Mirrors for Princes and Sultans: Advice on the Art of Governance in the Medieval Christian and Islamic Worlds

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Abstract

When and how did European modes of political thought diverge from those which existed in other world regions, particularly Middle Eastern societies that shared significant institutional heritage with Europe? To address this question, we compare Muslim and Christian political advice texts from the medieval period using automated text analysis to identify four major themes and sixty granular themes common to both Muslim and Christian polities, and examine how emphasis on these topics evolves over time. While European mirrors, and Machiavelli's *Prince* in particular, have been extensively studied, there has been less scholarly examination of a parallel political advice literature emanating from the Islamic world. Our empirical findings identify a major inflection point in the political discourse for Muslim texts beginning in the $12th$ century, a juncture suggested by historians as an ideational turning point as a result of the influence of Turkic and, later, Mongol invaders. For Christian texts, we empirically identify a decline in the relevance of religious appeals from the Middle Ages to the Renaissance.

1 Introduction

An influential literature in political economy seeks to explain the historical roots of economic and institutional divergence within and across world regions (e.g., North, Wallis and Weingast, 2009; Kuran, 2010; Morris, 2010; Acemoglu and Robinson, 2012; Blaydes and Chaney, 2013). There remains little consensus, however, as to *why* some parts of the world came to develop impersonal political institutions earlier than others or as to *when* Europe first began to enjoy institutional advantages, like the separation of church and state, that likely facilitated later trade expansion and technological innovation. Blaydes and Chaney (2013) document differences in the stability of monarchical rule in Christian Europe and the Islamic world beginning in the Middle Ages.[1] If Muslim and Christian political institutions were changing in meaningful ways during this era, we would expect that such changes would be apparent in writings of political philosophy focused on modes of rulership.

Among the most important genres of political writing emanating from the medieval period are works of advice offered to rulers.[2] Termed "mirrors for princes" in the European tradition, such texts advise rulers on subjects as diverse as military strategy, choice of advisors, management of the royal household, and spiritual practice. These advice books varied considerably in their content and form; scholars agree, however, that such texts reflected the political ideas, beliefs, and practices of their day. Long considered valuable literary contributions, "mirrors" texts also provide a window into the inner political life of otherwise opaque polities.

[1] We use the terms "Christian," or "Latin," Europe and "Muslim," or "Islamic," world as regional designations and do not presume that there exists a shared "nation" or community across the heterogenous populations within the two geographic regions. Indeed, there is tremendous variation within the designated regions in terms of political thought (e.g., Boroujerdi, 2013). Alternative geographic designations, like "Western" Europe for example, would have the advantage of making the location of production clear but could create a problem for categorizing texts emanating from Muslim Spain and Sicily which were produced for Muslim kings.

[2] Political organization during the medieval period was dominated by monarchs — in particular, kings and their equivalents — who were decisive holders of political power (Wormald, 2005).

While European texts offering advice to rulers are well known and widely studied, there has been relatively less scholarly work comparing such texts to a parallel political advice literature written in the Islamic world (Darling, 2013*b*). We make the first major attempt to use automated text analysis to examine the comparative discourse on kingship and governance in the Christian and Muslim worlds during the medieval and early modern periods and identify four broad, conceptually distinct areas of discussion common to both regions as well as sixty subtopics nested within these themes.[3] We find that while Muslim and Christian texts pay roughly similar levels of attention to the four broad topics we identify, Christian texts display a decrease in the relevance of religious discourse over time. While there is no point at which we observe a sharp differentiation in the downward trend, the decline in the relevance of religious discourse becomes more stable and pronounced in the years following the resolution of the Investiture Controversy in 1122 CE. Our findings suggest that European political thought was moving away from the use of religious appeals in a fairly steady, likely endogenous, manner alongside what might be described as growing institutionalization of European polities in the early medieval period (Blaydes and Chaney, 2013; Blaydes and Paik, 2015).

While Muslim and Christian texts in the "mirrors for princes" genre display important similarities in our empirical analysis, the nested subtopics, or specific themes, we identify allow us to explore more fine-grained trends in political thought. In particular, for the Muslim texts, the four largest subtopics display an inflection point in the political discourse regarding monarchy beginning around 1100 CE. This corresponds to the start of a period during which Muslim societies witnessed a massive influx of steppe and nomadic peoples, particularly Turks and Mongols from Central Asia. Historians have argued that the Turkic and Mongol invasions significantly altered the political institutions with the effect of giv-

[3]London (2016) points to how new methods in the digital humanities provide opportunities for study of the history of ideas. This paper aims to contribute to this development.

ing greater societal weight and influence to religious elites (Berkey, 2010). Why was the $12th$ century a period particular vulnerability to external shocks? Decreasing ruler stability associated with weak political institutions (Blaydes and Chaney, 2013) were likely exacerbated by exogenous weather shocks (Pederson et al., 2014), making eastern Muslim societies unusually vulnerable to outsider invasion.

The remainder of the paper is organized as follows. Section 2 describes the "mirrors for princes" genre in political theory and considers the opportunities automated text analysis offers for exploring works of this sort. Section 3 discusses our empirical approach, including how texts were selected as well as details on the empirical models employed. In this section, we also describe the four broad topic areas uncovered by the automated text analysis, offer our interpretation of these themes, and identify the more granular themes. In section 4, we present our interpretation of the observed empirical trends. Section 5 concludes.

2 "Mirrors for Princes" in Political Theory

The term "mirrors from princes" designates a genre of political writing offering counsel to rulers, and frequently also to their delegates and courtiers. In this section, we characterize the scope, features, and thematic content of this genre of political writing at a high level of generality. We then explain how automated text analysis might be applied to works of political thought in general and to the mirrors genre in particular.

2.1 Advice on Governance

Advice literature flourished in both Christian Europe and the Islamic world in the Middle Ages. In both traditions, the genre emerged in the eighth and ninth centuries from both classical and scriptural roots and exploded in the eleventh through thirteenth centuries. Advice literature persisted in Europe through the Renaissance and lasted into the nineteenth

century in the Islamic world.

Often called "mirrors for princes" in the European tradition, the works were intended to provoke self-examination on the part of the ruler by providing him or her with standards of conduct and examples of virtuous leaders to imitate (Forhan, 2002).[4] Defining the scope of the genre is difficult. In the European case, a broad definition might include any works that, either in whole or in part, convey ideals of rulership. A stricter definition might be "limited to independent works explicitly aiming at instructing kings and lesser rulers about the virtues they should cultivate, their lifestyle, their duties, the philosophical and theological meaning of their office" (Lambertini, 2011, 792). In the Islamic case, a broad definition might include wisdom literature, works of moral exhortation, ethical treatises, and testaments, as long as they "serve an advisory purpose and address a royal recipient" (Marlow, 2013a, 349). A stricter definition might be limited to works entirely focused on the manners, conduct, and counsel of kings and their immediate delegates (Marlow, 2009, 2013a). Many of the works in our analysis meet the standards of these narrower definitions. However, we have selected a few from each tradition that may not meet these stricter requirements (e.g., *Utopia*, *Kalila wa Dimna*, *Aphorisms of the Statesman*) in order to capture a diversity of approaches to political counsel and broader ideas about the nature of kingship.

In both the Christian European and Islamic traditions, advice literature reflects an acceptance of monarchical government.[5] If kings were, as was widely believed, chosen by God and essential for social order, then the personal attributes and virtues of one's ruler became central concerns. For writers in both traditions, the moral virtues of the ruler were directly correlated to the material prosperity and moral health of the political community (Born,

[4]While several European works self-identify as "mirrors," the term was not used by any Islamic author. However, the imagery and concept of a "mirror for princes" was not entirely foreign to the Islamic tradition. Yusuf Khass Hajib's eleventh-century *Wisdom of Royal Glory*, for instance, notes that "A loyal man may serve one as a mirror: by regarding him one may straighten one's habits and character" (Crone, 2004, 149).

[5]Some works, of course, have a more critical edge than others (e.g., *Sea of Precious Virtues* and John of Salisbury's *Policraticus* and, on some interpretations, Machiavelli's *Prince*).

1928; Marlow, 2013b; Crone, 2004). The hope behind much of the advice literature was that it might be used to educate a ruler, to shape his or her character for the good of his subjects.

Authors of advice books were almost exclusively members of the educated elite and, in both the European and Islamic traditions, included rulers (often writing for their sons), courtiers, administrators, jurists, men and women of letters, and religious scholars. The works were frequently written as gifts and dedicated to specific recipients (e.g., to a particular king, courtier, or vizier), but often with the expectation that they would be read by a wider audience. In the Islamic tradition in particular, advice books often presented an image of a ruler that enhanced his legitimacy and sovereign power. Furthermore, as Marlow (2013b) suggests, "a ruler's generous reception of such a work was a sign of his subscription to the catalogue of royal virtues it contained, and reflected positively on his personal merit and that of his court." Beyond the intention of shaping a ruler's character and legitimizing his reign, authors wrote mirrors in order to enhance or consolidate their ties to the royal family, for reasons of professional advancement (a motive commonly attributed to Machiavelli), and to delight and please their royal audiences (e.g., by including stories and poetry).

Advice literature in both traditions tends to adhere to a set of generic conventions in its framing, source materials, and thematic content. Many works begin, for instance, with a profession of humility, an insistence on the author's lack of relevant qualifications, or a disclaimer to the effect that the recipient already embodies the relevant virtues and, therefore, does not require the proffered advice (Forhan, 2002; Marlow, 2013b). Prescriptions are often offered to rulers indirectly through the use of classical and scriptural authorities and examples.[6] Authors are often at pains to balance praise with counsel, conveying more subtle critiques through their choice of quotations and their presentation of examples.[7]

[6]See London (2008) for a discussion of indirect, but frank, political speech through fables in the medieval Islamic context.

