 6 vols. London: Oriental Translation Fund, 1845; vol. 4, p.127.

¹⁹Avicenna. *The Canon of Medicine of Avicenna*. trans. Oscar Cameron Gruner. New York: AMS Press, 1973; p.32.

²⁰French, *Medicine before Science*; pp.188-9. "[M]edieval doctors... had declared that medicine was an extension of natural philosophy and that the doctor began where the philosopher finished... [P]art of the program was that such philosophical axioms could not and should not be questioned by the medical man."

similar scholastic attitude was a deep and structural component of Ottoman education.

This Ottoman epistemic arrangement that delegated all theoretical matters to theology enjoyed a lasting influence among the physicians well into the seventeenth century. Davud al-Antaki, a sixteenth-century Ottoman scholastic doctor, was a typical product of this epistemic regime.²¹ He defined medicine as the discipline that seeks to preserve the healthy body by prescribing a proper diet, and to heal the sick body with treatments. Anatomy was helpful for discovering the kinds of trouble the body was suffering, and concluded that medicine was the art of “kings and judicious men.” Antaki placed medicine right below theology, and claimed that those who sought a “more profound knowledge of medicine would best consult Baydawi’s *Tawali al-Anwar*”, a well-known manual of philosophical theology.²²

Translations and Converts

Muslim and European medicine in the sixteenth century were compatible with one another – they were both Galenic -, but the two intellectual realms did not interact with one another. There was social separation between the *‘ulemā’*-physicians with lay practitioners. The boundaries began to disappear as an increasing number of non-Muslim physicians converted to Islam. This was the crucial dynamic that the historians of medicine have falsely identified as the Ottoman physicians’ interest in European theories. European texts flowed into the medical marketplace because university-trained doctors, particularly from Padua, were now Muslims.

There were a large number of non-Muslims practicing medicine in the seventeenth Ottoman palace, but the adult converts (*müẖtedīs*) outnumbered them from 1650 onwards.²³ Mehmed IV wanted a Muslim doctor by his side, but, rather than employing *medrese* graduates, he asked the existing personnel to convert.²⁴ Consequently, he

²¹The only reasonably detailed treatment of Antaki is Nicola A. Ziadeh, “Al-Antaqi and His Tadhkara,” *ARAM Periodical*, 12, 2000: 503-508.

²²Davud al-Antaqi. *Taẓkirā*. Milli Yazmalar Mehmet Tufan Aslan Collection MS 231, 9r.

²³For example, while the majority of the palace physicians in the late sixteenth century were of Jewish descent, they were replaced by converts (designated as either *müẖtedī* or ibn Abdullah in palace registers) in the seventeenth century. See Rıfkı Melül Meriç, “Türk Tababeti Tarihine Ait Vesikalar I,” *Tarih Vesikaları*, 1, 1955: 37-113 and idem. “Türk Tababeti Tarihine Ait Vesikalar II,” *Tarih Vesikaları*, 2, 1958: 267-93.

²⁴Baer, *Glory of Islam*, pp. 121-138

incorporated converted Jewish as well as Greek scholars into the *‘ulemā’*. The effect, it seems, was the exact opposite of what Mehmed IV expected. Rather than confessionalizing palace service, and medicine along with it, his policies deconfessionalized Ottoman medicine for good. Conversion obscured and even destroyed former divisions between Muslim, Christian and Jewish medical traditions. The clearest sign of this transformation was the rise of medical humanism in the Ottoman Empire.

As the name suggests, medical humanism was originally part of the humanist movement in Renaissance Italy. Fifteenth and sixteenth century humanists recovered, translated and published both familiar and unfamiliar ancient philosophers. Galen and Hippocrates, two ancient medical authorities, had received their fair share of attention in the revitalization of Greek thought. In his recent book, Hiro Hirai argued that medical humanism was one of the first challenges to scholastic natural philosophy. Renaissance re-readings of medical texts and case histories in anatomical theaters opened up questions of the origins of life and the attributes of the soul. The academic doctors’ critical and philosophical engagement with medicine even extended to include the Aristotelian theory of matter.²⁵ A similar transformation took place in seventeenth-century Istanbul.

What distinguished the new, humanistic way from scholastic medicine was its method. In imitation of ancient authorities, fifteenth and sixteenth century doctors united their new observations with existing theories. The medical faculties in Italy were important sites of confrontation between anatomical experience and scholastic learning. For example, at the University of Padua, the encounter had served to strengthen Galenist and Aristotelian commitments. Jacopo Zabarella, perhaps the most famous Paduan follower of Aristotle, had argued that true Aristotelians did not just read Aristotle, they tried to do what he had done two millennia ago.²⁶ Medical students of Padua, like William Harvey (1578-1657), sought to reinstate the ancient Galenic ways of approaching the human body with the desire to produce new knowledge.²⁷

Another outcome of the same humanistic movement was chemical medicine. Its most important proponent in sixteenth century Europe was Theophrastus Bombastus von

²⁵Hiro Hirai. *Medical Humanism and Natural Philosophy: Renaissance Debates on Life, Matter and the Soul*. Leiden: Brill, 2011; pp.1-4

²⁶See Chapter 4

²⁷Hirai, *Medical Humanism*, pp.10-1.

Hohenheim (1493-1541), commonly known as Paracelsus. He had received his medical degree in Ferrara in 1615. His university training had exposed him to the philosophies of nature that had emerged as alternatives to scholastic Aristotelianism. He favored Platonism and Hermeticism, thus, unlike Harvey, he was an opponent of Galenism. Paracelsian medicine arrived in Istanbul in the 1650s. Its chief purveyor was also the first convert to become an *‘ālim*-physician: Salih b. Nasrallah Ibn Sallum (?-1669). Born to a Catholic family in Aleppo, he had learnt Latin as a young man, probably under Franciscan oversight, and had converted to Islam as an adult. He later studied logic and astronomy under Muslim tutors in preparation for his career as a palace physician, but not *kelām*.²⁸

He became an outspoken proponent of Paracelsian or “new” medicine (*ṭıbb-ı cedīd*) while he was serving as Mehmed IV’s personal physician. Ibn Sallum’s translations served to introduce spagyric or chemical recipes to the Ottoman medical readership. What distinguished these new recipes from the established Ottoman medicine was that they used a number of new materials and procedures. Galen had favored food and herbs in his recipes. The Galenic physician would prepare his medicine essentially by using culinary techniques. He could crush a mixture of herbs into an ointment, boil them in stock or dissolve them in wine. By contrast, new medicine involved more complex procedures and non-organic substances: The chemical doctor would use minerals alongside herbs, and his favorite method was distillation.

Ibn Sallum chose to translate Oswald Croll (1563-1609) and Daniel Sennert (1572-1637), whom he considered to be good representatives of the new chemical methods in medicine. However, the disciplinary boundaries of Ottoman medicine meant that he could not adopt the philosophical foundations of these new practices. In this sense, Ibn Sallum’s predicament was similar to that of Sennert, an academic doctor from Wittenberg, who, much like the Ottoman physicians, received his education in an Aristotelian academic environment. Both Sennert and Sallum were convinced that

²⁸Miri Shefer, “An Ottoman Physician and His Social and Intellectual Milieu: The Case of Salih bin Nasrallah Ibn Sallum,” *Studia Islamica*, New Series, 1, 2011: 133-58. Felix Klein-Franke, “Paracelsus Arabus: Eine Studie zur alchemistischen medizin im Orient,” *Medizinhistorisches Journal*, 10/1, 1975: 50-4. Natalia Bachour, “Oswaldus Crollius und Daniel Sennert in frühneuzeitlichen Istanbul: Studien zur Rezeption des Paracelsismus im Werk des osmanischen Arztes Salih b. Nasrallah Ibn Sallum al-Halabi.” Unpublished doctoral dissertation, University of Heidelberg, 2010.

Paracelsus's recipes worked well, but did not take the effects to be indicative of sound philosophy. Consequently, neither author committed to the Platonic and hermeticist views of Paracelsus.²⁹

While Sallum had an easy time presenting Sennert to Ottoman physicians, Croll would prove to be much more problematic. Croll also carried the epithet, Paracelsian, but he could not be more different from Sennert in his approach to Paracelsus. He had Hermetic sympathies and was a staunch opponent of academic medicine. Ibn Sallum's engagement with both texts was highly surgical in nature and served to keep philosophical speculation at bay. In his *Ṭibbū'l-Ḳimyāū'l-Cedīd*, which was for the most part a translation of Sennert's *De Chymicorum cum Aristotelicis et Galenicis consensu ac dissensu* (Chymists' Agreements and Disagreements with the Aristotelians and the Galenists), he left out the more contentious parts that touched on philosophy: Sennert's treatment of Hermes Trismegistus and Democritus was not part of the translation, nor were the sections on the occult, on astrology, and on the kabbalah.³⁰ Ibn Sallum's work as an innovative medical author made him Head Physician in 1669, merely months before his death.³¹

The Ottoman reception of Paracelsian medicine and Copernican astronomy in the late seventeenth century exhibit certain common patterns. While what we may call "data" travelled well, theories did not – theoretical knowledge was still delegated to *kelām* Ibrahim el-Zigetvari (fl.1667), another convert to Islam who was also serving the Ottoman palace, had translated an ostensibly Copernican work, Noël Durret's *Ephemerides richelianaë* (1637) – a tabulation of planetary positions. Just as Ibn Sallum left aside the philosophical issues in favor of acquiring useful recipes, Zigetvari also focused on astronomical observations. While Ben Zaken has read great philosophical depth into the Ottoman translation of the work – which consisted mostly of numbers and drawings rather than prose-, in fact, Zigetvari never addressed the question of he-

²⁹There is a wealth of celebratory literature on Paracelsianism: Walter Pagel's works are foundational to the study of Paracelsus and Paracelsians. Also see Allen G. Debus's *French Paracelsians*. Cambridge: Cambridge University Press, 1991. However, I do not know if there is a "Paracelsian movement" as such – the differences between Sennert and Croll surely cast doubt on whether the two belong to the same group at all.

³⁰See Bachour, "Ibn Sallum." On the more contentious parts of these texts, see Ian Maclean. *Logic, Signs and Nature in Renaissance Medicine*. Cambridge: Cambridge UP, 2009; p. 34

³¹Bachour, "Ibn Sallum," pp.82-5. Also see Felix-Klein, "Paracelsus Arabus," pp.52-3.

liocentrism.*kelām*.³² In the 1660s, the Ottoman *hikmet-i tab'iyye* practitioners did not venture into theory, which still belonged with

To replace Ibn Sallum was another early victim of Mehmed IV's forced conversions (1648-1687): Moshe ben Raphael Abravanel (d.1693). When a Jewish millenarian movement broke out in Smyrna during the 1660s, the Sultan asked Moshe to serve as an interpreter during the interrogation of its leader, Sabbetai Tzvi. After the hearings of 1666, Mehmed offered Tzvi and his followers two options: They could convert to Islam or be executed. They took the former option. Three years later, the Sultan offered the same options to Moshe. Once he converted in 1669 and took on the Hayatizade Mustafa Feyzi, Mehmed rewarded him with a promotion. He became the Head Physician and acquired '*ulemā*' status.³³

Moshe was quite different from his predecessor: He had come to have '*ulemā*' status at an early age, and would ultimately break the disciplinary limits of medicine. While he was not a theoretically committed Galenist, he was also not a follower of Paracelsus. When we observe the transformation of the medical medreses during Moshe's tenure as Head Physician, it is clear that he encouraged the students to rely on clinical experience, and to approach theories critically and from a distance. For the first time in the 1670s, *kelām*'s philosophy and disciplinary order were no longer sacrosanct and Moshe was ideally situated to negotiate a new role for the academic doctor.

Moshe came from a distinguished Marrano family, known for its long line of esteemed theologians. In the late 1650s, he had begun to serve as Mehmed's personal physician. While sixteenth century Ottoman physicians believed that medicine was an art, Moshe was convinced that it was a science (*ilm*) that could yield certain knowledge about not only the body, but about the physical world at large. He argued that the experience was the proper method for investigating nature. He was an avid reader of Jean Fernel and Lazar Riverius, who were well-known French Galenists. However, he was also sympathetic towards the anti-Galenist Girolamo Fracastoro.³⁴ Moshe emphasized

³²Avner Ben Zaken, "Heavens of the Sky and the Heavens of the Heart: the Ottoman Cultural Context for the Introduction of post-Copernican Astronomy," *British Journal for the History of Science*, 37/1, 2004: 1-28. Cf. MS Kandilli 403.

³³On Abravanel, see Abraham Galanté. *Médecins Juifs au service de la Turquie*. Istanbul: Babok, 1938; pp.13-4. Also see Bayat, *Hekimbaşılık*, pp. 72-9.

³⁴For a brief summary of the books, see Kahya and Erdemir, *Tıp ve Sağlık*, pp.186-8.

that medical theories should be judged by the effectiveness of their results. His major work was *Hamse-i Hayatizade* (The Quintet of Hayatizade). This book focused primarily on the effective remedies for the most prevalent early modern diseases, such as the plague, scurvy, smallpox and syphilis. Moshe also devoted two sections to diseases that concerned the Ottoman elite in particular: melancholy (*sevdā*) and anxiety (*merak*).³⁵

Moshe kept his position as Head Physician until 1691. During these twenty odd years, he was the highest medical authority in the Ottoman Empire and he had done much to reform training at the medical medreses. He emphasized the importance studying ancient texts rather than medieval commentaries, and encouraged the students to trust clinical experience rather than authority. While he was an excellent physician, he was not particularly keen to fulfill his duties as a high ranking religious scholar. In 1691, soon before Moshe was dismissed from office, his fellow palace physicians had complained to Sheik al-Islam Feyzullah that Moshe, now called Hayatizade Mustafa Feyzi Efendi, was “not attending the ‘*ulemā*’ council, not praying or fasting, and playing an active role in the Jewish community.”^{36a} *Silahdar Tarihi*. 2 vols. Istanbul: Devlet Matbaasi, 1928; vol.2, pp.578-9

Evliya Çelebi (1611-1682) was the first Ottoman author to observe the changes that Moshe had ushered in. By 1670, the Ottoman medical *medreses* were no longer sites of instruction in Islamic medicine, but had become venues for philosophical debate:

Next to the Bayezid Han mosque is a hospital set in a heavenly garden. There, one also finds a medical medrese. Its cloisters are filled with students, expert physicians (*hükemā-i hāziki*) and perfect surgeons, who dispute about divine Plato, Hippocrates, Socrates, Aristotle, Galen and Pythagoras the Monotheist all day. Their methods are many times superior to that of Aristotle himself. The prophet has said: ‘Science is twofold: First comes the science of bodies, and then comes the science of religions’ All of them religiously study the time-honored books in the science of medicine, and try to find a cure for the ailments of the son of man.³⁷

What Evliya presented as the saying of the prophet was, in fact, the subversion of a dictum from the ninth century jurist, al-Shafi’i: “Science is twofold: First

³⁵Nuruosmaniye MS 3512

³⁶Silahdar Mehmed A[ğ]

³⁷Evliya Çelebi. *Seyahatname*. vol. 3. Orhan Şaik Gökyay, ed. Istanbul: Yapi Kredi, 2000; p. 363

comes religious law, and then comes medicine for the bodies." Unlike its new version, the original saying had a conservative overtone. The twelfth century religious scholar Al-Ghazali had cited Al-Shafi'i when he complained about the doctors who told their patients, "First look after your health and then after your religion."³⁸ The new version valorized medicine as being superior to the religious sciences, most notably *kelām*. The fictional saying of the prophet became the rallying cry of the early-eighteenth century Ottoman physicians who demanded the right to speak philosophically about nature.

The new Muslim philosopher-physician had neither knowledge of nor respect for the natural philosophy of *kelām*. Ömer b. Sinan (?-1707), a *medrese*-trained court physician, was one of the products of this new trend in medical training. He spared parts his *Kitāb-i Künūz-i Hayatü'l-Insān ve Kavānīn-i Eṭṭibbā-ı Feyleşüfān* (The Book of the Treasures of Human Life and the Canons of Philosopher-Physicians) to a critical reading of Ottoman Galenism. Izniki devoted most of his work to a discussion of the Aristotelian theory of the elements, astrology, the soul and the origins of life.³⁹ Islamic strictures could no longer bound off medicine from philosophy.

Greek Doctors, Sultanic Power and Medical Regulation

During Moshe's tenure as head physician, the Ottoman medical marketplace was undergoing another transformation. Sephardic Jews, who had been the most prominent medical practitioners in the Ottoman Empire in the sixteenth and early seventeenth centuries, were joined by another demographic in the 1660s: Padua-trained Greek physicians. The Ottoman conquest of Crete in 1669 marks the beginning of the influx of Venetian Greek physicians to Istanbul. When the Phanariot merchant families rose to power under Ahmed III, so did the Greek intellectuals. Unlike the new medical *medrese* graduates who favored chemical medicine, many Greek doctors had received their de-

³⁸Fazlur Rahman. *Health and Medicine in the Islamic Tradition: Change and Identity*. New York: Crossroad, 1987; p. 38.

³⁹Şehid Ali Paşa MS 2085, see 1r-12r for Ömer's discussion of the origins of life. For judicial astrology, see 154v-157v. Also see Nil Sarı and M. Bedizel Zülfikar, "The Paracelsian Influence on Ottoman Medicine in the Seventeenth and Eighteenth Centuries," in *Transfer of Modern Science and Technology to the Muslim World*. ed. Ekmeleddin İhsanoğlu, ed. Istanbul: IRCICA, 1992; pp. 157-79; pp.158-9.

grees from Padua and were committed Aristotelians and Galenists.⁴⁰

Ahmed's first Chief Physician, Nuh of Crete was the chief proponent of Galenism during Ahmed's reign.⁴¹ Nuh was born in 1627, when the island of Crete was still under Venetian rule.⁴² He trained in the medical faculty of Padua before he converted to Islam. He became the Head Surgeon at the palace in 1675, after he circumcised Mehmed IV's sons, including Ahmed III. In 1695, he became the Head Physician and acquired *‘ulemā* status.

Nuh served the Ottoman household in more than just his official capacity. The queen mother Gülnuş was a Cretan convert like Nuh. Dimitri Cantemir (1673-1723), who was living at the court until 1710, relates that the two were close friends.⁴³ When the queen mother Gülnuş had found out that prince Ahmed had made a Circassian chamber pregnant, she went to Nuh to help her get the child out of the palace. When Ahmed assumed the throne in 1703, he would also impart new authority on Nuh's office: regulating private medical practice. This had become necessary in the early 1700s, because the medical profession was in disarray. The intellectual rejuvenation at the medical *medreses* had not trickled down into the medical marketplace. Muslim physicians, who had no expertise and had received the right to open up shops only as favors from private patrons, had given rise to a side industry. Patients had come to rely on European physicians who employed the new chemical techniques. Nuh harbored no sympathies towards chemical medicine, and found no reason to defend it when an incident that implicated the European chemists in the city of Edirne.⁴⁴ However, what began as a singular in-

⁴⁰For an overview of the literature on Padua, see Cynthia Klestinec, "Medical Education in Padua: Students, Faculty and Facilities," *Medical Excellence? Medical Travel and Education in Europe, 1500-1789*. eds. Ole Peter Grell, Andrew Cunningham and Jon Arrizabalaga. Aldershot: Ashgate, 2010; pp. 193-220.

⁴¹On Nuh, see Bayat, *Hekimbaşılık*, pp.84-8.

⁴²On Venetian Crete, see Molly Greene. *A Shared World: Christians and Muslims in the Early Modern Mediterranean*. Princeton: Princeton UP, 2000. And Natalie Rothmann. *Brokering Empire: Trans-Imperial Subjects between Venice and Istanbul*. Ithaca: Cornell University Press, 2011.

⁴³Dimitri Kantemir. *Osmanlı İmparatorluğunun Yükseliş ve Çöküş Tarihi*. 3 vols. Ankara: TTK, 1980 [1722]; pp. 504-7.

⁴⁴One of the first imperial edicts that Ahmed III issued addressed chemical medicine: "It is clear that there is no one who has drawn any benefit from those that follow the path of chemical medicine, since their treatments seem innocent at first and one suffers harm only later. These are the ones who try to say that they can draw out the essence of every medicine and every object, and do the job with an ounce of medicine rather than ten. However, the people of our lands are not well-versed in these practices. According to the principles of medicine, the fruit of the golden shower tree is collected when

tervention soon turned into a crusade, when Ahmed issued a more general edict in May 1704, soon after he arrived in Istanbul:

The Municipal Governor and the Judge of Istanbul, as well as the Head of the Police Corps (Sekbanbasi) are hereby ordered:

Some European (Frenk) physicians have abandoned the path of ancient medicine, and those they medicate in the fashion that goes by the name of new medicine have suffered harm as a result of their practices. I have already banished Mehmed the Convert as well as his company, which includes a European physician, from Edirne. It is my sublime order that you search for European physicians in the vicinity of Istanbul and that you banish them. And, as long as I am in power in this city, you are to keep searching for European physicians. Furthermore, you are to examine all practicing physicians once, and close the shops of incompetent physicians. Those whose expertise (*hazākāt*) and righteousness are clear are to report to the most felicitous scholar among scholars, Nuh, who is serving as the Chief Physician at a level of authority equivalent to that of the Chief Judge of Rumelia [Ottoman Europe], for a sealed certificate. Except for those who have been examined by the aforementioned scholar, physicians who have come to these lands from Europe [including Orthodox Greeks and Jews] and set up medical shops will likewise be banished. Even those in possession of a sealed certificate will be advised not to employ anyone else to work in their shops. After you have accomplished these, you are hereby informed of my sublime desire through this Imperial Edict, you are to report to the palace.⁴⁵

ripe, pressed with almond oil, added to an ounce of melon seed and half an ounce of cinnamon and mixed with chicken stock. This is the absolutely correct way (kaide-i külliye) to prepare this medicine in our lands, whereas those whom chemical medicine afflicts extract the essence of the fruit of the golden shower tree, and serve a dirham of it as medicine. It is more effective than the 10-dirham recipe, but because it is effective many times over and agitates other conditions, it does more harm than good. And it is not just the golden shower tree that they treat this way, they use the same principle in other types of medicine as well. Some French and English physicians of this sort came to Edirne as a group this year, and made a reputation for themselves. [T]here was a talented scribe who went by the nickname of Şinasi. Once he began to show symptoms of illness, he received services from one of these physicians. Once he was cured, he said to them, 'I am now well, glory be to God in the highest, but I feel somewhat weak.' They began to discuss his condition and told him that he should take one of their pills (habb) and that he would surely be pleased with the results. He took the pill and within twenty four hours, he was dead. The chief physician Nuh Efendi brought in one of them and forced him to take two of the pills that he had given to Şinasi, but nothing happened. However, because they are not beyond suspicion, I hereby order their shop shut down, and they are hereby ordered not to open up a shop in Istanbul, Edirne or anywhere else in the lands of Islam." (1703) The transcription of the Turkish text is in Markus Köhbach, "Europäische Ärzte im Osmanischen Reich am Beginn des 18. Jahrhunderts - der Fall Şinasi," *Sudhoffs Archiv*, 64/1, 1980: 79-85.

⁴⁵Original text reproduced in Ahmed Refik. *Onikinci Asr-ı Hicride İstanbul Hayatı*. Istanbul: n.p, 1930; p.37.

Ahmed's edict suggests what might have been a prevalent business model for medical shops: A Muslim, typically not a physician himself, would open up a medical shop and have a European physician, in all likelihood a chemist as well, as his partner. The European physician would do the medical work while the Muslim owner would serve as the shop's shield against excessive taxes traditionally levied from non-Muslims.

Ahmed's edict targeted not only a medical doctrine but also a way of practicing medicine in Istanbul. The new regulatory regime belongs with a host of other Ahmedian urban reforms, such street cleaning and municipal maintenance, or the establishment of a fire brigade. It is also important to note that Ahmed regulated not only physicians, but also other tradesmen, such as bakers. Medical and urban reform went hand in hand.

Just as the physicians had worn down its Avicennian infrastructure, Istanbul had worn down its physical and administrative infrastructure. The city had grown out to ever new and densely populated suburbs over the sixteenth century. Many of the established towns that surrounded Istanbul, such as Beyoğlu, Findıklı, Beşiktaş and Ortaköy, needed more water than the existing waterways could supply. One of the most important long-term rebuilding policies of Ahmed III was to make the city's derelict infrastructure serviceable again. Ahmed built and refurbished many of the public fountains and waterways, while encouraging the elite, first among whom we can count Damad Ibrahim Pasa, to follow his example and to reach into their pockets for the public good.⁴⁶ Ahmed III built or repaired an extraordinary number of fountains.⁴⁷

Many of the new and repaired fountains were embellished with couplets, written by palace poets and calligraphed by palace artisans, which invoked the relationship between health and water.⁴⁸ After Damad Ibrahim managed to fill the palace coffers, he went on to spend large sums of the surplus income on the city and one of his crowning achievements was the new and expanded Üsküdar aqueduct.⁴⁹ Üsküdar traditionally was the Muslim suburb of Istanbul and the Islamizing policies of seventeenth century

⁴⁶ *ibid.*, p. 55.

⁴⁷ *ibid.*, p.1

⁴⁸ Dorothy Porter, "Public Health," in *The Companion Encyclopedia of the History of Medicine*. eds. W.F. Bynum and Roy Porter. 2 vols. London: Routledge, 1993; vol.2, pp 1231-1261, see esp. pp.1235-6 on the revival of Hippocratic medicine in early eighteenth century London and the renewed emphasis placed on environmental factors and running water on public health.

⁴⁹ Aynur and Karateke, *III. Ahmed Devri Çeşmeleri*, p. 269.

Sultans had swelled its population to an all-time high without, at the same time, addressing the basic needs of its residents.

Chemical Medicine in Opposition

Hafız Hasanzade was a product of the new medical *medreses* and was serving the palace in the late 1710s. He was not one of the happy beneficiaries of the new regulatory regime. He angrily remarked in a treatise addressed to Damad Ibrahim, and to Ömer Şifai, the chief physician of the sultan's hospital in Bursa: "In our times, medicine is not only the noblest art, but also a perfect and legitimate way to speculate about nature... However, Greek physicians are plotting (*ittifaq iderler*) to make medicine subservient to their natural philosophy."⁵⁰

Ahmed's interventionist policies were largely responsible for the reactionary attitudes among Muslim physicians. The poor track record of chemical practitioners led prominent Turkish physicians to compile and codify spagyric remedies that were accessible to a Turkish-speaking audience – which included not only the Muslims, but Jewish and Christian physicians as well. The chemical works that the authors had the audacity to present to the Sultan invoked expertise (*hazakāt*) and natural-philosophical (*hikmet-i tab'iyye*) and medical training as proper qualifications for a physician – which, the authors implied, could be judged only by other physicians, not by the ruler or his Chief Physician.

The towering figure of the chemical medicine during Ahmed III's reign is Ömer Şifai (?-1742). Ömer's father was a Sufi sheik from Sinop, a coastal town overlooking the Black Sea. After losing his father at an early age, Ömer moved to Konya, perhaps the most important seat of mysticism and Islamic scholarship in the Ottoman lands. He settled in Bursa afterwards, where he first received medical training at the Bayezid I hospital, and later became a practicing physician at the same institution.⁵¹

As someone who had never studied at a medical *medrese*, he grew into the profession as someone who did not have a chance at the high career his *‘ulemā* colleagues enjoyed. While his Sufi background and artisanal education placed him high office and lofty

⁵⁰Hafız Hasanzade, *Ṭıbb-ı Cedīd*. MS Ragıppaşa 674, 5v-6r

⁵¹Esin Kahya, "Ömer Şifai: Osmanlılarda İyatrokimyanın Temsilcisi," *OTAM*, 4, 1989: 171-195.

salaries out of his reach, it also seems to have afforded him certain intellectual liberties. During the years of the ban on chemical medicine in Istanbul, he was free to tinker in his laboratory a hundred and fifty miles southwest of the Imperial capital and use chemical remedies on his patients.⁵² Ömer Şifai trained and patronized not only Muslim chemists, but European ones as well.⁵³ It also appears that the relative intellectual freedom that obtained in Bursa attracted the chemical practitioners who were banished from Istanbul.

What made Ömer an enlightenment figure was neither his remedies nor his laboratory, but his understanding of medical expertise. Adnan Adıvar, the positivist pioneer of the history of Ottoman science, deemed Ömer a veritable quack who was overconfident in his assertions, and whose Turkish was “difficult to understand and outright awful.” Adıvar thought that Ömer’s Sufism must have attracted him to alchemy and that his exposure to Paracelsianism could be little more than an accident.⁵⁴

One of Ömer’s most interesting works was *Ṭıbb-ı Kimyā-i Cedīd* (New Chemical Medicine), where he presented a new, chemical philosophy in Turkish.⁵⁵ The book targeted the ban against new medicine, which Ömer felt was unjustified. However, he was not simply presenting working remedies that could show the effectiveness of chemical methods. He rather presented a whole philosophical system that presented water as the prime matter, one of the distinguishing features of Van Helmont’s philosophy, and mercury, sulphur and salt as active principles.⁵⁶ He had more than the courage of his convictions, as there was growing a Van Helmontian movement in the Ottoman Empire.⁵⁷

Ömer invoked the seventeenth century distinction between the sciences of the

⁵²On Şifai’s laboratory, see Hamidiye MS 1020

⁵³Osman Şevki claims that it was Ömer Şifai’s European students who buried him based on the tombstone. Şevki, *Tababet*, p.197

⁵⁴A. Adnan Adıvar. *Osmanlı Türklerinde İlim*. 7th ed. Istanbul: Remzi, 2000; p.162.

⁵⁵Esin Kahya worked on Süleymaniye MS Hacı Mahmud 5553, the following passages are from Milli Yazmalar Fahri Bilge Collection MS 112. The latter contains much the same material as the former, but it also has a long preface, which is what interests me here. The copy in the Hacı Mahmud collection appears to be a calligraphed clean version from a later date (1746) whereas Fahri Bilge MS 112 is written in not only poor Turkish but also contains some of the worst handwriting I have seen, which might suggest that this is the authorial copy.

⁵⁶Esin Kahya offers a detailed summary of the medical contents of Ömer’s work without commenting on his philosophical convictions.

⁵⁷See Nicolae Iorga. *Geschichte des osmanischen Reiches*. 4 vols. Frankfurt am Main: Eichborn, 1990 [1908-11]; vol. 3, p. 269

body and the sciences of religion as a pretext for philosophizing:

Our Prophet, the Sultan of the entire universe, who is most wise in all matters and the highest authority among those who study the bodies and the heavens, may God bless his name, has said: ‘Science, it is two. First is the science of bodies, and second, the religious sciences’... When it comes to medicine, it is best to listen only the expert (ḥāzık) physician who has mastered the methods and branches of this science, and whose worth is well known. And this much should also be known: Muslim physicians (ḥükema) and philosophers (feyleşüfān) of all religions unanimously agree that medicine is natural philosophy (*ḥikmet-i tab‘iyye*), since the subject of natural philosophy is the principles behind all creation.⁵⁸

Expertise was the only proper qualifications for the physician, as opposed to political authority or doctrinal compliance. The same experiential (tecrübe) familiarity with the body could extend to include the understanding of nature at large, and could lend veracity to chemical philosophy: “Many physicians who follow the new medicine...say that the science of medicine appears to be a part of natural philosophy, but in reality, natural philosophy is a branch of the science of medicine.”⁵⁹ The benefits of subscribing to the new chemistry, Ömer contended, were easy to see. Later in his preface, Ömer addressed the work to Damad Ibrahim Paşa, who “d[id] not allow the practitioners of new medicine to enter his court.” What Ömer wanted from Ibrahim was not an audience, but he wanted his book to “render these pleasant new remedies in Turkish, so that [Ibrahim] c[ould] see for himself the benefits of the curing powers of the new recipes.”⁶⁰

One of Ömer’s students, Ali Münşi (?-1747). Ali was a native of Bursa and came from Menteşezade family, who had been the lords of Bursa prior to Ottoman conquest in the fourteenth century. Ali had trained under Ömer in the early 1700s during the ban on chemical medicine in Istanbul and he appears to have received a formal *medrese* education as well, since he spent most of the 1710s and 20s as a professor of religious law. His *icāzet* in philosophy was signed by none other than Esad of Ioannina, which also places Ali in close proximity to the palace circles.⁶¹

⁵⁸Fahri Bilge MS 112, 4v

⁵⁹Fahri Bilge MS 112, 5r

⁶⁰Fahri Bilge MS 112, 6r

⁶¹Kahya and Erdemir, *Tıp ve Sağlık*, pp. 216-7. Şevki, *Tababet*, p.198. Feridun Nafiz Uzluk, “Bursalı Hekim Ali Münşi,” *DTCF Dergisi*, 8/3, 1950: 329-337.

One of his early works was a selection of Rhazes's case histories, which he claimed to have rendered into contemporary medical terminology. The book began with an invective against Muslim medical tradition. The opening poem of his compilation, *Terceme-i Zekeriyā el-Rāzī* depicted a sick man who begs the physician for a remedy, and the physician, following Islamic custom prescribes sherbet rather than wine. The concluding triplet of the poem is as follows:

Charges of idolatry [şirk] have worn down the followers of the scholar
[Rhazes]
Caution has left the physician without power
And made bowls and bowls of sherbet an ample reward for his work.⁶²

Like his teacher Ömer, he would live to see the vindication of chemical medicine, and indeed, would become the first Chief Physician to voice his sympathy for chemical medicine. After Hayatizade Mustafa Feyzi the Younger became the Sheik al-Islam in 1736, Ali assumed the position of the Chief Physician.⁶³ With his new position, he no longer had to keep chemical medicine a side occupation, but could openly declare and even enforce his reformist stance. During his early years in office, He wrote the ambiguously titled *Bida'at el-Mübtedī*, which could mean the Introduction for the Beginner or the Innovation of the Innovator, where he presented a broad selection of chemical remedies. Van Helmont and Paracelsus were the philosophical authorities Ali most frequently cited.

Ahmed issued another edict towards the end of his reign, after the experiments at the palace introduced a decisive break with Aristotelianism, and liberated the physicians from both the grip of the *medrese* and of the Greeks' Galenism:

My order to Hekimbaşı Hayatizade Mustafa Feyzi Efendi [Jr., Moshe's son]:

It is imperative that physicians follow the canons of medicine and use the knowledge they have gained through experience to prescribe the remedies to the patients. Many of those who have recently opened medical shops in Istanbul are not aware of the practical and theoretical foundations of

⁶²Süleymaniye MS Hamidiye 1013, 1r.

