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A Topic Modelling of Muslim Religious Reform in the Colonial Age: A Computational and Digital Study of *al-Manār* (1898-1935)

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The present paper is a test case of how far computational sciences and Islamic and Arabic studies can be “partners” in answering cultural-religious and historical questions related to the Arab and Muslim world. The paper mainly discusses methods that could help us computationally track, quantify, and explain the development of religious concerns of reform as reflected in the well-known Muslim reformist journal *al-Manār* (Lighthouse), published by the Muslim reformer Muḥammad Rashīd Riḍā (1865-1935) from 1898 until 1935 in Cairo. We employ quantitative and qualitative methods based on *al-Manār*-corpus by using morphological processing, topic modeling in order to examine the thematic co-occurrences of the topics and lexemes pertaining to Muslim thinking and societies in Riḍā’s time.

In recent years, the field of Digital Humanities has become a challenge and profit at the same time for history and cultural studies. The integration of applied methods, encompassing inclusive distant and exclusive close reading can provide multifaceted views of existing vast amounts of cultural and historical data. Coined by Franco Moretti, computational distant reading facilitates a broader perspective and visualization of vast quantities of data.² However, the validation of accuracy, contextualized within historical events, necessitates a closer analysis of the associated texts and their historical context. To clarify, distant reading provides an abstract overview by processing digitized results in graphs and diagrams, requiring refinement through close examination against the corpora and their historical backgrounds. Reading and analyzing data, the research questions posed by computational scientists and historians may not always align. Nevertheless, collaboration between these fields is essential in the quest for novel answers to longstanding questions and the development of mutually beneficial methodologies.³

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2 Franco Moretti, *Distant Reading* (Verso Books, 2013), id. *Graphs, Maps, Trees: Abstract Models for a Literary History*. Verso, 2005.

3 S. Jänicke (et al), “On Close and Distant Reading in Digital Humanities: A Survey and Future Challenges”, in R. Borgo, F. Ganovelli, and I. Viola (eds.), Eurographics Conference on Visualization (EuroVis) (2015) <https://pdfs.semanticscholar.org/20cd/40f3f17dc7d8f49d368c2efbc2e27b0f2b33.pdf>. Katherine Bode, *Reading by Numbers*. London: Anthem, 2014; Matthew L. Jockers, *Macroanalysis: Digital Methods and Literary History*. Urbana: University of Illinois Press, 2013. Stephen Marche, “Literature Is Not Data: Against Digital Humanities.” *Los Angeles Review of Books*. Oct 28, 2012; Brendan O’Connor, David Bamman, and Noah Smith,

The current paper should not be construed as part of the ongoing debate regarding the effectiveness of distant reading versus close reading per se. Instead, this study serves as a test case to explore the extent to which computational sciences and Islamic and Arabic studies can collaborate in addressing cultural, religious, and historical inquiries related to the Arab and Muslim world. The paper primarily delves into methods that could computationally track, quantify, and investigate concerns related to religious reform as reflected in the prominent Muslim reformist journal, *al-Manār* (The Lighthouse), published by Muḥammad Rashīd Riḍā (1865-1935) in Cairo from 1898 to 1935. Our approach employs both quantitative and qualitative methods, utilizing the *al-Manār* corpus. We employ morphological processing and topic modeling to scrutinize thematic co-occurrences of topics and lexemes associated with Muslim thought and societies during Riḍā's era.

This distant digital reading will be complemented by a qualitative historical close analysis to contextualize these topics in relation to the events that prompted them. In this case study, we will explore disciplinary connections by experimenting with computational quantitative models alongside the backdrop of historical qualitative evidence. Our objective is to uncover overarching narratives through a combination of quantitative data, focusing on recurring topics in *al-Manār*, and interpreting them through qualitative micro-histories that offer a deeper understanding. This collaborative effort seeks to evaluate the results of digital history against the traditional interpretative reading of historical sources, using *al-Manār* as a case study. Through this endeavor, we aim to bring statistics and algorithms closer to human historical interpretations.

It is essential to situate this paper within the recent academic landscape of the intellectual digital history of the Arabic renaissance (*nahḍa*). In his research, Till Grallert explored digital history applied to the study of the late Ottoman Eastern Mediterranean periodical press (1906-1918). Grallert uses the term 'ideosphere' as a spatial metaphor for understanding the periodical press, referencing the realm of human ideas. This involves transcending individual periodicals and engaging in a systematic study of the periodical press at scale. Grallert's essay is not limited to the specific case study but makes use of early Arabic periodicals such as Buṭrus al-Bustānī's *al-Jinān* (Beirut, 1876-1886), Yaḳūb Ṣarrūf, Fāris Nimr, and Shāhīn Makāriyūs's *al-Muqtaṭaf* (Beirut and Cairo, 1876-1952), Muḥammad Kurd 'Alī's *al-Muqtabas* (Cairo and Damascus, 1906-1918/19), or Rashīd Riḍā's *al-Manār* (Cairo, 1898-1941). In his method, Grallert focuses on (social) network analysis and