[7]Because both Christian European and Islamic mirrors seem to adhere so closely to these conventions of framing, source material, and thematic content, an older generation of scholars tended to miss the ways in which authors tailored their advice to the exigencies of their times, often with a subtle and sometimes even

These generic conventions extended to the issues and themes that dominated advice works. European mirrors tended to offer a vision of a just ruler who "treated equals equally" by maintaining a balance between the various social orders (Forhan, 2002, 35). While many European mirrors took the ruler to be above the law, they nonetheless tended to insist that the good ruler would conform with the law as a matter of virtue and faith (Born, 1928; Nederman, 1998). Beyond this, most European mirrors emphasized the importance of the cardinal virtues (prudence, justice, temperance/restraint, and courage/fortitude), devotion to popular welfare, commitment to public works and economic development, judicious selection of advisors and a willingness to take their advice, and personal faith and promotion of Christianity (Born, 1928). We see a similar set of themes in many Islamic mirrors, which also offered an ideal of a just ruler as one who maintains a harmonious social order (the trope of the "circle of justice" recurs throughout the Islamic mirror genre), practices the cardinal virtues, consults with advisors and heeds good advice, avoids ostentation, and attends to the material and spiritual wellbeing of his subjects (Lambton, 1971; Marlow, 2013a).[8]

A common stock of source material for Christian European mirrors texts include classical sources like Seneca, Plutarch, Cicero, and particularly after the thirteenth-century recovery of his practical philosophy, Aristotle; scriptural passages and exemplary biblical figures (particularly Hebraic models of kingship like Solomon and David); and patristic literature (especially Ambrose and Augustine, and particularly the 24th chapter of the latter's *City of God*) (Forhan, 2002; Lambertini, 2011). Islamic advice books similarly drew from classical sources, particularly Plato and Aristotle's ethical and political works and a pseudo-Aristotelian work, the *Sirr al-Asrar*, which purported to be a letter of advice from Aristotle to Alexander the Great; Sassanian theories of kingship; Arabian oral literature; and testamentary advice from

an overt critical edge (Nederman, 1998; Marlow, 2009). Scholarship on mirrors has increasingly come to attend to contextual specificity and critical edge in a body of advice literature that, at least on its surface, can easily seem entirely conventional.

[8]See London (2011) for a more complete discussion of Islamic conceptions of the 'circle of justice.'

royal and caliphal descendants to their heirs (Lambton, 1971; Marlow, 2013b). Overlaps in their periods of production, the aims of their authors, and their generic conventions make the Christian European and Islamic mirrors ripe for comparative analysis.[9]

2.2 Text Analysis for Political Theory

This kind of comparative analysis presents an ideal opportunity for the use of text-as-data methods. While automated text analysis has been used in biblical studies, classics, literary studies, and law for several decades (Schreibman, Siemens and Unsworth, 2004), it has has made very few inroads in political theory and comparative political thought.

Its primary use in political theory has been to settle debates about authorship. Scholars have used statistical wordprint analyses, which detect idiosyncratic but consistent patterns in the use of non-contextual terms or function words (e.g., articles, pronouns, prepositions, and conjunctions), to evaluate competing hypotheses about the authorship of texts. In an early and groundbreaking study, Mosteller and Wallace (1964) used wordprinting to show that James Madison was very likely the author of twelve disputed papers in the *Federalist*. More recently, wordprint analysis has been used to confirm that Thomas Hobbes was very likely the author of three discourses in the *Horae Subseviae* (1620) that were originally published anonymously and whose authorship had been the subject of ongoing debate (Reynolds and Saxonhouse, 1995). However, to our knowledge, text-as-data methods have not been used to discover and analyze themes in political theory or comparative political thought.

To characterize the themes in the mirror genres across the Muslim and Christian king-

[9]Like the mirrors literature emanating from Europe at this time, there existed no clear dividing line between administrative manuals, works of religious theory and guidance on royal manners in Muslim polities. Muslim writers had a "floating repertoire" of Indo-European ideas, institutions and metaphors to draw upon where the vocabularies used to describe kingship in the Muslim and Christian worlds were, to a large extent, interchangeable (Al-Azmeh, 1997). As a result, it would be wrong to assume that Islam imposed a particular form of Muslim kingship, *ex nihilo*; rather, Muslim forms of government were the product of existing historical paradigms (Al-Azmeh, 1997). Although Muslim monarchs were supposed to abide by interpretations of Islamic law, such expectations could not be enforced (Lambton 1974, 423).

doms, we introduce a new statistical topic model for texts. In so doing we contribute to the growing use of text-as-data methods. These methods have been used in a variety of contexts in political science (Grimmer and Stewart, 2013) and applied across the humanities in the in the literary analysis of poetry and novels (Jockers, 2013; Rhody, 2012), the historical analysis of newspaper articles (Yang, Torget and Mihalcea, 2011; Newman and Block, 2006), and textual analysis of disciplinary history (Goldstone and Underwood, 2012; Mimno, 2012). Our use of statistical models is not intended to replace careful reading nor the subtle work required to interpret and understand works of political thought. By their very nature, statistical models cannot accomplish these tasks. At best, they can serve as an aid to historians of political thought — a resource that can provide a macroscopic thematic guide to direct more careful and nuanced readings of the texts.

Text-as-data methods are particularly useful to political theorists when they are exploring new and large collections of texts. For example, scholars of comparative political thought interested in charting cross-cultural themes or variations in conceptual vocabulary through time are often confronted with a large set of texts. Likewise, when scholars want to know about the historical, intellectual, and linguistic context in which canonical texts are produced, they will often want to consider not only non-canonical works of political thought but also perhaps less formal texts like political pamphlets, newspaper articles, sermons, correspondence, and diary entries (Skinner, 2002) . The large number of texts make it difficult for scholars to allocate careful and equal attention to each text and make organization into broader themes more challenging. Large numbers of texts, then, challenge the limits of our cognitive ability.

When considering many texts, a political theorist's familiarity with particular authors and modes of argument will inevitably vary. This varying level of expertise can make it harder for readers to identify coherent themes or to engage in a true comparison of the content of the texts. Without additional guidance, researchers may tend to focus on the

texts that are more familiar and and might struggle to identify content from the less familiar texts. Certainly, for a small set of books or thinkers, it is possible for scholars to expand their expertise. But this is not possible when considering the large numbers of texts required to address more macroscopic questions about the history of political thought and comparative political thought.

Text-as-data methods, then, are particularly useful for our comparison of the mirrors genre across Christian and Muslim polities. While we examine a relatively small set of books, they incorporate a wide array of historical thinkers in distinct time periods. And each of the books engage multiple themes. To better understand the common — and contrasting — themes across the texts we use a statistical model as a conceptual guide.

3 Empirical Analysis

By focusing on the two medieval civilizations within what has been called the "Western core" (Morris, 2010), we seek to understand the relationship between political advice literature and institutional development in a comparative context. Why select texts from these two world regions? Historians have long argued that the two areas share both a common political experience and a core set of philosophical ideas. For instance, Lapidus (1984, 2-3) describes the Mediterranean region as sharing an "essentially uniform ecological situation" with the "common historical and political experience of the Roman Empire" and roots in Greek urban society. Al-Azmeh furthers the argument that cultural and civilizational boundaries in late Antiquity were fluid. Iranian polities, for example, had "vigorous relations with the realms of Hellenism and Romanity" (1997, 7) and that wars between Persians and Greeks or Byzantines were "integrative and universalizing" moments (1997, 8). There existed considerable similarity between Roman, Persian and Indian political forms, for example, and Persian kings were seen to be exemplary rulers (1997, 9-10). Until the Middle Ages, there was a

well-integrated Mediterranean political culture with strong ties to western Asia before the areas of northern Europe were even admitted to the Euro-Asian system (Al-Azmeh, 1997). Mediterranean societies also shared an intellectual culture that was heavily influenced by classical Greek philosophy (Lambton, 1974). As a result, there is a high level of consistency in terms of how kingship is imagined and represented in the two world regions over both time and space (Al-Azmeh, 1997, 18).

In this section, we first discuss the texts selected from the medieval Muslim and Christian worlds for use in our analysis. Next, we describe the estimation strategies that we employ. A final section focuses on the results of that estimation approach and lays out categories of discourse identified in the texts. Each category is discussed in turn.

3.1 Selection of Texts

Our empirical analysis is focused on 21 texts in the Islamic tradition and 25 texts from Christian Europe. To facilitate the kind of computer-assisted textual analysis used in this project, we have only selected texts that have been translated into English. The texts selected from the Islamic tradition draw on Arabic, Turkish and Persian sources; the texts from Christian Europe were written in Latin, Italian, French, English, and Old Norse. The texts selected from the Islamic world represent works from the $8th$ century through the $17th$ century with most drawn from the $11th$ and $12th$ centuries. The Christian texts span the period from the $6th$ to the $17th$ century. The advice offered in the texts ranges from religiously-derived rules and admonitions to more "secular" prescriptions for effective statecraft, war-fighting, and bureaucratic management. Not all of these advice books meet the "strict" definition of the mirror genre described in Section 2.1. However, each text has been selected with an eye to capturing a range of both approaches to advice-giving and conceptions of rulership. Tables 1 and 2 list all of the texts used in our empirical analysis. In Appendix A we show that the selected texts are similar to other, untranslated texts. This is useful, because it allays some