⁶³Ayten Aydın, "Bursalı Ali Münşi'nin Bidaat el-Mübtedi Adlı Eseri ve Osmanlı İyatrokimyasındaki Yeri," *OTAM*, 16, 2004: 77-107; p. 79.

medicine. Furthermore, they appear unwilling to learn and lack the relevant talents. They have opened shops wherever they like through their contacts with the administration and they have caused deaths as a result of the ill-conceived remedies and harmful cures that they have prescribed. As a result, one can no longer tell the competent [ehl] physician from the incompetent one, and the profession has fallen out of favor with the people. Consequently, one can hardly find a student who aspires to be a physician. In the great city of Istanbul, it is imperative to have doctors who earn the respect of the medical community [fenn-i tıbb erbābı] in return for their expertise [hazakāt] and talents, since it is they who honor and draw attention to the medical profession. You are hereby ordered to draw up a list of Muslim, Christian [zımmī] and Jewish physicians who have shops in Istanbul, Galata and Üsküdar. The ones who have shops will be examined, and those who are not. It is my order that those who are medical apprentices are to be issued a certificate of apprenticeship, are not to be allowed to prescribe medicine before they have completed their training, and are to be punished if they do not comply... Henceforth, when a physician dies, it will be the most advanced one of the five journeymen physicians who work under him that shall replace him, and those whose competence is not proven shall never receive an appointment as a favor.⁶⁴

The edict was tantamount to creating a set of circumstances that was favorable to able physicians of all theoretical convictions. Expertise and experience, not Galenic pedigree set the new standards of medical profession. However, this victory had come after a long, philosophical battle between the physicians and the Greeks at the Ottoman court.

⁶⁴Reproduced in Bayat, *Hekimbaşılık*, pp.96-7.

Chapter 5

Contemplation and Virtue: Greek Aristotelianism at the Ottoman Court

In 1640, Katip Çelebi had just finished his bibliographical lexicon, an extensive survey of every Arabic manuscript that was known to him. His vast erudition helped him place the withering of Ottoman philosophy in perspective:

The majority of the books dealing with natural philosophy, metaphysics and mathematics, are not Islamic but Greek and Latin, for the bulk of these have remained in the lands of the Christians and have not been translated into Arabic, with very rare exceptions. Nor have those that have been translated retained their original meaning, because of the abundant distortions that occur through defective translation: this is an established fact in rendering books from one language to another. I have personal experience of this, having observed it when I was engaged in translating the *Atlas* and other works from Latin into Turkish.¹

The Ahmedian elite were interested in natural philosophy for other reasons than the physicians. They believed, for reasons that will soon become clear, that Aristotelian philosophy (*hikmet*) engendered virtue, and virtue was indicative of good breeding and strong faith. However, there was a major obstacle that prevented them from cultivating their minds. As Mehmed Çelebi, an aspiring bureaucrat and future diplomat remarked in 1716: “After having studied the art of philosophizing in its partial, worldly forms, and after having digested the art of logic lesson by lesson, I desired to apply myself

¹Cited in Katip Çelebi, *Balance of Truth*, p.13

to the discussion of the opinions of the mystics and the peripatetic natural philosophers...Philosophy as a demonstrative discipline is the legacy of Aristotle. Yet, the Muslim thinkers who came Aristotle had no taste for exploration and no passion in their faith. Thus, they took what was easy to understand, and abandoned what only became clear after reflection and demonstration.”²

Natural philosophy was a means to contemplating the orderliness of nature and, consequently, had a direct moral benefit. Many Ahmedian tracts, from short treatises on gardening to political advice literature associated nature (*ṭabʿiat*) with virtue (*fazīlet*). Ancient Greek and Roman Stoic philosophy was chiefly responsible for this conceptual association, and had become a common trope in European natural history and natural philosophy in the early seventeenth-century.³ What carried the understanding that natural philosophy was a means to moral self-improvement to Istanbul were the Ottoman Greeks.

The clearest expression of the new meaning of natural philosophy among the elite was *Et-Tʿalīmü’s-Sālīs* (A Study of the Three [Books of Aristotle’s Physics]) – an Arabic translation of an early seventeenth century Latin commentary on Aristotle’s Physics. The author of the original work, *Commentarii lucidissimi in octo libros Aristotelis de physico auditu*, was Johannes Cottunius (1577-1658), an Ottoman Greek and a professor of philosophy at Padua.⁴ The translator, Esad of Ioannina (d.1731), was a Greek-speaking member of the *ʿulemāʾ*, but also a client of the Chrisanthos Notaras, the Orthodox Patriarch of Jerusalem.⁵ When he began the translation, Ahmed had just

²Topkapi Palace MS Treasury 424, 1v-3r

³See Peter N. Miller. *Peiresc’s Europe: Learning and Virtue in the Seventeenth Century* New Haven: Yale UP, 2000; pp.16-8, 155-6. Shapin defined the seventeenth-century man of science as “not a professional scholar, not a schoolman, not a slave to a philosophical system, not a professional cleric, and not a professional physician, but a free, independent, modest, and virtuous seeker of truth about God’s nature.” Steven Shapin, “Man of Science,” in *Cambridge History of Science*, vol.3 *Early Modern Science*. eds. Katharine Park and Lorraine Daston. Cambridge: Cambridge UP, 2006; p.190. Also see James Lancaster. “Natural Knowledge as a Propaedeutic to Self-Betterment: Francis Bacon and the Transformation of Natural History,” *Early Science and Medicine*, 17, 2012:181-196.

⁴Johannes Cottunius. *Commentarii lucidissimi in octo libros Aristotelis de physico auditu; una cum quaestionibus*. Venice: Pauli Frambotti, 1648. Two clean copies of Esad of Ioannina’s *Et-Tʿalīmü’s-Sālīs* (A Study of the Three [Books of Aristotle’s Physics]) are housed in Süleymaniye MS Ragıppaşa 824 and Hacı Beşir Ağa 414-5.

⁵*Documente privitoare la istoria romanilor: volumul XIV al colectiei Hurmuzaki*. Bucharest: Romanian Academy, 1917; pp.824-6 includes a letter that Esad wrote regarding his old student Nicholas Mavrocordato.

made him the palace librarian.

Cottunius and Esad both argued that natural philosophy was key to cultivating virtue, both for princes and for their subjects. Philosophy as a purely rational and speculative activity provided a unique type of solace, namely, the understanding that the universe at large was calm and orderly. The translation, just like the values it stood for, signaled the emergence of an Ottoman cultural world that Greek merchants and Muslim elite shared in common. Esad's translation was a clear exposition of the new Ottoman values, which had transcended confessional and social divisions. It was also an important specimen of the new culture of Ottoman erudition, where the mastery of Greek, Latin, Persian and Arabic alongside the widespread knowledge of vernacular Turkish had become the gold standard for enlightened Orthodox Greek and Muslim scholars alike.

However, the cultural setting of both Cottunius's work and Esad's translation remain obscure because of the established, but ultimately misguided, nationalist historiographies. Currently, there is a very short published monograph on Esad, and three articles dealing with certain aspects of Esad's translations.⁶ Aside from several footnote references that blur Cottunius into the undifferentiated body of European textbook writers of the seventeenth century, there are only three articles that engage with his life and work – two that present him as a scholastic thinker who did not sufficiently emphasize the superiority of philosophy over theology and one that portrays him as a Macedonian national hero.⁷ The process or processes that tied the two works together remain

⁶Kazım Sarıkavak. *XVIII Yüzyılda Bir Osmanlı Düşünürü: Yanyalı Es'ad Efendi*. Ankara: Kültür Bakanlığı, 1998. Mahmut Kaya, "Some Findings on Translations Made in the Eighteenth Century from Greek and Es'ad Efendi's Translation of The Physica" in *Transfer of Modern Science & Technology to The Muslim World*. ed. Ekmeleddin Ihsanoğlu. Istanbul: IRCICA, 1992; pp. 385-392. Ihsan Fazlıoğlu, "As'ad al-Yanyawi (d.1142/1730)" in *Mawsuat A'lam al-Ulama wa al-Udaba al-Arab wa al-Muslimin*. Beirut: Dar al-Jil, 2004; vol.I, 604-677. <http://www.ihsanfazlioglu.net/EN/publication/articles/1.php?id=108> M. Sait Özervarlı, "Yanyalı Esad Efendi's Works on Philosophical Texts as Part of the Ottoman Translation Movement in the Early Eighteenth Century," in *Europe und die Türkei im 18. Jahrhundert*. ed., Barbara Schmidt-Haberkamp. Göttingen: V & R Unipress, 2011; pp.457-72.

⁷Ioannis Vasdravellis, "Ioannis Kottounios: Ho Ek Veroias Sophos," *Makedonike Bibliothekhe*, 4, 1943: 7-31. Antonis Fyrigos, "Joannes Cottunius di Verria e il neoaristotelismo padovano," in *Renaissance Readings of the Corpus Aristotelicum*. ed. Marianne Pade. Copenhagen: Museum Tusculanum Press, 2001; pp.225-240. George Karamanolis, "Was There a Stream of Greek Humanists in the Late Renaissance?" *Hellenika*, 53, 2003: 19-46. For further references to Cottunius, see Leen Spruit. *Species Intelligibilis: Renaissance Controversies, Later Scholasticism and the Elimination of the Intelligible Species*

completely unknown.

I have been working to understand the relationship between the two authors for as long as I have been working on my dissertation, and many of these attempts have failed because I have had difficulty in letting go of the anachronistic and nationalistic approaches that imparted certain roles and responsibilities to these authors, which is all that I found in the literature. Cottunius was the professor of philosophy *primo loco* at the University of Padua from 1632 until his death in 1657. Historians of philosophy have classified him as an insignificant seventeenth century manual writer.⁸ Cottunius's emphasis was on the careful philological reading of Aristotelian texts like that of his predecessor at Padua, Cesare Cremonini (1550-1631). Like Jacopo Zabarella (1533-1589), another professor at the same university, he also believed that a philosopher engaged in all that could be known by "unaided reason alone," namely, logic and physics.⁹ Cremonini had enjoyed extraordinary publicity as a poster child of Venetian liberty. He had engaged in verbal skirmishes with Galileo, was steadfast in his adherence to Aristotelian philosophy and had bravely defied an injunction from the Inquisition.¹⁰ Among

in *Modern Philosophy*. Leiden: Brill, 1995. Heinrich C. Kuhn. *Venetischer Aristotelismus im Ende der aristotelischen Welt: Aspekte der Welt und des Denkens des Cesare Cremonini (1550-1631)*. Frankfurt am Main: Peter Lang, 1996.

⁸Fyrigos, "Cottunius."

⁹Heikki Mikkeli, "The Foundation of an Autonomous Natural Philosophy: Zabarella on the Classification of Arts and Sciences," in *Method and Order in Renaissance Philosophy of Nature: The Aristotle Commentary Tradition*. eds. Daniel Di Liscia, Eckhard Kessler and Charlotte Methuens. Aldershot: Ashgate, 1997; pp. 211-228.

¹⁰Besides Heinrich Kuhn's book, the only monographic study of Cremonini's philosophy is Leopold Mabillean. *Étude historique sur la philosophie de la Renaissance en Italie (Cesare Cremonini)*. Paris: Hachette, 1881. Mabillean dedicated his work to Ernest Renan, whose influential analysis of the connection between Averroism, Paduan Aristotelianism and European radicalism constitutes the beginning of modern scholarly interest in the University of Padua. His analysis was by and large celebratory, and presented Cremonini as an atheist. René Pintard, the famous historian of French libertinism identified the philosopher as the fountainhead of early modern radical thought. *Le libertinage érudit dans la première moitié du XVIIe siècle: La Mothe Le Vayer, Gassendi, Guy Patin*. Paris: Boivin, 1943. For an early reassessment of the hubris of the Renanites, see Paul Oskar Kristeller. *Renaissance Thought: The Classic, Scholastic and Humanist Strains*. New York: Harper, 1961; pp. 115-6. Schmitt continued in Kristeller's footsteps in his analysis of Paduan Aristotelianism: Charles B. Schmitt, "Aristotelianism in the Veneto and the Origins of Modern Science," in *The Aristotelian Tradition and Renaissance Universities*. Aldershot: Ashgate, 1984; idem. *Aristotle and the Renaissance*. Cambridge, Mass: Harvard UP, 1983. Charles Schmitt, who has done extensive research on Aristotelianism in the Renaissance seems to have avoided Cremonini, perhaps partly because most of the sources remained in manuscript form. His only publication dealing with the Italian thinker is a short lecture published as a booklet: *Cesare Cremonini: un Aristotelico al tempo di Galilei*. Venice: Centro Tedesco di Studi Veneziani, 1980. On how Averroism

other things, he was the most famous and best-paid academic in his lifetime and he had left a legacy that was compatible with the radical tendencies of late seventeenth century Spinozism.¹¹ Cottunius's fame indeed did not precede himself, and his scholarly aura, at least in terms of the citations or praise he received in other parts of Europe, was dim. While Cremonini was content to endorse a mortal Aristotelian soul, Cottunius was a proponent of a more pious philosophy that teetered on the edge of Thomism. Cottunius also believed that physics was prior to and separate from theology both in the epistemic and the curricular sense, but he was no Cremonini. Consequently, placing him side by side with his predecessor from the perspective historians of philosophy have followed in studying Paduan Aristotelianism makes him "less than Cremonini," but still does not help us individuate him.

Scholarship on Esad casts a positive light on his life and work, but fails to address the relevant context of the translation. Since the framework that Ihsan Fazlıoğlu, Kazım Sarıkaya, Sait Özervarlı as well as Dimitri Gutas adopted was the history of Arabic thought from Avicenna onwards, they had identified Esad falsely as a product of medieval Islamic traditions.¹² Since Esad wrote in Arabic, he seemed to belong, almost by default, to the history of Arabic thought.¹³ Turkish scholars who wrote on his work considered him to be a Muslim Renaissance figure, one who was interested in

stopped being an epithet even as Averroës's commentaries became fashionable in the sixteenth century, see Craig Martin, "Rethinking Renaissance Averroism," *Intellectual History Review*, 17/1, 2007: 3-19. For another account of Padua, see John H. Randall. *The School of Padua and the Emergence of Modern Science*. Padua: Antenore, 1961. Also see Schmitt's and Eckhard Kessler's other works. Eugenio Garin says the following regarding Cremonini: "He was surely not a revolutionary but a scholar tied to an already consumed tradition and disposed, for its defense, to refuse not only the testimony of experience, but also to unite himself, this time not in a heroic guise, to those who denounced the work of Telesio to the Inquisition." *History of Italian Philosophy*. 2 vols. trans. and ed. Giorgio Pinton. Amsterdam, New York: Rodopi, 2008 [Italian, 1947]; vol. 1, p.377.

¹¹Pierre Bayle's entry on Cremonini: "He was accounted a Freethinker, who did not believe the immortality of the Soul, and whose Opinions about other Matters were not in the least consonant with Christianity." *The Dictionary Historical and Critical of Mr. Peter Bayle*. 2nd ed. 5 vols. London: Printed for J.J. and P. Knapton, 1735; vol.2, pp.566-7.

¹²No scholar who studied Esad's translation to date has looked at Cottunius's own work. Consequently, every writer makes the claim that Esad was responsible for summarizing parts of the commentary. In fact, Cottunius himself spent more than two thirds of the manual treating the first three books of Aristotle. Consequently, Cottunius's focus seems to be defining the scope and method of natural philosophy. In doing so, he also attacked (Book III) Democriteanism and Pythagoreanism, both of which had recently become fashionable in Europe.

¹³See Sarıkavak, Es'ad. M. Sait Özervarlı, "Yanyalı Esad."

Aristotle, whom they presumed was the foundation of Ottoman philosophy. Since Aristotle, or rather Avicenna, was the foundation of medieval Arabic philosophy, the Islamic tradition by itself seemed to warrant Esad's interest in translating an Aristotelian commentary. Seeing Esad as part of an Ottoman and Islamic intellectual revitalization also fit nicely with an old historical paradigm that viewed the eighteenth century Ottoman Empire and the Islamic intellectual traditions in decline. A translation such as Esad's was effectively an affirmation of this presumed decline — he brought in intellectual reinforcements from abroad, did he not? Esad's "assistants," two young Greeks, also received permanent tax exemptions from the Sultan (their families did not pay taxes for generations). This gesture suggests that the Sultan was trying to extract the Ottomans from the philosophical coma that the decline of theology had caused.¹⁴ In their accounts, Esad's translation was not an indication of the new Ottoman interest in European philosophy, it was an attempt to revitalize Arabic philosophy.

Khaled El-Rouayheb has made considerable progress in debunking the myth of Islamic intellectual decline. If anything, Islamic thought appears to be flourishing during the seventeenth and eighteenth centuries. The idea that the Ottomans were in political decline has also been shelved for a much more nuanced account that shows that the Empire underwent a substantial administrative transformation over the seventeenth century. Esad belongs more with the administrative transformation in the Ottoman Empire than he does with medieval Islamic thought.

Part of the historiographical confusion surrounding Esad has to do with the sources themselves. Esad's European acquaintances wrote about him variously as "a follower of Aristotle," "soaked in Democritean philosophy," "the most erudite man in the Ottoman Empire" and a cosmopolitan socialite. On the other hand, Salim, a court intellectual and a contemporary of Esad spoke of him as a pious and well-educated Muslim scholar with an exemplary career and an extraordinary command of Arabic who frequented "Greek circles."¹⁵ Consequently, it has been difficult for researchers to

¹⁴Kaya, "Some Findings"

¹⁵In addition to Dimitri Cantemir's identification of *doctissimus Isaad Efendi* (Esad) as the person "to whom [he was] indebted for [his] Turkish learning," he also noted, in his *Historia incrementorum atque decrementorum aulae othomanicae*, that Esad was entrenched in Democritan philosophy (*democratea philosophia imbutus*), was a most excellent astronomer (*astronomus perfectissimus*). See Ion Matei, "Le maître de langue turque de Dimitri Cantemir: Esad Efendi," *Revue des Études Sud-Est Européennes*, 2,

gain an accurate intellectual profile of Esad because of the conflicting claims found in the original sources.

I tried to follow these leads in my own research on Cottunius and Esad, but I always seemed to reach a dead end. The histories that I read did not seem to add up. Why had the Venetians selected an Ottoman Greek and a mediocre philosopher to fill Cremonini's place? How had Cottunius's relatively obscure text, which had minimal circulation in Europe, reached the Ottoman court? Why did Esad choose to translate a seventeenth-century Aristotelian commentary? Why was the court so generous to Esad's assistants? These were all questions, I believe, that a satisfactory account of this translation needed to address, and failing to address them brought me to the edge of abandoning Esad altogether. I began to feel worse than uncertain about Esad's place in a dissertation on natural philosophy in the Ottoman Empire.

Fortunately, I am no longer in the unfavorable situation that I have just described. I have now determined that Both Cottunius and Esad were, indeed, very important figures in their respective periods. They were both proponents of a non-confessional natural philosophy and they both had very good reasons for being so. Esad's translation of Cottunius was the first and possibly the only early modern scholarly attempt to save Islamic natural philosophy from its Avicennian and theological attachments.

What also makes both figures important, who lived a hundred years apart, is the role that they played in the same confessional politics, more precisely, Orthodox Greek confessional politics. To make this claim as clear as I possibly can, I will begin the story with the establishment of the College of St. Athanasius in Rome in 1576 and end with the failure of Ahmed III to establish an academic printing press in Istanbul in 1727. I will observe the division within the early modern Orthodox Greek community between those who advocated unification with the Catholic Church and those who wanted an independent Orthodox Church. The Ottoman conquest of Venetian Crete in 1669 and of the rest of the Venetian Greek colonies by 1718 punctuates the story. The formation of

1972: 281-288. Abbé Sevin, who visited Istanbul in 1729, called Esad "un adorateur d'Aristote," in his *Lettres sur Constantinople* (publ. 1802). Johann Friedrich Bachstrom, another visitor in 1729, related an episode where he engaged Esad on the issue of gravity, where Esad takes an Aristotelian stance, in his *Nova aestus marini theoria*. Lugduni Batavorum: Wishoff, 1734; pp.63-4. Regarding Esad's connections with Istanbul's Greek circles, see Mirzazade Mehmed Emin Salim. *Tezkire-i Sâlim*. Istanbul: Ikdam, 1310 [1892]; pp.76-8.

the political alliance between the Ottoman Sultan and the Greek elite in the early 1720s will mark the beginning of the end of this whole development. Aristotle is integral to every narrative turn. Consequently, I will be presenting Aristotelian natural philosophy as an important reflection of Greek and Ottoman intellectual identity formation in the seventeenth and eighteenth centuries. In short, I am not interested in specific Aristotelian ideas at stake, but in the politics and the social function that Aristotle served.

Philosophy and the Post-Byzantine Greek Diaspora

The claim that early modern Greeks rediscovered Aristotle seems like an odd proposition that borders on implausibility, but it is true. We usually think of Byzantium as one of the centers of medieval Aristotelian thought.¹⁶ We know about the Byzantine scholars who departed for Venice after the fall of Constantinople in 1453, but the simple fact that there were learned Byzantine emigres in Venice does not also warrant the old notion that all learning had fled the city by the mid-fifteenth century.¹⁷ The Greek language lived on; and any Greek scholar willing and able to acquire a printed Aldine edition or simply to hold on to the manuscripts accessible in Istanbul could easily continue to study Aristotle. Then, how had the post-Byzantine Greeks lost Aristotle in the first place?

Intellectual tradition, an anachronistic concept that is familiar to scholars of Christian and Muslim scholasticism, often serves as a black box that obscures the actual practices necessary to keep a body of authors and texts current: Reciting, copying, commenting, amending and summarizing were all very laborious and very common intellectual practices prior to the advent of printing. Both the medieval university and the Muslim medrese (college) had evolved successfully to reinforce and perpetuate their respective and often quite similar intellectual traditions. Generations of students and

¹⁶See Charles B. Schmitt, "Towards a Reassessment of Renaissance Aristotelianism," *History of Science*, xi, 1973: 159-193; pp.168-9. Two scholars who have done sustained work on Byzantine Aristotelianism and Latin translations from Greek originals are John Monfasani and Lorenzo Minio-Paluello.

¹⁷That Greece had lost not only its empire but also its erudition was a popular trope among early modern Greek scholars who wrote in Europe. See Dean Kostantaras, *Infamy and Revolt: The Rise of the National Problem in Early Modern Greek Thought*. New York: Columbia UP, 2006; Chapter 2. Also see Deno Geanakoplos, *Interaction of the Sibling Byzantine and Western Cultures in the Middle Ages and the Italian Renaissance (330-1600)*. New Haven: Yale UP, 1976; p.6.

teachers engaged one another intensively in common physical spaces that provided intellectual nourishment, professional satisfaction as well as a reasonable livelihood. Education was a flourishing industry in both the Latin West and the Muslim East.¹⁸

The medieval intellectual traditions were not self-sustaining monolithic structures, but living entities. Their foundations were fragile and vulnerable texts that could survive only because of a constellation of values, practices and interests. The Ottoman scholars symbolically viewed their enterprise as being similar to gardening. When they wrote about the past, they believed that they were metaphorically picking flowers, tending gardens and discovering precious pearls. The absence of such careful gardeners was synonymous with drought.

Many Greek humanists of the sixteenth century identified the intellectual condition of their nation as one of sterility and torpor. The Orthodox Church had no institutionalized education.¹⁹ The Ottoman Greek community enjoyed a modicum of judicial autonomy under Muslim rule, but the financial and political resources available to them were very limited. Simply keeping all the churches operational required great effort. Aspiring priests could expect to get some education at the Patriarchal Academy in Istanbul or at the monasteries at Mount Athos before being summoned to service, but most ordained priests did not have the training that would take them beyond basic literacy — in the literal sense.²⁰ The Orthodox of Muscovy were hardly better off. They shared the same level of ignorance as their Ottoman brethren. There were a few schools that trained priests, but until the establishment of the Greco-Slavo-Latin Academy in 1679, there was no institution that estimated the European university.²¹

¹⁸See Makdisi, *The Rise of Colleges*. Alastair Minnis. *Medieval Theory of Authorship: Scholastic Literary Attitudes in the Later Middle Ages*. Philadelphia: University of Pennsylvania Press, 2009. Jacques Verger, "Teachers," in *A History of the University in Europe*. Vol. 1: *Universities in the Middle Ages*. Hilde de Ridder-Symoens, ed. Cambridge: Cambridge UP, 1992; pp.144-168. idem. "Patterns," in *Universities in the Middle Ages*, pp. 35-75.

¹⁹Deno Geanakoplos. *Byzantine East and Latin West: Two Worlds of Christendom in Middle Ages and Renaissance*. New York: Harper & Row, 1966; pp.183-93.

²⁰Joseph Georgirenes [Bishop of Samos]. *A Description of the Present State of Samos, Nicaria, Patmos and Mount Athos*. London: Moses Pitt, 1678. p.40: "After the candidate for Holy Orders has thus made his way, the day before he enters into Priests Orders, he comes to the Metropolitane, who having try'd whether he Read and Write without false Pronuntiation, or mis-spelling; and being satisfied in that point, doth presently Ordain him Sub-deacon and Deacon, and the next day Priest, if he be of sufficient Age. The Age for a Reader is 18; For a Sub-Deacon, 20; For a Deacon, 25; For a Priest, 30."

²¹Nikolaos A. Chrissidis "A Jesuit Aristotle in Seventeenth-Century Russia: Cosmology and the Plan-

By comparison, the educational opportunities for Greeks living in Venetian colonies were simply luxurious.²² Crete was a center of Venetian intellectual life in the sixteenth century. Cretan scribes became exclusive purveyors of luxury as well as scholarly copies of rare Greek manuscripts, always in high demand among Italian humanists. Innumerable Venetian Greeks received their university education in the various city-states of Italy, and many of them stayed on as professors. However, the education that they received did not necessarily prepare them for the Orthodox cassock. In fact, there were no orthodox educational institutions as such in any of the Venetian colonies and, by the late sixteenth century, one could hardly distinguish between a Catholic parish and an Orthodox one. While there were Orthodox churches that operated in Morea and the Aegean islands, it was the local Catholic bishops who invariably oversaw the appointments of their priests.²³

Venice was also the center of the Byzantine diaspora. The imperial Comnenos family had called the city their home since the fifteenth century. The Comneni used the Constantinian Order of St. George, an institution of dubious early medieval origins, as a means to mobilize the Greek community and to help finance wars against the Ottomans. Greek merchants were a notable presence in the city's commercial life. Venice even had physical vestiges of the old Byzantine capital, not least because of the loot that Venetian ships had brought back after the Siege of Constantinople in 1204. The Greeks also celebrated their community, and frequently patronized students of their own nation who wished to attend the University of Padua.²⁴

By the early sixteenth century, the Greek community was almost fully assimilated into the Venetian social fabric. Most Aegean islands had Jesuit schools that trained and converted Orthodox youths, intermarriages between Catholic and Orthodox communities were commonplace, and the Greek rite of the Catholic Church further blurred

etary System in the Slavo-Greco-Latin Academy," in *Modernizing Muscovy: Reform and Social Change in Seventeenth-Century Russia*. eds. Jarmo Kotilaine and Marshall Poe. London, New York: Routledge, 2004; pp. 380-405.

²²David Holton, ed. *Literature and Society in Renaissance Crete*. Cambridge: Cambridge UP, 1991. S. Marketos, J. Lascataros and A. Diamandopoulos, "The Links between the Medical School of Padua and the Hellenic Medical World," *Medicina nei Secoli*, 4, 1992: 45-58.

²³Karen Hartnup. *'On the Beliefs of the Greeks': Leo Allatios and Popular Orthodoxy*. Leiden: Brill, 2004; pp.17-21

²⁴Kostantaras, *Infamy and Revolt*, pp.42-50.

the confessional lines.²⁵ In certain Venetian colonies there were considerable contingents of Greek Catholics. By the late sixteenth century the Catholic/Orthodox divide had emerged as the fault line that, with only slight exaggeration, one might describe as dividing Eastern and Western Greeks. Those who lived under Muscovite and Ottoman rule advocated Orthodox Christianity, and those who lived in Italy became members of the Uniate Church.²⁶

In 1576, Pope Gregory XIII established the College of St. Athanasius in Rome. The goal of this college was to train Orthodox clergy, who were infamous for their ignorance, and to send them back home as Greek Rite Catholics — clearly a policy that would further irritate existing tensions within Greek communities.²⁷ The college naturally admitted students from Muscovy and the Ottoman Empire. This was a move that consolidated Rome's missionary activities. The students who wanted to matriculate at the college could do so without having to convert, but they would have to observe the Catholic faith for the duration of their studies. In return, they were entitled to room, board and a free education.²⁸ The combination of risks and benefits that the college offered attracted a trickle of Ottoman students in the sixteenth and seventeenth centuries.

Leo Allatios, was one of the finest products of St. Athanasius's rigorous education. He was born in Chios in 1587. The island had been a Genoese colony until the Ottoman conquest in 1566. He was 9 years old when he travelled to Rome with his maternal uncle, Michael Neurides, who himself was a graduate of St. Athanasius. Both of his parents were Orthodox, but numerous members of the Neurides family had converted to Roman Catholicism over the years. Allatios matriculated at the college in 1600. After a few unpleasant years suffering the rigors of serving as an unwelcome Catholic priest on Ottoman soil, Allatios returned to Italy. His former professors secured him a position as a librarian at the Greek collections of the Vatican as well as a teaching appointment at the Greek College as a professor of rhetoric.²⁹

²⁵See Molly Greene, *A Shared World*, pp.3-6.

²⁶Cléobule Tsourkas. *Les débuts de l'enseignement philosophique et de la libre pensée dans les Balkans: La vie et l'oeuvre de Théophile Corydalée (1563-1646)*. Bucharest: Institut d'Études et de Recherches Balkaniques, 1948; pp.120-1.

²⁷Raymund Netzhammer, OSB. *Das griechische Kolleg in Rom*. Salzburg: "Separatabdruck aus der Kathol. Kirchenzeitung," 1905; p.5.

²⁸Netzhammer, *Griechische Kolleg*, pp.16-20.

²⁹Charles Frazee, "Leon Allatios: a Greek Scholar of the Seventeenth Century," *Modern Greek Studies*

Allatios became a lifelong follower of the Uniate Church: In his works, he not only denied that the Great Schism had ever occurred, but also claimed that there had been no doctrinal disagreements between the Orthodox and Catholic Churches in the past 1500 years. He emphasized the harmony between the two churches from other perspectives as well. In his *De Graecorum hodie quorundam opinionibus* (On the Opinions of Contemporary Greeks), he argued that there was nothing more to Greek religion than religious practices and a handful of unfounded superstitions. Since the Orthodox Church did not have a theological backbone as did post-Tridentine Catholicism, the two faiths were fundamentally compatible with one another. The ideal arrangement, he contended, was to keep the internal organization of the Orthodox Church intact and to place the Patriarch of Constantinople under the Pope.³⁰ This was the typical political position among the students of St. Athanasius who converted to Catholicism, but none were as successful, eloquent or erudite as Allatios.³¹

Nonetheless, the efforts of the professors of St. Athanasius to convert their Greek students could also backfire. Hence, a second type of graduate was, in the words of one of the masters of the college, “[those who,] after living for years at the expense of the Holy See, returned to the East as confirmed enemies of the Papacy.”³² The best example of this is Theophilos Korydalaes, the second of the three classmates. Unlike young Allatios, Korydalaes was completely committed to a free and independent Orthodox Church. After receiving a few years of free room, board and education at the college, he moved to Padua and matriculated at the arts faculty in 1609.³³

Korydalaes’s matriculated in the wake of the Venetian Interdict.³⁴ The Jesuits who were his teachers at St. Athanasius had been ousted from Venice, not only physically but also intellectually. The main intellectual actor who drew a clear line between a civil and an ecclesiastical Aristotle was Cesare Cremonini. Korydalaes witnessed that

Yearbook, 1, 1985: 63-78.

³⁰Frazer, “Allatios,” p.72. Athanasius’s famous book defending the compatibility of the two churches was *De ecclesiae occidentalis atque orientalis perpetua consensione libri tres*. Köln: Apud Jodocum Kalcovium, 1648. The work was dedicated to Louis XIV.

³¹Antonios Fyrgos, ed. *Il Collegio greco di Roma: ricerche sugli alunni, la direzione, l’attività*. Rome: Pontificio Collegio greco S. Atanasio, 1983; pp.11-2.

³²Fyrgos, *Collegio greco*, p.157.

³³Tsourkas, *Les débuts d’enseignement*, p. 29.

³⁴See David Wootton. *Paolo Sarpi: Between Renaissance and the Enlightenment*. Cambridge: Cambridge UP, 1983; pp.46-54.

Cremonini enjoyed far greater prestige in Venice than any other professor that he had met.³⁵ Most of Cremonini's corpus dealt with natural philosophy, but he was best known for his philological and principled engagement with Aristotle's texts.³⁶ Cremonini's adherence to Aristotle's philosophy was a matter of professional integrity. His predecessor and sometime colleague Jacopo Zabarella (1533-89) had made it clear in numerous orations that the task of the philosophy professor at a university like Padua, renowned for its medical faculty, was to focus on the parts of philosophy that were accessible to unaided human reason. Consequently, Zabarella contended, the philosopher had to focus his efforts on natural philosophy and logic, while leaving ethics and metaphysics to the theologians.³⁷

Zabarella's compromise position liberated at least parts of philosophy from theology. In the wake of the Council of Trent, this seemed like a good path to follow. Zabarella separated his work from the realm of "faith and morals," which the ever-vigilant Inquisition scrupulously guarded. When Cremonini assumed Zabarella's position, the most difficult challenge he faced was to maintain this separation. Thus, he aimed squarely at the scholastic curriculum of the Jesuit College in Padua.³⁸ The thoroughgoing Thomism of the Jesuits naturally blurred the distinction between theology and philosophy, and, consequently, between ecclesiastical and civil authority. Cremonini's literal interpretation of Aristotle, which his Jesuit adversaries considered evidence of outright materialism, was the fruit of some thirty years of teaching and of substantial political backing from the Venetian government. Just as Venice was struggling to keep papacy at bay in the late sixteenth century, the University of Padua was fighting against the Jesuit college, which Cremonini regarded as a bastion of papal authority.³⁹

Natural philosophy was a heroic pursuit in early seventeenth-century Venice. Perhaps this perception is nowhere clearer than it was in the writings of Korydalaios.

³⁵Tsourkas, *Les débuts d'enseignement*, pp.94-8.

³⁶Kuhn, *Venetischer Aristotelismus*, p.167.

³⁷Nicholas Jardine, "Keeping Order in the School of Padua: Jacopo Zabarella and Francesco Piccolomini on the Offices of Philosophy," in *Method and Order*; pp. 183-210; see esp. pp. 195, 198.