"Computational Text Analysis for Social Science: Model Assumptions and Complexity," *Second Workshop on Computational Social Science and Wisdom of the Crowds (NIPS 2011)*, December 2011; Hanna Wallach, "Computational Social Science: Toward a Collaborative Future," *Data Science for Politics, Policy, and Government*, Cambridge: Cambridge University Press, 2015.

stylometric authorship.⁴ When establishing a network of authors and texts in these journals, he analyzes bibliographic data, not primarily focusing on the contents of articles. The present work extends the analytical scope to include the application of topic modeling on *al-Manār*. We use *al-Manār* as a case study by employing topic modeling, which is mostly concerned with the contents of the journal rather than the network of authors. Boğaç Ergene and Atabey Kaygun produce a semantic mapping of Ottoman Fetva collections by the Ottoman Chief Mufti Ebyssuud Efendi (1490-1574) by using topic modelling as a tool. As a systemized compilation, the authors have a priori knowledge of the ‘thematic categories’ included in the fatwas. Then they used a modeling algorithm to identify ‘topics’ based on the relative proximities of words and phrases that constitute the text. The method also provided clues to broader semantic concentrations in the corpus.⁵ The authors stress that their “article is methodological in nature. It proposed computational techniques and approaches that successfully capture the substantive constituents of an important Ottoman fetva collection.”⁶

Normally speaking, topic modelling aims to “discover” issues in collections of texts without requiring knowledge beforehand what topics might exist in them. Also there is a challenge in the method of distant and close reading that the reading of everything in the latter method seems impossible. However, *al-Manār* has been closely studied and the frequent salient topics which were discussed by its founder are highlighted in scattered secondary studies that provide us with formal in-depth analysis. This knowledge will help us experiment with the computational results of topic modelling, which is actually meant to unearth evidence that already exists in the texts. In this research, we therefore take a reverse approach to the standard historical reading of *al-Manār* by first automatically clustering the data into topics; and then trying to study the context for the results by narrowing the scope to focus on the individual patterns or probably unexpected topics that can be found in the dataset.

Why *al-Manār*? The *al-Manār* magazine was one of the most significant reformist publications in the colonial age. It was founded in 1898 and continued till the death of Riḍā in 1935. In his magazine, Riḍā wrote on the Qur’an, Islamic reform, politics, as well as hosted other topics that rose and fell with the ebb and flow of political, religious, and social events in Egypt, his birthplace Syria and the wider Muslim world. During these years, the magazine dominantly represented the trend of “Islamic modernism” or “Islamic reformism” in its time. Historically *al-Manār* is thus a rich mine of

⁴ Till Grallert, “Catch Me If You Can! Approaching the Arabic Press of the Late Ottoman Eastern Mediterranean through Digital History”, *Geschichte und Gesellschaft* 47 (2021), pp. 58–89.

⁵ Boğaç Ergene and Atabey Kaygun, “Semantic Mapping of An Ottoman Fetva Compilation: EBUSSUUD Efendi’s Jurisprudence through a Computational Lens”, *Journal of Islamic Studies* 32/1 (2021), pp. 62-115.

⁶ Ergene and Kaygun, “Semantic Mapping”, p. 103

information and a good historical window about the Muslim world in Riḍā's age on various religious, cultural, political, social and literary issues. In its general mission, *al-Manār* called for the preservation of Islamic beliefs and religious practices without ignoring challenges of modernity. In other words, his religious tactics were part and parcel of a broader reformist discourse that tried to urge Muslims to accept specific tools of modernity without losing the grip on their religious core beliefs and practices.

Around the magazine Riḍā gathered a plenty of associate writers who shared with him similar reform ideas from North Africa to Indonesia and China to Russia and Europe. In addition, it was one of the early Muslim magazines that published Qur'anic exegesis and fatwas which made Islamic knowledge accessible to many generations up till nowadays. In 1940 and at the request of Riḍā's family four issues of *al-Manār* were published under the editorship of Hasan al-Bannā (1906-1949), the founder of the Muslim Brotherhood in Egypt, despite the fact that neither al-Bannā nor the Brotherhood are nowhere mentioned in Riḍā's magazine.

Much has been written about *al-Manār*, but two recent works should be mentioned here. Florian Zemmin uses *al-Manār* as a case study in order to see how modernity developed in Islamic tradition in the colonial age. For this end, he used the concept of 'society' and how it was defined and mobilized in Riḍā's magazine against its socio-political and intellectual contexts.⁷ Zemmin made use of the computational tool PowerGrep in order to count the terms related to the concept of 'society' and the 'social' (such as, *mujtama'*, *al-hay'a al-ijtimā'iyya*, *ijtimā'*, *ijtimā'iyya*) in *al-Manār*. He recorded his quantitative findings in order to see how these terms significantly increased or decreased in their usage over the lifespan of Riḍā's journal. Zemmin noted that the frequency of the usage of specific terms are sometimes obvious when it is connected to significant historical events, such as the controversial abolishment of the Ottoman caliphate in 1924.⁸ While studying individual lexical terms is useful, topic modelling, which we examine in this article, adds another layer of complexity, and usefulness, by clustering words together, similar to collocation analysis, which helps discover connected terms and topics. Associating themes with time stamps helps track thematic changes beyond the single lexical items.