Christian Texts	*Author*	*Date Produced*	*Location*	*Language*	*Descriptor*
Advice to Justinian	Agapetus	527 CE	Eurasia-Byzantium	Latin	ATJ
Life of Charlemagne	Einhardt	831-2 CE	Central Europe-Central Carolingian Empire	Latin	LCH
Handbook for William	Dhuoda	842 CE	Western Europe-Frankish Kingdom	Latin	HW
On the Education of a Christian Prince	Sedulius Scottus	857 CE	Western Europe-Western Frankish Empire	Latin	OEC
De Administrando Imperio	Constantine VII	950 CE	Eastern Europe-Northwest Balkan Peninsula	Latin	DAI
Policraticus[a]	John of Salisbury	1159 CE	Western Europe-England/France	Latin	POL
The Italian Guest	Thomasin von Zerclare	1215 CE	Western Europe-Italy	High Middle German	IG
On the Instruction of Princes	Gerald of Wales	1217 CE	Western Europe-England/France	Latin	OIP
The King's Mirror	Anonymous	1247 CE	Northern Europe-Norway	Old Norse	KM
On the Government of Rulers	Ptolemy of Lucca[b]	1265 CE	Western Europe-Italy	Latin	OGR
On the Nobility, Wisdom, and Prudence of Kings	Walter de Milemete	1326 CE	Western Europe-England	Latin	NWP
The Mirror of King Edward III[c]	William of Pagula	1330s CE	Western Europe-England	Latin	MKEa, MKEb
Education of the Prince[d]	Guillaume Budé	1375 CE	Western Europe-France	French	EP
A Medieval Woman's Mirror of Honor	Christine de Pizan	1405 CE	Western Europe-France	French	MWM
Book of the Body Politic	Christine de Pizan	1407 CE	Western Europe-France	French	BBP
Tract on the Prince	Giovanni Pontano	1468 CE	Western Europe-Italy	Latin	POTP
On the Prince[e]	Bartolomeo Sacchi	1471 CE	Western Europe-Italy	Latin	OTP
On Majesty[f]	Giuniano Maio	1492 CE	Western Europe-Italy	Latin	OM
The Prince[g]	Niccolò Machiavelli	1513 CE	Western Europe-Italy	Italian	PRN
Education of a Christian Prince	Erasmus	1516 CE	Central Europe-Switzerland	Latin	ECP
Utopia[h]	Thomas More	1516 CE	Western Europe-England	Latin	UT
Book of the Courtier	Baldesar Castiglione	1528 CE	Western Europe-Italy	Latin	BC
Basilikon Doron	James VI/I	1599 CE	Western Europe-Scotland	English	BD
Testament Politique[i]	Cardinal Richlieu	1630-40s CE	Western Europe-France	French	TP
The Adventures of Telemachus	Archbishop Fénelon	1699 CE	Western Europe	French	AT

Table 1: *Listing of all Christian texts used in the empirical analysis with author (when known), approximate date of writing, region from which the text emanates and original language of the text.*

[a]We use the Cambridge edition (Nederman, ed.), which omits Book II, along with several chapters or parts of chapters in Books I and III

[b]Also, Thomas Aquinas (attributed), see Blythe (1997) on disputes about the authorship of parts of this text.

[c]There are two "versions" of this text. The second is a substantially revised version of the first and restates the earlier text's central grievances in a more direct and urgent language (Nederman, 2002). We include both versions and, following scholarly convention, refer to them as versions 'A' and 'B.'

[d]Chapters 3, 5, 7, 9, 20, 27, 33

[e]Selections from books 1, 2, and 3

[f]Chapter 20 ("On Magnificence") only.

[g]Russell Price translation

[h]Book 1

[i]Selections from chapters 1.1-1.4, 1.8, II.9; chapters I.6-1.7, II.1-II.8, II.10; chapter I.5 omitted.

Islamic Texts	*Author*	*Date Produced*	*Location*	*Language*	*Descriptor*
Kalila wa Dimna	folk/Abdullah Ibn Muqaffa‘	748 CE	Mesopotamia-Persia	Arabic from Persian	KD
Letter on Companionship	Abdullah Ibn Muqaffa‘	mid-8*th* CE	Mesopotamia-Persia	Arabic	LC
Major Works of Secretarial Etiquette	Abdullah Ibn Muqaffa‘	mid-8*th* CE	Mesopotamia-Persia	Arabic	MWE
Epistle to his Son	Tahir ibn al-Husayn	821 CE	Mesopotamia	Arabic	ES
Taxation in Islam	Qudama ibn Ja‘far	928 CE	Mesopotamia-Persia	Arabic	BLT[a]
On the Perfect State	Al-Farabi	942-3 CE	Levant-Mesopotamia	Arabic	PS
Aphorisms of a Statesman	Al-Farabi	942-9 CE	Levant-Mesopotamia	Arabic	AS
Ordinances of Government	Al-Mawardi	late 10*th* CE	Mesopotamia	Arabic	OG
Wisdom of Royal Glory	Yusuf Khass Hajib	1070 CE	Turkic Central Asia	Middle Turkish	WRG
Qabus Nama	Kai Ka‘us	1080 CE	Persia	Persian	QN
Book of Government	Nizam al-Mulk	1090 CE	Turko-Persian Eurasia	Persian	BG
Counsel for Kings	Al-Ghazali[b]	1110 CE	Turko-Persian Eurasia	Persian	CK
Four Discourses	Nizami-i-Arudi	1152-7 CE	Turko-Persian Eurasia	Persian	FD
Consolation for the Ruler	Muhammad ibn Zafar al-Siqilli	1159 CE	Sicily	Arabic	CR
Sea of Precious Virtues	Anonymous	1159-62 CE	Levant-Mesopotamia	Persian	SPV
Treatise on Advice to Kings	Sa‘di	mid-13*th* CE	Persia	Persian	TAK
The Manners of Kings[c]	Sa‘di	1258 CE	Persia	Persian	MK
The Nature of Governance[d]	Ibn al-Azraq	1485 CE	Spain	Arabic	NG
The Morals of the Beneficent	Hussein Vaiz Khashifi	1494-5 CE	Persia	Persian	MB
Advice on the Art of Governance	Mauizah I Jahangiri	1612 CE	Mughal India	Persian	AAG
The Sultan's Register of Laws	Aziz Effendi[e]	1632-33 CE	Ottoman Empire	Ottoman Turkish	SRL

Table 2: *Listing of all Muslim texts used in the empirical analysis with author (when known), approximate date of writing, region from which the text emanates and original language of the text.*

[a]Part seven of the *Book of Revenues and the Profession of Secretaryship*

[b]See Crone (1987) on the disputed authorship of this text.

[c]This is Chapter 1 of *The Gulistan*.

[d]Table of Contents and First and Second Premises

[e]The authorship of this text is disputed.

concern that translated texts are qualitatively different than untranslated texts.

3.2 Estimating Broad and Specific Themes

To examine the themes across the Christian and Islamic mirrors literature we introduce a new statistical model for texts. Our model is built around two different hierarchies in our data set. The first hierarchy is a thematic hierarchy, building on other topic models that estimate a hierarchy of topics (Li and McCallum, 2006). At the top of the thematic hierarchy are broad themes that provide coarse summaries of the thematic issues that the mirrors texts engage. We assume that there are four such themes. Below the coarse themes in the hierarchy are more granular themes. We assume there are sixty of the more granular themes. Our model presumes that the more granular topics are nested within the coarser themes so that the granular topics refine and clarify distinctions within each of our broader themes. We determine the number of coarse and granular topics following extensive testing which uses both quantitative and qualitative measures. Following Roberts et al. (2014) and Mimno et al. (2011) we use quantitative measures to measure the cohesiveness and exclusivity of the coarse and granular topics across modeling assumptions. Our research team also evaluated the model qualitatively (blind to the quantitative evaluation), selecting the specification and final model that provided the most substantive clarity (Chang et al., 2009; Quinn et al., 2010; Grimmer and Stewart, 2013). Both our quantitative and qualitative analysis agreed on the number of coarse and granular topics.

A second hierarchy measures how the texts divide their attention across themes. At the top of this hierarchy are the advice books. We suppose that each of the underlying books are a mixture of the underlying themes — and to identify this mixture of themes we break each book into a set of shorter sections.[10] All together our 46 books are composed of 9,838 shorter

[10]To make this division we used natural breaks in the texts. In instances where the natural breaks were very short, we combined the breaks until they comprised at least 150 total words.

sections. At the bottom of this hierarchy are the shorter segments for each book, which we assign to a single granular theme. By assigning each of the shorter segments a single theme, we simultaneously assign the text to a single coarse theme at the top of the hierarchy as our granular themes are nested within the coarse themes (Grimmer, 2010; Wallach, 2008).

To apply the statistical model to the texts we perform a series of steps that simplify the texts and represent them quantitatively; these steps are commonly called "pre-processing" in the text-as-data literature (Grimmer and Stewart, 2013). The assumptions that we impose are not intended to capture the realistic ways texts are constructed and language is used in every day discussions (Grimmer and Stewart, 2013). Rather, the assumptions are intended to simplify language to aid in the identification of broad and specific themes in the mirrors texts. Our preprocessing steps are similar to numerous other applications of text-as-data in political science (Quinn et al., 2010; Hopkins and King, 2010); we discard word order, remove common placeholding words, discard punctuation and capitalization, and map variants of a word to a common term.

The varied content of our texts also lead us to impose additional preprocessing. It is common for words that are clearly synonyms to be used in distinct texts. Without further guidance, our method may confuse the synonyms for distinct words about different themes. To avoid this confusion, we identified synonyms and collected the words under a single term. And because our texts are translations that often leave some words in the original language, we imposed additional translations. For example, we combined *God* and *Allah*, ensuring that our model did not arbitrarily separate religious appeals based on differences in translation. The result of this procedure is that each document is represented as an 2,124 element long vector, where each term represents the number of times a word is used in a document.