³⁸Kuhn, *Venetischer Aristotelismus*, pp.126-30.

³⁹A very good account of the relationship between Venice and Cremonini is in Edward Muir. *The Culture Wars of the Late Renaissance: Skeptics, Libertines, and Opera*. Cambridge, MA: Harvard UP, 2007; pp.34-40.

After returning to Athens in 1615, he translated Cremonini's entire corpus into Greek and used Cremonini's philosophy to arm aspiring Orthodox priests against the risk of conversion by the Jesuits.⁴⁰ He was perhaps the most popular Greek author of the seventeenth-century. How could he not have been, given that his patron was none other than the Orthodox Patriarch Kyril Loukaris (1572-1638)?⁴¹ Loukaris himself was a Cretan, but had studied, not only at Padua, but at Wittenberg and Geneva as well. He patronized Greek Orthodox students wishing to study in England, the Netherlands as well as the Republic of Geneva. In his view, forming a theological alliance with the Calvinism was key to distinguishing the doctrines of the Orthodox Church from Roman Catholicism. Swiss theologian and philologist Heinrich Hottinger used Loukaris's sympathies to establish historical as well as contemporary connections between the reformed Church and original Christianity. Needless to say, Hottinger became one of Leo Allatios's prime targets.⁴²

Loukaris granted Korydalaos full authority to rebuild the curriculum of the Patriarchal Academy in Istanbul. Korydalaos then sought to turn the Academy into a smaller version of the University of Padua. Manuscript copies of his works were exceptionally well circulated in the Ottoman Empire, and as widely dispersed as Ioannina, Bucharest, Jassy, and Moscow. By the late seventeenth century, his curriculum had become the foundation of all Orthodox education in the Ottoman Empire and in Muscovy.⁴³

Aristotle and the New Greek Identity

There was also a third type of student who tried to steer clear of religious controversies between the Greek Orthodox and the Roman Catholic Churches. These opportunistic students were by far the most populous. To put it bluntly, they used St.

⁴⁰Gerhard Podskalsky. *Griechische Theologie in der Zeit der Türkenherrschaft*. München: C.H. Beck, 1988; p.195

⁴¹While Loukaris had political dealings with the Calvinist church, the key doctrine of predestination had an old history in the Orthodox Church.

⁴²Jan Loop. "Johann Heinrich Hottinger (1620-1667) and the 'Historia Orientalis'," *Church History and Religious Culture*, 88/2, 2008: 169-203. Cf. Leo Allatios. *Ioannes Henricus Hottingerus fraudis, et imposturae manifestae conuictus*. Rome: Congregatio de Propaganda Fide, 1661

⁴³See Ariadna Camariano-Cioran. *Les Academies princières de Bucarest et de Jassy et leurs professeurs*. Thessaloniki : Institute for Balkan Studies, 1974

Athanasius as a point of departure for further education in Italy. Many of them spent a few years in Rome and then moved on to Padua for a medical degree. Medicine was a very lucrative profession in the Ottoman Empire, as there were so few formally trained Muslim physicians in the medical marketplace. Furthermore, pursuing a medical career was the best way for these students, who seemed to have no intention to put on anyone's cassock, to make the most of the educational opportunities that Italy offered.⁴⁴

The man who epitomized this third type was Johannes Cottunius (1577-1658). Like Allatios and Korydalaos, he was also an Ottoman Greek. He and his brother had left their hometown, Verria, to travel to Rome by land in 1589. They were captured by Tartar bandits before they crossed the Ottoman border, but the Duke of Württemberg ransomed them and brought them to Tübingen. Cottunius arrived in St. Athanasius in 1605, after having spent several years with the famous Greek philologist, Martin Crusius (1526-1607).⁴⁵ Between 1613 and 1615, he studied medicine at Padua. Cottunius and Korydalaos rubbed shoulders at the university and they were both nurtured in the same Venetian intellectual climate.

Since Cottunius was already a well-trained philologist and well-connected to Rome's patronage networks, he was able to secure an appointment at the papal university of Bologna as a professor of Greek as early as 1615. Thirteen years into his career, he began to publish on Aristotle's *De anima* and *Meteorologica*, possibly because he was seeking an appointment to the immeasurably more prestigious philosophy chair in Padua. Like Cremonini, Cottunius was also a philologist, and clearly deemed himself capable of successfully replacing the aging professor and keeping up the Paduan tradition. After the famous philosopher died in 1632, Cottunius became a second rank professor of philosophy, and then moved up to the first rank within five years.

Cottunius faced a different set of challenges than did his illustrious predecessor. While Cremonini was simply arguing against the Jesuits during 1590s and 1600s, there was widespread philosophical opposition against Aristotle in the 1630s. Cottunius's *Commentarii* no longer served to defend the Paduan interpretation of Aristotelianism from theological incursions, but from other philosophies of nature. One of the chief opponents that he targeted were Pierre Gassendi, who had recently published an attack

⁴⁴Fyrigos, *Collegio greco*, p.156

⁴⁵Vasdravellis, "Kottounios," p.9 n.5

on Aristotle called *Exercitationes paradoxicae adversus Aristoteleos* (Paradoxical Exercises Targeted against Aristotle). The *Exercitationes* was a preliminary formulation of the philosophical Epicureanism that historians of philosophy commonly associate with Gassendi.⁴⁶ It argued that Aristotelian philosophy was obscure, because it employed analytic categories, such as essences, that human senses could not access. Since all knowledge was based on the senses, Aristotelian philosophy, which was as metaphysical as it was empirical, was obscure.

What made Cottunius's Commentary "most clear" was Cottunius's philological and rationalist response to Gassendi's challenge. Philosophy was a rational not an empirical activity. Cottunius also argued that foolish readers and incompetent philologists generally tended to misunderstand Aristotle's *Physics*.⁴⁷ Because the book was not from Aristotle's pen, but rather was a set of lecture notes, the philologist's careful eye had to read through the text and between the lines to get to Aristotle's own meaning.⁴⁸

A second opponent that Cottunius targeted was Paracelsus and the Paracelsian movement. Maintaining the superiority of philosophy over medicine was a particularly pressing concern at Padua, because the medical faculty was exposed to the new chemical ideas, which proposed a different physics than Aristotelian had. For example, Aristotle argued that the sublunar world consisted of four elements, fire, water, earth and air. Paracelsus, added to these four element another three active principles – mercury, sulphur and salt - which were responsible for the functions of physical bodies. Paracelsian physics also featured neo-Platonist overtones that highlighted the interaction between macrocosm and microcosm.

Cottunius's main line of defense against the opponents of peripatetic philosophy was deeply intertwined with his understanding of the ultimate goal of philosophy. Like many of his contemporaries and scholarly correspondents, he was a neo-Stoic who believed that the philosophical exercise of reason was essentially a means to perfecting the soul.⁴⁹ Since Justus Lipsius's translations of the works of the ancient Stoics in the 1570s

⁴⁶Cottunius, *Commentarii*, p.1. On Gassendi, see Antonia Lolordo. *Pierre Gassendi and the Birth of Early Modern Natural Philosophy*. Cambridge: Cambridge UP, 2007.

⁴⁷Cottunius, *Commentarii*, p.9.

⁴⁸Cottunius, *Commentarii*, p.42.

⁴⁹On early seventeenth century Stoicism, see Peter Miller. *Peiresc's Europe: Learning and Virtue in the Seventeenth Century*. New Haven: Yale UP, 2000.

and 80s, a new movement had emerged that emphasized virtue rather than piety as the highest good.⁵⁰ Cottunius's account of the utility of natural philosophy was in line with neo-Stoicism. While he reiterated the sense of piety that nature engendered in man, as did many other seventeenth century scholastic textbooks, he also added that the orderly operation of nature imparted "justice, fortitude, temperance, prudence, liberality, munificence and every conceivable virtue" to its students.⁵¹

Natural philosophy was also essential to educating steadfast citizens. After all, it was Socrates's wish to ascend to the orderly heavens that had given him the strength to drink the hemlock. Zeno of Elea had bravely endured torture as a consequence of his understanding of nature, and Anaxarchus could stand up against Nicocreon, the Cypriot tyrant, simply because he had studied natural phenomena so carefully. Considering Cottunius's Venetian audience, it was clear that he was proposing that natural philosophy guarded and perpetuated Venice's republican values.⁵²

For various reasons, Paracelsians and physicians in general could not possibly fulfill the role Aristotelian natural philosophy: Because philosophy was an enterprise that involved as much sociable exchange as private contemplation, its practitioners had to be public figures. "Solitary [practitioners] of arcane philosophies," a jab against Paracelsus, clearly were "not sociable."⁵³ Physicians in general were no better: The medical faculty was disorganized and embattled. Physicians who were also good orators, he said, continually spoke against the truth. And, because doctors mixed with the people, they were often the ones to excite crowds and were, hence, the architects of popular insurrections. He rounded off his criticism with a gentle reminder that while the natural philosopher contemplated the noble order of nature, the physician was preoccupied with sickness and disease.

However, Cottunius was not only defending peripatetic philosophy, but also establishing himself as the exclusive authority on Aristotle. In his *Commentarii*, Cot-

⁵⁰William J. Bouwsma, "The Two Faces of Humanism: Stoicism and Augustinianism in Renaissance Thought," in *Itinerarium Italicum: The Profile of the Italian Renaissance in the Mirror of its European Transformations* eds. Heiko Oberman and Thomas Brady. Leiden: Brill, 1997; pp.3-60.

⁵¹Cottunius, *Commentarii*, p.2. Regarding the seventeenth century scholastic view of the utility of natural philosophy, see Sister Mary Richard Reif, "Natural Philosophy in Some Early Seventeenth Century Scholastic Textbooks," Unpublished doctoral dissertation, University of St. Louis, 1962; pp.49-57

⁵²Cottunius, *Commentarii*, p.3.

⁵³Cottunius, *Commentarii*, p.5.

tunius suggested that his Greekness gave him an exclusive understanding of ancient philosophy, one that was inaccessible to those who were not familiar with Greek culture. Other works written by Cottunius's scholarly relations, most notably Martin Crusius and Gabriel Naudé (1600-1653) had advanced the idea that language, manners, idioms and mores usually belonged together.⁵⁴ Crusius had articulated a humanistic sentiment on the specific example of modern Greeks when he argued that Greek intellectual decline after the Byzantine Empire paralleled the barbarization of the Greek language, just as a pure language indicated a sound moral constitution and purity of habit. Naudé's *Syntagma de studio liberali* (The Proper Arrangement of Liberal Studies) suggested that it was not sufficient to study language and literature by itself, but that culture was key to the proper understanding of the particular idioms.⁵⁵

Cottunius himself claimed that he was working against what he took be the impure Greek language he grew up with. When he made a point of proudly mentioning his Macedonian lineage in treating Aristotle, he was also drawing a cultural association between himself and the Stagirite, further reinforced by the epigram that adorned his portrait.⁵⁶

*Veria te genuit, passus quae mille Stagiris
distat: tu ne uno mente ab Aristotele.*

Verria, which gave birth to you, lies a thousand leagues from Stagira;
Whereas your mind is not even a single league away from that of Aristotle.

The connection Cottunius drew between contemporary Greek identity and Aristotelian philosophy convinced – or at least pleased- the Venetian Greeks. While Korydalaios had used the same philosophy to forge a confessional identity for his compatriots, the Cottunian Greek transcended confessional boundaries. The connection between modern Greeks and the Orthodox Church had come under scrutiny in Allatios's work. Sixteenth century Greek humanists had only seen a contrast between the ignorant modern Greeks and the Greek philosophers of yore. Thus, Cottunius fashioned himself as

⁵⁴Asaph Ben-Tov. *Lutheran Humanists and Greek Antiquity: Melanchthonian Scholarship between Universal History and Pedagogy*. Leiden: Brill, 2009; pp. 178-184.

⁵⁵Thomas Jean-Marie Cerbu, "Leone Allacci (1587-1669): The Fortunes of an Early Byzantinist," Unpublished doctoral dissertation, Harvard University, 1986; pp. 16-8. Cerbu's analysis is based on Gabriel Naudé's *Syntagma de studio liberali*. Urbino: Apud Mazzantinum & Aloysium Ghisonum, 1632.

⁵⁶Cottunius, *Commentarii*, p.6: "Aristoteles,..., fuit natione Graecus, provincia Macedo, patria Stagirites, meus conterraneus, ac penè concivis"



Figure 2: Johannes Cottunius's portrait from the *Commentarii* (1648).

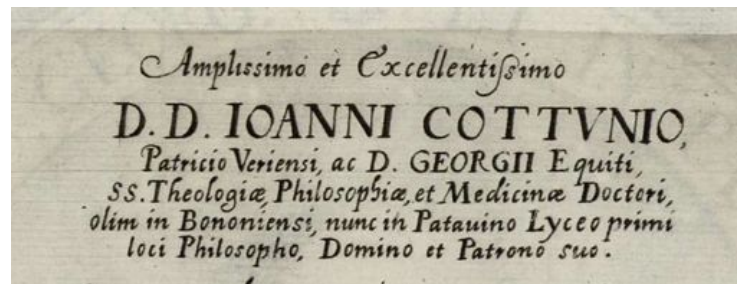


Figure 3: Cottunius's titles according Matteo Bolzetta's preface to *Icones graecorum sapientium* (1657).

the new model for Greekness: through philology and philosophy, he had transcended both confessional identity and ignorance.

Consequently, Cottunius introduced humanistic values to Greek cultural identity, while giving European monarchs new reasons to save this great nation from Ottoman yoke. By 1648, Cottunius was inducted into the Order of St. George, an order invented and run by the imperial Comnenos family to support Europe's anti-Ottoman wars. In the same year, Cottunius also patronized the preparation of *Icones graecorum sapientium*, a handsome book that served a catalog of ancient Greek busts in the city of Venice. By 1653, he had also become the titular Bishop of Ottoman Salonica and was recognized as a Verrian nobleman.⁵⁷

Cottunius was a patron of this new Greek identity not only on paper, but also in action. In 1653, Cottunius dedicated his *Two Books on Greek Epigrams* (*Hellenikon epigrammaton biblia duo*) to Louis XIV, who, in return, funded Cottunius's project to establish a Greek college in Padua. Louis's response was not simply a naive applause for Cottunius's rhetoric. He had political interests in the Ottoman Empire and aspired to become the protector of the Eastern Churches. Patronizing Cottunius's college gave Louis an alternative way to address the Greek Orthodox Church, one that did not require support from the papacy.⁵⁸

The Cottunian College admitted only poor students from the east and provided a very intense cultural bonding experience. The students, eight to ten in number, had

⁵⁷Kaya, "Some Findings." *Icones graecorum sapientium amplissimo et excellentissimo D.D. Ioanni Cottunio Equiti dicatae*. Padua: apud Mattheum Bolzettam de Cadorinis, 1648; [n.p.]

⁵⁸Nicholas Dew. *Orientalism in Louis XIV's France*. Oxford: Oxford UP, 2009; 1-40.

to wear clothing that reflected the particular region they came from. They dined together with the professors, presumably on regional dishes, and were expected to act “in a Greek manner” at all times. Needless to say, the students observed Orthodox holidays and received a rigorous education in ancient Greek language and literature. Before his death in 1657, Cottunius had become the official protector of all Greek students at the University of Padua.⁵⁹

Gentrification of Aristotelian Philosophy

Cottunius’s legacy remained strong for about a decade after his death, before the Ottoman siege of Candia in 1666 brought his Paduan interpretation of Greekness to an abrupt end. The island surrendered in 1669. Even before then, however, the gates of Italy were slowly shutting to Ottoman Greeks. In 1666, Alexander Mavrocordato, the head of the Patriarchal Academy in Istanbul, hastily dispatched a letter to Leo Allatios asking to purchase a philosophical library for the Patriarchal Academy.⁶⁰ In 1668, the rector of the College of St. Athanasius declared that the school would no longer admit Ottoman students.⁶¹ Around the same time, the Venetian Senate took over the administration of the Cottunian College from the Greek community.⁶² By 1670, Ottoman Greeks families who could not pay for a diploma from Padua had very few options to get their sons educated in Italy. It fell to the Patriarchal Academy to play a central role in Greek education. In the late seventeenth century, many small Greek schools began to appear in Athens, Ioannina and Bucharest. Of course, Padua continued to receive students from Ottoman lands, but the new generation came almost exclusively from wealthy families.

The Ottoman conquest of Crete had brought the Papal and Venetian interest in cultivating good relations with the Greeks to an abrupt end.⁶³ While Ottoman students in the early part of the seventeenth century were poor students who sought to elevate their social status with the help of an education, the new students were either already

⁵⁹Niccolo Comneno-Papadopoli. *Historia gymnasii patavini post ea, quae hactenus de illo scripta sunt, ad haec nostra tempora plenius, & emendatius deducta. Cum actuario de claris professoribus tum alumnis eiusdem*. 2 vols. Venice: Apud Sebastianum Coleti, 1726; vol. 1 pp.37-8.

⁶⁰Podskalsky, *Griechische Theologie*, p.263

⁶¹Fyrigos, *Collegio greco*, p.158.

⁶²Comneno-Papadopoli, *Historia gymnasii Patavini*, p.38.

⁶³Greene, *Shared World*, p.205

wealthy or they were attached to a wealthy Greek household. Hence, receiving a degree from Padua after the Ottoman conquest of Crete had quite a different meaning than it did during Cottunius's lifetime. Many of Padua's later graduates came from noble Byzantine families, while a handful of others received patronage from the Sultan's Greek vassals. University training was a sign of political power and the new Cottunian identity took on a different meaning in its new, gentrified setting.

Orthodox students turned to local patrons and institutions for education either in the Ottoman Empire or in Padua. An important figure who mobilized the Ottoman Greeks to create these patronage networks and local educational institutions was Alexander Mavrocordato (1636-1709). He was the son of a wealthy merchant from the island of Chios. Like many of his contemporaries seeking a university education, he first enrolled at St. Athanasius, and soon after left that college to spend a year at the University of Bologna. After several years, he moved to Padua. He was probably one of the last Greek students to hear Cottunius lecture.⁶⁴ In 1663, he travelled from Venice to Istanbul to teach at the Patriarchal Academy.⁶⁵ We do not know the texts that he taught, but it is almost certain that Cottunius's works were involved.

In 1673, Mehmed IV offered Mavrocordato the position of Chief Dragoman (a variant of Tarjuman, the Arabic word for translator). Panagiotis Nicousios (1613-1673), the former Chief Dragoman, was also a graduate of Padua, and was an important patron for Greek-speaking Ottoman scholars such as Hezarfenn Hüseyin Çelebi. His death had left the position vacant, and Mavrocordato's appointment marked the beginning of a palace tradition that would last more than a century.

The Chief Dragoman functioned somewhat like the Ottoman secretary of state rather than an ordinary translator. Throughout the eighteenth century, university-trained Greeks occupied this office. As they knew Turkish as well as Latin, they could easily mediate between the sultan and the European missions. As the European ambassadors required similar services, they also tended to employ Ottoman Greeks as their interpreters. Consequently, much seventeenth- and early eighteenth century diplomatic

⁶⁴Demetrius Procopius, "Succincta eruditorum graecorum superioris & praesentis saeculi recensio" in Johannes Albertus Fabricius. *Bibliothecae Graecae*. vol. 11. Hamburg: Theodorus Felginer, 1722; pp.774-6.

⁶⁵Camariano-Cioran, *Academies*, p. 152

negotiation in Istanbul was a dialogue between Greeks and other Greeks speaking on behalf of different monarchs.

Mavrocordato's influence grew over the four decades that he served as the Chief Dragoman. He headed the Ottoman diplomatic corps during the tough negotiations at the Treaty of Carlowitz (1699), which cost the Ottomans Podolia, much of Hungary as well as Morea.⁶⁶ During his years in sultanic service, he also became an important figurehead for Ottoman Christians. He represented the interests of his fellow Greek merchants, who for the most part resided in the Phanar district of Istanbul. He was central in the politics of the Orthodox Church and exerted considerable influence in the election of patriarchs.⁶⁷

However, Mavrocordato was not merely a solitary Greek at the top echelons of Ottoman power. Ahmed's mother, Gülnuş Sultan, was from Crete. She was enslaved as a young girl and was sent to the imperial Harem at the age of 25, where she converted to Islam and received a palace education.⁶⁸ Another important palace official with Paduan credentials was Nuh b. Abdülmennan (d.1715). A Cretan by birth, he had served as the Chief Physician to Mustafa II and Ahmed III.⁶⁹ While his rank in Ottoman protocol placed him just one step below the Sheik al-Islam, he also had exclusive access to the Sultan. Abdullah(?-1743), who served as the Sheik al-Islam between 1718 and 1730, the highest religious and judicial authority in the Empire, hailed from the Greek town of Larissa. Esad himself was born and raised in the Greek town of Ioannina, which had been a center of Orthodox education from 1660 onwards.

The Greek merchants of Phanar served as financiers to the sultan and to other elite Muslim households, which brought them within close proximity to Ottoman political power. Because Crete occupied a central role in Venetian trade in the eastern Mediterranean, the change in political custody meant a cultural and economic readjustment for the Cretans. Following the island's conquest in 1669, many of the wealthier

⁶⁶Bedrettin Tuncel, "L'age des drogman" *Revue des Études Sud-Est Européennes*, XII/2, 1974: 221-242.

⁶⁷See for a critical view of the "secularization" of the Orthodox Church under the Mavrocordato family: Theodore H. Papadopoulos. *Greek Church and People Under Turkish Domination*. Aldershot: Ashgate, 1990.

⁶⁸Lucienne Thys-Şenocak. *Ottoman Women Builders*. Aldershot: Ashgate, 2007; p.46

⁶⁹Bayat, *Hekimbaşılık*, pp.34-8.

Greek inhabitants of the island converted to Islam.⁷⁰ Conversion saved their land and property from confiscation, and lightened their tax burdens. Furthermore, because political power now lay in the hands of the Ottoman Sultan rather than the Doge of Venice, it was simply prudent for families to find a way into the palace in Istanbul. One sure way to achieve this standing was to secure positions for their Paduan-educated sons as palace physicians or interpreters.⁷¹

Thus, it is no accident that over the last decades of the seventeenth century, Greek physicians from Crete flocked to the Ottoman medical marketplace. The emergence of Ottoman medical humanism in the 1670s and 80s, was at least in part a sign of Paduan sensibilities among the doctors. And finally, the presence of bilingual or polyglot medical compendia (Greek, Turkish, Arabic, Persian and Latin) testified to the intense interactions between Greek and Turkish physicians as well as to the rise of a new Ottoman figure, the philosopher-physician.

Aristotle at the Ottoman Court

Esad's translation of Cottunius represented the philosophy of the elite. The ranks of Greek neo-Aristotelians thickened at the court during the first decade of Ahmed III's reign. Alexander Mavrocordato was both the most senior and most famous of the group, but Chrisanthos Notaras, the Orthodox Patriarch of Jerusalem, Ömer el-Izniki, Nuh's successor, the Head Astronomer Mehmed Çelebi, the historian Naima, another Mehmed Çelebi who would serve as the Ottoman ambassador to the Versailles in 1721, were all committed Aristotelians.⁷² Indeed, first-person accounts of elite gatherings from 1700s

⁷⁰Bruce Masters, "Christians in a Changing World," in *The Cambridge History of Turkey*, vol 3: *The Later Ottoman Empire*. Suraiya Faroqhi, ed. Cambridge: Cambridge UP, 2006: pp.272-280.

⁷¹For an overview of the literature on Padua, see Cynthia Klestinec, "Medical Education in Padua: Students, Faculty and Facilities," *Medical Excellence? Medical Travel and Education in Europe, 1500-1789*. Ole Peter Grell, Andrew Cunningham and Jon Arrizabalaga, eds. Aldershot: Ashgate, 2010; pp. 193-220. For Greek students at Padua, see Kostantaras, *Infamy and Revolt*, pp. 40-1. For detailed biographies of illustrious Greek graduates of the university, see Comneno-Papadopoli, *Historia gymnasii Patavini*, vol.1, pp.317-40.

⁷²On Mehmed Çelebi the ambassador, see Topkapi Palace MS Treasury 424, 1v-3r; on Mehmed Çelebi the astronomer, see Emile Legrand. *Bibliothèque Grecque Vulgaire*, vol 4: *Epistolaire Grec (ou recueil de lettres adressées pour la plupart à Chrysanthos Notaras)* Paris: Maisonneuve, 1888; p. 117; on Izniki, see Sarı and Zülfiyar, "Paracelsian Influence," pp.158-9; on Notaras see, Germaine Aujac, "Chrysanthos Notaras et les systèmes du monde," *Pallas*, 59, 2002: 75-88.

and 1710s suggest that philosophy was the centerpiece of polite conversation.⁷³

Esad was a client of the Mavrocordato family and of Chrisanthos Notaras.⁷⁴ His general preoccupation with uniting the two well-established learned languages attests to his dual role: an *‘ālim* on the one hand, a client of the elite Greek households on the other. While Notaras taught Ptolemaic astronomy and geography to Mavrocordato’s son Nicholas, Esad was responsible for their knowledge of philosophy, history, Turkish and Arabic.⁷⁵ He had spent most of his professional career as a professor and as an Islamic judge, but his written work comprised mainly glossaries and dictionaries to make Arabic and Greek philosophical vocabularies accessible to one another.⁷⁶

While Esad was a singularly successful scholar, his aspirations were not unique, at least when we place him against his proper, Greek setting. During the early 1700s, intellectual exchange between the Orthodox and the Muslims had reached such a level of maturity that many erudite Ottoman Greeks had a command of Arabic, Persian, and Latin.⁷⁷ Hezarfenn Hüseyin, a Greek-speaking Muslim from Chios, was the first Ottoman scholar to use Byzantine sources in his history of Istanbul. One of Ahmed’s astrologers, Ahmed Dede had served as the Judge of Athens for over forty years until he wrote a history of the city, *The History of the City of Philosophers*. He used Thucydides, Plutarch, Polybius alongside modern Greek sources. Nicholas Mavrocordato, Esad’s student, penned a dialogue called *Parerga Philotheou* (Leisure Hours of Philotheos), where he praised this new culture of learning:

Greece is no longer completely dispossessed of learned men and books; she at least guard the relics of her ancient grandeur. Over the years, excellent scholars in all fields have returned from the illustrious academies of Rome and Padua. They enrich their nation in both foreign knowledge and Greek philosophy. Especially now, some among them read the writings of Ancient Greeks (Hellenes), and all that is worth reading in Latin, Arabic, Persian, Italian and French. They apply themselves to their studies and ceaselessly read day and night.⁷⁸

⁷³Paul Lucas. *Voyage du Sieur Paul Lucas, fait par ordre du Roi, dans La Grece, L’Asie Mineure, Macedonie et l’Afrique*. 2 vols. Amsterdam: aux dépens de la Compagnie, 1724; vol. 1, [Preface] and in passim.

⁷⁴Legrand, *Bibliothèque Grecque Vulgaire*, p.237.

⁷⁵Podskalsky, *Griechische Theologie*; pp.270-321

⁷⁶Fazlıoğlu “As’ad al-Yanyawi”

⁷⁷Demetrius Procopius, “Succincta eruditorum graecorum,” in passim.

⁷⁸Mavrocordato, *Loisirs*, pp.116-7.

Yet, until 1718, this specifically Ottoman Greek culture of erudition had remained a private pursuit and did not crystallize into a policy of patronage that might have integrated, consolidated or perpetuated the Greaco-Turkish intellectual engagement at the court. The Ottoman-Venetian war that ended with the Treaty of Passarowitz (1718) was an important turning point for Ottoman learning. Between 1714 and 1716, the Ottoman navy fought successfully against the Venetians and recovered Morea, which they had recently lost, and conquered practically every Venetian stronghold in the Aegean. After 1718, being Greek practically meant living under Ottoman rule.

Soon after the Treaty, the Ottoman court moved to consolidate its power over the Greek populations. The best way to do this was through the patriarchate: The Sultan helped Patriarch Jeremias III seize control over the various independent Orthodox communities and to suppress the Patriarchate of Muscovy. In 1721, Sheik al-Islam Abdullah of Larissa passed a judicial verdict that placed Christians on equal confessional footing with the Muslims.⁷⁹ In 1722, Ahmed III issued another edict that prevented Jesuit missionary activity among Greeks and Armenians.⁸⁰ In 1723, he handed control of the Holy Sepulcher to Chrisanthos Notaras, who was all too happy to oust the Dominicans not only from the church but from the city of Jerusalem as well. By 1724, the Ottoman Empire was as Orthodox as it was Muslim.

Translating Cottunius

In the hubris following Passarowitz in 1718, Ahmed III ordered that a library be built in the palace. We do not know much about the contents of the library, but we do know that Esad became its librarian once the construction was completed in 1719.⁸¹ During the 1720s, Ahmed patronized Arabic translations of Cottunius's *Expositio universai logices* as well as the *Commentarii*.⁸² He gave permanent tax exemptions to two Greek subjects for partaking in the translation, while Esad moved up the scholarly pay

⁷⁹Yenişehirli Abdullah Efendi. *Behçetü'l-Feṭavā*. Istanbul: Matbaa-yı Amire, 1872; p.5

⁸⁰Frazee, *Catholics and Sultans*, p.156.

⁸¹Fazlıoğlu, "As'ad al-Yanyawi"

⁸²The alleged source is Johannes Cottunius, *Expositio universai Logices Auctore Jo. Cottunio...* Padua: Bolzetta, 1651. The copies of Esad's are housed in Süleymaniye Library, Ayasofya MS 2568, Hamidiye MS 803, Esad Efendi MS 1939, Ragıp Paşa MS 881; Nuruosmaniye Library MS 2655; Topkapı Palace Library MS 6895. See Sarıkavak, p.34.

scale in 1725, reaching the same rank as the Judge of Galata, a very prestigious position in the Ottoman judicial career. One of the Greeks who received a tax exemption was the librarian of the Patriarchate, but I have been unable to find anything on the other. Translating Cottunius into Arabic was clearly very important to the court.⁸³

There was more than a measure of harmony between the needs and sensibilities of Ottoman Greek scholars and Cottunius's philosophy. The air of sociability that Cottunius had imparted to philosophy, was clearly valued by the polite Aristotelians who pervaded the palace. The text itself was neither particularly religious in nature nor was it impious, which meant that it could accommodate a Muslim as well as a Christian audience. Cottunius was a Macedonian and had argued that there was an important connection between the land and the philosophy that emerged from it. Since Macedonia was Ottoman territory, it only made sense that the Stagirite, who was responsible for honing Alexander the Great's strong character, would serve the same function for contemporary Ottomans as well as the Sultan.⁸⁴ Ahmed was regulating the marketplace to exclude chemical practitioners, who were among the chief targets of Cottunius's *Physics*. Cottunius's approach to Aristotle seemed tailor-made to Ottoman problems, but why would it have been seen so important to translate his work rather than to produce an indigenous Cottunian work?

Developments in 1725 and 1726 shed some light on possible court objectives. One of Ahmed's goals was to unite Orthodox and Islamic learning by creating a common intellectual framework; another was to defend Greek Aristotelianism, which had already become philosophical orthodoxy among the Ottoman elite. What then happened at the Patriarchal Academy reflected these initiatives. Methodios Anthrakites (1660-1736), professor of philosophy at the academy as well as a Cartesian sympathizer, was excommunicated and exiled to Ioannina in 1725.⁸⁵ Jacob Manas (fl.1720) assumed Anthrakites's position, because, not incidentally, he was a student of Alexander Mavrocordato and a follower of Cottunius.⁸⁶

In 1726, Ibrahim Müteferrika (d.1747), an ex-Socinian who was employed in

⁸³Kaya, "Some findings," Procopius, "Succincta eruditorum graecorum," p.797

⁸⁴Hacı Beşir Ağa 414, 4v.

⁸⁵Borje Knös. *Histoire de la littérature néo-grecque*. Stockholm: Almqvist, 1962; pp.473-5

⁸⁶Procopius, "Succincta eruditorum graecorum," p.798.

the Ottoman diplomatic corps and who was running a cartographic workshop in the city, proposed that a printing press be set up in the capital, one that would expressly cater to the medrese students. Suffice it to say that Ahmed III approved the plan, and Sheik al-Islam Abdullah of Larissa agreed that establishing a printing press that specialized in dictionaries as well as books on logic, philosophy, astronomy, geography and history was legally admissible. The edict appointed four censors who would oversee the press and Esad was one of them.

One of the remaining copies of Esad's translation of Cottunius's *Logic* gives us a clue about the purpose of the translations. In the introduction, Esad claimed that the work was meant for the students of Sahn-ı Seman (Medrese of the Eight Courtyards). With more than a thousand students, it was by far the largest medrese in Istanbul.⁸⁷ Sultanic intervention in the curriculum of elite medreses was not unknown, but, as a general rule, the professors had freedom when it came to the selection of texts. Issuing a newly-written textbook from the palace was unusual. There are plenty of editorial remarks on the copy, mostly scratches marked as *fi al-kharij* (meaning cross out). When we view these editorial remarks in the context of the Sultan's plans to establish a press, it seems highly likely that this copy was headed for print.

Ibrahim Müteferrika's astronomy manual is likely another example of the books headed for the press. It presented the various ancient and modern astronomical systems but ultimately viewed Ptolemaic astronomy as the best and the most compatible with Aristotelian natural philosophy – a view that Chrisanthos Notaras had expressed in his astronomy manual, which he wrote around the same time.⁸⁸ In short, the goal of Esad's translation of Cottunius's physics was probably aimed to align the curricula of the Patriarchal Academy and Sahn-ı Seman along the same lines and with the same Aristotelian texts.

Contrary to the claims of previous scholarship on Esad's *Physics*, the work was a literal translation. Esad's main contribution, aside from the difficult task of working through a 700-page technical commentary, was the short dedication. There was not even a translator's introduction. The work was addressed to Sultan Ahmed III, his Grand Vizier Ibrahim Paşa and to the Sheik al-Islam Abdullah Efendi. According to

⁸⁷Ayasofya MS 2569, 1r

⁸⁸MS Askeri Müze 1456.