In another study, Leor Halevi studied diverse fatwas by Riḍā in which he answered many questions raised by Muslims from all over the world dealing with then modern things, such as gramophone records, brimmed hats, tailored trousers, lottery tickets, paper money, gigantic gongs, and toilet paper, and how they (as mostly western) "crossed cultural and political

⁷ Florian Zemmin, *Modernity in Islamic Tradition: The Concept of 'Society' in the Journal al-Manār (Cairo, 1898–1940)*, Berlin & Boston: Walter de Gruyter GmbH, 2018.

⁸ Zemmin, *Modernity*, p. 482

frontiers” in the colonial age. Halevi put *al-Manār* and its founder under what he calls “laissez-faire Salafism,” by which he described Riḍā’s “good tidings, which he spread far and wide, that adherence to the sharia’s original spirit would empower modern Muslims to overcome hardship and rise to affluence.”⁹ In that sense, *al-Manār* tried to provide Muslims with “a common ethical framework” by which they could perceive their “local entanglements with modern things.”¹⁰ He studied Riḍā’s fatwas as an “history from below,” by employing “microhistorical investigations of particular religious or legal questions in a local context and ends with reflections on broader global patterns.”¹¹

The present approach will see how digital tools will help us understand how *al-Manār* reacted to a globalized Muslim world by figuring out the big historical picture of events and questions of modernity. By the use of topic modelling, the paper will not produce a microhistorical top-down historical investigations to Riḍā’s religious reform, but will offer a macro-historical down-top approach; and through which close reading will follow in order to examine the historical details of such automated topics. By this we will apply the topic modelling as a method for studying modern intellectual history of the Muslim world and the challenges the Arabic language poses to computational methods. How far do graphical representations of the topic modelling speak to a proxy to the historical social, political and religious reality or to capture discursive change in *al-Manār*?

Data and Methods: Frequent topics and issues

Data Properties of al-Manār

For the purpose of this study, we have used the Shamela version of *al-Manār* (<https://old.shamela.ws/index.php/book/6947>). This version of *al-Manār* exists as an epub file comprising 4552 xhtml files. Not all of these have textual content. We have preprocessed the magazine through extracting the text from the xhtml using the Python BeautifulSoup library. The resulting corpus has some very useful properties as a corpus: (1) it is large enough for computational tools to glean insights. The magazine contains 3980 textual files and 6.740.567 words, with an average of 1693.6 per document, and (2) the documents are chronologically ordered, which makes it possible to examine and track the historical changes in the dataset in a way that helps historians see which events became prominent at certain points of time and which faded away. Also the nature and availability of *al-Manār* in print and digitally therefore make the magazine a unique historical source by which

⁹ Leor Halevi, *Modern things on trial : Islam’s Global and Material Reformation in the age of Rida, 1865–1935* New York, NY : Columbia University Press, 2019, 8-9.

¹⁰ Halevi, *Modern things on trial*, 17.

¹¹ Halevi, *Modern things on trial*, 22

we can reconstruct scattered information by analyzing its founder's ideas and major topics of religious Islamic reform on the basis of measuring patterns of word (co)occurrence throughout the years of its publications. Although the available digital version of *al-Manār* allows keyword search, this tool cannot manually read and analyse the quantity of evidence for topics as topic modelling.

In our examination of the *al-Manār*-corpus, we exclude *Tafsīr al-Manār*¹² for two reasons (1) *Tafsīr* is a category in its own right, and does thus not fit naturally within our historical analysis framework, and (2) while the *Tafsīr* is available in a digital format, it is not available as part of the Shamela version. Also it does not have date information, which makes it hard to track the influence of the political and social events on the tafsir. This may be a worthy study of its own, and we plan to explore the possibility of such an investigation in the future.

Throughout its 37 years of existence, *al-Manār* received contributions by 370 writers with Rashīd Riḍā himself contributing over 70% of the content, which makes *al-Manār* more of a personal commentary by Riḍā on the then current affairs. Other notable contributors include a certain ‘Abdul-Azīz Muḥammad (72 articles), the Egyptian medical doctor Muḥammad Tawfīq Ṣidqī (see below) (68 articles), extracts of famous works by the medieval Muslim scholar Aḥmad ibn Taymiyya (37 articles), the Lebanese Prince Shakīb Aṣṣalān (1869-1946) (36 articles) and Rashīd Riḍā's brother Sāliḥ Mukhlis Riḍā (1884-1922) (29 articles). The inclusion of content by Ibn Taymiyya indicates that *Al-Manār* had to recycle some old material with the writing of Ibn Taymiyya being the most used outside of direct and indirect quotations.