Using the hierarchy, the statistical model simultaneously estimates five quantities of interest. The model estimates (1) a set of specific themes, (2) a set of broad themes, and (3) classifies each specific theme into a single broad theme. For each of the 46 books in our

collection ($i = 1, \ldots, 46$) the model estimates (4) how each book divides its attention over the 60 specific themes. For book i, define $\mathbf{theme}_i$ as

$$\mathbf{theme}_i \quad = \quad (\text{theme}_{i,1}, \text{theme}_{i,2}, \ldots, \text{theme}_{i,60})$$

where $\text{theme}_{i,k}$ is the proportion of space in book i dedicated to specific topic k. Our procedure is analogous to estimating the weights each book attaches to each theme — so we suppose that each entry in $\mathbf{theme}_i$ is greater than zero ($\text{theme}_{i,k} > 0$) and that the $\mathbf{theme}_i$ sums to 1 ($\sum_{k=1}^{60} \text{theme}_{i,k} = 1$). Because each of the specific themes are nested in the more broad themes, we can easily aggregate $\mathbf{theme}_i$ to obtain the attention each book allocates to the more general themes by summing together the attention to the specific themes assigned to each coarse theme. Our final quantity of interest (5) assigns each short section to a specific topic. To estimate the statistical model we use a variational approximation, a deterministic method for estimating complex posteriors (Jordan et al., 1999; Grimmer, 2011). To select the final model, we run the model several times from different starting values and selected the fit using both quantitative and qualitative evaluations (Roberts et al., 2014). In the Appendix B, we provide full model details and derive the estimation algorithm.

3.3 Themes

We estimate 4 broad themes and 60 specific themes with our model. We summarize our broad and specific themes in Table 3. Column 2 contains key words that distinguish the themes. In Column 3, we present the average proportion of the books allocated to the broad and specific themes. Our model *discovers* the topics, so the key words merely reflect what our model estimates — we did not fix the key words beforehand.

Figure 1 shows the proportion of Christian and Muslim books, respectively, that focus on each of the four themes we describe below. Both the absolute levels of attention to different

Table 3: Broad and Specific Themes in the Mirrors Genre

1	king,princ,good,peopl,rule,law,power,govern,war,honour	0.37
1	king,royal,court,servic,father,moon,seat,presenc,minist,majesti	0.06
2	peopl,lineag,religion,fear,ruler,tribe,countri,famili,leader,common	0.035
3	princ,peopl,good,state,mind,public,christian,realm,tyranni,ought	0.033
4	good,evil,bad,courtier,fortun,instruct,wise,master,care,ought	0.031
5	virtu,vice,good,generos,true,knowledg,wisdom,human,nobl,virtuou	0.024
6	law,unlaw,allow,punish,princ,public,wine,accord,author,judg	0.02
7	good,peopl,bad,lord,princ,king,evil,countri,ought,love	0.018
8	justic,judg,right,equiti,court,world,law,judgment,king,injustic	0.015
9	son,father,mentor,dear,death,thee,arm,glori,perish,daughter	0.015
10	kingdom,king,reign,great,son,father,tyranni,place,possess,realm	0.014
11	power,alexand,pope,abl,reason,roman,duke,tyranni,consid,emperor	0.013
12	war,fight,arm,wage,peac,engag,neighbor,nation,christian,chief	0.013
13	honour,great,gift,lord,nobl,money,desir,hous,rich,servant	0.012
14	tax,land,pay,muslim,collector,treasuri,collect,payment,crop,paid	0.012
15	princ,great,roman,good,ought,nobl,valeriu,honour,knight,rome	0.011
16	rule,govern,kind,art,best,pillar,excel,power,affair,peopl	0.011
17	peac,war,emperor,desir,arm,preserv,neighbor,nation,enemi,roman	0.011
18	govern,politi,tyranni,aristotl,lordship,king,citi,multitud,ruler,human	0.009
19	prais,highli,king,heart,brother,awak,wide,face,tell,man	0.006
20	appoint,judg,offic,deleg,right,author,sovereign,jurisdict,valid,evid	0.006
2	man,woman,know,love,ladi,wish,old,natur,ruler,great	0.238
1	man,wise,wisdom,poor,fool,speech,learn,eat,generos,food	0.047
2	know,knowledg,learn,man,tell,truth,excel,courtier,ignor,abl	0.023
3	man,good,bad,evil,wick,deed,better,wise,fortun,heart	0.021
4	great,art,courtier,place,caus,count,esteem,hors,laugh,mean	0.019
5	man,peopl,place,kill,money,tell,priest,busi,need,properti	0.016
6	ruler,power,new,consid,peopl,princip,qualiti,help,individu,state	0.016
7	natur,human,art,reason,imit,perfect,anim,scienc,bodi,virtu	0.014
8	command,letter,man,faith,governor,armi,believ,order,present,servant	0.014
9	love,woman,lover,passion,ladi,heart,young,beauti,mentor,desir	0.013
10	woman,wive,husband,old,beauti,hous,magnifico,know,ladi,children	0.013
11	woman,man,wive,beauti,marri,laugh,young,unlaw,ladi,perfect	0.01
12	old,man,young,youth,tell,older,wive,boy,vigor,sheep	0.009
13	wish,man,desir,know,speech,question,talk,stupid,avoid,courtier	0.009
14	intellig,caus,substanc,perfect,essenc,intellect,mean,contrari,follow,necessarili	0.008
15	ladi,mistress,woman,court,love,princess,courtier,good,young,wise	0.007
3	almighti,prophet,world,prayer,sin,death,book,bless,life,pray	0.221
1	almighti,holi,world,command,spirit,faith,priest,christ,peopl,glori	0.043
2	almighti,bless,grant,messeng,prophet,peac,muslim,merci,kill,qur	0.035
3	almighti,king,peopl,divin,end,glori,understand,royal,solomon,minist	0.029
4	almighti,man,david,know,wealth,saul,tale,high,poor,creat	0.028
5	almighti,good,evil,work,fear,grant,merci,counsel,bless,wisdom	0.021
6	world,life,almighti,desir,perish,wealth,seek,soul,heart,earth	0.016
7	book,read,work,studi,mind,knowledg,learn,philosoph,scienc,pray	0.012
8	death,life,perish,world,end,soul,hope,left,today,heart	0.012
9	prophet,almighti,muslim,kill,islam,perish,bless,relat,priest,companion	0.01
10	sin,almighti,repent,commit,merci,punish,forgiv,transgress,evil,believ	0.009
11	prayer,almighti,lead,pray,leader,friday,prophet,pilgrimag,servic,priest	0.005
4	bodi,water,enemi,land,eye,faculti,order,friend,citi,lion	0.171
1	citi,countri,citizen,peopl,place,emperor,nation,hous,roman,inhabit	0.024
2	state,reason,necessari,majesti,public,affair,mind,princ,realm,punish	0.016
3	enemi,fight,battl,arm,victori,armi,attack,forc,defeat,war	0.016
4	order,place,hous,imperi,servant,offic,accord,presenc,stay,given	0.015
5	friend,friendship,rat,crow,don,tell,tale,hole,heart,eye	0.013
6	land,water,muslim,countri,cultiv,sea,owner,grant,properti,lie	0.013
7	bodi,soul,beauti,form,mind,contrari,aris,relat,celesti,sens	0.013
8	eye,mentor,head,heart,hair,hors,beauti,face,black,blood	0.011
9	armi,troop,camp,battl,enemi,forc,soldier,fight,order,kill	0.01
10	pleasur,life,beauti,delight,enjoy,mentor,felt,happi,natur,mind	0.01
11	water,spring,river,stone,drink,mountain,sea,flow,place,eat	0.009
12	sun,light,night,earth,cours,tree,beauti,bear,winter,fruit	0.008
13	lion,majesti,bull,jackal,head,tree,camel,crow,king,don	0.006
14	faculti,sens,bodi,organ,imit,receiv,sensit,intellect,form,appetit	0.006

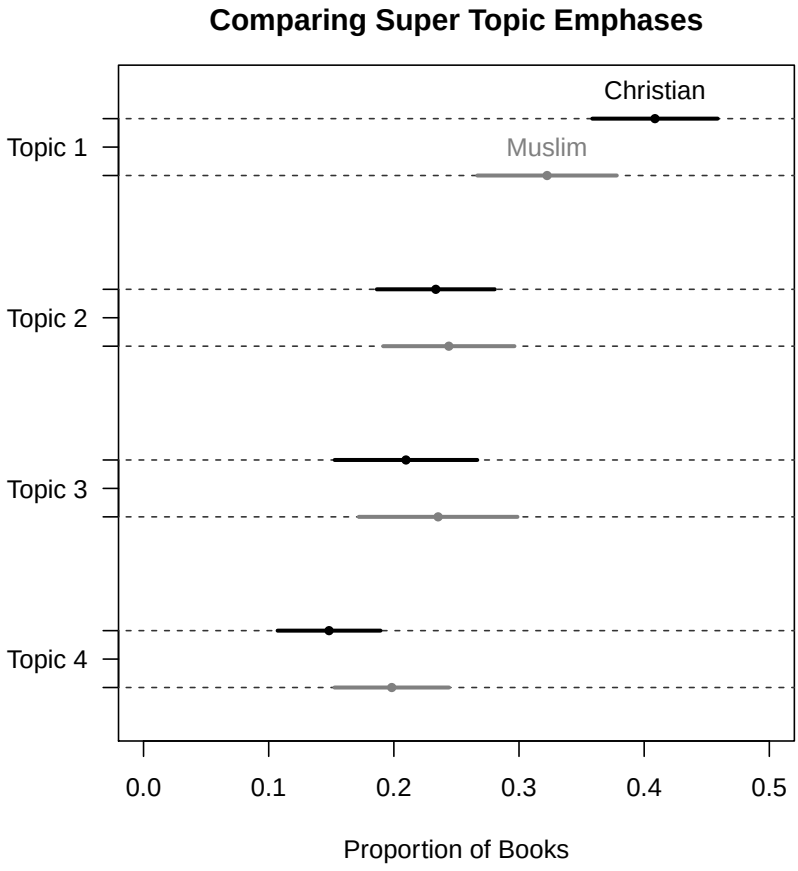

Figure 1: *Difference between Muslim and Christian texts across super topics. Topic 1 focuses on the art of rulership; topic 2 focuses on the private life and personal virtues of rulers; topic 3 focuses on religion; topic 4 focuses on political geography and the natural world.*

themes and the difference between Christian and Muslim texts in terms of emphasis are noteworthy. Figure 2 provides information on how the texts analyzed deal with each of the four themes discussed. There exists a great deal of variation in terms of the relatively topic emphasis across specific texts.