Esad, Aristotle was a philosopher on which all monarchs, east and west, unanimously agreed (1v). He later reinforced this statement with further praises for Aristotle, whom Cottunius represented as the best philosopher of the greatest empire in the world. (4v)

Table 2: Cottunius-Esad Correspondence

Sections	<i>Commentarii</i>	MS Hacı Beşir Ağa 414
1. De Utilitate philosophiae naturalis et de ipso Aristotele	p.1	2v
1.1 De Utilitate philosophiae naturalis	p.2	3r
1.2 Iudicium de ingenio Aristotelis Stagiratae, utrum ne fuerit omnium mortalium maximum et quae ratione	p.6	4v
1.2.1 Quam sit ardua proposita disceptatio; et de ortu ac educatione Aristotelis	p.6	4v
1.2.2 Argumenta, quod Aristotelis ingenium fuerit omnium maximum, et summum	p.7	not translated
1.2.3 Argumenta pro contraria parte, quod videl. ingenium Aristotelis non fuerit maximum: quinvero vix mediocre	p.9	not translated
1.2.4 Auctoris sententia de ingenio Aristotelis Stagiratae	p.13	5v
1.2.5 Depelluntur duo priora argumenta in sect. tertia contra magnitudinem ingenii Aristotelis confecta	p.13	summarized

Table 2 – continued from previous page

Sections	<i>Commentarii</i>	MS Hacı Beşir Ağa 414
1.2.6 Expenditur tertium argumentum eiusdem tertiae sect. depromptum ex Aristotelis balbutie, oculis, cruribus, habitu et progressu in philosophia	p.20	summarized under previous section
2. Utrum de rebus naturalibus scientia habeatur; Et qualis sit	p.25	7r
2.1 Varia veterum philosophorum placita de scientia naturali. Et argumenta, quod philosophia naturalis non sit scientia	p.25	7r
2.2 De rebus naturalibus verè habetur scientia, ac proinde Philosophia naturalis syncerè, ac propriè est scientia.	p.26	7v
2.3 Philosophia naturalis est scientia speculativa et non practica	p.27	8r
2.4 Diluuntur argumenta initio quaestioni proposita	p.29	9r
3. De objecto philosophiae naturalis	p.30	9v
3.1 Nomina et conditiones obiecti	p.30	9v
3.2 Referuntur octo diversa sententiae de objecto philosophiae naturalis et confutantur tres minus probabiles	p.31	10r
3.3 Expenduntur quinque priores sententiae et eliguntur duae, veluti caeteris probabiliores	p.34	11v

Table 2 – continued from previous page

Sections	<i>Commentarii</i>	MS Hacı Beşir Ağa 414
3.4 Propria auctoris opinio de subiecto naturalis philosophiae et dubia aliqua depulsa	p.36	13r
4. Cur octo libri phisicorum inscribantur de phisico auditu, seu de phisica auscultatione	p.38	14r
Consuetudo Aristotelis in exordiando et Textura omnium octo librorum de phisico auditu	p.41	15v
COMMENTARY BEGINS	p.44	17r

However, Esad's preference for Cottunius's *Physics* displays subtle differences between the autograph copy and the presentation copy. In the autograph, Esad's stated goal was to unite Islamic and Greek (Yunani) learning. He later replaced this with the broader claim that, at different moments in the past, Aristotle had been exceptionally well received. His works had served as a royal philosophy in Sassanid Iran, Rome and Abbasid Baghdad. Cottunius's book was a contemporary commentary on the natural philosophy of Aristotle, while most books and commentaries that dealt with this science were based on Avicenna's philosophy and dealt almost exclusively with minutiae, which such commentators engaged in out of piety and in expectation of a spiritual reward(2r) Having thus set aside some seven centuries of Islamic theological and philosophical literature, Esad proceeded to his translation.

Esad argued that it was utility and not authority that made natural philosophy a worthwhile pursuit. Midway into his preface, Esad echoed Cottunius in claiming that natural philosophy was not a practical but a theoretical science that produced certain knowledge about nature. However, the certainty of natural philosophy was a direct result of its disciplinary purity: philosophy not about knowing fate or drawing out the spirits residing in objects. Natural philosophy was the pious science of bodily motions

and was beneficial both to religion and the ruler.

The translation occupied a middle ground between Islamic theology and experimental philosophy. While the text served to liberate Esad's contemporaries from Islamic tradition, it also enabled the Ottoman cognoscenti to bound off legitimate from illegitimate natural philosophy. There are two further contexts relevant to explaining Esad's effort: Foremost, there was the clear recognition of the Greek cultural and intellectual presence in Istanbul and in the palace itself. Esad presented Aristotelian natural philosophy as conterminous with philosophy itself and, hence, in clear conflict with the theologians' metaphysical reading of Aristotelian thought. Esad's was a pious philosophy that emphasized continuity and the harmony of the old with the new. It created a space where philosophy could be pursued as a limited but independent discipline. It is still impossible to say precisely what role the translations played in the Ottoman intellectual landscape because, ultimately, they did not make it to print. Because of popular opposition, the printing press project that the court had conceived in 1726 never came to pass and was replaced by a different one in 1729. Thus, although Esad trained a number of influential students, the Arabic Cottunius would have relatively limited circulation outside of court circles.

Chapter 6

The End of Aristotelianism: Upright Experience and the Printing Press

Knowledge and Social Order

This final and closing chapter serves to investigate the mechanisms that put an end to the conflict between court philosophers and the physicians. The process that culminated with the establishment of the press created a new discursive space that appealed to the gentry as well as the physicians seeking access to public discourse. The same process also weaved together a quarter century philosophical debate.

All of the texts that I treated so far served to increase Ottoman scholars' exposure to works they could not otherwise access. While the Paracelsian medical compendia addressed the community of Turkish-speaking physicians, Esad's translations were headed for the *medreses*. The authors viewed their translations as a means to render knowledge accessible to a readership that did not have the privilege of knowing Latin, Greek, Persian or Arabic. However, access to knowledge, an idea that we today hold to be unequivocally positive proved to be a problematic notion when the Sultan decided to establish a printing press in 1726.¹ Since education was the primary facilitator of social mobility for the poor, access to books and access to the elite rungs of Ottoman society were connected. What motivated the press was a desire to enhance social mobility.

¹Ahmed's edict is printed in *Tercemetü's-Şihāhü'l-Cevheri*. 2 vols. Istanbul: Royal Printing Press, 1729; n.p.

Table 3: Editions of the Ottoman Printing Press

January 1729	<i>Tercemetü's-Şihāhü'l-Cevheri</i> . Mehmed b. Mustafa el-Vānī (fl. 1710). The Translation of the Truths of Cevheri
May 1729	<i>Tühfetü'l-kibār fī eṣfāri'l-bihār</i> . Katip Çelebi (1609-1657) A Gift to the Lords regarding Ottoman Naval Campaigns.
August 1729	<i>Tārīḥ-i seyyāh der beyān-i zuhūr-i Agvāniyān ve sebeb-i inhidām-i binā'-i devlet-i şāhān-ı Safeviyān</i> . Judasz Tadeusz Krusiński (1675-1756). On the Recent Revolutions in Persia.
March 1730	<i>Tārīḥ-i Hind-i Garbī</i> . Anonymous. History of the West Indies.
May 1730	<i>Tārīḥ-i Tīmūr</i> . Nazmizade Hüseyin Mustafa (d.1722?). History of Tamerlane.
June 1730	<i>Tārīḥ-i Mısrü'l-cedīd ve'l-kadīm</i> . Süheyli (fl. 1580) History of Ancient and Modern Egypt.
August 1730	<i>Gülşen-i Hulefā</i> . Nazmizade Hüseyin Mustafa (d.1722?). Rose Garden of the Caliphs[History of Baghdad].
1730	<i>Grammaire turque, ou méthode courte et facile pour apprendre la langue turque</i> . Jean-Baptiste Holdermann (1694-1730) Turkish Grammar.
February 1732	<i>Uşūlü'l-ḥikem fī nizāmü'l-ümem</i> . Ibrahim Müteferrika. The methods of ruling in [various] social orders. [A short tract on the various types of political rule and military tactics, later translated into French as <i>Traité de Tactique</i> .]
February 1732	<i>Füyūdāt-ı Mıknatısiyye</i> . Ibrahim Müteferrika. Magnetic Effluvia.
July 1732	<i>Cihānnümā</i> . Katip Çelebi. Cosmorama.
June 1733	<i>Takvimü't-Tevārīḥ</i> . Katip Çelebi. Chronology of Histories.
June 1734	<i>Tārīḥ-i Nāimā</i> . Mustafa Naima (d.1718) History of Naima. [A recently finished Ottoman chronicle.]

When Ahmed finally implemented his plan in 1729, he became the founder of

the first Muslim and Turkish press. There were other presses in Istanbul at the time, but they neither published in Turkish nor addressed a Muslim audience. European presses had experimented with Arabic prints, but the results were poor: while the sixteenth century Medici edition of Tusi's *Commentary on Euclid's Elements* and seventeenth century prints of Avicenna's *Canon of Medicine* were widely available in Istanbul, they seemed to contain many errors. The books were easily accessible but they were not reliable.

In contrast, Arabic and Turkish manuscripts, when properly copied, were very reliable, but were very few in number and their numbers diminished still due to "wars and fires." Manuscripts also tended to get lost over time. Two examples that Ahmed singled out were the Mongol raids on Arabia and Persia, and the European conquest of Andalusia, both of which had destroyed many valuable works. Reliable books were a "source of inspiration" for students and, without good books one did not even feel the desire to learn.

Thus, Ahmed's edict diagnosed a particular problem. The books available to Ottoman readers were either reliable or edifying, but not both. Good books of any kind were in short supply in the world of Islam. Ahmed commended the efforts of the *ulemā*, who were responsible for the propagation of the Koran and who had done much to preserve the religious sciences, but found their efforts to be insufficient when it came to secular scholarship. New commentaries on and copies of classical texts were not as reliable as the old ones because the readers were no longer attentive. Ahmed avoided, at least in rhetoric, to mention the content of *medrese* books. He simply claimed, without offering additional justification, that printing philosophy books would be beneficial to the Muslims.

The edict claimed that printing was the sultan's prerogative, "like minting money or impressing the paper with a signet ring." Ahmed had done much to improve empire's economy by stabilizing the value of the *kuruş* by confiscating counterfeit coins, by offering work to the unemployed, and by rigorously inspecting the quality of food and supplies in Istanbul's shops. Metaphorically, he was now turning to weed out counterfeit and low quality knowledge. The press was at once more and less than just preserving Islamic classics. It served to valorize new learning.

The man who would become the primary agent of the Sultan's new enterprise was Ibrahim Müteferrika (d.1747). He was a Socinian from the Hungarian town of Cluj who had converted to Islam. Fausto Sozzini was the founder of Socinianism, a fifteenth-century religious movement that gained popularity in Poland and Transylvania, had rejected the idea that there was the Holy Trinity. A few narrative sources also identify Müteferrika as a monk, which makes it quite likely that he had not grown up as a Socinian, but was an ex-Catholic. He belonged to a demographic that was similar to many other European thinkers of Jonathan Israel's "radical enlightenment".

His earliest known work was *Risale-i Islamiyye*, dated to about 1710, which sought to show that true Christianity was closer to Islam than it was to Trinitarianism.² Ahmed came to consider him to be a loyal courtier by 1716. On that year, Müteferrika was his personal envoy to Ferenc Rakoczy II, a Hungarian prince who had sought asylum and support from the Ottoman palace in order to organize an uprising in Habsburg Hungary.³

As a convert, Müteferrika had a unique perspective on Ottoman culture. He had not grown up as an Ottoman subject, but had nevertheless become a seasoned courtier over the years. He was exposed to both European printed books and Ottoman manuscripts. He framed his argument for establishing a press with a rare assessment of the virtues and vices of printing in the Islamic context: The printing technology, which had been so successful for European languages, had proven to be an utter failure with Arabic letters. Printing books in Arabic type did not simply pose a technological challenge, but also a scholarly one.

In 1726, Müteferrika presented a programmatic statement of the benefits of publishing books to the Sultan. His *Virtues of Printing* (*Vesiletü't-Tıbb'a*) opened with an autobiographical anecdote: When he had studied ancient history and know about the

²Socinianism and Islam were dangerously compatible in the European imagination. In fact, it was popular to see them as part of the same challenge to Christianity, which the phrase *Socinioturkismus* aptly captured. See Martin Mulsow, "Socinianism, Islam and the Radical Uses of Arabic Scholarship," *Al-Qantara*, XXXI/2, 2010: 549-586. It is quite possible that Dimitri Cantemir was responsible for inducting Müteferrika into the palace. Cantemir had sympathies towards unitarianism and was generally quite sympathetic towards Islam. The fact that Cantemir's Greek rendition of Andreas Wissowatius's anti-trinitarian ethical tract *Stimuli Virtuti* was later rendered into Arabic by the Athanasios III Dabbas, the Orthodox Patriarch of Antioch suggests that a philosophical anti-trinitarianism was perhaps a fairly popular view.

³Sabev, *Müteferrika*, pp. 78-100.

deeds of the “children of Adam,” he received very little in return for his hard work. The poor quality of the books was the culprit. He added:

At that point, I was suddenly inspired: Books are tools that societies and communities use to organize matters that are important to them. It was with these tools, deployed in the service of monarchies and governments (*mülk-ü-devlet*), that ancient states (*düvel-i müteahhirin*) became well-ordered (*niẓāmī*), strong, rational (*erbāb-ı ʿaql*) and judicious (*eshāb-ı rüṣd*). These tools also helped them perpetuate their faith. Even lawless men came to appreciate reason, merit and law with the help of the same tools. The ancients always made fine innovations (*ibdʿā*), literally novelties). Modern scholars are no more hesitant than the ancients in coming up with new rules and laws by which to organize empires and nations (*mülūk-ü-milel*). Writing has helped them preserve their histories and perpetuate their respective orders. It has helped them defend their faith and morals against falsehoods and corruption. It has served as a safeguard against catastrophes and poor memory. Writing has helped them maintain a correct record of their laws and social orders, as if they were set in stone. It has helped them acquire knowledge and produce ideas by means of debate (*müzakere*), and has facilitated innovation. If one studies these examples to learn about the merits of faiths and the virtues of states, then these books are like an emerald tablet and will surely exalt the state and order the nation (*millet*). Books will bring the community and the state to perfection; they will glorify the Empire by protecting and preserving the arts and the sciences (*fünūn-ü-ʿulūm*) until the Day of Judgment.⁴

The main problem Müteferrika identified with the state of Islamic books echoed Ahmed’s sentiments, but also interlinked printing with creating and preserving social, particularly religious order. Nebuchadnezzar had destroyed the Torah and carelessness of the Christians had destroyed the true Gospels. Muslims were able to preserve the word of God, but everything else – “histories, biographies, lexica and other important works” - had become scarce over time.⁵

He followed up on his inspired introduction with a scholastic enumeration of the benefits of the printing press. There were ten distinct positive consequences that the Sultan could expect to see from the proliferation of printed books. The first benefit

⁴*Cevheri*, n.p.

⁵Stefan Reichmuth, "Islamic Reformist Discourse in the Tulip Period (1718-30): Ibrahim Müteferrika and His Arguments for Printing." *International Congress on Learning and Education in the Ottoman World. Istanbul, 12-15 April 1999*. ed. Ali Çaksu. Istanbul: IRCICA, 2001; pp 149-161.

of the press was that printing helped religious (*ṣerʿī*) education by producing lexica as well as books on history, astronomy, logic, geography and affairs of state. Secondly, printing reinvigorated learning. Unlike manuscript commentaries, which the *ʿulemā* wrote and taught, the printed books would restore the splendor of the original, now available accurately and in great number “as if they had been written only recently.” A third benefit was the beautiful, accurate and durable volumes. The books would not only look good, but they would also be presented in the correct order and with accurate spelling. Printing also gave both rich and poor students access to books, hence saving the time otherwise “wasted” in copying and comparing manuscripts – a key occupation at the *medrese*. The fifth was the new level of access that editorial material could offer: Printed books came with summaries, indices and tables of content. A sixth benefit was universal access. Everyone could buy books and hence printing was a remedy for ignorance. The seventh benefit had to do with strengthening the Empire. Since printed books were easy to disseminate, towns and libraries would be filled with books. A natural consequence, Müteferrika contended, was that students would be better educated and townships would become more “orderly.” The eighth item on the list had to do with the glory of the Sultan: books would invigorate the Muslims, and they would feel gratitude towards Sultan. A ninth benefit had to do with international book trade: Europeans were interested in Islamic manuscripts and many of them had so far made handsome profits from trading in these books. The press would give the Muslims the upper hand in oriental book trade. The last benefit was to spread Islamic learning among the non-Arabs: Turks, Tartars, Turcomans, Kurds, Uzbeks, Chagatays, Hindis, Persians, Maghribis, Yemenis, Greeks, Ethiopians and Maghribis, who had converted to Islam at various points in history, needed access to Arabic books. Müteferrika’s treatise, however judicious and thorough it may have been, still relegated law, exegesis and *kelām* to manuscript transmission, hence to the *ʿulemā*.

Müteferrika and Ahmed identified the primary problem with the world of learning to be the scarcity of books, but there were others who believed that the real issue was the scarcity of teachers.⁶ Seventeenth and early eighteenth century Ottoman readers usually sought teachers, not books, when they wanted to study. This was especially true

⁶Reichmuth, "Bildungskanon und Bildungsreform"

for religious works, but was applicable to philosophy as well.

However, the limits of sultanic prerogative and of the intellectual domain of the press proved to be less clear cut than could be foreseen in 1726. At least philosophy and astronomy were nominally practiced by the *‘ulemā’*, while logic was a very popular occupation at the medreses, particularly in the Kurdish and Arabic territories. Hence, there was a boundary problem: Whose prerogative was it to disseminate these texts? In other words, who decided who could and could not enter the ranks of the *‘ulemā’*? Ahmed expressly stated his desire to print books for the *medrese* students, which meant that the press would effectively de-regulate the study of the disciplines that did not explicitly need oral transmission in the way Koran or exegesis did.

Philosophical and astronomical texts such as Esad’s translations were boundary objects in this controversy. They held different meanings for the court and the *‘ulemā’*. For Müteferrika, such translations reasonably belonged with the press. Ibrahim himself had written an astronomy manual with the intention of publishing it. Such books would be exactly the kind of work that could and should reach students in all corners of Islam. For Muhammed Saçaklızade, a Kurdish scholar writing in 1730, what the Sultan tried to achieve by translating European works into Turkish and Arabic was an un-Islamic way to address the scarcity of teachers. What needed to be done, he contended, was curricular reform that centralized the works of Islamic theology.⁷

Esad’s translation of European works destined expressly for *medrese* use disrupted the old order of texts that privileged commentaries on medieval works. While the court was careful to draw limits around just how much they would venture into *‘ulemā’* territory, they had clearly overestimated their reach when they proposed to establish a press that would publish works of philosophy, logic and astronomy, fields that belonged in the *medrese* curriculum.

The sultanic press thus posed a political challenge because access to knowledge also meant access to the learned profession. The one thing that scholarship has illustrated exceptionally well is that the *‘ulemā’* had practically become an aristocracy by the early eighteenth century. Family memberships and patronage networks, which the teaching practices supported, were key to acquiring positions. Having knowledge

⁷See Chapter 3

or expertise, on the other hand, was the sole means an outsider could resort to access power. Ahmed also instituted an official examination (*rü'us*) for those who aspired to top *‘ulemā* positions, which complemented the work of the press.⁸

Ultimately, the Sultan failed in his foray into traditional learning. While historians have extensively studied the Ottoman printing press since the nineteenth century, they have not offered an explanation for why the intentions for establishing a press in 1726 turned into effective action only in 1729 and why the end result turned out to be so different from the original expectations.⁹ There are a few vignettes that suggest that there was a negotiation process underway after 1727 between the palace and the *‘ulemā*, who had allied with the city’s professional scribes.

In one version of the story, which Selim Nüzhet Gerçek relates, the scribes headed by influential preachers halted the press.¹⁰ In another account, related by Johann Christian Kundmann (1684-1751), a physician from Breslau who had reliable contacts in Istanbul at the time, the reactionaries embarked on a ship with the equipment from the press, sailed out to the high seas and dumped their cargo so that it could never be recovered. On their return, they had asked the Sultan to swear off the very idea of establishing a press – something, Kundmann tells us, that the Sultan was willing to do.¹¹

It is nowadays popular among Ottoman historians to disregard such alleged upheavals as insignificant vignettes that reflect the Turkish Republican sentiment of the historians who choose to make reality out of the fanciful imaginations of partisan Ottoman chroniclers. What accounts for the dismissal of these vignettes is the overarching thesis attached to them: Namely, that Ottoman society was conservative and fanatical, and that they were hostile to all change, particularly when it came to Western-inspired

⁸Uzunçarşılı, *İlmiye Teşkilatı*; pp.50-2.

⁹Henri Omont, “Documents sur l’imprimerie à Constantinople au XVIIIe siècle,” *Revue des bibliothèques*, V, 1895:28-236. Henri Omont. “Nouveaux documents sur l’imprimerie a Constantinople au XVIIIe siècle,” *Revue des bibliothèques*, XXXIV, 1905:1-10. Franz Babinger. *Stambuler Buchwesen im 18. Jahrhundert*. Leipzig: Deutscher Verein für Buchwesen und Schrifttum, 1919. Niyazi Berkes, “İlk Türk Matbaası Kurucusunun Dini ve Fikri Kimliği,” *Belleten*, XXVI/104, 1962: 715-737. Tibor Halasi Kun, “İbrahim Müteferrika,” *İslam Ansiklopedisi*. Istanbul: MEB, 1988 [1950]; vol V., 896-900

¹⁰Selim Nüzhet Gerçek. *Türk Matbaacılığı: I. Müteferrika Matbaası*. Istanbul: Devlet Basımevi, 1939; p.7

¹¹Johann Christian Kundmann. *Rariora naturae et artis, item in re medica*. Breslau: bey Michael Hubert, 1737; p. 710.

innovations.¹² Yet, independent collaboration from Kundmann, a Lutheran physician who was in no way invested in the story, gives us pause. What if the story had some truth and what if there were more concrete motivations involved in the scribes' and the *ulemā*'s reaction the press?

Neither the scribes nor the *ulemā* needed to be Muslim zealots to wish to prevent the Sultan from printing books. In its nebulous state, print technology posed a potential risk to the livelihood of professional copyists and to the authority of the *medrese* professors. However, they might have also been suspicious that the press would sooner or later expand to print religious books. After all, the educated denizens of Istanbul had experience with printed books and they were not naively reacting to a new technology. They knew all too well what the press meant. All of the presses in Ottoman cities, while they were operated by and for non-Muslims, published predominantly religious books. That was, so to speak, the Ottoman publishing business. Consequently, from the scribes' perspective, the sultanic press that was in the works probably mean just that – an operation that published editions of the Koran or popular Islamic books such as Mehmed Birgivi's *Muhammedan Path* for a profit.

The first printing press in Istanbul was almost as old as Gutenberg's movable type. David Nahmias, a Ladino Jew who was among those who fled Spanish persecution, had established a Hebrew press in Istanbul as early as 1492. Another Hebrew press was established in Thessaloniki in 1512. Serbian Orthodox monks also set up printing presses, one in 1539 and the other, in 1544. Maronite monks had established Syriac printing press in Lebanon in 1610. There was also an Arabic press in Lebanon that was run by Congregation for the Propagation of Faith and began printed Arabic Bibles during 1670s. These were followed by a Greek printing press that operated out of Bucharest from 1678 onwards. The Glikis Press in Venice printed prayer books and catechisms for the Ottoman Greeks from the early eighteenth century onwards. The Melkite Church had its own press operating out of the Romanian town of Jassy, and had founded another press in Aleppo in 1734. The most recent press established in Istanbul was that of Rabbi Jonas, which had begun its operations in 1711. These presses were invariably engaged in printing devotional books, Bibles, Torahs and catechisms. Why would the

¹²Halil Inalcık. *The Ottoman Empire: The Classical Age, 1300-1600*. London: Weidenfeld & Nicholson, 1973; pp. 179-185

sultan act any differently?¹³

The *‘ulemā*’ also seemed uneasy about the prospects of the press. To appease their worries, the Sultan had appointed four censors from high-ranking religious scholars who had occupied prestigious teaching and judicial positions, and Esad of Ioannina was one of the four.¹⁴ The first edition of the press also included lengthy endorsements from well-known scholars. While we do not have any first hand accounts of the *‘ulemā*’s precise sentiments, it was common knowledge by 1727 that the palace was dabbling in European philosophy, something that seemed loathsome to some well-connected professors.¹⁵ Letting the palace publish books for students would prove detrimental to the *‘ulemā*’s control over the colleges and over the students’ reading practices, which were so essential to Islamic pedagogy.¹⁶ These must have been at the kernel of their worries, because the printing press, when it began its operations in 1729, had retracted its claims to printing textbooks for students completely and unconditionally.

The Original Project for the Press

By 1727, the palace was fully invested in establishing a printing press with a robust agenda to revitalize the secular elements in the Ottoman college curricula and to push the newfound interest in Aristotelianism not only in Istanbul but in all corners of the Empire.¹⁷ Müteferrika had already been anticipating Sultanic approval for some time. He had cultivated good relations with non-Muslim printers and artisans, such as

¹³On Arabic printing presses in the Ottoman Empire, see Wahid Gdoura. *Le Début de l'imprimerie arabe à Istanbul et en Syrie : évolution de l'environnement culturel: 1706-1787*. Tunis: ISD, 1985. On the Jewish printing presses, see Moritz Steinschneider, "Jüdische Typographie und Jüdischer Buchhandel" in *Allgemeine Encyclopädie der Wissenschaften und Künste*. 167 vols. Johann Samuel Ersch and Johann Gottfried Gruber, eds. Leipzig: Gleditsch, 1818-1889; Series II, vol. 28, pp. 21-94. On the Greek printing presses, see Victor Papacostea "Les origines de l'enseignement superieur en Valachie" *Revue des Études Sud-Est Européennes*, 1/1-2, 1963: 7-39. On the Greek press in Venice run by Chrisanthos Notaras, who was also very close to the Ottoman court, see Georg Veloudis. *Das griechische Druck- und Verlagshaus Glikis in Venedig (1670-1854): das griechische Buch zur Zeit der Türkenherrschaft*. Wiesbaden: Harrassowitz, 1974

¹⁴Gerald Duverdier. "Savary de Brèves et Ibrahim Müteferrika: Deux Drogmans Culturels a l'Origine de l'Imprimerie Turque," *Bulletin du Bibliophile*, 3, 1987: 322-359.

¹⁵El-Rouayheb. "The Myth of 'the Triumph of Fanaticism'," pp.204-5.

¹⁶See Jonathan Berkey. *The Transmission of Knowledge in Medieval Cairo*. Princeton: Princeton University Press, 1992.

¹⁷Orlin Sabev. *Ibrahim Müteferrika ya da İlk Osmanlı Matbaa Seriüveni (1726-1746)*. Istanbul: Yeditepe, 2006; p.149.

the enterprising printer Rabbi Jonas, and Mıgirdiç of Galata, an Armenian craftsman who could work wonders on the copperplate.¹⁸ He had begun printing maps of the Ottoman Empire on a small scale, which showed that the Ottoman printed books would be as beautiful and precise as he intended them to be. He also showed his talents as an intellectual in his own right when he wrote and prepared the galley proofs for his treatise comparing old and new astronomy. The book would have been a fine elementary textbook that would go along nicely with traditional Islamic mathematical astronomy and with Esad's translations. It came with nice visuals, presented the basic explanations of the Copernican, Tychonic and Ptolemaic systems, and concluded that the other two systems lacked any philosophical advantage over the Ptolemaic system.¹⁹ Müteferrika also placed Andreas Cellarius's drawings from *Atlas coelestis* (1660) in the relevant places in the book, which were, without doubt, waiting for their Turkish renditions from Mıgirdiç of Galata, who was to be responsible for each and every copperplate illustration that came out of the press.

The dictionary had cost Ahmed a small fortune, more money than what Muteferrika's sizeable estate was worth in 1747. The basis of the dictionary was a famous eleventh century Arabic lexicon. The entire text was corrected, collected and translated into Turkish by scholars under Muteferrika's supervision. The resulting work spread over two tomes and 1500 folio pages. It had, just as Muteferrika had promised in 1726, a table of contents and diligently prepared marginalia. The goal was to facilitate education in the Arabic language and hence to increase the students' access to a scholarly career.

However, aside from the dictionary, which had required substantial investment, none of the intended books ever made it to print. Esad's translations were not forthcoming, Ibrahim Müteferrika's clean copy of his astronomy book remained in Ahmed III's personal library and there were no other philosophy or logic books in the pipeline. After a delay of two years, the press began to print books that seemed to have nothing to do

¹⁸Sonja Brentjes, "Mapmaking in Ottoman Istanbul between 1650 and 1750: A Domain of Painters, Calligraphers or Cartographers?" in *Frontiers of Ottoman Studies*. 2 vols. Colin Imber, Keiko Kiyotaki and Rhoads Murphey, eds. London: I.B. Tauris, 2005; vol. 2, pp.125-156. Edvard Carleson. *Ibrahim Müterrika Basımevi ve Bastığı İlk Eserler*. ed. and trans. Mustafa Akbulut. Ankara: Türk Kütüphaneciler Derneği, 1979; pp.8-12.

¹⁹Ibrahim Müteferrika. *Mecmu'at-ı Hey'etü'l-İkdam ve el-Cedide*. MS Askeri Müze 1456, Istanbul.

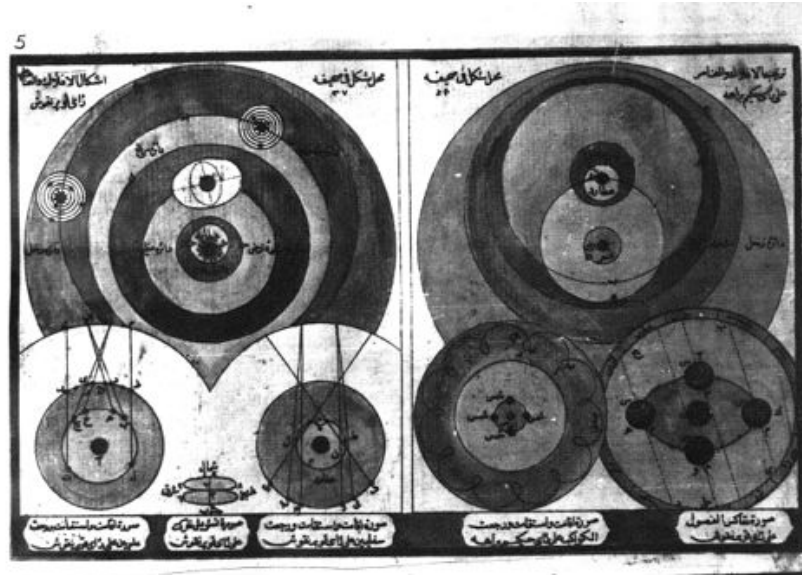


Figure 4: A hand-drawn illustration comparing the Copernican and Tychonic models for the universe from *Mecmu'at-ı Hey 'etü'l-Ḳadīme ve el-Cedīde*. At the top center, İbrahim Müteferrika gives instructions about the placement of the image in the printed version.

with the press's original agenda. Among these, one could also find an editorial introduction to Katip Çelebi's *Cihannümā* (Cosmorama, 1732) as well as two pamphlets that introduced Cartesian natural and political philosophies to an Ottoman readership. These writings, hitherto attributed to the printer Müteferrika himself, had in fact appeared, like two other volumes printed at the same press, without any authorial designation beyond a brief dedication indicating that the work had been prepared for the Sultan and the Grand Vizier.²⁰ How was it that the palace, once so enamored of Renaissance Aristotelianism, had come full circle in a few years time to publicize Cartesian thought, the most powerful opponent of Aristotelian philosophy in the European continent?

²⁰Müteferrika only claimed that he was responsible for the *taswīd* (galley proof) and *tabb'* (printing) of the books. See the 24r in *Füyūḍāt* (and 48v in *Nizāmü'l-Ümem*). The other two works that appeared without authors were Jean-Baptiste Holdermann's *Grammaire Turque* (1730) and Judasz Tadeusz Krusiński *Chronicon peregrinantis*, the Turkish translation of which appeared under the name *Tārīḥ-i seyyāh* (1730).

Experience and Experiment at the Ottoman Court

Mehmed Çelebi's 1721 embassy report on the Versailles shows that the court thought that Academie des Sciences and Academie des Belles Lettres played an important role in vivifying France's intellectual life. Ambassador Bonnac noted with great pleasure that the palace, in seeking to augment its power in the city, also began to show a distinct predilection for the French style in gardens.²¹ However, gardening and architecture were not the only feature of the French civilization the Ottomans sought to implement. It was ultimately French-style naturalistic pursuits that rekindled the press in the last days of 1728.

After Mehmed's visit to France, we also find the rise of other kinds of scholarly pursuits, which were quite different from Aristotelianism: informal gatherings where Damad Ibrahim refereed experiments, which he intended to turn into a full-fledged scientific academy. Kundmann, who had received the news from a friend in Istanbul, Johann Friedrich Bachstrom (1688-1742) recounted the story of the Ottoman naturalism as follows:²²

The late Grand Vizier was a peculiar lover of learning who had a complete mastery of the Latin language, since he had translated Julius Caesar, Curtius [Quintus Curtius Rufus, historian, author of *Historiae Alexandri Magni* – tr.] as well as Justinus [Marcus Junianus Justinus, historian, author of *Libri XLIV historiarum Philippicarum* –tr.], and incorporated the lives and deeds of Turkish Sultans (*Kayser*) [into his translations]. He held Mathematics in particularly high esteem. He often refereed (*referiren*) physical experiments (*experimenta physica*) and mathematical demonstrations from the French *Journal des Sçavans*. At the same time, he wondered if such a society could not be sustained in Istanbul. And, indeed, the Director [Mehmed Said Efendi, 28 Mehmed Celebi's son] had brought in a few learned Frenchmen, and also those Turks who were better acquainted with such studies.²³

Kundmann's account gives us a glimpse of insight into the intellectual environment of the palace. The paper trail the experimental society left behind is quite thin.

²¹Jean-Louis D'Usson de Bonnac, *Mémoire historique sur l'ambassade de France à Constantinople*. Paris: Leroux, 1894; pp.153-5

²²Kundmann and Bachstrom might have known one another through Thomasius, who taught them both. Bachstrom's bid to establish a medico-physical academy in Istanbul must have received by Kundmann with great enthusiasm, who reported on Turkish plague outbreaks month after month. Johann Graetzer. *Daniel Gohl und Christian Kundmann*. Breslau: Schottlaender, 1884; pp.24-5.

²³Kundmann, *Rariora naturae et artis*, pp.710-1.

This is only natural, given that these gatherings were about repeating the experiments recorded in *Journal des Sçavans* and in other European books rather than about performing new and original ones. However, circumstantial evidence, together with the evidence I present below makes a compelling case.