Topic Modeling for Arabic

Probabilistic Topic Modeling is a way of summarizing a collection of documents into clusters of keywords, usually called themes. It uses co-occurrence statistics and the principles of distributional semantics to find the most relevant words.¹³ In their research, Eid Mohamed and Emad Mohamed¹⁴ used topic modeling to examine whether Egyptians still care about the Arab Spring. They first collected a large corpus of Facebook comments, performed morphological analysis and topic modeling. They then built a regression model in which the independent variables were the probabilities of the topics, and the dependent variable was the number of shares. Based on a ranking of the themes based on the importance produced by the regression model,

12 Muḥammad ‘Abduh & Rashīd Riḍā, *Tafsīr Al-Manār*, 12 vols., Beirut: Dār al-Kutub al-‘Ilmiyya, 1999.

13 David M. Blei., "Probabilistic topic models", *Commun. ACM* 55, 4 (April 2012), 77–84. <https://doi.org/10.1145/2133806.2133826>

14 Emad Mohamed and Eid Mohamed. "Do Egyptians still care about the Arab Spring? Computational cultural assessment of online and offline activism". In E. Mohamed, and A. Douai, (Eds.), *New Media Discourses, Culture and Politics after the Arab Spring Case Studies from Egypt and Beyond*, London: Bloomsbury, 37-53.

they also ranked the various topics of interest in Egypt and found out the Arab Spring ranked 16. In this article, we follow the same pipeline of preprocessing, but without the use of regression analysis.

While topic modeling has been in common use for English language material, Arabic poses special challenges to language processing in general. One main reason for this is the rich morphology of Arabic, which leads to large vocabularies, where many surface forms are various realisations of the same word in different conjugations. Consider, for example, the word فسندخدمها in [Figure 1](#). The word translates into the English word “then we shall use it” among other things. It is made of the conjunction *f*, the future prefix *s*, the verb *nstxdm*, and the third person feminine singular object pronoun *hA*. The verb *nstxdm* itself is made up of the prefix *n* (we) and the verb stem *stxdm* (to use). It becomes now obvious that it may not be a good idea to use these words as is in topic modeling since *fsnstxdmhA* and *wsnstxdmhA* will be treated as two different words while they differ only in the conjunction used. Conjunctions are normally discarded in building topic models. For this reason, we perform morphological stemming before doing topic modeling whereby we get rid of all the prefixes and suffixes, and maintain only the lexical stem of lexical words (nouns, verbs, and adjectives)

In order to maximise the benefit of the automatic processing of *al-Manār* we use a computational linguistics pipeline as follows:

First we use the *al-Manār* version distributed by Al-Shamlila library. This is an epub version which is basically made of compressed xhtml files having a clean and simple navigational structure. After uncompressing the files, we extract the texts from the xhtmls through removing the boilerplate and the markup tags using the Python BeautifulSoup library¹⁵. The text files come in lines matching the print version, which means that line breaks are not representative of sentence boundaries. We use heuristics to detect sentence boundaries to make the files ready for processing. Although sentence boundaries may not be significant for topic modeling, the information contained in these boundaries are useful for the morphological analysis component.

Then *Morphological Segmentation* comes next. We have already established the nature of Arabic words and the importance of segmentation above. We use stems for building the topic models. Stems are produced by the Arabic-