Theme 1: The Art of Rulership This broad theme focuses on the practical virtues and political practices of good rulers. The single most prominent subtopic within this theme concerns the duties and characteristics of exemplary kings (1.1). These ideas are conveyed

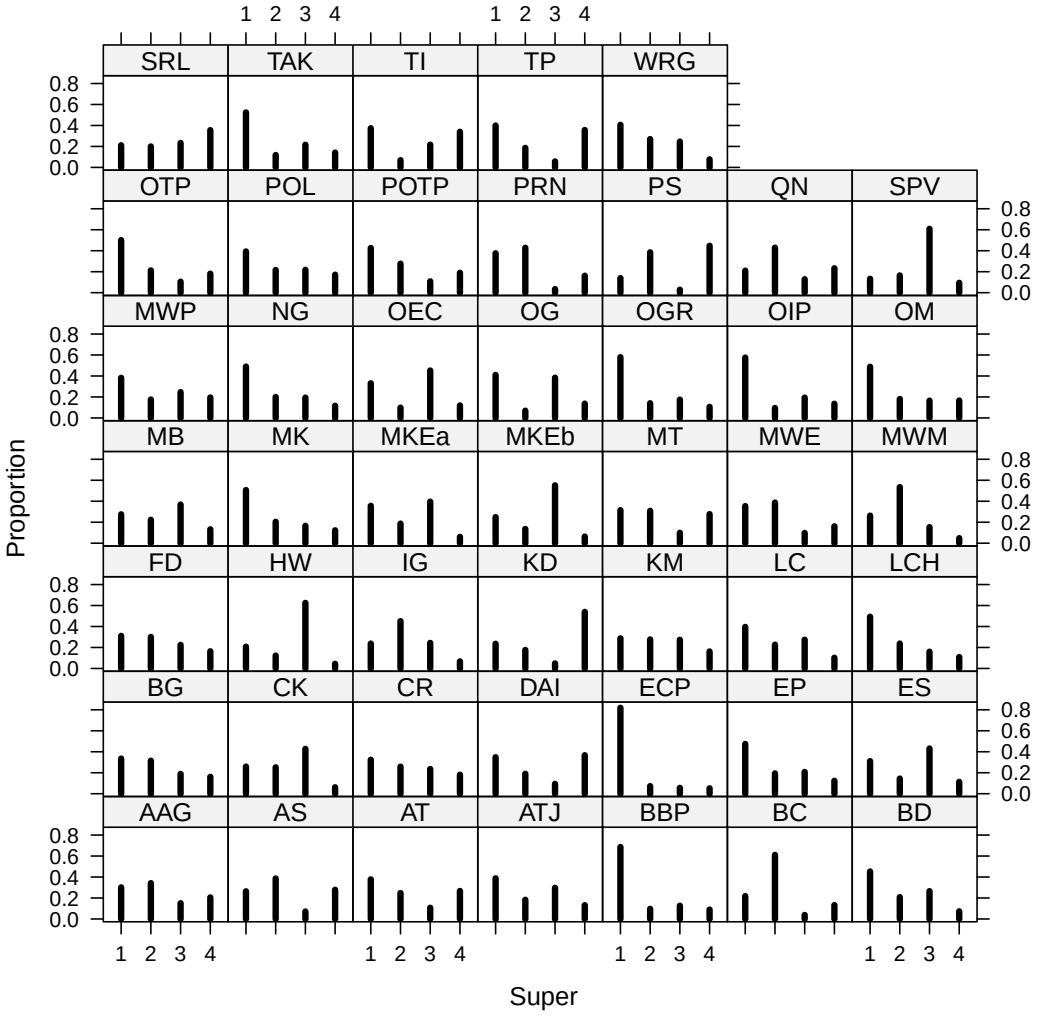

Figure 2: *Emphasis across super topics for each text. Topic 1 focuses on the art of rulership; topic 2 focuses on the private life and personal virtues of rulers; topic 3 focuses on religion; topic 4 focuses on political geography and the natural world. Text descriptors in Tables 1 and 2.*

through both abstract discussion of the ideals of kingship and historical accounts of exemplary rulers. Many subtopics address connected moral concerns like how the ruler's obligations to his people and to the maintenance of the public good (1.3), his moral education (1.4) and moral character (1.5), and his responsibility and reputation for justice (1.8). However, most of the discussions in this theme are more overtly practical. They touch on the ruler's relationships to particular peoples, groups, and factions (1.2), his legislative and executive roles (1.6), the acquisition and exercise of power (1.11), the practice of foreign relations (1.17), the waging of war and the prospects for peace (1.12), tax collection (1.14), and public administration and delegated authority (1.20).

This is the largest area of discussion among Christian and Muslim authors. We see comparatively more emphasis on this theme in the Christian texts, though the difference here is not large. While attention to this theme remains fairly stable over time among Muslim texts, it shows a slight increase among Christian ones. An analysis of the subtopic results reveals several distinct patterns. Most strikingly, there is a repeated temporal inflection point between 1100 and 1200 CE in several of the over-time trends for the Muslim texts in several subtopics (e.g., 1.1, 1.2, 1.8, 1.9, 1.14). While there are similar inflection points in the over-time trends for the Christian texts (e.g., 1.1, 1.3, 1.7, 1.12), they tend to be much less pronounced. We discuss these findings and offer a tentative interpretation of them in Section 5.

Theme 2: Personal Virtues, Habits, and Relationships This broad theme addresses the ruler's personal virtues and relationships. The most prominent subtopic focuses on knowledge, advice, and practical wisdom (2.1). It advises rulers on how to acquire knowledge, cultivate personal and moral judgment, and make use of trusted advisors. The crucial point here is that the personal traits, habits, and practices of the ruler will tend to determine his or her degree of political success. Other related subtopics concern good and evil (2.3), virtue

and vice (2.5), and the requirements of living morally good life (2.4); truth, knowledge, and philosophy (2.2, 2.14); the personal attributes and habits required for maintaining political power (2.6); the ruler's personal relationships (2.9, 2.11, 2.12); and the roles and behavior of women at home and in court life (2.10, 2.15). A common thread running through many of these subtopics concerns the importance of establishing certain habits or practices in the service of virtue, political power, and human relationships.

This is the second largest area of discussion among both Christian and Muslim authors and there is close to equal emphasis on this theme in both traditions. Once again, attention to this theme remains fairly stable over time across Muslim texts, but shows a slight a slight increase over time among Christian ones. A closer look at the subtopics reveals a strong temporal inflection point in the over-time trend for the Muslim texts in subtopic 2.1. Attention to the questions of knowledge, advice, and practical wisdom peaks in the Muslim texts between 1100 and 1200 CE and then declines sharply.

Theme 3: Religion This broad theme concerns religious beliefs and practices and the relationship between religious and political authority. The most prominent subtopic is centered on the relationship between divine will and political rule (3.1). It includes advice about the religious virtues and habits that political rulers ought to cultivate, the relationship between divine favor and political success, the subjection of political rulers to God's will, and the divine sources of political authority. Related subtopics address the obligations of political rulers to God (3.3), the actions and beliefs through which a ruler may secure God's blessings and favor (3.2) as well as his mercy and rewards (3.4), and religious virtues and vices (3.5). Other subtopics deal with specific religious beliefs, such as those relating to sin (3.10) and the ultimate fate of the soul (3.8), and practices, such as prayer (3.11) and religious study (3.7).

This is the third largest area of discussion among both Christian and Muslim texts.

Muslim authors tend to focus slightly more on this theme than their Christian counterparts. Attention to this broad theme within the Muslim texts remains fairly stable over time, with a slight increase between the eighth and 12*th* centuries and a leveling off thereafter. By contrast, attention to this broad theme in the Christian European texts declines steadily from the sixth through the 17*th* centuries. This decline is particularly evident in those subtopics dealing with the relationship between divine will and political authority (3.1), religious virtues and vices (3.5), and sins (3.10). A more abrupt decline beginning roughly around 1200 CE is observable in those subtopics that address a ruler's obligation to God (3.3) and divine mercy and rewards (3.4).

Theme 4: Political Geography and the Natural World This broad theme is centered on discussions of the spaces of politics and the natural world. The most prominent subtopic concerns the spaces and places of political rule — the cities and regions over which a ruler exercises authority and the peoples and ethnic groups that occupy these territories (4.1). Related subtopics address military matters, which a particular (though not exclusive) emphasis on the spaces of battle (4.3) and the role of landscape and topography for military strategy (4.9). Other subtopics included here address the advice associated with the reason of state tradition (4.2) and questions of social order (4.4). While these discussions may initially seem unrelated to political geography and landscapes, the use of spatial language and metaphors (e.g., the state or empire as a space of political action, the public and private *realms*, territorial governors) are common to both. Other subtopics address nature and the natural world as such, touching on the discovery and cultivation of land (4.6), water and watery landscapes (4.11), the cycles of the natural world (4.12), the body and the soul (4.7), and the senses and faculties (4.14).

This is the least discussed theme among both Christian and Muslim texts. It receives slightly more attention from Muslim authors. Within the Christian tradition, attention to

this broad theme remains largely stable until roughly 1300 CE, after which it begins to increase somewhat. Within the tradition, there is a marked decline in attention to this theme between the eighth and $12th$ centuries and then a slight increase thereafter.