We know that Damad Ibrahim had a particular predilection for geometry and astronomy. In 1728, he also patronized small-scale training in engineering in Üsküdar, which Mehmed Said ran.²⁴ One of the last dispatches sent by Jean Louis D'Usson Marquis de Bonnac (1672-1738), French ambassador to the Ottoman court between 1713 and 1724, also included an order for three telescopes and two microscopes, which, Bonnac relates, Damad Ibrahim asked for.²⁵

The experimental pursuits were part and parcel of the broadly mathematical, geographical and historical interests of the court and would later become one of the causes behind the court's Cartesian convictions. Yet, it was in no way clear at the outset that a philosophical conversion of this sort would take place. Cartesianism seems to have won the minds of the courtiers only some time after they begun experimenting. After the disappointing failure of the press in 1727, an unexpected visitor, Johann Friedrich Bachstrom, seemed to be taking the court in an entirely different direction.

Bachstrom was one of the first graduates of Hermann August Francke's (1663-1727) Collegium Orientale in Halle. The goal of the college was to spread pietism among the Eastern Churches, and two professors of the college had a missionary excursion to Istanbul in 1703 to get to know the Orthodox Church and the sympathies of its prelates. Bachstrom's professors had failed to establish contact, mainly due to linguistic difficulties – they tried to speak in ancient Greek, but the Greek Bishop, who had granted them an audience only spoke the modern vernacular. Bachstrom's visit to Istanbul in 1728 broke a twenty five year hiatus in the college's missionary activities. His task was to translate key Pietist texts into Turkish and to spread Francke's ideas among not only the Orthodox Greeks, but also among the Muslims.²⁶

²⁴Aykut Kazancıgil, "Lale Devri'nde Bilim Hayatı," *İstanbul Armağanı 4: Lale Devri*. ed. Mustafa Armağan. İstanbul: Büyükşehir Belediyesi, 2000; pp.195-210.

²⁵Archives Ministère des Affaires Etrangères, Correspondance Politique, Turquie, vol.64, 99 r-v; cited in Mustafa Kaçar. "Osmanlı İmparatorluğu'nda Askeri Teknik Eğitimde Modernleşme Çalışmaları ve Mühendishanelerin Kuruluşu (1808'e kadar)," *Osmanlı Bilimi Araştırmaları*, II, 1998: 69-137.

²⁶Martin Kriebel, "Pietistische Halle und das orthodoxe Patriarchat von Konstantinopel, 1700-1730,"



Figure 5: Joseph André Jacques Aved's portrait of Mehmed Said Efendi (1742), Musée de Versailles

After having studied at Collegium Orientale and the University of Jena, Bachstrom spent some time in Leiden before settling in the Polish town of Toruń, where he was teaching at the local gymnasium. In 1724, the tensions between his school and the Jesuits escalated, and the Jesuit college was sacked by protestant students. August II (1670-1733), who had converted to Catholicism to assume the Polish-Lithuanian throne had to manage the event as a good Catholic would, and many professors and students of the gymnasium, including Bachstrom were condemned.²⁷

Bachstrom fled Toruń after the event and went back to Halle. Callenberg encouraged him to go to Istanbul as a pietist missionary.²⁸ Bachstrom had a distinct advantage over similarly motivated Europeans. He knew Turkish. His knowledge of Turkish, by all means a very rare talent for a European who had not been trained for and employed in diplomatic service, was a precious asset, which, when leveraged correctly, could help his missionary pursuits.

Bachstrom's exchanges with his friends in Halle show that his missionary pursuits took on a secondary role soon after his arrival. Given that the entirety of Bachstrom's religious works advocated tolerance, it is also dubitable that he had any explicitly missionary ambitions at all – perhaps, he was stuck between his own convictions and the expectations of his fellow pietists. At least part of the reason was Bachstrom's own approach to religion. He believed that the best way to inspire piety was to improve man's control over nature. In his *L'Art de nager*, he claimed that man was the highest animal and reached his true potential once he cultivated the physical skills that placed him above other animals. Swimming, clearly, was one of them. There was a tinge of pietism in this sentiment. Early Halle pietists like Georg Ernst Stahl also believed that the best Christian community was one where all the physical needs of its members were met – piety followed, almost naturally, from working for one's community.²⁹

The situation he found in Istanbul was also a reason why Bachstrom set aside his

Jahrbücher für Geschichte Osteuropas, 3/1, 1965: 50-70

²⁷Hermann Ullrich. "Johann Friedrich Bachstrom," *Euphoriion*, 16, 1909: 320-49; pp.321-3. Anon. *A faithful and exact narrative of the horrid tragedy; lately acted at Thorn, in Polish Prussia, by the contrivances and the instigation of the Jesuits*. London: n.p., 1725.

²⁸Ullrich, "Bachstrom," pp.321-3.

²⁹Joanna Geyer-Kordesch, "Georg Ernst Stahl's Radical Pietist Medicine and Its Influence on the German Enlightenment," in *The Medical Enlightenment of the Eighteenth Century*. eds. Andrew Cunningham and Roger French. Cambridge: Cambridge UP, 2006; pp.67-87.

missionary activities. Sultan Ahmed had fallen sick with smallpox and Damad Ibrahim seemed to be wavering in his desire to establish a printing press. The philosophers and the physicians were engaged in a debate about whether logic or experience was the true method of natural philosophy. Philosophers sought to cultivate virtue through the exercise of reason; and the advocates of physical chemistry insisted on the value of experience in producing effective remedies – but also physical theories. There seemed to be no middle road that could address both of the competing parties. Logic and experience did not go hand in hand, and virtue seemed to be diametrically opposed to expertise. Bachstrom was a physician with a medical degree from Leiden. He had substantial experience in printing, since he had operated a press in Thorn between 1719 and 1724. Soon before his arrival in Istanbul, he had published a short book outlining Newton's theory of gravitation, which clearly displayed that his interests had grown to include experimental natural philosophy. If he could gain access to the court, he would be ideally situated to help and eventually unite the two parties.

In a private letter written in 1742 to a later patron, Prince Michel Radziwiłł (1702-1762), the son of the Grand Chancellor of Lithuania, Bachstrom claimed that he belonged to the well-respected Köprülü family, whose various members had served as Ottoman Grand Viziers throughout the seventeenth century. Bachstrom contended that Thököly Imre (1657-1705), the Prince of Transylvania, had rescued his mother, one of Kara Mustafa Paşa's (1632-1683) daughters, when she was captured during the failed siege of Vienna in 1683. He claimed that he was able to approach the palace with these credentials, and he was well-positioned to play a key role in the establishment of the press and in the would-be academy.³⁰

His first contact in Istanbul was Johannes Mavrocordato, who was serving as the Grand Dragoman in 1728. He gained access to the palace as a physician, where he met Mehmed Said, who was a court philosopher and the curator of the Ottoman printing press. The only account that claims that the two had met at the court was from another doctor, Johann Christian Kundmann. Kundmann met Bachstrom as a fellow chemist at

³⁰“Ma mere etoit de la Nation Turque, elle fut prise en siege de Vienne, mais comme le Comte Emeric Tökeli rescut que cette person étoit fille du Grand Vizier Kiuperli [Köprülü], il la racheta, voulant par là faire un service très grand à une famille assez célèbre parmi les Turcs.; le Comte avoit déjà épousé ma grande mère Veuve du François I. Ragozzi, qui étoit mort l'année 1681...” Letter to Prince Michel Radziwiłł, dated February 27, 1742 in Ullrich, “Bachstrom,” pp.336-9.

the Meissen porcelain factory in Dresden.

Bachstrom lent a helping hand to Mehmed Said in the daily operations the press, and one of the later publications of the press, a book on the magnetic properties of the earth, bore his mark.³¹ Long after he left Istanbul in 1731, Bachstrom also wrote a book that idealized the Ottoman Empire and portrayed Damad Ibrahim as a wise cowherd whose goal was to trim Islam from its traditions and superstitions, such as the pursuit of union with God through chanting and ritual dancing, and to set it on a solid and rational foundation – something that arguably seems consonant with Ibrahim's own stance on Islamic practices. Bachstrom's Ibrahim was at once a devout Islamic reformer and a rationalist.³²

In the palace, Bachstrom found Damad Ibrahim to be uniquely amenable to his religious views. Not only was Ibrahim a great patron who kept a coterie of scholars and poets in his court, but he had also begun to commission Turkish translations of European works. In 1727, he had posed three challenging questions to Darendeli Mehmed, who had become a court astronomer during Damad Ibrahim's grand vizierate. How would a Muslim living in North Pole observe the Ramadan fast (a standing issue, even to this day)? Was there an alternative to Mecca as a possible qibla? Was it possible for the Sun to rise from the West? Each of these were challenging questions both philosophically and from a theological perspective. During his years at the court, Mehmed had devised a modified compass that would point to the qibla. He had also prepared a perpetual calen-

³¹ See Johann Friedrich Bachstrom. *L'Art de nager, ou Invention à l'aide de la quelle on peut toujours se sauver du Naufrage et en cas de Besoin, faire passer les plus larges rivières à des Armées entieres*. Amsterdam: Zacharie Chatelain, 1741; pp.24-5. See Stephan Schultz's travelogue from 1752 for an independent account of Bachstrom's visit: *Die Leitungen des Höchsten nach seinem Rath auf den Reisen durch Europa*. 4 vols. Magdeburg: Hemmerde, 1771-1774; vol.4, p.115: "Es wurde auch (schreibt Herr Schultz) mit Herrn Benisch, einem gewesenen Apotheker, der uns den Telemac in vulgair griechischer Sprache zeigte, von dem Bachstrohm geredet, der vormalis hier gewesen und verursacht hat, dass hier eine Druckerey angeleget worden ist. Er hat damals mit dem Grosshern und dem Grossvezier incognito manche wichtige Unterredungen gehabt, und ist auch von hier mit der Ordre weggegangen einige Gelehrte aus der evangelischen Kirche zu verschreiben, damit hier eine Academia scientiarum möchte errichtet werden. Er kömmt bis nach Warschau, wird aber daselbst als ein Verräther des Landes angegeben und wäre beynahe auf gehänget worden. Indessen hat man hier lange aber vergeblich auf Briefe von dem Bachstrohm gewartet, mithin ist aus der Academie nichts geworden. Die Druckerey ward aber doch angelegt, aus etliche Bücher in türkischer Sprache gedruckt; nun aber ist sie ganz eingegangen."

³² Johann Friedrich Bachstrom. *Bey zwei hundert Jahr lang unbekannte, nunmehr aber entdeckte vortreffliche Land der Inqviraner*. 2 volumes. Breslau: Hubert, 1736-7; vol. 2, 173-184; also see 192-202 regarding the Greek Orthodox Church, and 218 ff. about Damad Ibrahim and Catholics.

dar with a full list of prayer times, which, with the help of a clock, would make previous religious time-keeping practices obsolete. This type of beneficial interaction between religion and naturalistic pursuits was compatible with Bachstrom's own ideals. He was a practical naturalist. While he indulged in high speculation on matters of religious tolerance, his naturalistic works invariably addressed significant but practical problems, such as scurvy, fevers and the art of swimming. Bachstrom's physical interests were in terrestrial magnetism and navigation, which were among the most important practical problems facing eighteenth century physics.³³ Indeed, Bachstrom's engagement with physical experiments at the palace drew on his recent interest in Newtonian physics.³⁴

Damad Ibrahim was an attentive student of the mathematical sciences, and he was also impressed with Mehmed Said's demonstrations from the French *Journal des Sçavans*. In fact, Mehmed Said had become a court scholar precisely because he was so good at drawing room demonstrations.³⁵ Bachstrom, who had gained access to the court as a physician, clearly believed that a full-fledged "medico-physical" academy was on the horizon. The pairing of the disciplines is interesting because Aristotelian natural philosophers and the physicians were the two parties who stood in need of a common discursive ground at the court. Bachstrom drafted a preliminary project for what Kundmann called the Ottoman *academia scientarum*, which, unfortunately is part of Bachstrom's now-lost travel journals.

The academy never came to pass, but Bachstrom's visit left physical and intellectual remnants. We know that he was responsible for introducing a treatise on terrestrial magnetism to the Ottoman readership. Its author was his friend, Christoph Eberhard (1675-1750), who had presented his theory to the English Senate in 1718 as a possible solution to the longitude problem. Eberhard was a German geographer who spent the majority of his career in Halle and had travelled as part of Peter the Great's retinue between 1717 and 1718, had been one of the unsuccessful contenders for the grand prize.³⁶

³³A.R.T. Jonkers. *Earth's Magnetism in the Age of Sail*. Baltimore: Johns Hopkins University Press, 2003.

³⁴Johann Friedrich Bachstrom's first physical work is his *Exercitatio sive Specimen de causa gravitatis*... N.p, 1728.

³⁵See Chapter 1

³⁶For brief biographies of Eberhard, see: *Neue Deutsche Biographie*, Bd.4, Berlin, 1959; pp.238-9. Also see *Biographie universelle*, T. 12 Paris: Michaud, 1814; p. 441

His proposal was simple enough and required an instrument that he had perfected: the inclinatory compass. He believed, as Edmund Halley and Rene Descartes had, that terrestrial magnetism resulted from giant lodestones buried deep inside the earth. The inclinatory compass helped to establish one's precise angular position vis-a-vis the nearest terrestrial lodestone and consequently yielded better results than one could get with just a regular compass.

William Whiston (1667-1752), a Newtonian philosopher and the erstwhile Regius Professor of Mathematics, was the next to present a possible solution 1721. Whiston's book was largely built on two earlier works that he had dismissed in order not to share the credit with his predecessors.³⁷ These were François Noël's (SJ) *Observationes mathematicae et physicae* (Prague, 1710) and Eberhard's solution from 1718. Whiston proposed that the earth's magnetic poles rotated periodically, much like the Earth itself, in his *The Longitude and Latitude Found by the Inclinatory or Dipping Needle; wherein the Laws of Magnetism are also Discover'd*. The book enjoyed a measure of success in London, but ultimately proved to be unworthy of further encouragement from the Longitude Committee.

Eberhard was running a cartographic press with his associate Christoph Semmler (1669-1740) at Halle when he received news of Whiston's forthcoming work. He published his proposal and its German translation, *Specimen theoriae magneticae/Versuch einer magnetischen Theorie* (An Attempt at Magnetic Theory), in a rush during 1720 as a way to preempt his competitor's book.³⁸ Eberhard accused Whiston of stealing the inclinatory compass. As he would later found out, the former Regius Professor added insult upon injury when he dismissed the *Specimen* as an unoriginal work that lacked

³⁷Whiston, *Longitude*, xxv: "At first I thought [Eberhard's method] might admit of some Mystery, which he conceal'd; I found at last, when he sent me Père Noel's Book, it was little more than that Author's Hypothesis, already mentioned, of Two Internal Lodestones, and the Imitation thereof by the Insertion of small loadstones under Maps, and within Terrestrial Globes: With some hopes he had, that Nature would afford a sort of Magnetick Needle, which should point East and West, as the ordinary ones pointed North and South. While yet he confessed he did not know that there was such a Power in Nature, as most certainly there is not: And yet without such a Power, all his Expectations must come to nothing... Being thus disappointed in Mr. Eberhard's Proposal of discovering the Longitude, I could not, however, forbear to think of this, to me, wholly new Instrument, the Dipping Needle it self..."

³⁸Christoph Eberhard. *Specimen theoriae magneticae quo ex certis principiis magneticis ostenditur vera et universalis methodus inveniendi longitudinem & latitudinem*. Lipsiae: apud Joannem Christianum Martini, 1720; pp. 6-10.

any merit.

Eberhard's *Specimen* was not just a book. Whiston's account suggests that Eberhard controlled its distribution and in the same way Galileo had done with *The Sidereal Messenger*. Galileo had travelled with his telescope and offered live demonstrations of his claims in the book, while Eberhard's book came packaged with a large inclinatory compass as well as a globe with lodestones sewn in. Bachstrom was in possession of this set, but we do not know whether he used it to pursue his own work on magnetism or whether it was originally intended to draw possible converts. It is understandable that Eberhard's instruments appealed to Mehmed Said and Damad Ibrahim, who were already curious about geography and astronomy. These courtly bundles were ultimately responsible for the positive reception of the book at the Ottoman court, so much so that we later see that the Sultanic press printed a translation of Eberhard's *Specimen* in 1732.

However, there were philosophical obstacles that prevented the book's immediate acceptance. Stakes were far higher than curiosity or parlor tricks. The key problem was that the court scholars were severely underexposed to seventeenth century European debates on natural philosophy. Ottoman readers had never read Francis Bacon. A century earlier, Bacon had sought to transform experimental natural history into speculative natural philosophy. If one accumulated enough observational knowledge of the particulars, these could be used to formulate general physical theories based on sensory experience. This was a particular weakness of Ottoman naturalism, which had failed to unite philosophy with experiential knowledge.

In the medieval Arabic and European traditions, experience occupied the middle ground between sensation and intellection. While experience helped the understanding, it was by no means a source for certain knowledge.³⁹ In Aristotle and in most philosophical systems built on Aristotle, the building block of knowledge was not the bare fact, which experience could yield, but the reasoned fact, which was impossible to attain without understanding the causes behind the experience.

³⁹Peter Dear. *Discipline and Experience: The Mathematical Way in the Scientific Revolution*. Chicago: University of Chicago Press, 1995; pp.13-4. Edward Grant, "Medieval Natural Philosophy: Empiricism without Observation," in *The Dynamics of Aristotelian Natural Philosophy from Antiquity to the Seventeenth Century*. eds. Cees Leijenhorst, Christoph Lüthy, and Johannes M. M. H. Thijssen. Leiden: Brill, 2002; pp. 141–68. Abdelhamid I. Sabra, "Science and Philosophy in Medieval Islamic Theology," *Zeitschrift für Geschichte der arabisch-islamischen Wissenschaften*, 9, 1994: 1-42.

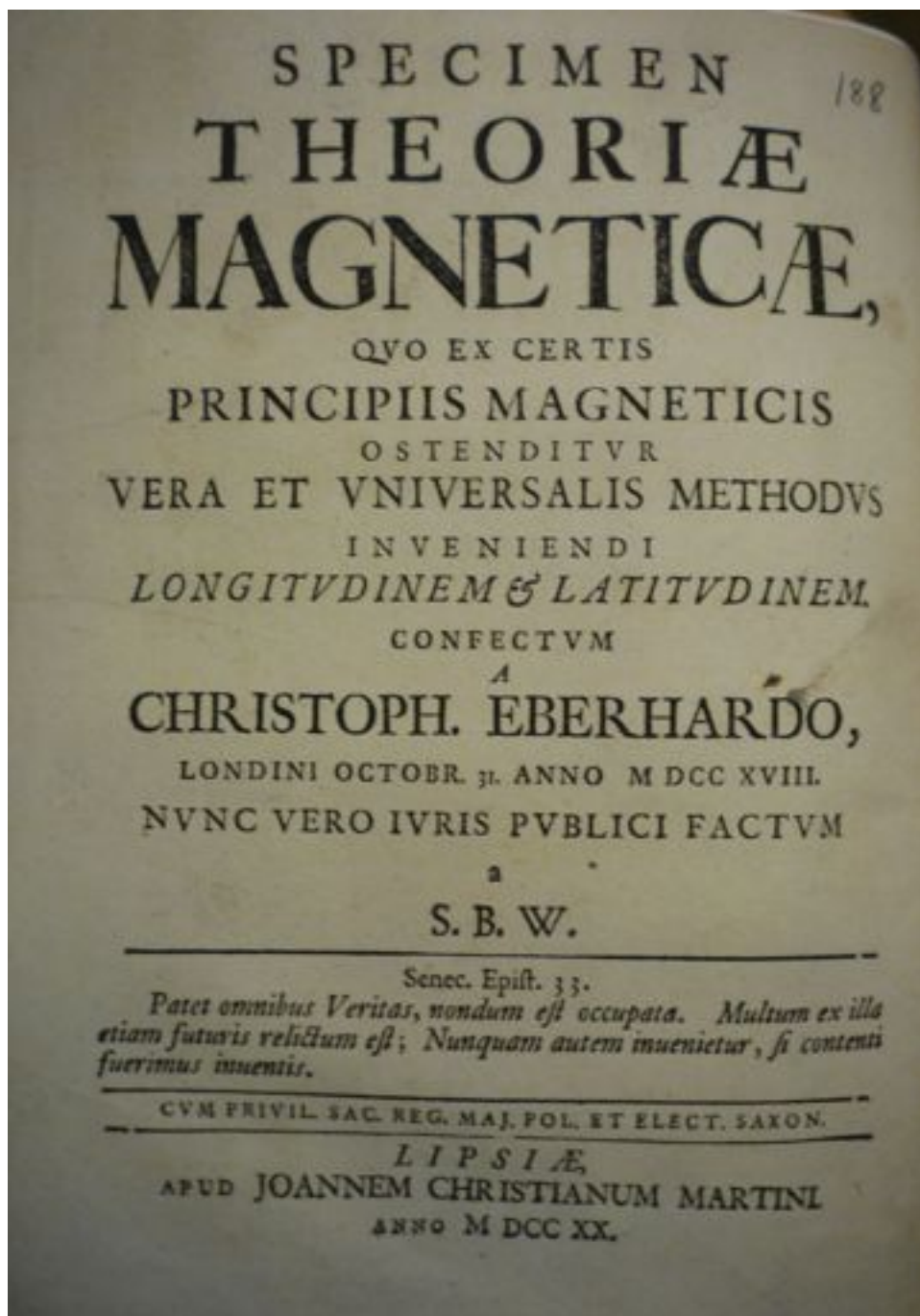


Figure 6: The title page of Christoph Eberhard's *Specimen theoriae magneticae*

The building block of scientific knowledge slowly shifted from reasoned facts to matters of fact in seventeenth century Europe.⁴⁰ Islam, however, had no comparable empirical tradition, and natural philosophy was subservient to metaphysics and theology.⁴¹ Muslim scholars were quite familiar with astronomical and clinical observation, but neither of those was useful for rethinking natural phenomena.

On the other hand, there was a tainted, chemical way of “experiencing” nature during the 1720s. If one followed the Aristotelian route like Esad did, sense experience was sterile: It was impossible to gain new knowledge about the general order of the universe from a string of particular experiences. If one followed Ömer Şifai, the high-profile adversary of Esad, experience seemed like a convenient but ultimately unreliable way to bypass the test of Aristotelian syllogisms – the true test of philosophical knowledge.

Performing experiments with the intention of acquiring reliable knowledge or questioning the claims of Aristotelian natural philosophy was therefore completely novel to the Ottoman court audience. The results of experiments ostensibly gave rise to free-standing facts about phenomena without explaining the causal structure underlying them. Such facts could challenge established Aristotelian theory – Aristotle was completely quiet on magnetism-, and terrestrial magnetism clearly exposed an area where the Aristotelian tradition was particularly weak. Experiments were good for discovering particulars that helped articulate the limitations and weaknesses of a philosophical system, but they were not necessarily the building blocks for a new one.

Magnetism was instrumental to overcoming the particular Ottoman impasse. One could not experience terrestrial lodestones without the help of an instrument. Was magnetism even real? Neither Aristotle nor Muslim philosophers had much to say about it. In seventeenth-century Europe, naturalists were developing experimental protocols that could demonstrate hitherto indemonstrable theoretical propositions. William Gilbert was among the first to use experiments to prove theoretical claims, which he considered to be a “new kind of philosophizing”.⁴² Robert Boyle had used an air pump

⁴⁰One of the classic accounts of this development is Steven Shapin, “Pump and Circumstance: Robert Boyle’s Literary Technology,” *Social Studies of Science*, 14/4, 1984: 481-520.

⁴¹Edward Grant. “What was Natural Philosophy in the Late Middle Ages?” *History of Universities*, 20/2, 2005: 12–46.

⁴²Westman, *The Copernican Question*, p.368.

to evacuate air from glass vessels and declared that the evacuated vessel proved the existence of a natural vacuum – a theoretical impossibility according to Aristotle. Trusting in experience and measurements was necessary if one wanted to speak of magnetism at all.

The *Specimen*, otherwise a short pamphlet of about fifty pages, was enough to give the court philosophers a long pause. Eberhard's instrument assumed theoretical entities – not one, but two lodestones buried inside the Earth -, a completely alien idea to the court philosophers. He had argued before the English Senate, basing himself on the good authority of Edmund Halley, that the magnetic poles had a regular precession that was independent of Earth's rotation. Halley was not an authority that the Ottomans recognized. Since the poles were in motion, there was no permanent guide to finding their location. There was no simple way to tabulate a solution. One always had to use an instrument to take measurements on the spot. The theory, the authorities on whom the theory was based, and the instrument had evolved out of a debate that went back to William Gilbert's *De Magnete* (1600), were all unknown to Bachstrom's Turkish audience.

The precise debates that led to the positive Ottoman reaction to Eberhard's theory are yet to be discovered, but the Turkish translation of the *Specimen* appeared in 1732 under the title *Füyūḍāt-ı Mıknāṭısiyye*, which could mean either Magnetic Effluvia or the Magnetic Counsels. The highlight of the translation was a new Turkish phrase that sought to capture the idea of experimental demonstration: *tecrübe-i berr*. The word *tecrübe*, aside from its alchemical and astrological connotations, simply meant experience. *Berr* had a range of both literal and metaphorical meanings similar to the word solid: The kind of experience that the student of magnetism relied on was at once reliable and morally upright. Conceptualizing experiment as morally upright experience seemed to establish a middle route between the virtue of the philosophers and the experience of the alchemists.

***Füyūḍāt-ı Mıknāṭısiyye* or the First Turkish Book on Magnetism**

Füyūḍāt-ı Mıknāṭısiyye (1732) was also the first Cartesian book to come out of the sultanic press. The majority of the book consisted of word-for-word translations



Figure 7: Eberhard's engravings of a regular and an inclinatory compass.

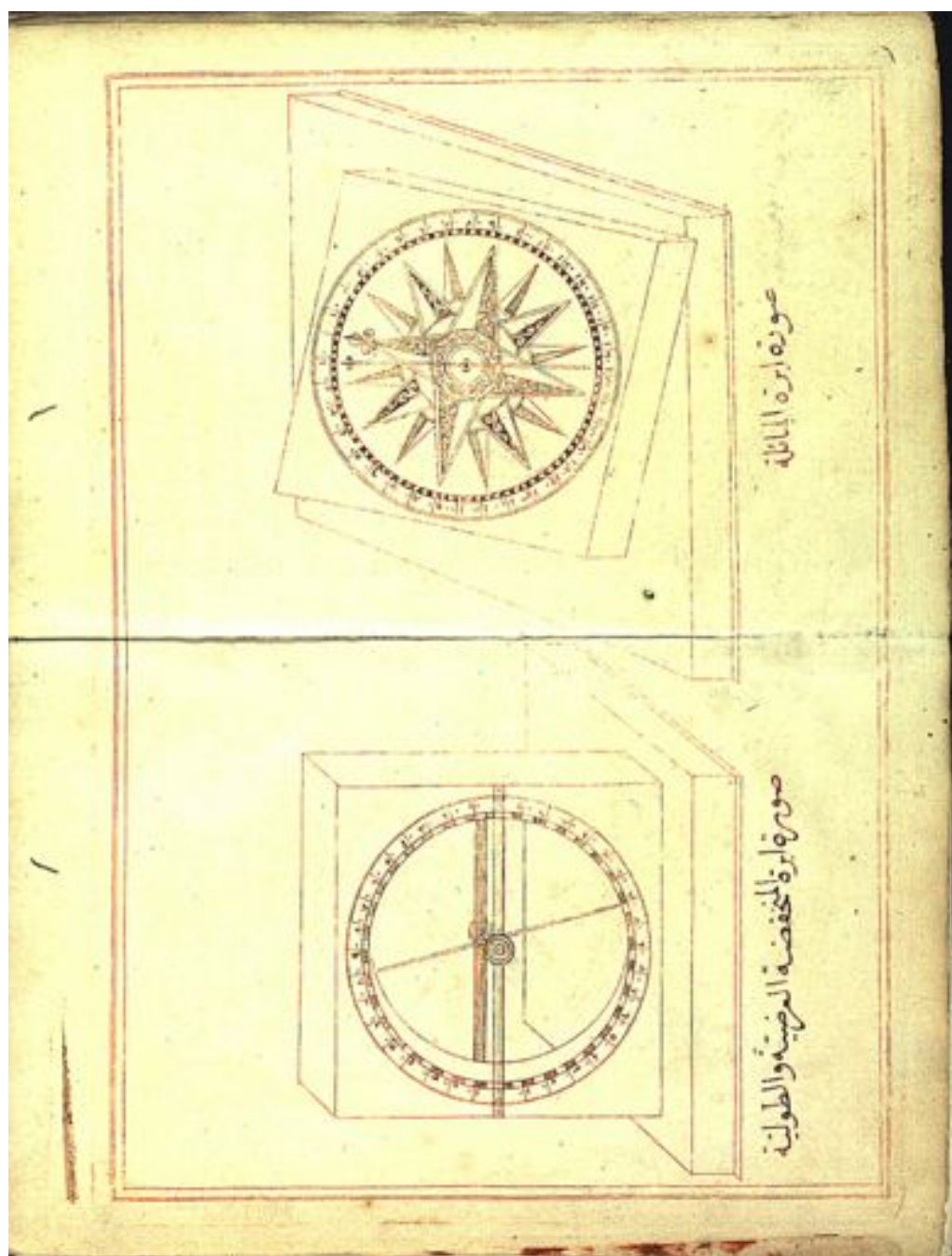


Figure 8: Eberhard's Compasses in the *Füyûdât-ı Mîknâtsiyye*

straight out of Eberhard's Specimen. However, the translator(s) had masked the original book by hiding both the author and the title. The one useful clue, namely that the book was printed in Leipzig (Līpsīyā) in 1721, was misleading.⁴³ And the sources used in *Füyūḍāt* had remained a complete mystery until now. The translator removed all European references in the book. Eberhard had mentioned Descartes, Newton and Halley by name, but those had been masked with a general designation as *müteʿahḥirīn* (moderns) in the Turkish edition. The Ottoman edition also did away with Eberhard's preface, which included the story behind the publication of the book.

Although these efforts seem piratical by eighteenth-century European standards, they were completely in line with the general practices of Müteferrika's press. They were also similar to European incunabula of the fifteenth and early sixteenth centuries. The Ottoman printed book did not always come with a single authorial designation, and many of the Turkish books whose authors had been long dead were published with anonymous appendices and modifications. The press had appropriated various elements from the manuscript tradition as well. Many of the printed books the books lacked title pages. The title was part of the first page of the book, and was set in ornaments, just like in a manuscript that was prepared for a wealthy patron — and unlike what a scholar would use on a daily basis. The author's name was mentioned during the preface or *mukaddime*, and Ibrahim Müteferrika also signed his name and gave the date of publication at the very end of the book in regular prose rather than using a special layout that made European books easy to identify on sight. Pagination was continuous regardless of whether the book contained more than one work and, just as in a manuscript, the numbers referred to sheets rather than pages. This was all the more surprising because Müteferrika, like many other contemporary European printers, printed most his books in the octavo format, where numbering the pages would have been more practical than numbering the sheets. Both the aesthetic sensibility and the superficial anonymity of the book were standard. The hand-drawn margins in extant copies of early Ottoman prints also suggest that some of the volumes were intended for hand illumination. The etchings that came as part of the book were hand-colored after the book had been sold. Consequently, only the hand-finished volume, not the bare print edition, looked like a

⁴³ *Füyūḍāt-ı Muknāṭısiyye* Istanbul: Sultanic Press, 1732; 6r-v.



(a) A scholarly edition of (b) The presentation copy (c) *Füyûdât-ı Mıknâtısiyye*, first Esad's translation of Cot-tunius's *Commentarii*. MS
 Esad's translation of Cot-tunius's *Commentarii*. MS
 Ragıp Paşa 824, 1v Hacı Beşir Ağa, 1v

Figure 9: The first pages of a scholarly book, a presentation book and a Müteferrika print compared.

book that was destined for the library of a pasha or a vizier.

The published books did not strictly reflect the original. For example, Katip Çelebi's *Cihānnümā*, which was originally written in 1648, was a very different book by the time it was published in 1732. The printed book was largely based on the seventeenth century original, but it had been revised and redacted by an anonymous hand or hands, probably by the censors of the press.⁴⁴ The printed edition of the book included newly drawn maps and also featured a hijacked preface that presented a Cartesian argument for heliocentrism, something that not been a part of Katip Celebi's project by any stretch of the imagination.⁴⁵ *Füyûdât-ı Mıknâtısiyye* was edited and altered in a similar way.⁴⁶

⁴⁴[699] in Katip Çelebi. *Cihānnümā*. Istanbul: Sultanik Press, 1732 portrays the printed book as a collective effort patronized by Ahmed III.

⁴⁵Katip Çelebi, *Cihānnümā*, pp.34-6. Regarding the original, see Gottfried Hagen. *Ein osmanischer Geograph bei der Arbeit. Entstehung und Gedankenwelt von Katib Celebis Gihannüma*. Berlin: Klaus Schwarz Verlag, 2003.

⁴⁶For example, *Tārīḥ-i Hind-i Garbī*, an anonymous sixteenth century history of the West Indies that the Sultanik press published in 1730 was a collage of Arabic and Spanish sources that were unspecified in the text. Thomas Goodrich. *The Ottoman Turks and the New World: a Study of Tarih-i Hind-i Garbi and Sixteenth-Century Ottoman Americana*. Wiesbaden: Otto Harrassowitz, 1990. As Gottfried Hagen shows,

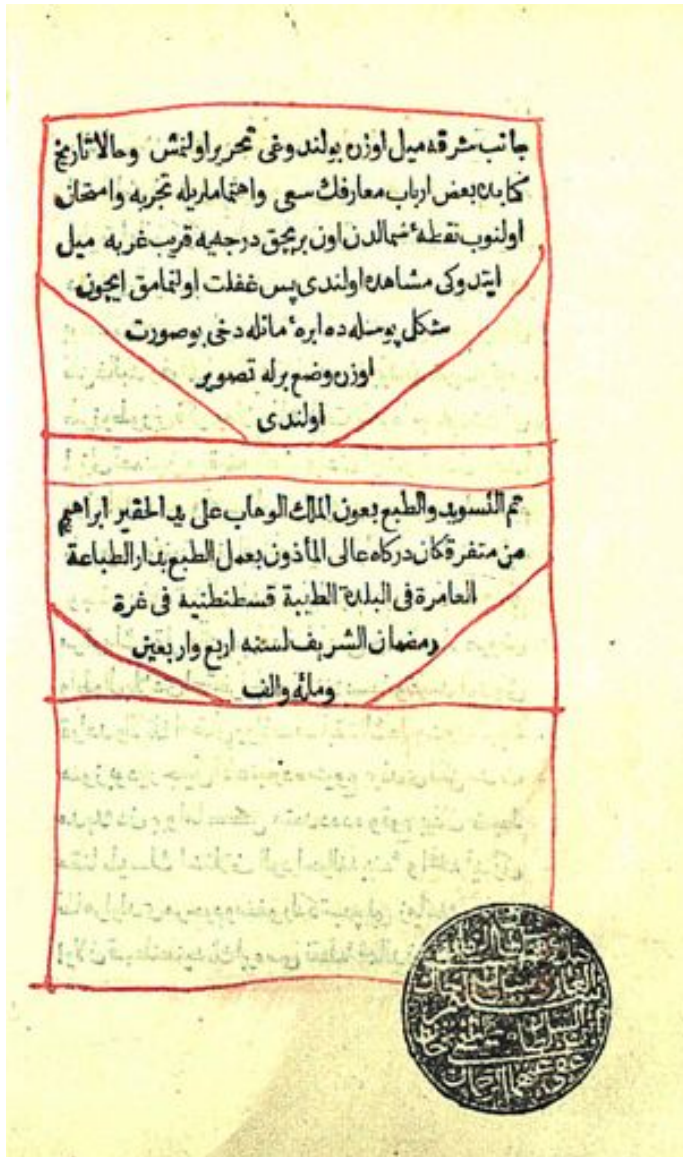


Figure 10: The colophon of *Füyûdât* (Süleymaniye Library MS Laleli 2548) on the last page, showing hand-drawn rules. The last paragraph gives the date, the city, the press and the printer's name.