¹⁵ <https://beautiful-soup-4.readthedocs.io/en/latest/#>

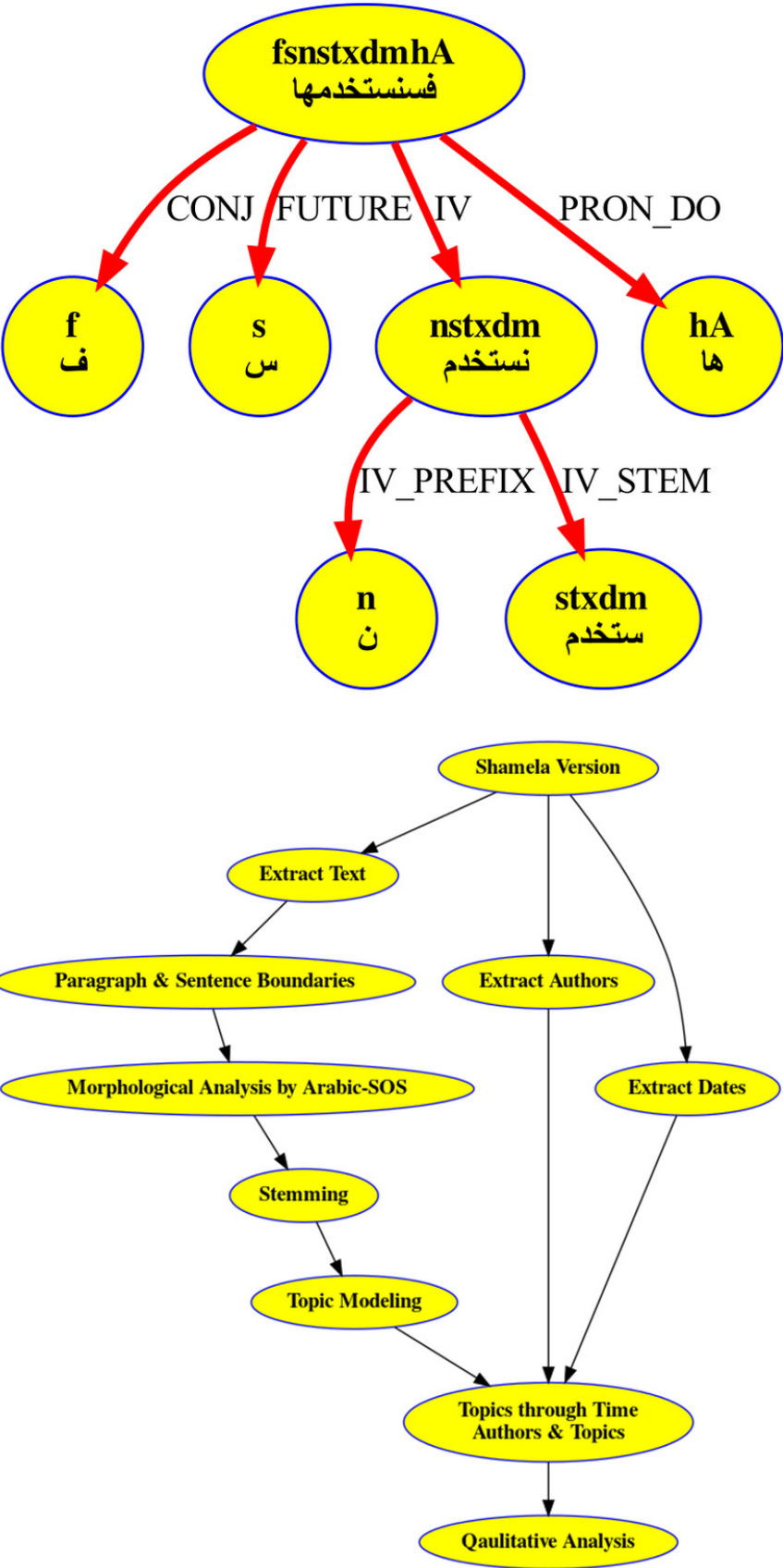


Figure 1. Workflow

SOS tools.¹⁶ Arabic-SOS uses Gradient Boosting Machine Learning algorithm to perform word segmentation, and it achieves accuracy of 98.8% on Modern and pre-Modern Arabic.

The morphologically segmented texts are then passed to the stage of *Topic Modeling*, which is a statistical method by which themes in a corpus can be discovered. We use the Mallet topic modelling toolkit.¹⁷ Mallet is useful for handling large amounts of data and for its ease of use in the Unix command line terminal. In addition to the themes, Mallet also produces detailed information about each document that we use for historical tracking and probabilistic topic membership. The method recognizes distributions across all words in the corpus of *al-Manār*. While each topic technically comprises proportions of every word in that corpus, the tool features the words with significantly higher frequency than others. It is assumed that these words are thematically related; and this results in a list of its highest-frequency words as clustered under a probable topic. Given a large number of documents, the Topic Modeling algorithm, which is a form of clustering, produces groups of keywords that together represent a theme. For example, the cluster {dog, cat, lion, tiger, fox} may indicate the topic ANIMAL while {headache, fever, stomachache, joint_pain} may represent ILLNESS. Each document in the corpus can have several topics ranked probabilistically according to higher frequency of the main themes of the document. We can say document A belongs to topic 1 with a probability of 17%, and to topic 2 with a probability of 14%. Given the dates of these documents, we can easily track topics through time, which we do in this paper.

Having performed segmentation, author extraction, and topic extraction, we can now associate dates with topics and also authors with topics. We can now see which topics which authors took an interest in and at what time this interest went up or down. We can thus have a computational history of *al-Manār*.

Detection of Topics and Trends

Combining the topics extracted by topic modeling and the information on the dates of publication, we can now infer what topics pre-occupied the editor(s) of *al-Manār* at a certain time. In order to make a balance between digital methods and historical interpretation, we will contrast the digital results with *al-Manār* content of topics that are more strongly associated with Riḍā's concerns of reform and his debates. We closely look at the

¹⁶ Emad Mohamed & Zeeshan Ali Sayyed, "Arabic-SOS: Segmentation, Stemming, and Orthography Standardization for Classical and pre-Modern Standard Arabic", *DATeCH2019: Proceedings of the 3rd International Conference on Digital Access to Textual Cultural Heritage* (May 2019), pp. 27–32

¹⁷ McCallum, Andrew Kachites. "MALLET: A Machine Learning for Language Toolkit." <http://mallet.cs.umass.edu>. 2002.

automated output in order to determine for each topic if it was pertinent to the period of time under consideration, and to see if these results propose a high degree of accuracy in highlighting leading themes in the corpus.