4 Interpretation

It is important to note the broad similarities that we find between the European and Islamic advice texts. We find that there are not large differences in aggregate (i.e., time-period average) emphasis on the four major themes (Figure 1). For super topics 2 (Personal Virtues, Habits, and Relationships) and 4 (Political Geography and the Natural World), European and Islamic texts track very closely over the historical interval. We see somewhat greater emphasis on super topic 1 (The Art of Rulership) among the European texts, though this difference is not substantial. We find the existence of similar emphases across European and Islamic texts, in the aggregate, to be reassuring as this suggests that the broad comparability of the cases. This is consistent with arguments offered by Darling (2013*b*), who finds that although there is no evidence that the two literatures strongly influenced one another, there do appear to be important similarities in their content and development.

Nevertheless, there are two pronounced differences in over-time trends across Muslim and Christian texts, one of which only becomes apparent when examining the nested subtopics. The first is an inflection point at around 1100 CE in the over-time trends for Muslim texts for the model's four largest subtopics. While this inflection point is also present in the Christian over-time trends for the Christian texts, it is substantially less pronounced. The second differential trend is a decline in the emphasis on super topic 2 (Religion) over time in the Christian texts that is not mirrored in the Muslim texts. This trend is also observed for a number of the subtopics within this super topic. A limitation of our approach is that

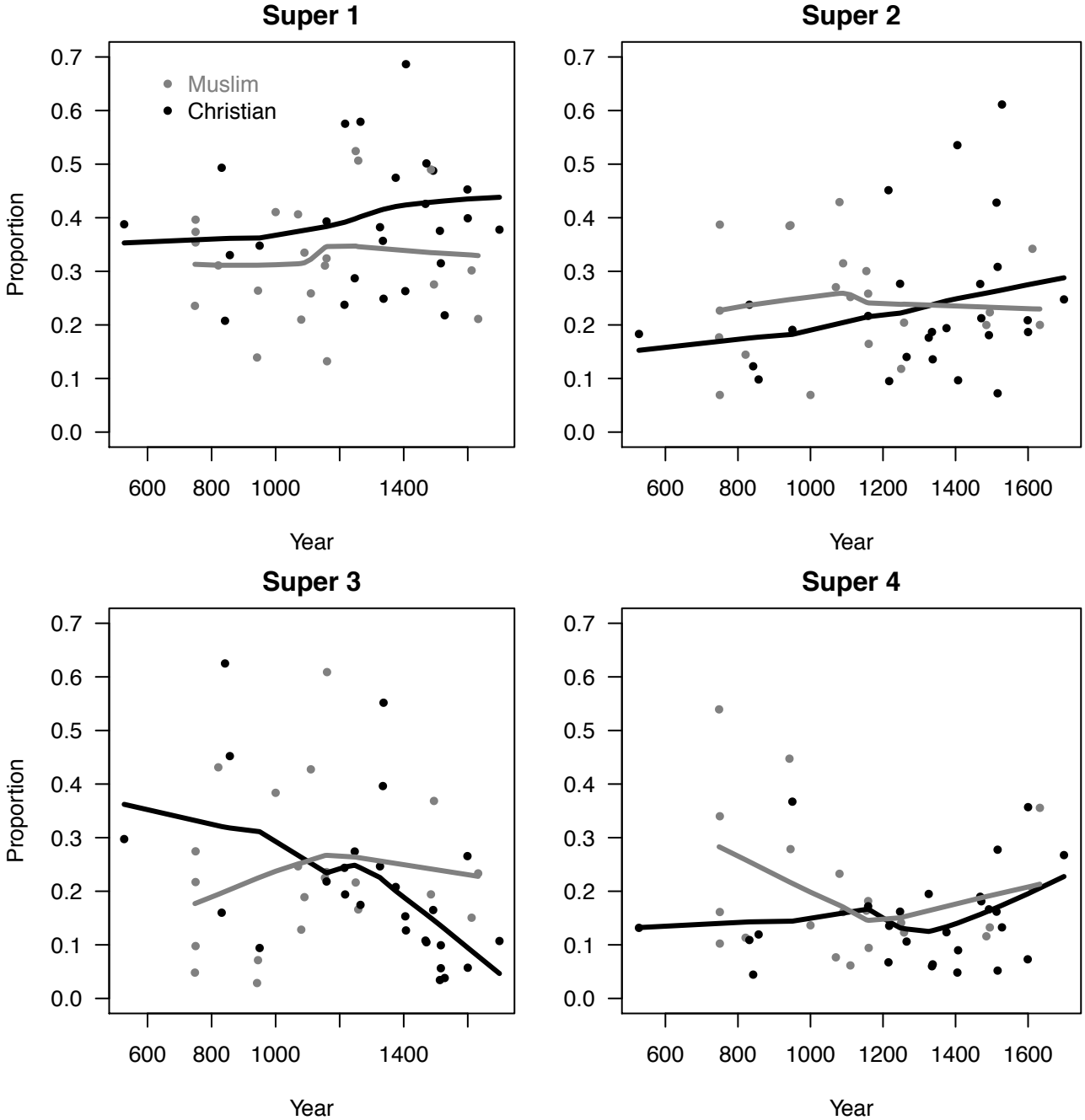

Figure 3: *Emphasis for each of four super topics over time. Topic 1 focuses on the art of rulership; topic 2 focuses on the private life and personal virtues of rulers; topic 3 focuses on religion; topic 4 focuses on political geography and the natural world.*

there are a relatively small number of texts being examined for any particularly time period, making it difficult for us to estimate these trends with precision. We therefore proceed tentatively here with an eye to opening avenues for future research.

4.1 An Inflection Point in Muslim Political Discourse

The inflection point in the over-time trends for the Islamic texts is pronounced in the four largest subtopics estimated by the model. The first two subtopics concern the characteristics of the ideal ruler. Subtopic 1.1, the single largest granular topic identified by the model, addresses the obligations, responsibilities, attributes, and comportment of the ideal king. It includes both abstract discussions of the characteristics of ideal kings and historical discussions of past kings who are exemplary in one or more ways. The salience of subtopic 1.1 increases for Muslims texts, peaks around 1100 CE, and then declines afterwards. While both the Muslim and Christian texts reflect this trend to some degree, 1100 CE stands out much more clearly as a point of inflection for the Muslim texts (see figure 4). Subtopic 1.2, also an area of substantial attention within the corpus, is centered on the relationships between rulers and other groups or classes of people. The Islamic texts in this category emphasize the connection between social hierarchies and political stability. They also include attempts to catalogue, classify, and characterize peoples of different ethnic groups (e.g., tribal bedouin, Armenians). The focus on this subtopic is almost the reverse image of the trend for subtopic 1.1. After initial high levels of focus on this subtopic in the early years of Islam, emphasis declines and then the trend reverses around the $12th$ century.

Similar inflection points can be seen in other thematic areas. Subtopic 2.1, the largest within a theme focused on the ruler's personal habits, virtues, and relationships, centers on the connections between wisdom, virtue, and advice as they pertain to politics and other domains. Among the Islamic texts grouped in this subtopic, special attention is given to practical wisdom — learning from experience, cultivating good personal judgment, and

developing the practices and habits associated with political success. The trend line here looks much like it does for subtopic 1.1. The salience of the topic increases for the Islamic texts, peaks around 1100 CE, and declines thereafter (see Figure 4). A similar inflection points can be seen in the over-time trend for subtopic 3.1, which deals with the relationship between divine will and political rule (see Figure 5).

This inflection point is associated with three highly important political trends that may have had an impact on established political, social, and religious institutions as well as intellectual production. Although Muslims had controlled the Holy Land for many centuries at that point, in 1095 CE Pope Urban II appealed to Christians in the west to assist their eastern brethren, with a further goal of recapturing Jerusalem and the Holy Land from Muslim control. The military mobilizations which came to be known as the Crusades continued for the two centuries to follow. While the Holy Land Crusades may well have had a significant impact on state formation of Europe, the long-term affect on Muslim political development is less documented.[11] This is likely the case because the absolute number of European crusaders was small and the crusader states which did emerge were geographically concentrated and not particularly long-lived. The Crusades did, however, give rise to increased propaganda in favor of *jihad* as Muslim leaders sought a reconquest of Jerusalem (Edde, 2010).

Second, Turkic incursions may have been of even greater importance to the political and institutional development of the Islamic world. Bosworth (2010, 21) argues that until the start of the $11th$ century, the eastern frontier of the Muslim world had been quite stable. After that point, however, new ethnic elements drawing from the steppe and forest hinterlands were "injected" into the eastern Islamic world, acting as a major shock to the pre-existing Perso-Arab political and intellectual equilibrium (Bosworth, 2010, 21). Historians have argued that these early Turkic incursions began as nomadic attacks in search of booty

[11] See Blaydes and Paik (2015) for a discussion of the impact of crusader mobilization on European state formation, for example.