The Turkish translation of Eberhard's *Specimen* was the first work to introduce the idea of performing scientific experiments to a Turkish audience. Despite the fact that Eberhard's name was kept from the readers, the translator had followed Eberhard's text faithfully and had worked very hard to give the Turkish readers, who were unacquainted with Eberhard's vocabulary that involved scientific measurements, experiments and methods, a proper sense of the author's meaning.⁴⁷ The translator(s) paid particular attention to the idea of experiments. In contrast to simple *tecrûbe*, they used a composite phrase, *tecrûbe-i berr*. The meaning of the Arabic word *barr* (and its Turkish pronunciation, *berr*) has a literal and metaphorical range similar to those of the English word "solid." *Berr* is commonly used to connote land, or *terra firma*, as opposed to air or sea. Ottomans also used *berr* in this sense, and the palace established a royal army engineering school with the name Mühendishane-i Berri-i Humayun in the last quarter of the eighteenth century, this was different from its twin school, Mühendishane-i Bahri-i Humayun, which trained naval officers. In *Füyûdât*, the word invariably pointed to the trustworthiness of the experience (*tecrûbe*) or the measurement (*istikrâ*), which it qualified. Experiments, when repeated a number of times, were solid or trustworthy experiences that could yield philosophical or certain knowledge.

Katip Çelebi likewise employed a number of unspecified European and Arabic works while composing his *Cihānnümā*.

⁴⁷Consider, for example, the following passages: Eberhard's Latin reads: "Utamur autem eadem methodo, qua usi sumus inveniendos Polos Magneticos Experientia nos docet, acum Inclinatoriam gradu quinto Lat. Austr. non procul ab Insula Ascensionis esse Horizontalem, & Lat. Boreali gr. 12. min 30. ad littus Indicum rursum esse Horizontalem & in America apud Insulam Callao 7. grad. Inclinare: ex hoc sequitur, Aequatorem Magneticum in America non procul distare ab Aequatore terrae." The Turkish translation is as follows: "Taħarri ve istikrâ-i berrle inķilâbın noķtaları meylinde mevķ-i iyi taħiķde hemân ķutublarını t-ayinde meslūk olan mesleke-i sülūk ile mücerrebât ve müşâhedât ile dâbķlarına teşebbüth olunur. Mühella-i ibre-i munħafađa beş derece -arđ cünübunda Aşķanşıyo nâm cezîre civârında afākî olub..." The translation of the Latin passage give us: "Let us use the same method we have used in finding the magnetic poles. As experience teaches us, the inclinatory needle at the 5th southern latitude, not far from Ascension Island, is horizontal, and is horizontal again at 12 degrees and 30 minutes, at the Indian shore & in America, by the Callo island, it inclines 5 degrees: from which it follows that the magnetic equator in America is not far from Earth's equator." The same passage, this time translated into English through the Turkish translation reads: "We try to apply by means of precise measurement and trustworthy observation the same method followed in the proper investigation and measurement of the position of the poles in [terms of] their relation to the ecliptic. We find that the inclinatory needle is horizontal at the 5th Southern latitude, near the Ascension Island..."

Cartesian Appendices

The court was ultimately interested in the instrument, but not in the theory of magnetic attraction. What *Füyūdāt* ultimately offered as an explanatory mechanism was Cartesian philosophy. This appears to be a deliberate choice. Soon after the sultanic press printed the court-patronized account of terrestrial magnetism in 1732, Bachstrom published his book on sea temperature, *Nova aestus marini theoria* (1734), and appended his own magnetic theory, which built on a Newtonian framework of forces and the inverse square law of gravitation. In this book, he used Eberhard's instruments, and also mentioned his conversations with a certain Aristotelian *molla* (teacher) in Istanbul about the direction of the flow of the Nile.⁴⁸

Part of the rationale behind the court's preference may have been that invoking the intangible forces would mean to venture into the realm of the occult. However, Eberhard's book, unlike that of Whiston or of Bachstrom, was not necessarily built on a Newtonian framework of attraction. Indeed, the key question of whether he was dealing with a physical flow of magnetic particles or what Newton had called action at a distance had been left unresolved in the *Specimen*. Instead, Eberhard called magnetism a mystery, and followed an experimentalist approach, which simply established that the compasses worked well, without at the same time explaining how or why they did. Consequently, one could use the evidence presented in the book as evidence for any theory whatsoever, and the explanatory framework was where Bachstrom and the Ottoman court ultimately diverged.

The very beginning of *Füyūdāt* included a brief explanation for terrestrial magnetism. The passages were translations of yet another European book, *Institutiones philosophicae*. This was a Cartesian textbook which had become popular in Paris in the 1690s. The author of the book, Edmond Pourchot (1651-1734) was a professor at the University of Paris, a position that placed him within Louis XIV's easy reach. Consequently, Pourchot's *Institutiones* was and had to be an innocuous textbook that lacked the radical political and philosophical agendas of other Cartesian works from this era. Its

⁴⁸Johann Friedrich Bachstrom. *Nova aestus marini theoria ex principiis physico mathematicis detecta & dilucidata. Cui accedit, examen acus magneticae spiralis, quae a declinatione & inclination libera esse creditur...* Leiden: Apud Conradum Wishoff, 1734; pp.64-5.

sections on logic and politics were loosely based on Aristotle's writings and Descartes came into the picture only as a system of natural philosophy. Unlike other contemporary and near-contemporary Parisian proponents of Descartes, such as Jacques Rohault (1618-1672) and Pierre-Sylvain Règeis (1632-1707), Pourchot did not have Jansenist sympathies. However, the perceived intellectual connection between Jansenism and Cartesianism was enough to get Louis XIV to ban the book in 1695.⁴⁹

Institutiones was one of the textbooks used at the Jesuit Collège Louis-le-Grand between 1690 and 1695, and was also popular in other colleges at Paris after Louis XV came to power. Collège Louis-le-Grand was where the so-called *jeunes de langues* or polyglot boys were trained in oriental languages for diplomatic service.⁵⁰ Jean-Baptiste Holdermann (SJ), who had to come to Istanbul to help with the Turkish press and to finish his Turkish grammar book in 1729 was a professor of oriental languages at the Collège. And, he was the most likely the person who had introduced Pourchot to the Ottoman court.⁵¹

Füyūḍāt borrowed two key sections from Pourchot's *Institutiones*. The first was a short history of the main theses regarding magnetism, and the second was Descartes's theory of the magnetic field of the earth:

The lodestone is hidden inside the earth and by nature includes many holes and channels. According to its essential properties, even when extracted from inside the crust to the outside, it keeps flowing into and out of these holes and channels. And the magnet, by moving along lines parallel to the axis of the earth, places itself in order to achieve this succession, and aligns its poles to the poles of the earth. This is the opinion the majority of European philosophers have followed.⁵²

⁴⁹See Tad M. Schmaltz. *Radical Cartesianism: The French Reception of Descartes*. Cambridge: Cambridge UP, 2002; idem. "A Tale of Two Condemnations: Two Cartesian Condemnations in seventeenth-Century France," in *Descartes e i suoi Avversari: Incontri cartesiani II*. ed. Antonella Del Prete. Florence: Le Monnier Università, 2004; pp. 203-21.

⁵⁰See Nicholas Dew. *Orientalism in Louis XIV's France*. Oxford: Oxford University Press, 2010.

⁵¹Laurence Brockliss. "The Moment of No Return: The University of Paris and the Death of Aristotelianism," *Science & Education*, 15, 2006: 259-278. Henri Omont. "Nouveaux documents," pp.6-10.

⁵²*Füyūḍāt*, 3v: "Böyle ki seng-i mıknatıs baṭın-ı 'arḍda mestūr ve mütevārī olduğu 'alde zatında ḥulkī ve cebli niçe niçe menāfiz ve mecārī vāfī olub, baṭın-ı zemīnden ruy-i zemīne iḥrāc olunduḡda daḥī füyūḍāt-ı cevheriye-i merḡme ol menāfiz ve mecārī ḡuhūl ve ḡurūc ve cereyān iderler. Ve miḡvar-i 'arḍa mütevārī ḡuḡūt üze ḡareket ile mıknatıs ol siyāḡa muvāfıḡ nıḡāma vaḡve 'u'ublarını 'arḡıñ ḡutublarına teveccūh itdirirler. Ve ektheri bu r'eye ṡāḡib oldular. *Institutiones*, pp. 234-235: "Verum id plurimis

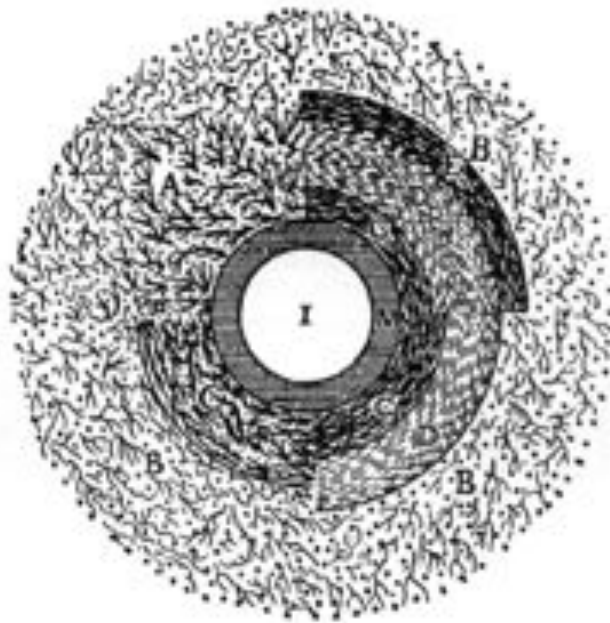


Figure 11: Descartes' visuals regarding terrestrial magnetism and the Earth's crust from *Principia philosophiae* (1644)

By translating this passage alongside Eberhard's book, the courtly authors of *Füyûdât* offered a brief explanation for why the compasses worked the way they did, but also presented the Cartesian theory of magnetism as the most widely accepted theory among European philosophers. Pourchot's textbook explained in a clear intelligible manner the mechanism behind the observed facts, while the experiments supported Cartesian theory.

Cartesianism's explanatory power extended beyond mysterious lodestones. In the similarly anonymous preface to the *Cihānnümā*, the same authors presented Pourchot's rendition of the Cartesian theory of vortices as a means to explain and support Copernican heliocentrism.⁵³ Building on the Cartesian outlook that had made its debut in *Füyûdât*, *Cihānnümā* presented a philosophical argument for heliocentrism for the first time in the history of Islam. While Katip Çelebi's cosmography did not have the same level of interaction with Cartesian theory as magnetism did, pushing philosophical arguments in support of heliocentrism alongside the magnum opus of a well-respected Ottoman author was a clever textual strategy that would help disseminate Cartesianism in the Empire.

Cartesianism and Ottoman Francophilia

If the experimental pursuits exposed the court to the new European science, had they also come to be convinced of Cartesianism by the same experimental methods? Surely, the clarity and the immediate intelligibility of Cartesian theories had been a boon for Ottoman scholars, who, before 1732, had no idea why the Copernican theory had taken hold of Europe or how terrestrial magnetism, which they had a chance to

incredibile videtur, tam eas materiae striatae cochleas, quam canales seu tubulos, in quibus moventur, figuram suam striatam constanter retinere, nec cochlearum strias prominentes atteri aut abradi...Statuit igitur, profluvia, quae continenter e Terra per lineas illius axi parallelas erumpunt, unum e magnetis polis penetrare, ac per lineas axi magnetis parallelas progressa per oppositum polum egredi: cumque facilius ea profluvia per magnetis quam per aeris meatus moveantur, vorticem aliquem circum magnetem sic efficere. . . "

⁵³Regarding the earlier dissemination of Copernican visuals, see Avner Ben Zaken. *Cross-Cultural Exchanges in the Eastern Mediterranean, 1560-1660*. Baltimore: Johns Hopkins University Press, 2010. For the widespread adoption of Copernican theory in the nineteenth century, see Robert Morrison, "The Reception of Early-Modern European Astronomy by Ottoman Religious Scholars," *Archivum Ottomanicum*, 21, 2003: 187-195.

experience first hand, worked. Cartesian accounts could explain away deep mysteries such as magnetism by using Descartes's "very fine" particles, or heliocentric physics by vortices in a matter of paragraphs and pages, not volumes. Cartesian philosophy was appealing to polite audiences of Europe, the salon crowd and the nobility, because of the same immediate intelligibility.⁵⁴ Since the unschooled Ottoman experimentalists were precisely such a crowd, it is not particularly surprising that they preferred Cartesianism over Aristotelian or Newtonian technicalities.

As out of context and as superficial as they seemed, the Cartesian passages that the court presented to Turkish readers were not simply disembodied ideas. Cartesianism was also attractive on account of its purveyors – the French. The French pedigree of Pourchot's philosophy worked to Cartesianism's advantage in a number of ways. The Ottomans had borrowed the practice of holding experimental gatherings at the court from France. The more proximate cause that must have tipped the Ottoman philosophical balance in Descartes's favor was the help that the court received in establishing the new printing press in 1729.

By 1728, cultural francophilia was already widespread among the Ottoman elite. While the Ottoman officials were singularly distrustful towards the French on matters of commerce, politics and warfare, they also harbored an honest admiration for France when it came to the arts, culture and most importantly, science. Damad Ibrahim's experimental interests were initially inspired by prior reports on the French Academie des sciences. He was following *Journal des Sçavans* and his instruments had also made by French artisans.⁵⁵ However, these were not sufficient for a realignment of the court's philosophical commitments, which remained firmly Aristotelian until the 1720s.

The palace had begun to look favorably on French culture ever since the seminal embassy of Mehmed Çelebi to the Versailles. Mehmet Çelebi was born around 1670 at

⁵⁴Geoffrey V. Sutton. *Science for a Polite Society: Gender, Culture and Demonstration of Enlightenment*. Boulder: Westview, 1995; pp.104-111.

⁵⁵The classic account of Ottoman Francophilia is Fatma Müge Göçek's *East Encounters West: France and the Ottoman Empire in the eighteenth Century*. Oxford: Oxford University Press, 1987. This book as well as its sequel, *Rise of the Bourgeoisie, Demise of Empire: Ottoman Westernization and Social Change*, (Oxford: Oxford University Press, 1996) have been generally discredited. While her overarching theses regarding Ottoman Westernization/modernization, the rise of conspicuous consumption have been replaced by a more refined outlook, her *East Encounters West* still presents a cascade of astute observations regarding the Ottoman palace's relationship with France.

Edirne (Adrianopolis). His father was a janissary colonel, Süleyman Ağa the Georgian, who had converted to Islam in his youth.⁵⁶ Like other members of the Ottoman household, he was educated at the palace and served as a junior accountant for the Ottoman family. His early education consisted of languages, history, literature and military arts. In 1710, he became an accountant to the second vizier Silahdar Ali Paşa in the 1710, soon after Ali married one of Ahmed III's daughters.⁵⁷ Before Mehmet went to France as ambassador around the age of fifty, he was the head accountant of the palace, and had good relations with Damad Ibrahim, who himself had occupied the same post several years before.

Upon his return from the Versailles in 1721, Mehmed presented a report of his stay to Ahmed III. His impressions of France were overwhelmingly positive and he was most impressed with the botanical gardens at the palace, the various printing presses in the French capital, and the observatory of Paris. He also admired French architecture and the opera. He noted that the Louis's armies were very well disciplined, and that the palace's coffers were full because of the king's business ventures. Both Ahmed III and Damad Ibrahim were greatly inspired by Mehmed's recommendations.⁵⁸

28 Mehmed also displayed an honest admiration for the learned activities that occupied the denizens of the French capital. In his visit to the Observatory of Paris, 28 Mehmed encountered two instruments that seemed novel to him.⁵⁹ These instruments were Cassini's giant telescope and a scale model of the solar system.⁶⁰ The first gave Mehmed the opportunity to observe with his very own eyes the moon directly, which he said looked like "spongy bread," as well as Venus and Saturn. Although the circumstances of his visit receive very brief treatment in his embassy report, it is worth

⁵⁶*Encyclopaedia of Islam*. 2nd ed. Leiden: Brill, 1998-2002 [abbreviated as EI below]; v.6, p.1004

⁵⁷In Ali Pasa's court, Mehmed translated into Turkish a natural philosophical tract from al-Shahrazuri's fifteenth-century Arabic philosophical compendium and compared Aristotelian thought with the philosophy of *ishraq*. I have briefly discussed this text in an earlier chapter.

⁵⁸Mehmed Efendi, *Paradis des infideles*.

⁵⁹Beynün, ed.; p.139

⁶⁰Mehmed Efendi, *Paradis des infideles*, pp. 148-150. cf. Kılınç, Berna. "Yirmisekiz Mehmed Çelebi's Travelogue and the Wonders that make a Scientific Centre" in *Travels of Learning*. eds. Ana Simoes, Ana Carneiro, Maria Paula Diogo. Boston: Kluwer, 1998; pp.85-89. Kılınç speaks about Çelebi Mehmed's amazement with these novelties and cabinets of curiosities and, ends her analysis on this note: "It is this proximity of God that may have been challenged by Mehmed Çelebi's experience in France. Upon visiting the castle of Marly, enchanted by the marvellously intricate architecture of sculpted trees, Mehmed Çelebi recalled the lines 'this world is the prison of the believer and the paradise of the unbeliever.'"

noting that Jacques Cassini's father Giandomenico enjoyed remarkable prestige in the Ottoman court circles as the mentor of the illustrious and learned Orthodox Patriarch of Jerusalem, Chrisanthos Notaras. Mehmed's meeting also proved to be of some consequence in the long-term, as Cassini's *Tables astronomiques* were translated into Turkish in the 1770s.⁶¹

In another episode, Mehmed spoke of the imported herbs and pharmaceutical specimens that attracted his attention during his visit to the Jardin du Roi. However, the high point in his account of the Jardin was the dissected elephant: "I was shown, above all, a dissected elephant which had been placed as if it were standing on its own feet by means of chains....Such innumerable palaces, churches, libraries, and rare, curious and extraordinary things I have not seen anywhere else than Paris!"⁶²

Mehmed's embassy report was also a lesson in baroque court practices, practices that the Ottoman palace sought to imitate in order to increase its own visibility in Istanbul. Alongside his valuable observations, Mehmed also brought back many books and engravings, which inspired eighteenth-century Ottoman architecture.⁶³

French-Ottoman Cooperation and the New Printing Press

While Cartesianism could ride on this long-standing fashion, French support for the press was ultimately responsible for the court's Cartesian convictions. Damad Ibrahim had approached Marquis de Villeneuve late in 1728, asking whether the court's various intellectual pursuits, experimental and historical, could not turn into full-fledged academies like the ones in France. Villeneuve's alleged response was clear and unequivocal: such an undertaking was impossible without establishing a printing press that would publicize the work done at the court.

Villeneuve did not simply tell Damad Ibrahim what to do, he also helped him do

⁶¹Ekmeleddin Ihsanoğlu "Introduction of Western Science to the Ottoman World: A Case Study of Modern Astronomy (1660–1860)," in *Transfer of Modern Science and Technology to the Muslim World*. ed. Ekmeleddin Ihsanoğlu. Istanbul: IRCICA, 1992; pp. 67–120, see esp. 96–97.

⁶²Mehmed Efendi, *Paradis des infideles.*, pp.131-2

⁶³Gül Irepoğlu. "Topkapı Sarayı Müzesi Hazine Kütüphanesindeki Batılı Kaynaklar Üzerine Düşünceler", *Topkapı Sarayı Müzesi Yıllığı*, I, 1986: 56-72; 174-197. On the engineering school, see Kemal Beydilli. *Türk Bilim ve Matbaacılık Tarihinde Mühendishane, Mühendishane Matbaası ve Kütüphanesi, 1776-1826*. Istanbul: Eren, 1995.

it. Within a month after his arrival, Villeneuve managed to ferry in journeymen printers from Marseilles, his hometown. Mehmed Said invited the two abbots who had arrived with Villeneuve, Sevin and Fourmont, to get their opinions on the books that should be printed at the press. Damad Ibrahim ordered two and a half tons of cast letters from Leiden, which arrived through Vienna.⁶⁴

While Damad Ibrahim felt enthusiastic about the new press, he was also keenly aware of the limits on its implementation. Instead of following the original idea behind the press, Damad Ibrahim now focused on the books that had been written at the court or for the court, works that publicized years of collaboration that had been taking place under his and the Sultan's patronage. The press not only helped Damad Ibrahim realize his vision, but it also turned what had once been the Ottomans' one-sided admiration for the French into a full partnership.

The press published chronicles of the Ottoman palace, which included much about the poets and thinkers attending the court, a number maps held at the palace, books dedicated to the Sultan, and books that reflected the new Cartesian sympathies of courtly experimentalists. The reconceived press dodged prior hostilities from the scholars and the scribes, partly because it specialized in rare books that were housed at the palace library. These were books that the scribes would not have had the opportunity to copy unless the court invited them to do so. The publications were also clearly not targeted at *medrese* students, since the political histories, chronologies and geography books which the press specialized in were not a part of the curriculum.

The geographical and the naturalistic works occupied no clearly defined disciplinary space, as geography was not a field of expertise that one could acquire in a

⁶⁴Sabev, p. 162. Abbé Sevin. *Lettres sur Constantinople*. Paris: Oubé, 1802; pp.27-9. Kundmann's account of this flurry of activity that culminated in the new printing press is as follows: "The Grand Vizier assigned the oversight of the printing press to Zaid Aga [Mehmed Said Efendi], one of the sons of the head treasurer Mehmed Efendi, who once was the irregular ambassador to the French court. Among the tasks was the casting of Arabic and Turkish letters. In order not to delay, six Turks were dispatched to Leiden through over Vienna (where the Turkish consul brought them an Imperial Pass). In Leiden, they finished casting 2 to 2 ? tonnes of Arabic and Turkish letters, which would be ample for the operation. The Turkish Aga in Vienna [Osman Aga] took several journeyman printers and type-setters, and sent them to Constantinople; and they were met by eight teachers, most of whom were born Greek and had full command of the Turkish language, and thirty-six students from the Seraglio, where the printing press was founded. Thus, they could present a specimen to the Grand Vizier by the beginning of 1729." (Rariora, pp.711-2)

medrese. Since the maps constituted a great part of the geography books, scribes, who by trade would not have been able to reproduce such maps, would not be losing a major source of income. The reflection of European science also sidestepped theology and Islamic philosophy, because they had none of the metaphysical bearings that were so characteristic of Islamic thought. The printing press addressed a lay crowd who had an interest in secular learning and who had the money to collect books. Without doubt, these were the very people who were in one way or another associated with the Ottoman court: pashas, bureaucrats and the urban gentry.

The reconceived press did not only cater to Ottoman audience, but also to the European scholars. When Abbot Sevin was helping Mehmed Said select books for the press, he had his own agenda as well. His original mission in Istanbul was to collect Ottoman and Greek manuscripts for the Bibliothèque du Roi, and he was after rare and valuable volumes that could adorn his patron's shelves. Sevin was also aware of the rising interest in oriental books among European readers, an interest that looked to the Ottoman Empire for its satisfaction. European readers had long been anticipating the establishment of a Turkish press. In 1726, the news of the imminent establishment of a Turkish press in Istanbul had already travelled to Europe. Christoph August Heumann (1681-1764), who was an important chronicler of European learning, spared a whole chapter in his *Poecile* (1728) celebrating the imminent intellectual "dawn" in Constantinople, not simply for the Turks, but also for Western scholarship:

I have read in the news today that the Prefect of the Turkish Emperor (Grand Vizier, as he is popularly called) has overcome long standing difficulties, which owed in most part to the objections of their highest bishop, called Mufti, and triumphantly introduced the celebrated art of printing not only to the city of Constantinople, but to the very palace of the Emperor. The printing press is now assiduously impressing and perhaps even printing literary works as well as splendid maps...

These works [Samuel Schelwig, *De philosophia Turcica*. Gdansk, 1686 and Adam Ebert "De Turcorum hodierna eruditione". *Acta Eruditorum*, 1716] make an elephant out of a mole, and claim to have some great knowledge of Turkish philosophy in trying to teach that the learning of the Turks is not inferior to the people of the West (*gentium occidentis*). Keen readers understand and stupid ones deduce that the truth is different from or altogether contrary [to their claims]. I am certain, having read their work, that they have not an inkling of Turkish literature and that the wisdom of Turkish

scholastics is not at all like the morosophy of the Scholastics before Luther.
 Let us always celebrate and honor the name of the GRAND VIZIER, if he
 is able to retain the typographic art [in the city]...⁶⁵

As someone who shared Heumann's enthusiasm for oriental books, Sevin asked Mehmed Said to publish important Ottoman books that were least known to European learned men, such as Nazmizade Hüseyin Mustafa's (d.1722) *Tārīḥ-i Tīmūr* (History of Tamerlane) and *Gülşen-i Hulefā* (The Rose Garden of the Caliphs [History of Baghdad]). The publication of Jean-Baptiste Holdermann's *Grammaire Turque* in Istanbul was also in line with Sevin's motivations to use the printing press to increase European access to Turkish learning.

Once it was finally established in 1729, the printing press served to advertise the Ottoman court as an important center of learning not only at home, but also in Europe. On the one hand, many of the publications served to introduce novel European ideas to Ottoman lay readers in a positive light. On the other hand, the printed books granted Europeans access to Ottoman learning, which had been a complete mystery until then.

Following Villeneuve's arrival in Istanbul – and to certain degree earlier, as well – the French became full supporters of the intellectual pursuits of the palace. Just as they had helped Damad Ibrahim fulfill his desires, he helped them realize theirs: Abbé Sevin returned home with two hundred rare books from the palace library and Jean Baptiste Holdermann placed the finishing touches on his Turkish books in a setting where he had immediate access to Turkish speakers. Villeneuve was able to strengthen the ties between France and the Ottoman Empire in anticipation of a possible Habsburg-Russian offensive, which could place France's commercial interests in the Ottoman Empire in jeopardy.

In light of this mutually beneficial relationship that the Ottoman press helped consummate, it only stands to reason that the roles and responsibilities the French actors such as Marquis de Villeneuve, Jean-Baptiste Holdermann and Abbé Sevin had undertaken during the establishment of the press also placed them in a position of cultural and epistemic authority. Cartesianism was accepted as an agreeable philosophical

⁶⁵Christoph August Heumann. "Programma quo aurora musis amicam nuper ortam in Contantintopoli contemplatur" in *Poecile*. Tomus III. 1728. pp.295-307. For other celebratory accounts of the press, see *Leipziger gelehrte Zeitungen*, XLI, May 1730, p. 357. *Theologische Bibliothek*. Leipzig, 1732; p.60

system that would, and did, pave the way for a lasting engagement European mechanical philosophy throughout the eighteenth century. It is difficult to establish a sound causal relationship between what the French did for the Ottoman press and the rise of Parisian Cartesianism in Istanbul, but they clearly belong to the same constellation of developments that brought the Ottoman court and European intellectual life one step closer to each other.

Chapter 7

L'Homme Machine

The first three decades of the eighteenth century was perhaps the liveliest period of Ottoman philosophy. The printing press brought together different strands in the Ottoman early enlightenment movement. Different intellectual enclaves proposed a unique mixture of reason, experience and tradition, but they all agreed that Avicennism and theology no longer had a place in Istanbul's intellectual life.

Physicians such as Ömer Şifai sponsored Paracelsian ideas and finally convinced the court to allow the chemical practitioners back into the Ottoman medical marketplace. They placed a high premium on experience and expertise, and pushed the disciplinary limits of medicine. The physicians were at the vanguard of philosophical innovation – a role that Ottoman doctors played, time and again, until the foundation of the modern Turkish Republic.

Court Aristotelians, their chief competitors, were no less enlightened. Ahmedian peripateticism was not scholastic, but secular, cosmopolitan and sociable. While Aristotle went out of fashion with the printing press, what remained were the values Esad and his fellow peripatetics had nurtured. After 1730, grand viziers were expected to be accomplished thinkers. And, Ottoman reformism of the high eighteenth century was a direct consequence of the intellectualization of the imperial administration.

Thus, what animated the Ottoman early enlightenment movement were four seemingly incompatible values. Expertise and innovation, which the physicians promoted, and, Stoical virtue and sociability, which the court elite were eager to cultivate. The press, which marked a natural turning point, reconciled and buttressed each of these

values. The Ottoman eighteenth century was the century of sociable innovation and reformism. Naturally, much work remains to be done. This dissertation merely proposed a new framework for the cultural history of Ottoman science. The true legacy of the Ottoman early enlightenment still remains unknown. Ottoman modernity, such as it was, still lacks a robust definition.

However, the two main protagonists of this dissertation, Ömer and Esad, also show the way to the future. One man, who had studied with both scholars, epitomizes the early enlightenment in Istanbul: Abbas Vesim (d.1767), a true freethinker.¹ Vesim's family was neither rich nor powerful, yet, he had access to the best minds in the Empire. He had also read the *Specimen* and was one of the beneficiaries of the epistemic regime that the press had wrought. When he wrote his *Düstūr el-Vesim* (The Judgments of Vesim) in the late 1730s, he was a young practicing physician in the city with no ties to the court and no 'ulemā' status. Vesim addressed the *Judgments*, two 1300-page tomes, to Ahmed's successor, Mahmud I (r.1730-1754). In the boastful epistle dedicatory, he claimed that the book was a very substantial contribution to medicine.

The main body of his work was similar to the ones his Ottoman predecessors had composed, and comprised of a list of medical recipes – a vast compendium for diagnosing and treating diseases. Yet, the book was much more than that. In fact, it was the single most radical volume written in eighteenth-century Istanbul. In the preface, Abbas Vesim made his sympathies for mechanical philosophy clear by saying that the aspiring physician first had to master mechanics (aḥvāl-i meḥānika) and the laws of chemistry (ḳānūn-ı kimyevī) before embarking on medical training, as “the human body is similar to a recirculating fountain.”²

Unlike the moderate modernizers that this dissertation has developed on, Vesim was a full-blooded mechanical philosopher. The most radical part of his philosophy was his denial of both the immortality and the unity of the soul. He argued that some kind of pneuma (ḥavā) moved the human body, which accounted for the similarity between the body and a machine, and that the human body composed of atoms.³ When we

¹ Adivar, *İlim*, p. 189.

² Süleymaniye MS Ragıp Paşa 946, 2v.

³ *ibid.*, 3r. Cf. Theodore Brown. *The Mechanical Philosophy and the 'Animal Oeconomy'*. New York: Arno Press, 1981; p.124 “When, for example Thomas Willis wrote his influential *Pharmaceutice rationalis* (1674/5), he prefaced his text with an appeal to find the “Mechanical Means of the working

divided a snake in two, he contended, both parts survived and even moved, which clearly showed that the soul was a material thing (şeyy-i maddī), otherwise it would not admit of division (teferrüd ve kışmet).⁴ The invective against Aristotelianism was now de rigueur, perhaps even anachronistic. According to Vesim, “the four-element theory of the ancients c[ould] not stand up to experimental verification (berr tecrübe).” Vesim cited Robert Boyle in support of his corpuscularian conviction, and claimed that the Englishman had conclusively proven that water and fire do not mix, and that it was obvious (belli) that bodies were composed of very small particles (ecsām-ı siğār).⁵

Vesim left those of his readers who had the stamina to leaf through the entire book with a loud remark that sounded as familiar as it was disturbing. Europeans had long surpassed traditional Muslim learning. The time to look to the ‘ulemā and to scholastic traditions was long past. What the Ottoman naturalists had to do was to learn Latin, which was the language of philosophers (līsān-ı feylesūfān), rather than Arabic. His last carefree remark was that he believed that the Europeans received a better education in medicine, anatomy and the science of the stars because they were not subject to the heavy Islamic strictures (qayd-ı diyānet) under which the Turkish philosophers had long been suffering.⁶

of Medicines in our Bodies;” once they were found, these “mechanical means” would save the medical art from the “vilest scum of the people [who] bark against and fling dirt upon Physick.” Likewise in the ‘eighties and ‘nineties, authors of iatromechanical treatises worked hand-in-hand with College officials who were trying to rebuild the physicians’ decaying income, power and prestige. Clearly, the acceptance, if not the growth, of iatromechanism was more than a purely intellectual event. Iatromechanism may have presented a new conceptual development, but the popularity of iatromechanical ideas at the College of Physicians had economic and social as well as philosophical roots. Iatromechanism, in short, was connected with the history of the College, particularly with its non-intellectual conditions and events that often controlled that history.”

⁴Süleymaniye MS Ragıp Paşa 946, 3v-4r.

⁵ibid, 2v.

⁶Süleymaniye MS Ragıp Paşa 947, 618r-v.

Bibliography

Manuscripts

Istanbul – Askeri Müze

Askeri Müze MS 1456.

Istanbul - Süleymaniye

Ayasofya MS 2569

Fahri Bilge Collection MS 112

Hacı Beşir Ağa MS 414-5

Hamidiye MS 1013

Mehmet Tufan Aslan Collection MS 231

Nuruosmaniye MS 3512

Ragıp Paşa MS 946-7

Ragıppaşa MS 674

Şehid Ali Paşa MS 2085

Manisa

Manisa İl Halk MS 5388

Printed Sources, Primary and Secondary

Abdüllatif Harputi. *Tārīḥ-i ‘İlm-i Kelām*. Istanbul: Necm-i Istikbal, 1914, p.87

Abidin, Adile. “Ayni’nin İkdü’l-Cuman’ında Osmanlılar’a Ait Verilen Malumatın Tetkiki,” *Tarih Semineri Dergisi*, II, 1938: 134-215.