Categorization of topics

Choosing a bigger or smaller number of topics will give a greater or lesser degree of granularity. The clusters below can provide a clear outline of the corpus contents, its themes and proportions based on a qualitative inspection of the distributions that were generated by a model of 50 topics. We should note the terms seem unremarkable in isolation, but it is assumed that they have significance when we recognise their repetitious presence as a series of more specific genres and subjects:

Topic	Weight	Terms	Gloss
0	0.08243	جمع سفر قصر صلي وقت صوم ركع رمضان ظهر صيام فطر صل جماع اصحاب مسافر ترك ثبت عرف واجيب عباد	Religious obligations and rituals
1	0.11445	قرآن تفسير كتاب أي سور نسخ قراء اسلام دين قرأ حفظ وحي نزل بقر جزء اصول مفسر منار انزل معجز	Qur'anic sciences, revelation and exegesis
2	0.086	أزهر أستاذ جامع ديني معاهد طلب علوم مدرس مشيخ أزهرى إصلاح امتحان درس طلاب إدار مجلس شهاد قسم تدريس قضاء	Reform of religious education, Al-Azhar and judicial system
3	0.14745	دين أرض مؤمن دنيا جعل كتاب قرآن أي خلق عباد قوم آمن صالح أيها سبيل باطل ظلم أنفس عز شاء	Creation, earth, scriptures, faith and injustice
4	0.11836	دين اسلام أستاذ كتاب إصلاح ديني جديد تاريخ مدني عصر رأي منار عالم تجديد رجال دكتور سياسي الإحاد أورب هداي	Religious reform, renewal, civilization, Al-Manār, politics, atheism, Europe, guidance
5	0.10918	مؤتمر مجلس ماد لجن حكوم قانون أعضاء نظام رئيس إدار محاكم وضع طلب قرر جمعي عمومي تقرير هيئ قرار رأي	Congresses, councils, committees, governments, associations, law, reports
6	0.18333	نفس عرف جعل إذ رأي عبار كتاب خبر وقع مخالف ثبت صدق حق جمل ظن واقع ظهر إلخ خالف خطأ	Other views, proof, doubt, certainty, error
7	0.12389	دول ترك عربي بلاد عرب شعوب دين اسلام جعل جنسي تركي جامع عثماني ديني اتحاد لغ شعب جمعي سياسي سياس	Turks, Arabs, Ottomans, religious Islamic citizenship, unity, political associations
8	0.0776	سوري حكوم استقلال بريطاني بلاد فلسطين فرنس عربي اتفاق شعب معاهد مؤتمر أمم سياسي وفد فرنسي شعوب عظمى حلفاء عراق	Syrian, government, Britain, France, independence, congress, nations, Palestine, Iraq, treaty, allied, great (war)
9	0.13332	دار رأي سيد أمير نفس ساع طلب كلم وقت بلد أخذ مر بلغ صديق جمع حضر طر ابلس رئيس كبير ترك	Prince, friend, Tripoli, leader, Turk
10	0.12713	جمعي خطاب احتفال مشروع حضر رئيس صاحب شكر بلاد مصر أفندي مصري سعاد مدرس جامع خطاب جمع مساعد شريف خيرى	Association, preaching, projects, celebrating, school/teacher, gathering, Egypt, noble and charitable