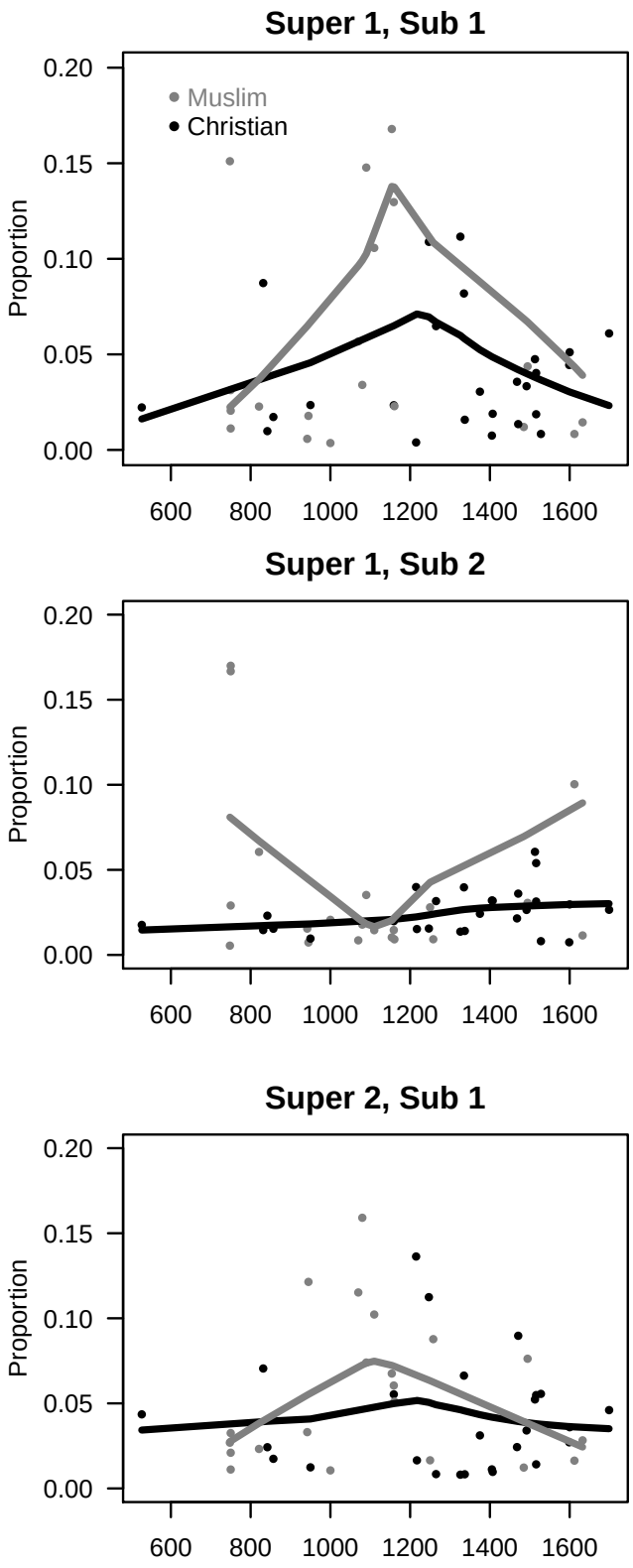

Figure 4: *Emphasis for subtopics 1.1, 1.2 and 2.1 over time.*

and pasture, not as traditional military invasions (Leiser, 2010, 303). Over time, however, repeated successful incursions led to the emergence of new Turkic regimes, like the Seljuks.

How significant were the Turkic invasions to the development of political life in Muslim societies, particularly of the east? Berkey (2010, 48) argues that the rise of these Turkic regimes was the "dominant political development of the medieval period" in the Muslim world. And while these new peoples were eventually Islamicized and absorbed into the Muslim world, historians have argued that the Turkic invasions led to a "circling of the wagons," including "a process of homogenising religious life, circumscribing the parameters of permitted thought and behaviour and giving greater force to the 'consensus' of the jurists and the scholarly elite" in the face of the new external challenges (Berkey, 2010, 51). Turkic rulers, like the Seljuks, sought to legitimize their political authority by presenting themselves as defenders of the faith, even waging "*jihad* against non-Muslim populations in Anatolia and Central Asia" (Lapidus, 1996, 13). This period also saw the rise of the *madrasa* education with a focus on religious learning; by the $13th$ and $14th$ centuries, the *madrasa* was ubiquitous in Muslim societies across the region (Berkey, 2010).

Finally, a progression of Mongol invasions and conquests took place over the course of the $13th$ and $14th$ centuries ushering in what some Middle Eastern historians have described as the start of a "totally new phase of Islamic history" (Bosworth, 2010, 75). According to one account, Hulagu Khan — a grandson of Ghengis Khan — led 20 percent of the steppe Mongol and Turkic population into the Middle East, which was estimated to be about 850,000 people along with 3-5 million horses and an additional 17 million sheep (Darling, $2013a$). Religious assimilation of the Mongols into Muslim practice took place quite rapidly and advice books for rulers helped provide some political continuity from pre-Mongol days (Black, 2001). That said, there is no question that Mongol ideas about political rule fused with Perso-Arabic political models and fundamentally changed ideals of rulership.[12] Black

[12]The Middle East had long seen "foreign" rule over local populations. What was different and potentially

(2001, 137) goes as far as to say "between 1219 and 1405, the Islamic world was torn apart" as a result of the Mongol invasions. And unsurprisingly, once in power, the Mongols sought to enumerate and classify the conquered people for purposes of tax collection and military conscription (Darling, 2013*a*).

The relatively rapid and substantively large entrance of nomadic Mongols and Turkic peoples onto the political landscape of the Eastern Islamic world created tremendous upheaval that may have been responsible for the changing nature of political discourse. We have gestured at three such changes. First, the external shocks may well have altered the ideals of kingship. Turkic models tended to view kingship as "a divine gift to the founder of the state" (Arjomand, 2010, 237). According to Bosworth (2010, 22), Turkish and Mongol princes found great appeal in "older Iranian ideas of kingship had been grafted on to Islamic concepts of authority" which "elevated the sovereign to a high position above his subjects, with his power buttressed by the support of a professional army." In other words, the there seemed to have been a reversion to pre-Islamic forms of kingship advice that would be consistent with the empirical reversal observed in the over-time data trends. Second, in response to the financial and military challenges of controlling new territories, Mongol rulers developed tools for enumeration and classification of individuals and social groups within conquered societies. This transformation was reflected in advice literature with an increasing focus on advocacy for the increasing occupational and other forms of differentiation across peoples (Marlow, 1997). Third, the Turkic invasions generated pressures toward religious homogeneity and uniformity among subject populations, but also created a demand for religious legitimation among the new foreign rulers via mechanisms that we describe above.[13]

more disruptive about the Mongol influence, however, was the absence of the common Greek, Roman, and Persian cultural referents that local populations had shared with previous foreign rulers.

[13]While the increasing focus on pre-Islamic, Persian forms of kingship would seem to suggest a greater emphasis on the separation between "God" and "King," we do not find that this was associated with a decline in religious discourse in Muslim political advice literature. Possible explanations include the importance of divine support within Persian kingship models and/or the increasing relevance of religious discourse associated with strategies of religious legitimation.

What made the Muslim world particularly vulnerable to external actors, like Turkic peoples and Mongol tribesmen? And why did these invasions come at this particular time? Historians have argued that the defining feature of human geography for what has become the Muslim world, and that which distinguishes it from Europe, India and China, is "the presence of large numbers of nomadic or transhumant peoples" where the "impact of the nomads has been enormous — sometimes destructive, sometimes leading to the formation of major states and empires" (Kennedy, 2010, 283). The historical record points to both endogenous and exogenous factors related to the timing of the incursions. Researchers specializing in the climactic conditions of Eurasia during the medieval period have found that nomadic Mongol horsemen were more successful at moving across the Eurasian steppe in the early $13th$ century compared to any other period because of unusually wet and mild weather that encouraged grass production which fed horses and other livestock (Pederson et al., 2014). This exogenous weather shock does not explain earlier Turkic incursions, however, the influence of which was likely as important as the Mongol invasions. Blaydes and Chaney (2013) argue that institutional innovations of the $9th$ century, particularly the use of foreign *mamluk* military elites, generated a relative unstable and brittle form of political rule which may have made Muslim sultans increasingly vulnerable to external invasions of any kind.

4.2 Declining Emphasis on Religion in Christian Mirrors Texts

A second important differential trend concerns the emphasis on religious themes. Within the Christian texts there is an overall decline in this emphasis over time — a decline that becomes more stable and pronounced after 1150-1200 CE. In contrast, focus on religious themes in the Muslim texts remains fairly constant overall (see Figure 3). Thus, while in the aggregate Christian and Muslim texts appear to emphasize religious themes at similar levels, there is important comparative temporal variation.

The downward trend in religious themes among the Christian texts is especially pro-

nounced in four subtopics, all of which deal with the connection between the spiritual realm and political rule. In two cases, this downward trend is steady and continuous, while in two others it is most pronounced after 1150-1200 CE. First, subtopic 3.1 is the largest of the subtopics within the "Religion" supertopic. This subtopic is focused on the relationship between God's will and political rule. It includes discussions of the religious virtues and habits that rulers ought to practice, the relationship between divine favor and worldly political success, the subjection of political rulers to divine rule, and the divine sources of religious authority. Focus on these issues in the Christian texts declines across the entire period of analysis, while the comparable focus in the Muslim texts declines until roughly 1100 CE and then increases thereafter (see Figure 5). We see a similar pattern in the Christian texts in subtopic 3.5, which is focused on discussions of religious virtues and vices and their connections to political authority. It includes passages that admonish rulers for failures of virtue, warn them against the vices of political rule, and urge them toward the difficult path of virtue. Attention to these issues declines sharply within the Christian texts across the entire period but remains constant within the Muslim texts (see Figure 5).

Subtopics 3.3 and 3.4 exhibit a different but related pattern. Subtopic 3.3 focuses on a ruler's obligations to God and includes discussions of the kinds of virtues (e.g., wisdom) and practices (e.g., nourishing and caring for the soul) necessary to fulfill one's obligations to God, as well as arguments about the connection between the ruler's relationship with his own people and his degree of divine support. Attention to these questions in the European texts remains steady until about 1150-1200 CE, then declines thereafter. Within the Muslim texts, we see an increasing focus on these questions until about 1150-1200 CE, after which attention remains steady (see Figure 5). The trend is similar among the European texts for subtopic 3.4, which captures discussions of God's mercy and rewards. It includes passages that stress the importance of being grateful for and to God and advice on appropriate displays of reverence to God in return for his gift of political rulership. The focus on these

themes in the Christian texts remains steady until roughly 1200 CE and then declines sharply thereafter, while comparable focus in the Muslim texts increases until about 1150-1200 CE and then declines slightly but steadily after that (see Figure 5). In short, we observe an overall decline in attention to religious themes within the Christian texts. When we narrow our attention to some of the more specific religious themes, we see either a steady and continuous decline (subtopics 3.1 and 3.5) or a decline that starts roughly around 1150-1200 CE. There are no similar trends in the Muslim texts.