Abou El-Haj, Rifaat. “Ottoman Diplomacy at Karlowitz,” *Journal of the American Oriental Society*, 87/4, 1967: 498-512.

Abou-El-Haj, Rifaat. "The Narcissism of Mustafa II (1695-1703): A Psychohistorical Study," *Studia Islamica*, 40, 1974: 115-131.

Abou-El-Haj, Rifaat. "The Ottoman Vezir and Pasa Households 1683-1703: A Preliminary Report," *Journal of the American Oriental Society*, 94/4, 1974: 438-447.

Abou-El-Haj, Rifaat. *The 1703 Rebellion and the Structure of Ottoman Politics*. Istanbul: Ned- erlands Historisch-Archaeologisch Instituut te Istanbul, 1984.

Adamson, Peter and Richard C. Taylor. "Introduction," in *The Cambridge Companion to Arabic Philosophy*. eds. Peter Adamson and Richard C. Taylor. Cambridge: Cambridge UP, 2005; pp. 1-9.

Adivar, Adnan. *Osmanlı Türklerinde İlim*. Istanbul: Remzi, 2000 [1937].

Ahmed Bican. *Dürr-i Mekkûn: kritische Edition mit Kommentar*. ed. Laban Kaptein. Asch: Kaptein, 2011

Ahmed Refik. *Lale Devri*. Istanbul: Ibrahim Hilmi, 1915.

Ahmed Refik. *Onikinci Asr-ı Hicride İstanbul Hayatı*. Istanbul: Enderun, 1988 [1921]

Ahmed, Shahab and Nenad Filipovic. "The Sultan's Syllabus: A Curriculum for the Ottoman Imperial Medreses Prescribed in a Ferman of Qanuni I Süleyman, Dated 973 (1565)," *Studia Islamica*, 98/99, 2004: 183-218.

Akasoy, Anna. "Ibn Sab'in's *Sicilian Questions*: The Text, Its Sources and Their Historical Context," *Al-Qantara*, XXIX/1, 2008:115-146; pp.135-6

Aksan, Virginia H. "Locating the Ottomans among Early Modern Empires," *Journal of Early Modern History*, 3/2, 1999: 103-134.

Aksan, Virginia. "War and Peace" in *Cambridge History of Turkey*, vol.3: *The Later Ottoman Empire*. ed. Suraiya Faroqhi. Cambridge: Cambridge UP, 2006;; pp. 81-117.

Aktepe, Münir. "Nevsehirli Damad Ibrahim," *Diyanet Vakfı İslam Ansiklopedisi*. 40 vols. Istanbul: IRCICA, 1988-; vol 29, pp. 292-3.

al-Taftazani, Masud ibn Umar. *A Commentary on the Creed of Islam: Sa'd al-Din al-Taftazani on the Creed of Najm al-Din al-Nasafi*. trans. Earl Edgar Elder. New York: Columbia University Press, 1950

al-Tikriti, Nabil. "Kalam in the Service of State: Apostasy and the Defining of Ottoman Islamic Identity," in *Legitimizing the Order: The Ottoman Rhetoric of State Power*. eds. Hakan Karateke and Maurus Reinkowski. Leiden: Brill, 2005; pp. 131-150.

Alexander Mavrocordato. *Peri kathekonton=Liber de Officiis*. London: Samuel Palmer,

1726.

Alexandru Sturdza. *L'Europe orientale et le rôle historique des Maurocordato, 1660-1830*. Paris: Plon, 1913,

Amar, Zohar and Efraim Lev. "An Early Glimpse at Western Medicine in Jerusalem, 1700-1840," *Vesalius*, XI/11, 2005: 81-87.

Artan, Tülay. "18. Yüzyıl Başlarında Yönetici Elitin Saltanatın Meşruiyet Arayışına Katılımı," *Toplum ve Bilim*, 83, 1999: 292-322.

Artan, Tülay. "Eighteenth Century Ottoman Princesses as Collectors: from Chinese to European Porcelain," *Ars Orientalis*, 29, 2011: 113-146.

Artan, Tülay. "Forms and Forums of Expression: Istanbul and Beyond, 1600-1800," in *The Ottoman World*. ed. Christine Woodhead. London: Routledge, 2012; pp. 378-405.

Atıl, Esin. *Levni and the Surname: the Story of an Eighteenth Century Ottoman Festival*. Istanbul: Koçbank, 1999.

Aujac, Germaine. "Chrysanthos Notaras et les systèmes du monde," *Pallas*, 59, 2002: 75-88.

Avicenna. *Kitābu's-Şifā: Fizik* [Parallel Turkish-Arabic text]. ed and trans. Muhittin Macit and Ferruh Özpilavcı. Istanbul: Litera, 2004.

Avicenna. *The Canon of Medicine of Avicenna*. trans. Oscar Cameron Gruner. New York: AMS Press, 1973

Aydın, Ayten. "Bursalı Ali Münşi'nin Bidaat el-Mübtedi Adlı Eseri ve Osmanlı İyatrokimyasındaki Yeri," *OTAM*, 16, 2004: 77-107

Aydüz, Salim. "Osmanlı Devleti'nde Müneccimbaşılık Müessesesi," *Belleten*, LXX/257, 2003: 167- 264.

Aynur, Hatice and Hakan Karateke. *III. Ahmed Devri Istanbul Çeşmeleri*. Istanbul: IBB, 1995.

Babinger, Franz. *Stambuler Buchwesen im 18. Jahrhundert*. Leipzig: Deutscher Verein für Buchwesen und Schrifttum, 1919.

Bachour, Natalia. "Oswaldus Crollius und Daniel Sennert in frühneuzeitlichen Istanbul: Studien zur Rezeption des Paracelsismus im Werk des osmanischen Arztes Salih b. Nasrallah Ibn Sallum al-Halabi." Unpublished doctoral dissertation, University of Heidelberg, 2010.

Bachstrom, Johann Friedrich. *Das Bey zwey hundert Jahr lang unbekannte, nunmehr*

aber entdeckte vortreffliche Land der Inqviraner. Frankfurt and Leipzig: n.p. 1737.

Bachstrom, Johann Friedrich. *L'Art de nager, ou Invention à l'aide de la quelle on peut toujours se sauver du Naufrage et en cas de Besoin, faire passer les plus larges rivières à des Armées entieres.* Amsterdam: Zacharie Chatelain, 1741.

Bachstrom, Johann Friedrich. *Nova aestus marini theoria.* Lugduni Batavorum: Wishoff, 1734

Baer, Marc, "The Great Fire of 1660 and the Islamization of Christian and Jewish Space in Istanbul," *International Journal of Middle East Studies*, 36/2, 2004: 159-181.

Baer, Marc. *Honored by the Glory of Islam.* Oxford: Oxford University Press, 2007.

Baer, Marc. *The Dönme: Jewish Converts, Muslim Revolutionaries and Secular Turks.* Stanford: Stanford UP, 2010

Barbir, Karl. "All in the Family: the Muradis of Damascus," in *Third Congress on the Social and Eco- nomic History of Turkey (Princeton University, 24-26 August 1983)*. eds. Heath W. Lowry and Ralph S. Hattox. Istanbul: Isis Press, 1990; pp. 327-355.

Bayat, Ali Haydar. *Osmanlı Devletinde Hekimbaşılık Kurumu ve Hekimbashılar.* Ankara: Atatürk Kültür Merkezi Başkanlığı Yayınları, 2000

Bayle, Pierre. *The Dictionary Historical and Critical of Mr. Peter Bayle.* 2nd ed. 5 vols. London: Printed for J.J. and P. Knapton, 1735.

Behrnauer, W.F.A. "Hagi Chalfas Dusturu'l-Amel: ein Beitrag zur osmanischen Finanzgeschichte," *Zeitschrift der deutschen morgenländischen Gesellschaft*, 11, 1847:111-132.

Ben Zaken, Avner. "Heavens of the Sky and the Heavens of the Heart: the Ottoman Cultural Context for the Introduction of post-Copernican Astronomy," *British Journal for the History of Science*, 37/1, 2004: 1-28.

Ben Zaken, Avner. *Cross-Cultural Scientific Exchanges in the Eastern Mediterranean, 1560–1660.* Baltimore: Johns Hopkins UP, 2010

Ben-Tov, Asaph. *Lutheran Humanists and Greek Antiquity: Melanchtonian Scholarship between Universal History and Pedagogy.* Leiden: Brill, 2009.

Berkes, Niyazi. *The Development of Secularism in Turkey.* Montreal: McGill UP, 1964

Berkey, Jonathan. *The Transmission of Knowledge in Medieval Cairo.* Princeton: Princeton University Press, 1992.

Bernard, Marie. "La critique de la notion de nature (Tab') par le *kelam*," *Studia Islamica*,

51, 1980: 59-105.

Beydilli, Kemal. *Türk Bilim ve Matbaacılık Tarihinde Mühendishane, Mühendishane Matbaası ve Kütüphanesi, 1776-1826*. Istanbul: Eren, 1995.

Biagioli, Mario. "Scientific Revolution, Social Bricolage, and Etiquette" in *The Scientific Revolution in National Context*. Roy Porter and Mikulas Teich, eds. Cambridge: Cambridge UP, 1992; pp. 11-54.

de Bonnac, Jean-Louis d'Usson. *Mémoire historique sur l'ambassade de France a Constantinople*. ed. Charles Shefer. Paris: Leroux, 1894.

Boukaris, Efthymios P. and Vangelis Koutalis. "The 'System of Chymists' and the 'Newtonian Dream' in Greek-Speaking Communities in the Seventeenth-Eighteenth Centuries" *Science and Education*, 15, 2006: 780-800.

Bouwsma, William J. "The Two Faces of Humanism: Stoicism and Augustinianism in Renaissance Thought," in *Itinerarium Italicum: The Profile of the Italian Renaissance in the Mirror of its European Transformations* eds. Heiko Oberman and Thomas Brady. Leiden: Brill, 1997; pp.3-60.

Brentjes, Sonja. "Mapmaking in Ottoman Istanbul between 1650 and 1750: A Domain of Painters, Calligraphers or Cartographers?" in *Frontiers of Ottoman Studies*. 2 vols. Colin Imber, Keiko Kiyotaki and Rhoads Murphey, eds. London: I.B. Tauris, 2005; vol. 2, pp.125-156.

Brockelmann, Carl. *Geschichte der arabischen Litteratur*. 5 vols. Leiden: Brill, 1943.

Brockliss, Laurence. "The Moment of No Return: The University of Paris and the Death of Aristotelianism," *Science & Education*, 15, 2006: 259-278.

Brockliss, Laurence. *Calvet's Web: Enlightenment and the Republic of Letters in Eighteenth-Century France*. Oxford: Oxford UP, 2002.

Brown, Theodore. *The Mechanical Philosophy and the 'Animal Oeconomy'*. New York: Arno Press, 1981.

Buehler, Arthur F. "Shariat and Ulama in Ahmad Sirhindi's Collected Letters," *Die Welt des Islams*, 43/3, 2003: 309-320.

Burke, Peter. *The Fabrication of Louis XIV*. New Haven: Yale University Press, 1994.

Camariano-Cioran, Ariadna. *Les Academies princières de Bucarest et de Jassy et leurs professeurs*. Thessaloniki : Institute for Balkan Studies, 1974

Cantemir, Dimitri. *Osmanlı İmparatorluğunun Yükseliş ve Çöküş Tarihi*. 3 vols. Ankara: TTK, 1980 [1722]

Carleson, Edvard. *Ibrahim Müterrika Basımevi ve Bastığı İlk Eserler*. ed. and trans. Mustafa Akbulut. Ankara: Türk Kütüphaneciler Derneği, 1979

Cengiz Orhonlu, "Bir Türk Kadısının Yazdığı Atina Tarihi (Tarih-i Medinetü'l-Hükema)", *Istanbul Üniversitesi Edebiyat Fakültesi Güney-Doğu Avrupa Araştırmaları Dergisi*, 2-3, 1973-4: 119-136.

Cerbu, Thomas Jean-Marie. "Leone Allacci (1587-1669): The Fortunes of an Early Byzantinist," Unpublished doctoral dissertation, Harvard University, 1986

Cezar, Mustafa. *Osmanlı Tarihinde Levendler*. Istanbul: Çelikkilt, 1965.

Chrissidis, Nikolaos A. "A Jesuit Aristotle in Seventeenth-Century Russia: Cosmology and the Planetary System in the Slavo-Greco-Latin Academy," in *Modernizing Muscovy: Reform and Social Change in Seventeenth-Century Russia*. eds. Jarmo Kotilaine and Marshall Poe. London, New York: Routledge, 2004; pp. 380-405.

Clayer, Nathalie. "L'Autorite religieuse dans l'islam ottoman sous le contrôle de l'Etat?" *Archives de sciences sociales des religions*, 49/125, 2004: 45-62.

Comneno-Papadopoli, Niccolo. *Historia gymnasii patavini post ea, quae hactenus de illo scripta sunt, ad haec nostra tempora plenius, & emendatius deducta. Cum actuario de claris professoribus tum alumnis eiusdem*. 2 vols. Venice: Apud Sebastianum Coleti, 1726

Cook, Harold J. "Institutional Structures and Personal Belief in the London College of Physicians," in *Religio Medici: Medicine and Religion in seventeenth-Century England*. eds. Ole Peter Grell and Andrew Cunningham. Aldershot: Scolar Press, 1996; pp. 91-114.

Cook, Michael A. *Commanding Right and Forbidding Wrong in Islamic Thought*. Cambridge: Cambridge UP, 2001.

Corbin, Henri. *En Islam Iranien: Aspects spirituels et philosophiques*. 4 vols. Paris: Galimard, 1971-3.

Cornell H. Fleischer, "Royal Authority, Dynastic Cyclism and 'Ibn Khaldunianism' in Sixteenth-Century Ottoman Letters," *Journal of Asian and African Studies*, 18/3-4, 1983: 198-220.

Cottunius, Johannes. *Commentarii lucidissimi in octo libros Aristotelis de physico auditu; una cum quaestionibus*. Venice: Pauli Frambotti, 1648.

de la Croix, Petis. *La Turquie chrétienne sous la puissante protection de Louis le Grand*. Paris: Pierre Herissant, 1695.

Dadich, Franciscus. "Denkwürdigkeiten von Constantinopel vom Jahr 1710," *Allgemeine historische Bibliothek*, 9, 1769: 278-88.

Danişmend, İsmail Hakkı. *İzahlı Osmanlı Tarihi Kronolojisi*. 4 volumes. Istanbul: Türkiye, 1971.

Darling, Linda T. "Social Cohesion ('Asabiyya) and Justice in the Late Medieval Middle East," *Comparative Studies in Society and History*, 49/2, 2007: 329-357.

David, Geza. "Administration in Ottoman Europe" in *Süleyman the Magnificent and His Age: The Ottoman Empire in the Early Modern World*. eds. Metin Kunt and Christine Woodhead. New York: Longman, 1995.

Dear, Peter. *Discipline and Experience: The Mathematical Way in the Scientific Revolution*. Chicago: University of Chicago Press, 1995

Debus, Allen G. *French Paracelsians*. Cambridge: Cambridge University Press, 1991.

Defter-i Kütübhâne-i Ayasofya. Istanbul: Matbaa-i Amire, 1886.

Defter-i Kütübhâne-i Çorlulu Ali Paşa. Istanbul: Matbaa-i Amire, 1885.

Demos, Raphael. "Neo-Hellenic Enlightenment, 1750-1821," *Journal of the History of Ideas*, 19/4, 1958: 523-541.

Dew, Nicholas. *Orientalism in Louis XIV's France*. Oxford: Oxford UP, 2009.

Dialetis, Dimitris, Kostas Gavroglu and Manolis Patiniotis. "The Sciences in the Greek-Speaking Regions during the Seventeenth and Eighteenth Centuries", in *The Sciences in the European Periphery during the Enlightenment*. 2 vols. Kostas Gavroglu, ed. Dordrecht: Kluwer, 1999; vol. 2, pp.41-71.

Dimitrie Cantemir. *The Salvation of the Wise Man and the Ruin of the Sinful World = Salah al-hakim wa fasad al-'alam al-zamim*. Bucharest: Editura Academiei Romane, 2006.

Duverdier, Gerald. "Savary de Brèves et Ibrahim Müteferrika: Deux Drogmans Culturels a l'Origine de l'Imprimerie Turque," *Bulletin du Bibliophile*, 3, 1987: 322-359.

Eberhard, Christoph. *Specimen theoriae magneticae : Versuch einer Magnetischen Theorie*. Leipzig: Martini, 1720.

Ekmeleddin İhsanoğlu et al., eds. *Osmanlı Astronomi Literatürü Tarihi*. 2 vols. Istanbul: IRCICA, 1997.

Ekmeleddin İhsanoğlu et al., eds. *Osmanlı Tabii ve Tatbiki Bilimler Literatürü Tarihi*. 2 vols. Istanbul: IRCICA, 2006.

Ekmeleddin İhsanoğlu et al., eds. *Osmanlı Tıbbi Bilimler Literatürü Tarihi*. 4 vols. Istanbul: ISAR, 2008.

El- Rouayheb, Khaled. "The Myth of 'The Triumph of Fanaticism' in the Seventeenth-Century Ottoman Empire," *Die Welt des Islams*, 48, 2008: 196-221.

El-Rouayheb, Khaled. "Opening the Gate of Verification: The Forgotten Arabic-Islamic Efflorescence of the Seventeenth Century," *International Journal of Middle East Studies*, 38, 2006: 263-81.

Eldem, Edhem. *French Trade in Istanbul in the Eighteenth Century*. Leiden: Brill, 1999.

Eldem, Sedat Hakkı. *Sadabad*. Ankara: Kltır Bakanlığı, 1977.

Elias, Norbert. *The Civilizing Process*. 2 vols. trans. Edmund Jephcott. New York: Pantheon, 1978

Endress, Gerhard. "Reading Avicenna in the Madrasa: Intellectual Genealogies and Chains of Transmission of Philosophy and the Sciences in the Islamic East" in *Arabic Theology, Arabic Philosophy: From the Many to the One. Essays in Celebration of Richard M. Frank*. Leuven: Peeters, 2006; pp.371- 423.

Erimtan, Can. *Ottomans Looking West? The Origins of the Tulip Age and Its Development in Modern Turkey*. London: Tauris, 2008

Ernesti, Johann Heinrich Gottfried. *Die Wol-eingerichtete Buchdruckerey*. Nuremberg: Endters, 1733

Faroqhi, Suraiya. "Guildsmen Complain to the Sultan: Artisans' Disputes and the Ottoman Administration in the eighteenth Century," in *Legitimizing the Order: The Ottoman Rhetoric of State Power*. eds. Hakan Karateke and Maurus Reinkowski. Leiden: Brill, 2005; pp. 177-194.

Faroqhi, Suraiya. "Crisis and Change, 1500-1699" in *An Economic and Social History of the Ottoman Empire*. 2 vols. eds. Halil Inalcık and Donald Quataert. Cambridge: Cambridge University Press, 1994; pp.411-635.

Faroqhi, Suraiya. *Another Mirror for the Princes: The Public Image of the Sultan and Its Reception*. Istanbul: Isis, 2009.

Fazlıoğlu, İhsan. "As'ad al-Yanyawi (d.1142/1730)" in *Mawsuat A'lam al-Ulama wa al-Udaba al-Arab wa al-Muslimin*. Beirut: Dar al-Jil, 2004; vol.I, 604-677.
<http://www.ihsanfazlioglu.net/EN/publication/articles/1.php?id=108>

Fazlıoğlu, İhsan. "The Samarqand Mathematical-Astronomical School: A Basis for Ottoman Philosophy and Science," *Journal for the History of Arabic Science*, 14/3, 2008: 3-68.

Findley, Carter V. "Political Culture and the Great Households" in *Cambridge History of Turkey*, vol.3: *The Later Ottoman Empire*. ed. Suraiya Faroqhi. Cambridge: Cambridge

UP, 2006; pp. 65-80.

Fleischer, Cornell H. *Bureaucrat and Intellectual in the Ottoman Empire: the Historian Mustafa Ali (1541-1600)* Princeton: Princeton UP, 1986.

Fodor, Pál. "15.-17. Yüzyıl Osmanlı Hükümdar Aynalarında Devlet ve Toplum, Kriz ve Reform." *Ege Üniversitesi Tarih İncelemeleri Dergisi*, XIV, 1999: 281-302.

Frazer, Charles. "Leon Allatios: a Greek Scholar of the Seventeenth Century," *Modern Greek Studies Yearbook*, 1, 1985: 63-78.

Frazer, Charles. *Catholics and Sultans: The Church and the Ottoman Empire, 1453-1923*. Cambridge: Cambridge UP, 1983.

French, Roger. "Astrology in Medical Practice," in *Practical Medicine from Salerno to the Black Death*. eds. L. García Ballester, R. French, J. Arrizabagala and A. Cunningham. Cambridge: Cambridge UP, 1994; pp. 30-59.

French, Roger. *Medicine before Science: The Business of Medicine from the Middle Ages to the Enlightenment*. Cambridge: Cambridge UP, 2003.

Füyûdât-ı Mıknâṭısiyye. Istanbul: Sultanî Press, 1732.

Fyrgos, Antonis, ed. *Il Collegio greco di Roma: ricerche sugli alunni, la direzione, l'attività*. Rome: Pontificio Collegio greco S. Atanasio, 1983

Fyrgos, Antonis. "Joannes Cottunius di Verria e il neoaristotelismo padovano," in *Renaissance Readings of the Corpus Aristotelicum*. ed. Marianne Pade. Copenhagen: Museum Tusculanum Press, 2001; pp.225-240.

Galanté, Abraham. *Médecins Juifs au service de la Turquie*. Istanbul: Babok, 1938.

Garcia, Humberto. *Islam and the English Enlightenment, 1670-1840*. Baltimore: Johns Hopkins UP, 2012.

Garin, Eugenio. *History of Italian Philosophy*. 2 vols. trans. and ed. Giorgio Pinton. Amsterdam, New York: Rodopi, 2008 [Italian, 1947].

Gdoura, Wahid. *Le Début de l'imprimerie arabe à Istanbul et en Syrie : évolution de l'environnement culturel: 1706-1787*. Tunis: ISD, 1985.

Geanakoplos, Deno. *Byzantine East and Latin West: Two Worlds of Christendom in Middle Ages and Renaissance*. New York: Harper & Row, 1966

Geanakoplos, Deno. *Interaction of the Sibling Byzantine and Western Cultures in the Middle Ages and the Italian Renaissance (330-1600)*. New Haven: Yale UP, 1976

Georgirenes, Joseph. *A Description of the Present State of Samos, Nicaria, Patmos and Mount Athos*. London: Moses Pitt, 1678.

Gerçek, Selim Nüzhet. *Türk Matbaacılığı: I. Müteferrika Matbaası*. Istanbul: Devlet Basımevi, 1939

Geyer-Kordesch, Johanna. "Georg Ernst Stahl's Radical Pietist Medicine and Its Influence on the German Enlightenment," in *The Medical Enlightenment of the Eighteenth Century*. eds. Andrew Cunningham and Roger French. Cambridge: Cambridge UP, 2006; pp.67-87.

Geyer-Kordesch, Johanna. *Pietismus, Medizin und Aufklärung in Preussen im 18. Jahrhundert: das Leben und Werk Georg Ernst Stahls*. Tübingen: Niemeyer, 2000.

Göçek, Fatma Müge. *Rise of the Bourgeoisie, Demise of Empire: Ottoman Westernization and Social Change*. New York: Oxford University Press, 1996.

Göçek, Fatma Müge. *East Encounters West: France and the Ottoman Empire in the Eighteenth Century*. New York: Oxford University Press, 1987.

Goffman, Daniel. *The Ottoman Empire and Early Modern Europe*. Cambridge: Cambridge UP, 2002.

Gökbilgin, M. Tayyip ed. *Türk-Macar kültür Münasebetleri Işığt Altında II. Rákóczi Ferenc ve Macar Mültecileri Sempozyumu Istanbul, 31 Mayıs - 3 Haziran 1976*. Ankara: TTK, 1981.

Goldstone, Jack A., "East and West in the Seventeenth Century: Political Crises in Stuart England, Ottoman Turkey and Ming China," *Comparative Studies in Society and History*, 30/1, 1988: 103-142.

Gölpınarlı, Abdülbaki. *Melamilik ve Melamiler*. Istanbul: Devlet Matbaası, 1931.

Graetzer, Johann. *Daniel Gohl und Christian Kundmann*. Breslau: Schottlaender, 1884

Grant, Edward. "How Theology, Imagination and the Spirit of Inquiry Shaped Natural Philosophy in the Late Middle Ages," *History of Science*, XLIX, 2011: 89-108.

Grant, Edward. "Medieval Natural Philosophy: Empiricism with- out Observation," in *The Dynamics of Aristotelian Natural Philosophy from Antiquity to the Seventeenth Century*. eds. Cees Leijenhorst, Christoph Lüthy, and Johannes M. M. H. Thijssen. Leiden: Brill, 2002; pp. 141-68.

Grant, Edward. "What Was Natural Philosophy in the Late Middle Ages?" *History of Universities*, XX/2, 2005: 12-46.

Greene, Molly. *A Shared World: Christians and Muslims in the Early Modern*

Mediterranean. Princeton: Princeton UP, 2000.

Gutas, Dimitri. *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early Abbasid Society*. London: Routledge, 1998.

Hagen, Gottfried and Tilman Seidensticker. "Reinhard Schulzes Hypothese einer islamischen Aufklärung. Kritik einer historiographischen Kritik," *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, 148, 1998; 83–110.

Hagen, Gottfried. *Ein osmanischer Geograph bei der Arbeit. Entstehung und Gedankenwelt von Katib Celebis Gihannüma*. Berlin: Klaus Schwarz Verlag, 2003.

Hamadeh, Shirine. "Ottoman Expressions of Early Modernity and the Inevitable Question of 'Westernization'," *Journal of the Society of Architectural Historians*, 63/1, 2004: 32–51.

Hamadeh, Shirine. "Public Spaces and Garden Culture of Istanbul in the Eighteenth Century," in *The Early Modern Ottomans: Remapping the Empire* eds. Virginia Aksan and Daniel Goffman. Cambridge: Cambridge UP, 2007

Hartnup, Karen. *'On the Beliefs of the Greeks': Leo Allatios and Popular Orthodoxy*. Leiden: Brill, 2004.

Heinz, Wilhelm. "Die Kultur der Tulpenzeit des Osmanischen Reiches," *Wiener Zeitschrift für die Kunde des Morgenlandes*, 61, 1962: 62–118.

Herzog, Christoph. "Aufklärung und Osmanisches Reich: Annäherung an ein historiographisches Problem," *Geschichte und Gesellschaft*, 23, 2010: 291–321.

Heumann, Christoph August. *Poecile*. 4 vols. Halle: Renger, 1726–32.

Heyd, Uriel. "Moses Hamon: Chief Jewish Physician to Sultan Süleyman the Magnificent," *Oriens*, 16, 1963: 152–70

Heyd, Uriel. *Studies in Old Ottoman Criminal Law*. ed. Victor L. Ménage. Oxford: Clarendon, 1973.

Hildebrand, Rémy. "Isaac Rousseau à Péra: heurs et malheurs d'un compagnon horloger," in *L'Horloger du Sérail: aux sources de fantasme oriental chez Jean-Jacques Rousseau*. eds. Paul Dumont and Rémy Hildebrand. Paris: Maisonneuve & Larose, 2005; pp.28–47.

Hirai, Hiro. *Medical Humanism and Natural Philosophy: Renaissance Debates on Life, Matter and the Soul*. Leiden: Brill, 2011;

Holton, David, ed. *Literature and Society in Renaissance Crete*. Cambridge: Cambridge UP, 1991.

Hourani, Albert. "Changing Face of the Fertile Crescent in the Eighteenth Century," *Studia Islamica*, 8, 1957: 89-122.

Ibn Khaldun. *The Muqaddimah: An Introduction to History*. 3 vols. trans. Franz Rosenthal, ed N. J. Dawood. London: Routledge Kegan Paul, in association with Secker and Warburg, 1967

Icones graecorum sapientium amplissimo et excellentissimo D.D. Ioanni Cottunio Equiti dicatae. Padua: apud Mattheum Bolzettam de Cadorinis, 1648.

Ihsanoğlu, Ekmeleddin. "Institutionalisation of Science in the Medreses of Pre-Ottoman and Ottoman Turkey" in *Turkish Studies in the History and Philosophy of Science*. eds. Gürol Irzık and Güven Güzeldere. New York: Springer, 2005; pp. 265-284.

Imber, Colin. *The Ottoman Empire, 1300-1650: The Structure of Power*. New York: Palgrave, 2002.

Inalcık, Halil and Donald Quataert, eds. *An Economic and Social History of the Ottoman Empire*. 2 vols. Cambridge: Cambridge University Press, 1994.

Inalcık, Halil. "Military and Fiscal Transformation in the Ottoman Empire," *Archivum Ottomanicum*, 6, 1980: 283-337

Inalcık, Halil. *The Ottoman Empire: The Classical Age, 1300-1600*. London: Weidenfeld & Nicholson, 1973.

Ingrao, Charles and Jovan Pesalij, eds. *The Peace of Passarowitz, 1718*. West Lafayette: Indiana, 2011.

Iorga, Nicolae. *Geschichte des osmanischen Reiches*. 4 vols. Frankfurt am Main: Eichborn, 1990 [1908-11]

Irepoğlu, Gül. "Topkapı Sarayı Müzesi Hazine Kütüphanesindeki Batılı Kaynaklar Üzerine Düşünceler", *Topkapı Sarayı Müzesi Yıllığı*, I, 1986: 56-72; 174-197.

Israel, Jonathan. "Counter-Reformation, Economic decline, and the Delayed Impact of the Medical Revolution in Catholic Europe, 1550–1750" in *Health Care and Poor Relief in Counter-Reformation Europe*. eds. Ole Peter Grell, Andrew Cunningham and Jon Arrizabalaga. London: Routledge, 1999; pp. 40–55.

Israel, Jonathan. *Enlightenment Contested: Philosophy, Modernity and the Emancipation of Man, 1670-1752*. Oxford: Oxford UP, 2006.

Izgi, Cevat, *Osmanlı Medreselerinde İlim*. 2 vols. Istanbul: İz, 1997.

Jonkers, A.R.T. *Earth's Magnetism in the Age of Sail*. Baltimore: Johns Hopkins University Press, 2003.

Kaçar, Mustafa. "Osmanlı İmparatorluğu'nda Askeri Teknik Eğitimde Modernleşme Çalışmaları ve Mühendishanelerin Kuruluşu (1808'e kadar)," *Osmanlı Bilimi Araştırmaları*, II, 1998: 69-137.

Kafadar, Cemal. "The Myth of the Golden Age: Ottoman Historical Consciousness in the Post-Süleymanic Era" in *Süleyman the Second and His Time*. eds. Halil İnalcık and Cemal Kafadar. Istanbul: Isis, 1993; pp.37-48.

Kahya Esin and Ayşegül D. Erdemir. *Bilimin Işığında Osmanlı'dan Cumhuriyete Tıp ve Sağlık Kurumları*. Istanbul: Diyanet Vakfı, 2000.

Kahya, Esin. "Ömer Şifai: Osmanlılarda İyatrokimyanın Temsilcisi," *OTAM*, 4, 1989: 171-195.

Karamanolis, George. "Was There a Stream of Greek Humanists in the Late Renaissance?" *Hellenika*, 53, 2003: 19-46.

Katip Çelebi, *Cihānnümā*. Istanbul: Sultanic Press, 1732.

Katip Çelebi. "Mizanü'l-Hakk fi İhtiyarü'l-Ahakk," *Mecmua-i Ulum*, 2, 1297 [1880]: 1-97.

Katip Çelebi. *Lexicon bibliographicum et encyclopaedicum*. ed. and trans. Gustav Flügel. 6 vols. London: Oriental Translation Fund, 1845.

Katip Çelebi. *The Balance of Truth*. trans. and ed. Geoffrey L. Lewis. London: Allen and Unwin, 1957

Kazancıgil, Aykut. "Lale Devri'nde Bilim Hayatı," *Istanbul Armağanı 4: Lale Devri*. ed. Mustafa Armağan. Istanbul: Büyükşehir Belediyesi, 2000; pp.195-210

King, David A. *Astronomy in the Service of Islam*. Aldershot: Ashgate, 1993.

Kitromilides, Paschalis. "The Enlightenment and the Greek Cultural Tradition," *History of European Ideas*, 36, 2010: 39-46.

Kitromilides, Paschalis. *Enlightenment as Social Criticism*. Princeton: Princeton UP, 1992.

Kılınç, Berna. "Yirmisekiz Mehmed Çelebi's Travelogue and the Wonders that make a Scientific Centre" in *Travels of Learning*. eds. Ana Simoes, Ana Carneiro, Maria Paula Diogo. Boston: Kluwer, 1998; pp.85-89.

Klein-Franke, Felix. "Paracelsus Arabus: Eine Studie zur alchemistischen medizin im Orient," *Medizinhistorisches Journal*, 10/1, 1975: 50-4.

Klestinec, Cynthia. "Medical Education in Padua: Students, Faculty and Facilities,"

Medical Excellence? Medical Travel and Education in Europe, 1500- 1789. eds. Ole Peter Grell, Andrew Cunningham and Jon Arrizabalaga. Aldershot: Ashgate, 2010

Knös, Borje. *Histoire de la littérature néo-grecque*. Stockholm: Almqvist, 1962.

Köhbach, Markus. "Europäische Äerzte im Osmanischen Reich am Beginn des 18. Jahrhunderts - der Fall Şinasi," *Sudhoffs Archiv*, 64/1, 1980: 79-85.

Kostantaras, Dean. *Infamy and Revolt: The Rise of the National Problem in Early Modern Greek Thought*. New York: Columbia UP, 2006

Kriebel, Martin, "Pietistische Halle und das orthodoxe Patriarchat von Konstantinopel, 1700-1730," *Jahrbücher für Geschichte Osteuropas*, 3/1, 1965: 50-70

Kristeller, Paul Oskar. *Renaissance Thought: The Classic, Scholastic and Humanist Strains*. New York: Harper, 1961

Krstić, Tijana. "Illuminated by the Light of Islam and the Glory of the Ottoman Sultanate: Self-Narratives of Conversion to Islam in the Age of Confessionalization," *Comparative Studies in Society and History*, 51/1, 2009: 35-63.