11	0.16928	أمم أعمال حيا نفس تربى أخلاق إنسان دين أفراد عقل سعاد حاج نفوس اجتماع إصلاح كمال حفظ علوم أسباب اجتماعي	Nations, life, upbringing, morality, human group, mind and reason, happiness, society, reform, perfection, preservation, sciences and society.
12	0.19993	نفس عرف هؤلاء رأي ظن سوء صدق حب جهل عتقد ريد أنفس طلب ظهر أجل أشد حقيق كذب عد شيبى	Doubt, faith, truth, love, ignorance, reality and lie
13	0.08756	أرض شمس رؤى سماء قمر نور سمو نهار حساب هلال فلك كواكب سيار ساع خلق عرش جبال معراج سحاب حول	Earth, sun, heaven, moon, light, day, crescent, universe, planets, mountains, clouds, calculation, ascension, circulation
14	0.11272	كفر إيمان قتل مؤمن شرك إسلام مشرک عباد ترك توب كافر كفار هؤلاء قاتل حق جعل عذاب طاع نار عرف	Faith, unbelief, worship, abandoning, murder, repenting, truth, punishment, hellfire, knowledge.
15	0.12389	كتاب تقليد أئم دين اجتهاد مسائل مقلد أخذ مذاهب مجتهد فقه رأي أصول ترك مصلح أقوال خالف اتباع حنفي أصحاب	Book, <i>fiqh</i> , schools of law, taqlid (imitation), ijtihad (independent interpretation), rulings, reform, legal opinion, differences
16	0.10903	فقيد فضل كريم حيا موت جزء كاتب فقد صبر عرف عين بدل مصائب حزن هكذا دهر قلب مات عظيم حسين	Death, life, loss, sorrow, age, great, calamity, writer, Ḥusayn.
17	0.09762	كتاب جمع أصحاب هير محدث كذب رجال كعب مرفوع بكر حفظ سنن حاكم يبهقي أئم أنس إلخ تابع مسند رحمن	Book, hadith, collection, companions, men, trasionists, lie, Abu Hurayra, Ka'b, Anas, Bayhaqī, Abū Bakr, sunan, musnad, al-Ḥākim,
18	0.13112	سيد منار صاحب أستاذ حضر رضا رشيد فضيل إسلام علام جزء صفح كاتب فضل إمضاء دين كتاب مولا برك مجل	<i>Al-Manār</i> , Rashīd Riḍā, part, page, signature, religion, book.
19	0.08821	ملك أمير بكر قتل قريش أمة مؤمن تاريخ إسلام خليف سير عرب صفح زيد قوم معاوي أخذ دول فرس دخل	King, prince, Abū Bakr, Quraysh, illiterate, history, Islam, caliph, Arabs, states, nations, Persian, Mu'āwiya
20	0.05822	جسم ميكروب إنسان مرض مواد سمى حيوان ماد حرار حمى حقن جلد هواء مصاب جزء أعراض قليل بول نوع كثر	Body, microbe, human, disease, substances, animal, materials, temperature, injection, skin, air, symptoms, urine.
21	0.11666	خلق إنسان عالم روح عقل عرف بشر وحي أنبياء حقيق نفس كرام غيب حيا اعتقاد ظهر أرواح معجز إيمان خوارق	Creation, human, world, soul, mind, knowledge, revelation, prophets, truth, unseen world, miracles, belief, spirits, supernatural
22	0.09175	شعر شاعر شعراء نظم بيت نفس قصيد معاني بلاغ كان خيال وصف مدح أنشد أدب هوى حين تمام إذ أبيات	Poetry, poet, poems, stanza, meaning, eloquence, imagination, description, literature, eulogy, love, (Abū) Tammām
23	0.14537	منار مجل جرید جزء مقال صاحب جرائد كاتب رشيد صفح انتقاد رضا قراء رأي كتاب صدر اشترک مجلد قيم رسال	<i>Al-Manār</i> , journal, issue, article, volume, writer, Rashīd Riḍā, critique, opinion, subscription, value, message
24	0.11748	تعليم مدارس مدرس علوم تربی معلم دين معارف تعلم طلب ديني درس فنون بلاد متعلم دروس عربی تلامذ إصلاح عرف	Education, school, teacher, sciences, upbringing, religion, arts, reform, students, knowledge
25	0.1298	حکوم مصر مصري بلاد باشا إصلاح سياس جرائد رأي مصلح حزب إنكليز وطني رجال جعل أمير سياسي دول لورد مقال	Government, Egypt, Pasha, reform, politics, newspapers, opinion, party, English, nationalist, men, prince, states, Lord, article
26	0.08836	عقل صف خلق ذات تأويل سلف واجب معتزل مخلوق نفس إراد إثبات خالق عرش متكلم جهمي نفي موجود عالم فرق	Reason/mind, creation, duty, <i>Ta'wīl</i> , <i>Salaf</i> , <i>Mu'tazilī</i> , <i>Jahmī</i> , creation, self, will, verification, denial, throne, theologian, existence, world, religious factions
27	0.10224	مال بيع ربا أموال نفق أخذ دين أجل وقف ثمن جنبه زياد دفع شرط	Money, purchase, usury, debt, endowment, price, pound, increase, payment, condition, commerce,