What might account for these trends? Our view is that they may indicate a gradual process of secularization in Christian advice literature. By "secularization" here, we mean the development of an idea of the political realm as a separate and differentiated sphere of activity with its own logic or "rationality" that need not rest on theological beliefs or commitments.[14] If European advice books were becoming more secular, this might explain why the declining focus on religious themes is particularly marked in those subtopics dealing with the relationship between spiritual authority and standards of behavior, on the one hand, and political rule, on the other. Such a process of secularization within advice books might plausibly reflect broader changes in medieval Europe that were not matched in the Islamic world.[15]

The conventional story about the rise of secular, differentiated, and territorially-bound political authority in Europe pins its development to a combination of ideational and institutional changes of the Reformation and the ensuing wars of religion (e.g., Berger, 1967;

[14]What we have in mind here is something close to Charles Taylor's first conception of secularity. Note that even if the advice literature were tracking a broader process of secularization within medieval and early modern Europe, this kind of secularity would still be "compatible with the vast majority of people still believing in God, and practicing their religion vigorously" (Taylor, 2007, 2).

[15]We should also note that the decline in attention to religious themes within the European mirrors should lead us to question accounts which cast Machiavelli's *Prince* as a radical break from earlier advice manuals and political theory more generally. Often, this break is seen to consist, at least in part, in Machiavelli's rejection of medieval religious statecraft and Christian standards of political rule (e.g. Strauss, 1958; Skinner, 1998; Wolin, 2004). Our findings suggest that, at least insofar as *The Prince*'s place within the genre of advice literature is concerned, the work might profitably be viewed as the culmination of a process of secularization, rather than the initiator of one.

Gregory, 2012; Parsons, 1978; Weber, 2002). A major challenge to this narrative, however, comes from scholars who point to the medieval origins of European state formation and separation of church and state (e.g., Gorski, 2000; Bueno de Mesquita, 2000; Spruyt, 1994; Strayer, 1970). We find that the decline in emphasis on religious themes within the advice literature is continuous over our entire period of study and that it more stable and pronounced in the period after 1150-1200 CE. These trends are consistent with arguments which focus on the Middle Ages as the key period in which secular, differentiated, and territorially-bound political authority first emerged in Europe.

For two important subtopics (3.3 and 3.4), 1150-1200 CE marks a decisive turning point in the over time trends. There are at least two potentially consequential events in Europe during this period. First, the Investiture Controversy — a struggle that was nominally about whether monarchs or the Church had the authority to select (invest) bishops and abbots, but that raised much broader questions about the content and scope of political and ecclesiastical authority — was resolved in 1122 CE. The controversy was the outcome of a broader agenda of reform within the Church which sought to secure the independence of ecclesiastical authority. This resolution was formalized in the Concordat of Worms, which not only gave the Church the powers of investment but also established a number of institutional and symbolic distinctions between spiritual and worldly authority (Bueno de Mesquita, 2000). While this outcome was seen as a partial victory for the Church, Strayer argues that it had unforeseen consequences: "By asserting its unique character, by separating itself so clearly from lay governments, the Church unwittingly sharpened concepts about the nature of secular authority" (1970, 22).[16]

Second, 1150-1200 CE marks the approximate middle of the first five Crusades to the Holy Land. Blaydes and Paik (2015) argue that Holy Land Crusades organized to counter Islam's rise encouraged the consolidation of the territorial state by increasing European

[16] On this point, see also: Bueno de Mesquita (2000); Black (2008)

political stability, strengthening political institutions and dismantling feudal estates with implications for the rise of towns and bourgeoise interests. Thus, while it was pious idealism that may have initially led Europeans to the Holy Land, the net effect of crusader mobilization was to strengthen territorial political authorities relative to the Church. Together, these developments served to differentiate the political from ecclesiastical authority and to strengthen the former relative to the latter. The pronounced decline in attention to religious questions in European advice books, particularly after 1150 CE, could well reflect these important institutional turning points.

5 Conclusions

In this paper, we explore temporal and cross-sectional trends in institutional development within the "Western core" through an examination of advice texts for royals — among the most important forms of political writing to emerge from the medieval and early modern periods. Our analysis of 46 "mirrors" texts suggests important similarities in theme and emphasis when comparing the ways that Muslim and Christian writers in this genre advised their patrons. Instruction on the art of political rule, personal virtues, management of the king's family and household and religious duties, rights and obligations were comparably represented — in the aggregate — for both the Christian and Muslim texts.

The examination of temporal trends reveals important differences, however. We find that for Christian polities, religious discourse become less central to political advice over time while emphasis on religious themes remains fairly steady for Muslim writers over the study period. Our findings point to one empirical manifestation of a growing separation of church and state for the Latin West which did not witness a parallel for the Islamic world. Our evidence suggests that while European political advice texts saw a marked decline in religious discourse by the Enlightenment, Muslim writers continued to invoke religious themes

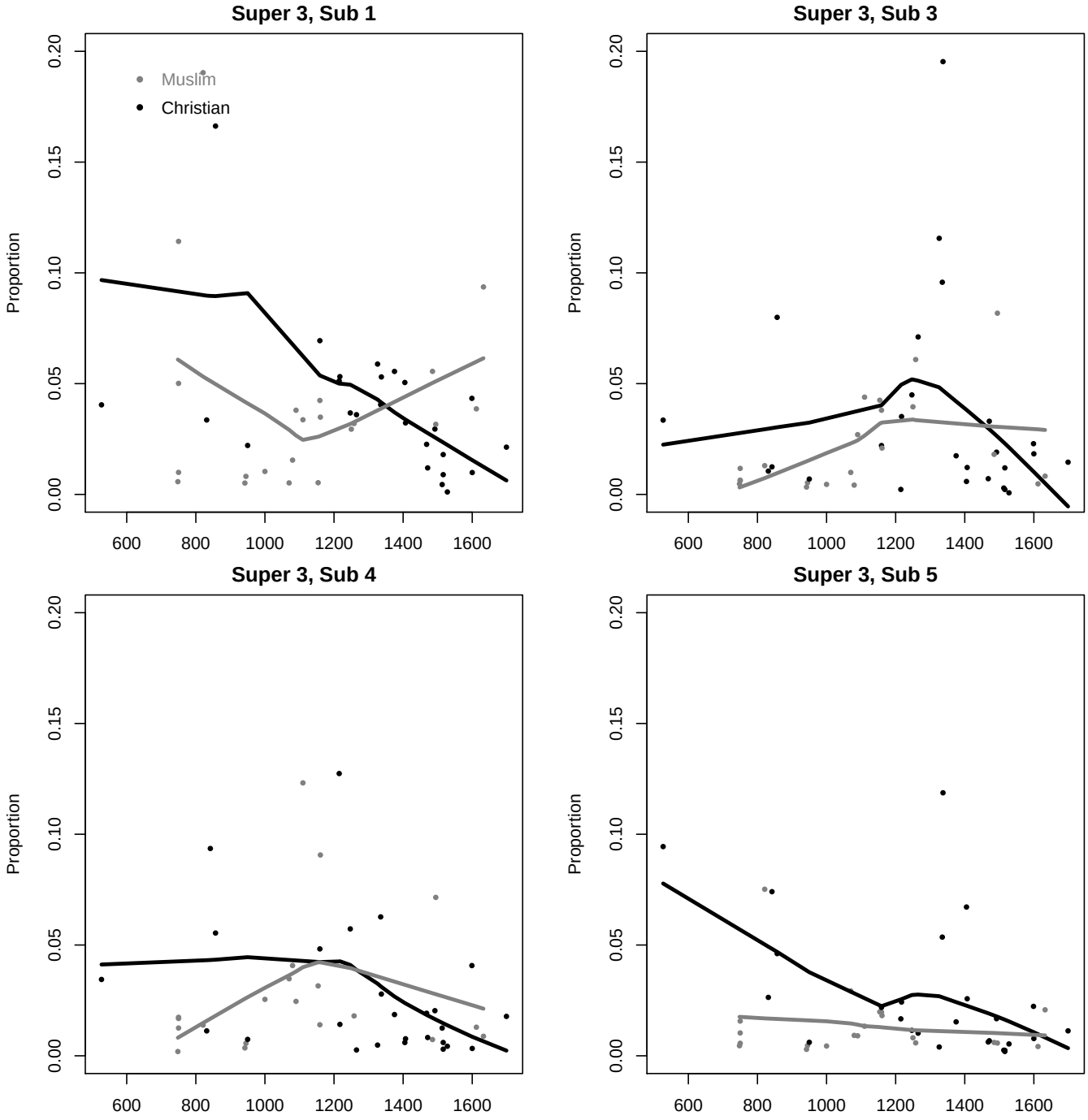

Figure 5: *Emphasis for subtopics 3.1, 3.3, 3.4 and 3.5 over time.*

into the early modern period. While some scholars have argued that Islamic societies have found it difficult to distinguish between religious and political authority (Lewis, 1993, 3-5), we find this common story to be deeply misleading. Distinctions between political and religious authority were subject to virtually continual renegotiation in the almost immediate aftermath of the religion's founding (Lapidus, 1996; Black, 2008). As a result, we do not view the importance of religious discourse in Muslim advice texts to be a characteristic of Muslim societies, *per se*, but rather a reflection of the differential development of political institutions in Muslim and Christian regions.

More generally, we offer the first major attempt to apply automated text analysis to important questions in the history of political thought. Through an examination of texts in a relatively well-defined genre of political theory — the "mirrors for princes" literature — we are able to highlight some of the benefits of automated methods for examination of both large numbers of texts as well as texts from different cultural and religious traditions. Our introduction of a new model for estimating both broad and more specific themes across texts allows for multiple levels of analysis and comparison. We believe that the methods introduced in this paper might be fruitfully applied to a variety of subject areas.

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