Krstić, Tijana. *Contested Conversions to Islam*. Stanford: Stanford UP, 2011.

Kuhn, Heinrich C. *Venetischer Aristotelismus im Ende der aristotelischen Welt: Aspekte der Welt und des Denkens des Cesare Cremonini (1550-1631)*. Frankfurt am Main: Peter Lang, 1996.

Kun, Tibor Halasi. "İbrahim Müteferrika," *İslam Ansiklopedisi*. Istanbul: MEB, 1988 [1950]; vol V., 896-900

Kundmann, Johann Christian. *Rariora naturae et artis, item in re medica*. Breslau and Leipzig: Hubert, 1737

Kunt, Metin and Christine Woodhead, eds. *Süleyman the Magnificent and His Age: The Ottoman Empire in the Early Modern World*. New York: Longman, 1995.

Kunt, Metin. "Ethnic-Regional (Cins) Solidarity in the Seventeenth-Century Ottoman Establishment," *International Journal of Middle East Studies*, 5, 1974: 233-39.

Kunt, Metin. "Siyasal Tarih (1300-1600)" in *Türkiye Tarihi*, vol. 2, *Osmanlı Devleti, 1300-1600*. eds. Metin Kunt, Hüseyin Yurdaydın and Ayla Ödekan. Istanbul: Cem, 1987; pp. 15-144.

Kunt, Metin. *Bir Osmanlı Valisinin Yıllık Gelir-Gideri: Diyarbekir, 1670-1671*. Istanbul: Boğaziçi Üniversitesi Yayınları, 1981.

Kunt, Metin. *The Sultan's Servants :The Transformation of Ottoman Provincial*

Government, 1550-1650. New York: Columbia University Press, 1983.

Kurat, Akdes Nimet. *Prut Seferi ve Barışı*. 2 vols. Ankara: TTK, 1953.

Kurt, Yılmaz ed. *Koçi Bey Risalesi: Eski ve Yeni Harflerle*. Ankara: Ecdad, 1994.

Lancaster, James. "Natural Knowledge as a Propaedeutic to Self-Betterment: Francis Bacon and the Transformation of Natural History," *Early Science and Medicine*, 17, 2012:181-196.

Landweber, Julia. "Fashioning Nationality and Identity in the Eighteenth Century: The Comte de Bonneval in the Ottoman Empire," *The International History Review*, XXX/1, 2008: 1-31

Leaman, Oliver and Sajjad Rizvi. "The Developed *Kalām* Tradition," in *The Cambridge Companion to Classical Islamic Theology*. ed. Tim Winter. Cambridge: Cambridge UP, 2008; pp.77-96.

Leen Spruit. *Species Intelligibilis: Renaissance Controversies, Later Scholasticism and the Elimination of the Intelligible Species in Modern Philosophy*. Leiden: Brill, 1995.

Legrand, Emile. *Bibliothèque Grecque Vulgaire*. vol 4: *Epistolaire Grec (ou recueil de lettres ad- dressées pour la plupart à Chrysanthé Notaras)* Paris: Maisonneuve, 1888; pp. 117, 237.

Lettinck, Paul. *Aristotle's Physics and Its Reception in the Arabic World*. Leiden: Brill, 1994.

Lewis, Bernard "Ibn Khaldun in Turkey", in *Ibn Khaldun: The Mediterranean in the 14th Century: Rise and Fall of Empires*. Seville: Foundation El Legado Andalusi, 2006; pp. 376-380

Lolordo, Antonia. *Pierre Gassendi and the Birth of Early Modern Natural Philosophy*. Cambridge: Cambridge UP, 2007.

Loop, Jan. "Johann Heinrich Hottinger (1620-1667) and the 'Historia Orientalis'," *Church History and Religious Culture*, 88/2, 2008: 169-203.

Lopez-Piñero, José Maria "The Medical Profession in Sixteenth-Century Spain," in *The Town and State Physician in Europe from the Middle Ages to the Enlightenment*. ed. Andrew W. Russell. Wolfenbüttel: HAB, 1981; pp. 85-98.

Lucas, Paul. *Voyage du Sieur Paul Lucas, fait par ordre du Roi, dans La Grece, L'Asie Mineure, Macedonie et l'Afrique*. 2 vols. Amsterdam: aux dépens de la Compagnie, 1724

Lucas, Paul. *Voyage du Sieur Paul Lucas, fait par ordre du Roi, dans La Grece, L'Asie Mineure, Macedonie et l'Afrique*. 2 vols. Amsterdam: aux dépens de la Compagnie,

1724.

Mabilleau, Leopold. *Étude historique sur la philosophie de la Renaissance en Italie (Cesare Cremonini)*. Paris: Hachette, 1881.

Maclean, Ian. *Logic, Signs and Nature in Renaissance Medicine*. Cambridge: Cambridge UP, 2009.

Mahmut Kaya, "Some Findings on Translations Made in the Eighteenth Century from Greek and Es'ad Efendi's Translation of The Physica" in *Transfer of Modern Science & Technology to The Muslim World*. ed. Ekmeleddin Ihsanoğlu. Istanbul: IRCICA, 1992; pp. 385-392.

Majer, Hans Georg. "Sozialgeschichtliche Probleme um Ulema und Derwische im Osmanischen Reich," in *I. Milletlerarası Türkoloji Kongresi, Istanbul, 15-20.10.1973 Tebliğler I: Türk Tarihi*. Istanbul: Tercüman, 1979

Makdisi, George. *The Rise of Colleges: Institutions of Learning in Islam and the West*.

Manolis Patiniotis. "Travels of the Greek Scholars in the Eighteenth Century," in *Travels of Learning: A Geography of Science in Europe*. eds. Ana Simões, Ana Carneiro and Maria Paula Diogo. Dordrecht: Kluwer, 2003; pp. 49–77.

Marketos, S., J. Lascataros and A. Diamandopoulos, "The Links between the Medical School of Padua and the Hellenic Medical World," *Medicina nei Secoli*, 4, 1992: 45-58.

Marsigli, Luigi Ferdinando. *L'Etat militaire de l'Empire Ottoman*. Amsterdam: Pierre Gosse, 1732.

Martin, Craig. "Rethinking Renaissance Averroism," *Intellectual History Review*, 17/1, 2007: 3-19.

Masters, Bruce. "Christians in a Changing World," in *Cambridge History of Turkey*, vol.3: *The Later Ottoman Empire*. ed. Suraiya Faroqhi. Cambridge: Cambridge UP, 2006; pp.272-280.

Matei, Ion. "Le maître de langue turque de Dimitri Cantemir: Esad Efendi," *Revue des Études Sud-Est Européennes*, 2, 1972: 281-8.

Mavrocordato, Nicholas. *Parerga Philotheou / Les loisirs de Philothée*. trans. and ed. Jacques Bouchard. Athens/Montreal: Association pour l'étude des Lumières en Grece, 1989

McGinnis, John. *Avicenna*. Oxford: Oxford UP, 2010

McGinnis, Jon. "Scientific Methodologies in Medieval Islam," *Journal of the History of Philosophy*, 41/3, 2003: 307-327.

Mehren, August Ferdinand. "Vues d'Avicenna sur l'astrologie," *Le Muséon*, 111, 1884: 383- 403.

Meriç, Rıfkı Melül. "Türk Tababeti Tarihine Ait Vesikalar I," *Tarih Vesikaları*, 1, 1955: 37-113

Meriç, Rıfkı Melül. "Türk Tababeti Tarihine Ait Vesikalar II," *Tarih Vesikaları*, 2, 1958: 267-93.

Meyerhof, Max. "Thirty-three Clinical Observations by Rhazes," *Isis*, 23, 1935: 321- 72

Mikkeli, Heikki. "The Foundation of an Autonomous Natural Philosophy: Zabarella on the Classification of Arts and Sciences," in *Method and Order in Renaissance Philosophy of Nature: The Aristotle Commentary Tradition*. eds. Daniel Di Liscia, Eckhard Kessler and Charlotte Methuens. Aldershot: Ashgate, 1997; pp. 211-228.

Miller, Peter N. "Statecraft and Culture in Early Modern Europe [Review Essay]," *The Historical Journal*, 38/1, 1995: 161-173

Miller, Peter N. *Peiresc's Europe: Learning and Virtue in the Seventeenth Century* New Haven: Yale UP, 2000

Minnis, Alastair. *Medieval Theory of Authorship: Scholastic Literary Attitudes in the Later Middle Ages*. Philadelphia: University of Pennsylvania Press, 2009

Mirzazade Mehmed Emin Salim. *Tezkire-i Sâlim*. Istanbul: Ikdam, 1310 [1892].

Montagu, Lady Mary Wortley. *The Letters and Works of Lady Mary Wortley Montagu*. 3 vols. ed. Lord Wharncliffe. London: Richard Bentley, 1887;

Morrison, Robert. "The Reception of Early-Modern European Astronomy by Ottoman Religious Scholars," *Archivum Ottomanicum*, 21, 2003: 187-195.

de la Mottraye, Aubry. *A. de la Mottraye's Travels through Europe, Asia, and into Part of Africa with Proper Cuts and Maps. Containing a Great Variety of Geographical, Topographical, and Political Observations*. London: Printed for the Author, 2003.

Muhammed b. Mustafa Akkirmani. *İklîlü't-Terâcim*. Istanbul: Matbaa-i Osmaniye, 1900.

Muir, Edward. *The Culture Wars of the Late Renaissance: Skeptics, Libertines, and Opera*. Cambridge, MA: Harvard UP, 2007.

Mulsow, Martin and Jan Rohls, eds. *Socinianism and Arminianism: Anti-Trinitarians, Calvinists and Cultural Exchange in Seventeenth-Century Europe*. Leiden: Brill, 2005.

Mulsow, Martin. "Socinianism, Islam and the Radical Uses of Arabic Scholarship," *Al-Qantara*, XXXI/2, 2010: 549-586.

Mulsow, Martin. *Die drei Ringe: Toleranz und clandestine Gelehrsamkeit bei Math-urin Veyssi re La Croze (1661-1739)*. T bingen: Max Niemeyer, 2001.

Murphey, Rhoads, "Westernisation in the Eighteenth-Century Ottoman Empire: How Far, How Fast?" *Byzantine and Modern Greek Studies*, 23, 1999:116-139.

Murphey, Rhoads. "Continuity and Discontinuity in Ottoman Administrative Theory and Practice during the Late Seventeenth Century," *Poetics Today*, 14/2, 1993: 419-443

Murphey, Rhoads. "Continuity and Discontinuity in Ottoman Administrative Theory and Practice during the Late Seventeenth Century," *Poetics Today*, 14/2, 1993:419-443

Murphy, Jane. "Ahmad al-Damanhuri (1689-1778) and the Utility of Expertise in Early Modern Ottoman Egypt," *Osiris*, 25, 2010: 85-103

Naima. *T rih-i Na'ım *. 6 vols. ed. Mehmed Ipsirli. Ankara: TTK, 2007.

Nasir al-Din Tusi. *Tajr d al- 'Itik d*. ed. Muhammad Cawad Husayni Jalali. Qom: Maktabatu'l-Ilami'l-Islami, 1986

Necatio lu, Halil. *Matbaacı Ibrahim-i M teferrika ve Risale-i Islamiye Adlı Eserin Tenkidli Metni*. Ankara: Elif, 1982.

Netzhammer, Raymund, OSB. *Das griechische Kolleg in Rom*. Salzburg: "Separatabdruck aus der Kathol. Kirchenzeitung," 1905

Nevi Efendi. *Ilimler n  z : Netayic el-F nun*. ed.  .Tolgay. Istanbul: İnsan Yayınları, 1995.

Nicholas Jardine, "Keeping Order in the School of Padua: Jacopo Zabarella and Francesco Piccolomini on the Offices of Philosophy," in *Method and Order in Renaissance Philosophy of Nature: The Aristotle Commentary Tradition*. eds. Daniel Di Liscia, Eckhard Kessler and Charlotte Methuens. Aldershot: Ashgate, 1997; pp. 183-210.

Nicolae Iorga, ed. *Documente privitoare la istoria romanilor: volumul XIV al colectiei Hurmuzaki*. Bucharest: Romanian Academy, 1917.

Niyazi Berkes, "Ilk T rk Matbaası Kurucusunun Dini ve Fikri Kimli i," *Belleten*, XXVI/104, 1962: 715-737.

Nizri, Michael. "The Memoirs of  eyhli lam Feyzullah Efendi," in *Many Ways of Speaking about the Self: Middle Eastern Ego-Documents in Arabic, Persian and Turkish (14th-20th Century)*. eds. Ralf Elger and Yavuz K se. Wiesbaden: Harrassowitz, 2010; pp. 27-37.

O'Fahey, R.S. and Bernd Radtke. "Neo-Sufism Reconsidered," *Islam*, 70, 1993: 52-87.

Ocak, Ahmet Yaşar. "XVII. Yüzyılda Osmanlı İmparatorluğu'nda Dinde Tasfiye (Püritanizm) Teşebbüslerine Bir Bakış: Kadızadeliler Hareketi," *Türk Kültürü Araştırmaları*, XVII-XXI/1-2, 1983: 208-223.

Omont, Henri. "Documents sur l'imprimerie à Constantinople au XVIIIe siècle," *Revue des bibliothèques*, V, 1895:28-236.

Omont, Henri. "Nouveaux documents sur l'imprimerie a Constantinople au XVIIIe siècle," *Revue des bibliothèques*, XXXIV, 1905:1-10.

Omont, Henri. *Missions archéologiques françaises en Orient aux XVIIe et XVIIIe siècles*. Paris: Imprimerie nationale, 1902.

Özervarlı, M. Sait. "Yanyalı Esad Efendi's Works on Philosophical Texts as Part of the Ottoman Translation Movement in the Early Eighteenth Century," in *Europe und die Türkei im 18. Jahrhundert*. ed., Barbara Schmidt-Haberkamp. Göttingen: V& R Unipress, 2011; pp.457-72.

Pamuk, Şevket. *A Monetary History of the Ottoman Empire*. Cambridge: Cambridge University Press, 2000.

Pamuk, Şevket. "Institutional Change and the Longevity of the Ottoman Empire, 1500-1800," *Journal of Interdisciplinary History*, 35/2, 2004: 225-247.

Papacostea, Victor. "Les origines de l'enseignement superieur en Valachie," *Revue des Études Sud-Est Européennes*, 1/1-2, 1963: 7-39.

Papadopoulos, Theodore H. *Greek Church and People Under Turkish Domination*. Aldershot: Ashgate, 1990.

Parker, Geoffrey. "Crisis and Catastrophe: The Global Crisis of the Seventeenth Century Reconsidered," *American Historical Review*, 113/4, 2008: 1053-1079

Patiniotis, Manolis. "Eclecticism and Appropriation of the New Scientific Methods by the Greek-Speaking Scholars in the Ottoman Empire," in *Science between Europe and Asia*. ed. Feza Günergun. New York: Springer, 2011; pp. 193-206.

Patiniotis, Manolis. "Textbooks at the Crossroads: Scientific and Philosophical Textbooks in Eighteenth-Century Greek Education," *Science and Education*, 15, 2006: 801-822.

Philliou, Christine. "Communities on the verge: Unraveling the Phanariot ascendancy in Ottoman governance," *Comparative Studies in Society and History*, 51, 2009: 151-181.

Pines, Shlomo. *Studies in Islamic Atomism*. Jerusalem: Magnes, 1997.

Pintard, René. *Le libertinage érudit dans la première moitié du XVIIe siècle: La Mothe Le*

Vayer, Gassendi, Guy Patin. Paris: Boivin, 1943.

Pintard, René. *Le libertinage érudit dans la première moitié du XVIIe siècle: La Mothe Le Vayer, Gassendi, Guy Patin*. Paris: Boivin, 1943.

Podskalsky, Gerhard. *Griechische Theologie in der Zeit der Türkenherrschaft, 1453-1821*. Munich: C.H. Beck, 1988.

Popkin, Richard. *The History of Scepticism from Savoranola to Bayle*. Oxford: Oxford UP, 2003.

Porter, Dorothy. "Public Health," in *The Companion Encyclopedia of the History of Medicine*. eds. W.F. Bynum and Roy Porter. 2 vols. London: Routledge, 1993; vol.2, pp 1231-1261

Pott, Sandra, Martin Mulsow and Lutz Danneberg, eds. *The Berlin Refuge, 1680-1780: Learning and Science in European Context*. Leiden: Brill, 2003.

Procopius, Demetrius. "Succincta eruditorum graecorum superioris & praesentis saeculi recensio" in Johannes Albertus Fabricius. *Bibliothecae Graecae*. vol. 11. Hamburg: Theodorus Felginer, 1722.

Radtke, Bernd. "Erleuchtung und Aufklärung: islamische Mystik und europäischer Rationalismus," *Die Welt des Islams*, 34/1, 1994; 48-66.

Ragep, F. Jamil. "Freeing Astronomy from Philosophy: An Aspect of Islamic Influence of Science," *Osiris*, 16, 2001: 49-64, 66-72.

Ragep, F. Jamil. *Nasir Al-Din Al-Tusi's Memoir on Astronomy = Al-Tadhkira Fi 'Ilm Al-Hay'a*. 2 vols. New York: Springer, 1993.

Rahimi, Babak. "Nahils, Circumcision Rituals and the Theatre State," i in *Ottoman Tulips, Ottoman Coffee* ed. Dana Sajdi. London: Tauris, 2007; pp. 90-116.

Rahman, Fazlur. *Health and Medicine in the Islamic Tradition: Change and Identity*. New York: Crossroad, 1987

Rahman, Fazlur. *Revival and Reform in Islam: A Study of Islamic Fundamentalism*. Oxford: One World, 2000

Randall, John H. *The School of Padua and the Emergence of Modern Science*. Padua: Antenore, 1961.

Rashed, Marwan. "Natural Philosophy," in *The Cambridge Companion to Arabic Philosophy*. eds. Peter Adamson and Richard C. Taylor. Cambridge: Cambridge UP, 2005; pp. 287-307.

Reichmuth, Stefan, "Bildungskanon und Bildungsreform aus der Sicht eines islamischen Gelehrten der anatolischen Provinz: Muhammad al-Sajaqli (Saçaqli-zade, gest. um 1147/1733) und Sein *Tartib al-'Ulum*," in *Words, Texts and Concepts Cruising the Mediterranean Sea: Studies on the Sources, Contents and Influences of Islamic Civilization and Arabic Philosophy and Science*. eds. R. Arnzen and J. Thielmann. Leuven: Peeters, 2004; pp. 494-520.

Reichmuth, Stefan. "Islamic Reformist Discourse in the Tulip Period (1718-30): Ibrahim Müteferrika and His Arguments for Printing." *International Congress on Learning and Education in the Ottoman World. Istanbul, 12-15 April 1999*. ed. Ali Çaksu. Istanbul: IRCICA, 2001; pp 149-161.

Reif, Mary Richard. "Natural Philosophy in Some Early Seventeenth Century Scholastic Textbooks," Unpublished doctoral dissertation, University of St. Louis, 1962.

Reinkowski, Maurus. "Hidden Believers, Hidden Apostates: The Phenomenon of Crypto-Jews and Crypto-Christians in the Middle East," in *Converting Cultures: Religion, Ideology of Transformations and Modernity*. eds. Dennis Washburn et al. Leiden: Brill, 2007; pp. 409-433.

Relation des deux rebellions arrivées à Constantinople en M.DCC.XXX. et XXXI., dans la déposition d'Achmet III...composée sur des Mémoires originaux reçus de Constantinople The Hague: chez Jean Neaulme, 1737.

Repp, Richard C. *The Mufti of Istanbul: A Study in the Development of the Ottoman Learned Hierarchy*. London: Ithaca Press, 1986.

Robertson, John. *The Case for the Enlightenment: Scotland and Naples, 1680-1760*. Cambridge: Cambridge UP, 2005.

Robinson, Francis. *'Ulama of Farangi Mahall and Islamic Culture in South Asia*. London: C. Hurst & Co., 2001.

Rosenthal, Franz. "The Physician in Medieval Muslim Society" *Bulletin of the History of Medicine*, 52/4, 1978: 475-91.

Rothmann, Natalie. *Brokering Empire: Trans-Imperial Subjects between Venice and Istanbul*. Ithaca: Cornell University Press, 2011.

Rycaut, Paul. *The Present State of the Ottoman Empire*. London: C. Brome, 1665.

Sabev, Orlin. *Ibrahim Müteferrika ya da İlk Osmanlı Matbaa Seriüveni (1726-1746)*. Istanbul: Yeditepe, 2006.

Sabra, Abdelhamid I. "Science and Philosophy in Medieval Islamic Theology," *Zeitschrift für Geschichte der arabisch-islamischen Wissenschaften*, 9, 1994: 1-42.

- Sajdi, Dana. "Decline, its Discontents and Ottoman Cultural History: by Way of Introduction," in *Ottoman Tulips, Ottoman Coffee* ed. Dana Sajdi. London: Tauris, 2007; pp.1-40.
- Salzmann, Ariel. "Ancien Régime Revisited: 'Privatization' and Political Economy in the Eighteenth Century Ottoman Empire," *Politics & Society*, 21, 1993: 393-423.
- Salzmann, Ariel. *Tocqueville in the Ottoman Empire: Rival Paths to the Modern State*. Leiden: Brill, 2004.
- Sarı, Nil and M. Bedizel Zülfikar. "The Paracelsian Influence on Ottoman Medicine in the Seventeenth and Eighteenth Centuries," in *Transfer of Modern Science and Technology to the Muslim World*. ed. Ekmeleddin Ihsanoğlu, ed. Istanbul: IRCICA, 1992; pp. 157-79
- Sarı, Nil. "Educating the Ottoman Physician," *Yeni Tıp Tarihi Araştırmaları*, 1, 1995: 11-54
- Sarıkavak, Kazım. *XVIII Yüzyılda Bir Osmanlı Düşünürü: Yanyalı Es'ad Efendi*. Ankara: Kültür Bakanlığı, 1998.
- Savage-Smith, Emilie. "Medicine," in *Encyclopedia of the History of Arabic Science*. 3 vols eds. Roshdi Rashed and Régis Morelon. London: Routledge, 1996; vol.3, pp. 903-62
- Schmaltz, Tad M. "A Tale of Two Condemnations: Two Cartesian Condemnations in seventeenth-Century France," in *Descartes e i suoi Avversari: Incontri cartesiani II*. ed. Antonella Del Prete. Florence: Le Monnier Università, 2004; pp. 203-21.
- Schmaltz, Tad M. *Radical Cartesianism: The French Reception of Descartes*. Cambridge: Cambridge UP, 2002
- Schmidt, Jan. "The Occult Sciences and Their Importance in Ottoman Culture: Evidence from Turkish Manuscripts in Dutch Public Collections," *Osmanlı Araştırmaları*, XXIII, 2003: 219-254.
- Schmitt, Charles B. "Aristotelianism in the Veneto and the Origins of Modern Science," in *The Aristotelian Tradition and Renaissance Universities*. Aldershot: Ashgate, 1984
- Schmitt, Charles B. "Towards a Reassessment of Renaissance Aristotelianism," *History of Science*, xi, 1973: 159-193
- Schmitt, Charles B. *Aristotle and the Renaissance*. Cambridge, Mass: Harvard UP, 1983.
- Schmitt, Charles B. *Cesare Cremonini: un Aristotelico al tempo di Galilei*. Venice: Centro Tedesco di Studi Veneziani, 1980.
- Schmitt, Charles. "William Harvey and Renaissance Aristotelianism: a Consideration of

Praefatio to *De generatione animalium* (1651)," in *Humanismus und Medizin*. eds. Rudolf Schmitz and Gundolf Keil. Weinheim: Acta Humaniora, 1984; pp. 117-38.

Schmitt, Charles. "Aristotle among the Physicians" in *The Medical Renaissance of the Sixteenth-Century*. eds. Andrew Wear, Roger French and Ian M. Lonie. Cambridge: Cambridge UP, 1985; pp. 1- 15.

Schulze, Reinhard. "Das islamische achtzehnte Jahrhundert: Versuch einer historiographischen Kritik," *Die Welt des Islams*, 30, 1990: 140-159.

Schulze, Reinhard. "Was ist die Islamische Aufklärung?," *Die Welt des Islams*, 36/3, 1996: 276-325.

Schwarz, Florian. "Writing in the Margins of Empires - The Husaynabadi Family of Scholiasts in the Ottoman-Safawid Borderlands," in *Buchkultur im Nahen Osten des 17. und 18. Jahrhunderts*. Bern: Peter Lang, 2010; pp. 151-198.

Şen, Adil. *Ibrahim Müteferrika ve Usulü'l-Hikem fi Nizamü'l-Ümem*. Istanbul: Diyanet Vakfı, 1995.

Şeşen, Ramazan et al., eds. *Fihris mahtûṭat maktabat Köprülü = Catalogue of Manuscripts in the Koprulu Library*. 3 vols. Istanbul: Research Center for Islamic History, Art and Culture, 1986.

Abbé Sevin. *Lettres sur Constantinople*. Paris: Oubré, 1802.

Shapin, Steven and Simon Shaffer. *Leviathan and the Air: Hobbes, Boyle, and the Experimental Life* Princeton: Princeton UP, 1989[1985].

Shapin, Steven. "Man of Science" in *Cambridge History of Science*, vol.3 *Early Modern Science*. eds. Katharine Park and Lorraine Daston. Cambridge: Cambridge UP, 2006

Shapin, Steven. "Pump and Circumstance: Robert Boyle's Literary Technology," *Social Studies of Science*, 14/4, 1984: 481-520.

Shefer-Mosensohn, Miri. *Ottoman Medicine: Healing and Medical Institutions, 1500-1700*. Albany: SUNY Press, 2009

Shefer, Miri. "An Ottoman Physician and His Social and Intellectual Milieu: The Case of Salih bin Nasrallah Ibn Sallum," *Studia Islamica*, New Series, 1, 2011: 133-58.

Shihadeh, Ayman. "From Al-Ghazali to Al-Razi: 6th/12th Century Developments in Muslim Philosophical Theology," *Arabic Sciences and Philosophy*, 15, 2005: 141-179

Silahdar Mehmed Ağa. *Silahdar Tarihi*. 2 vols. Istanbul: Devlet Matbaası, 1928.

Sönmez, Zeki. *Türk Çiniciliğinde Tekfur Sarayı İmalatı Çiniler*. Istanbul: n.p., 1987.

Steinschneider, Moritz. "Jüdische Typographie und Jüdischer Buchhandel," in *Allgemeine Encyclopädie der Wissenschaften und Künste*. 167 vols. Johann Samuel Ersch and Johann Gottfried Gruber, eds. Leipzig: Gleditsch, 1818-1889; Series II, vol. 28, pp. 21-94.

Stephan Schultz. *Die Leitungen des Höchsten nach seinem Rath auf den Reisen durch Europa*. 4 vols. Magdeburg: Hemmerde, 1771-1774.

Stockinger, Hermann. "Die Apostasie des Pascha-Grafen Alexander von Bonneval (1675-1747) und europäische Stimmen zum 'Fall' Bonneval" in *Wahrnehmung des Islam zwischen Reformation und Aufklärung*. eds. Birte Platow and Dietrich Klein. Munich: Wilhelm Fink, 2008; pp.111- 139.

Stone, M.W.F. and Robert Wisnovsky. "Philosophy and Theology," in *Cambridge History of Medieval Philosophy*. 2 vols. eds. Robert Pasnau and Christina van Dyke. Cambridge: Cambridge UP, 2009; pp.689-706.

Strauss, Johann. "The Rise of Non-Muslim Historiography in the Eighteenth Century," *Oriente Moderno*, Nuova serie, 18/1, 1999; 217-232.

Sutton, Geoffrey V. *Science for a Polite Society: Gender, Culture and Demonstration of Enlightenment*. Boulder: Westview, 1995

Ta'ibzade Osman et al. *Hadīkatū'l-Vüzerā*. Istanbul: Ceride-i Havadis, 1854

Taşköprüzade. *Mevzū'ātü'l-'Ulūm*. Istanbul: Asitane, 2000 [Lithograph].

Tercemetü's-Şihāhü'l-Cevherī. 2vols. Istanbul: Sultanīc Press, 1729.

Terzioğlu, Derin. "Sufis in the Age of State- Building and Confessionalization," in *The Ottoman World*. ed. Christine Woodhead. London: Routledge, 2012. 86-99.

Tezcan, Baki. *The Second Ottoman Empire: Political and Social Transformation in the Early Modern World*. Cambridge: Cambridge University Press, 2010.

Thomas, Lewis V. *A Study of Naima*. Chicago: Chicago University Press, 1972.

Thys-Şenocak, Lucienne. *Ottoman Women Builders*. Aldershot: Ashgate, 2007

Topping, Peter. "Venice's Last Imperial Venture," *Proceedings of the American Philosophical Society*, 120/3, 1976: 159-165.

Trevor-Roper, Hugh. *History and the Enlightenment*. New Haven: Yale University Press, 2010.

Trevor-Roper, Hugh. *The Crisis of the Seventeenth Century: Religion, the Reformation and Social Change*. New York: Harper & Row, 1967.

Tsakiris, Vasileos. *Die gedruckten griechischen Beibücher zur Zeit der Türkenherrschaft*. Berlin: De Gruyter, 2009;

Tsourkas, Cléobule. *Les débuts de l'enseignement philosophique et de la libre pensée dans les Balkans: La vie et l'oeuvre de Théophile Corydalée (1563-1646)*. Bucharest: Institut d'Études et de Recherches Balkaniques, 1948

Tuck, Richard. *Philosophy and Government, 1572-1651*. Cambridge: Cambridge UP, 1993.

Tuncel, Bedrettin. "L'âge des drogmans" *Revue des Études Sud-Est Européennes*, XII/2, 1974: 221- 242.

Ullmann, Manfred. *Islamic Medicine*. Edinburgh: Edinburgh UP, 1978,

Ullrich, Hermann. "Johann Friedrich Bachstrom," *Euphorion*, 16, 1909: 320-49

Unat, Faik Reşit. "Ahmet III. Devrine Ait Bir Islahat Takriri: Muhayyel Bir Mülakatın Zabıtları," *Tarih Vesikaları*, 1, 1941: 107-121.

Ünver, Süheyl. *Fatih Külliyesi ve Zamanı İlim Hayatı*. Istanbul, 1946.

Uzluk, Feridun Nafiz. "Bursalı Hekim Ali Münşi," *DTCF Dergisi*, 8/3, 1950: 329-337.

Uzunarşılı, İsmail Hakkı. *Osmanlı Tarihi*. 4 vols. Ankara: TTK, 1983.

Vajda, G. "Idjaza," in *Encyclopaedia of Islam*. 2nd ed. Leiden: Brill; p.1020

Vandal, Albert. *Une ambassade française en Orient sous Louis XV: La mission de Marquis de Villeneuve, 1728- 1741*. Paris: Plon, Nourriet et Cie., 1887.

Vasdravellis, Ioannis. "Ioannis Kottounios: Ho Ek Veroias Sophos," *Makedonike Bibliotheke*, 4, 1943: 7-31.

Veloudis, Georg. *Das griechische Druck- und Verlagshaus Glikis in Venedig (1670-1854): das griechische Buch zur Zeit der Türkenherrschaft*. Wiesbaden: Harrassowitz, 1974

Verger, Jacques. "Teachers," in *A History of the University in Europe*. Vol. 1: *Universities in the Middle Ages*. ed. Hilde de Ridder-Symoens. Cambridge: Cambridge UP, 1992; pp.144-168.

Victor Roudometof. "From Rum Millet to Greek Nation: Enlightenment, Secularization, and National Identity in Ottoman Balkan Society, 1453–1821," *Journal of Modern Greek Studies*, 16, 1998: 11-48.

Voll, John O. "Abdallah ibn Salim al-Basri and Eighteenth-Century Hadith Scholarship,"

Die Welt des Islams, 42/3, 2002; 356-372.

Weissmann, Itzhak. *The Naqshbandiyya: Revival and Activism in a Worldwide Sufi Tradition*. London: Routledge, 2007.

Westman, Robert S. *The Copernican Question: Prognostication, Skepticism and Celestial Order* Berkeley: UC Press, 2011

Whiston, William. *The Longitude and Latitude Found by the Inclinator or Dipping Needle; wherein the Laws of Magnetism are also Discover'd*. London: Senex, 1721.

White, Sam. *The Climate of Rebellion in the Early Modern Ottoman Empire*. Cambridge: Cambridge UP, 2011

Wisnovsky, Robert. "One Aspect of the Avicennian Turn in Sunni Theology", *Arabic Sciences and Philosophy*, 14/1, 2004: 65-100.

Wolff, Larry. *Inventing Eastern Europe: The Map of Civilization in the Mind of the Enlightenment*. Stanford: Stanford University Press, 1994.

Wolfson, Harry Austryn. *The Philosophy of the Kalam*. Cambridge: Harvard UP, 1976.

Wootton, David. *Paolo Sarpi: Between Renaissance and the Enlightenment*. Cambridge: Cambridge UP, 1983

Yazıcıoğlu, Mustafa Sait. "XV. ve XVI. Yüzyıllarda Osmanlı Medreselerinde İlm-i Kelam Öğretimi ve Genel Eğitim İçindeki Yeri," *İslam İlimleri Enstitüsü Dergisi*, 4, 1980: 273-283

Yenişehirli Abdullah. *Behçetü'l-Fetavā*. Istanbul: Matbaa-i Amire, 1872.

Yormaz, Abdullah, "Hidayetü'l-Hikme'nin Tenkitli Neşri," *Marmara Üniversitesi İlahiyat Fakültesi Dergisi*, 34/1, 2008:145-202

Ziadeh, Nicola A. "Al-Antaqi and His Tadhkara," *ARAM Periodical*, 12, 2000: 503-508.

Ziai, Hossein, "Islamic Philosophy (Falsafa)" in *The Cambridge Companion to Classical Islamic Theology*. ed. Tim Winter. Cambridge: Cambridge UP, 2008; pp. 55-76.

Zilfi, Madeline C. "The Kadızadelis: Discordant Revivalism in Seventeenth-Century Istanbul," *Journal of Near Eastern Studies*, 45/4, 1986: 251-269.

Zilfi, Madeline C. "The Kadızadelis: Discordant Revivalism in Seventeenth-Century Istanbul," *Journal of Near Eastern Studies*, 45/4, 1986: 251-269.

Zilfi, Madeline C. *The Politics of Piety: The Ottoman Ulema in the Postclassical Age*. Minneapolis: Bibliotheca Islamica, 1988.