		تجار قرض زکا مالی فضل ریح	zakat, profit
28	0.0723	مسیح یهود انجیل نصاری کتاب عیسی إله تورا صلب ملک عهد اسرائیل ارض مسیحی قدیم اناجیل عبار سفر مریم انبیاء	Jesus, Jews, Gospel, Torah Christians, god, crucifixion, kind, Israel, land, ancient, biblical book, Mary, prophets
29	0.16438	عالم حیا عظیم آخذ فکر نفس رید حرک غای اصبیح کبیر واجب حقیق افکار سبیل وقت تقدم احوال رجال اذ	Scholar, life, thought, ideas, self, movement, objective, way, great, duty, real, progress, men, conditions
30	0.13419	ید نفس خر ج بیت آخذ جعل قوم رأس قیل ضرب آتی رید دخل اکل رأي مر قتل صاحب اذ نعم	Hand, self, home, community, head, killing, seeing
31	0.09072	عثماني دول باشا آستان حکوم سلطان ولاي جمعی حمید ترکی دستور مجلس اتحادي ترقی مبعوث ایدار اصلاح اتحاد عسکری جرید	Ottoman, Turk, states, Pasha, Asitane (Istanbul), government, unity, (Sultan Abdul-)Ḥamid, constitution, council, union, progress, administration, <i>Meclis-i Mebusân</i> , reform, military, newspaper
32	0.08782	قبور مسجد قبر مساجد عباد صالح بدع بناء توسل زیار تعظیم طلب اتخاذ نهی منکر شرک نفع جعل هدم أولیاء	Tomb, mosque, worship, innovation, building, <i>Tawassul</i> (intercession), visit, glorification, seeking, prohibition, <i>Munkar</i> (detested) unbelief, benefit, destruction, <i>Wali</i>
33	0.1023	عربی کلم لغ حروف لسان عرب اسم کتاب ألفاظ استعمال وضع أسماء معانی قیاس حرف رسم نطق ملک مصري مفرد	Arabic, word, language, phrase, usage, meaning, names, analogy, letter, expression, singular, king, Egypt
34	0.08539	ملک حجاز عرب جلال بلاد عربي نجد حکوم سعود شریف حسین أمیر جزیر سلطان بریطانی عراق مک دول انکلیز عزیز	King, Ḥijāz, Najd, peninsula, Arabs, majesty, Saudi, government, Sharif Ḥusayn, prince, sultan, British, Iraq, states
35	0.12473	دین بدع اسلام شیع کتاب فرق هؤلاء صوفي منکر ظهر زعم ضلال عقائد صار اسم سلف جماع رسال ائم نسب	Religion, innovation, Shīʿī, book, religious faction, Sufi, detested, allegation, going astray, Salaf, consensus, error, lineage
36	0.12196	کتاب طبع مؤلف صفح عربي مصر تاریخ جزء افندي نسخ مکتب ثمن تألیف مطبع مطبوع طلب ادب مقدم عصر وضع	Book, printing, author, copy, price, Arab, Egypt, literature, history, effendi, age
37	0.08641	ماء امر اض اکل مرض شرب أطباء جسم طیب علاج مریض هواء طعام غذاء استعمال أدوي نفع موت ستعمل معالج نفس	Water, food, disease, body, medical, treatment, death, self
38	0.10653	دین اسلام مسیحی دینی نصرانی مبشر نصاری تعصب کنیس أوربي کتاب تبشیر مدنی جامع جمعی بلاد وثنی دیان عقید ادیان	Religion, Islam, Christianity, mission, fanaticism, church, Europe, civilization, unity, pagan, doctrine, religion
39	0.17271	نفوس قلوب قوم ایدي لقد کاد کلم سبیل بلاد مجد عقول بد جمع شأن أثر نهض صفح روح آخذ نعم	Soul, spirit, heart, speech, nation, state, glory, mind/ reason, unity, progress
40	0.10011	نفس امیل طفل تربی أطفال ولد إنسان قرن تاسع رأي عزیز ضروب تعلم بحر شئی سفین تال تبع کاتب ناشئ	Self, Emile, child, upbringing, education, human, nineteenth century, opinion, young
41	0.09975	أرض ماء باب قطع بحر حدید دار جانب کبیر وضع جمع رأس صغیر صنع عین شجر سمی کان صخر مختلف	Earth, water, sea, steel, house, big, small, head, industry, eye, tree, rock
42	0.11586	قلب نفس حب محب خلق کمال عین ذات اسم توکل أعظم قلوب صف فصل منزل مقام درج حق أسباب جمع	Heart, self, love, creation, name, great, stage, causes, truth, unity
43	0.08339	مک هند بیت حجاج عرف شریف کعب هندي مدین ابراهیم حرام حج حجاز منی مکرم رکن جماع خان ندو محمل	King, India, pilgrim, home, Abraham, Ḥijāz, Minā, Maḥmal, Mecca/medina
44	0.0953	ألماني فرنسا روسي حکوم روسيا	German, French, Russian, English, Chinese, Japanese,

		إنكلترا إنكلیزی بلاد ملیون ولای إنكلیز أوربا صین یابان أوروبا بلغ سودان فرنسوی المانیای مد	Europe, Sudan, government, states
45	0.09211	نساء زوج مرأ رجال امرأ تزوج طلاق زوج أو لاد نکاح ولد بنت بیوت زوجی عقد أزواج بیت حجاب تعدد عاد	Women, men, marriage, daughter/son, contract, house, veiling, polygamy
46	0.08226	عرب بلاد عربی تاریخ جزیر یمین مصر قبائل مغرب أمم دول آثار قدیم لغ عراق شام أرض مؤرخ قرن هؤلاء	Arab, history, peninsula, Yemen, tribes, Maghreb, nations, ancient, archeology, Iraq, Syria, century
47	0.08842	تحريم خمر أكل محرم لبس شرب حرام حل دین نجاس طعام ذبح نهی عاد استعمال حلال تشبه ترك سماع إباح	Prohibition, wine, eating, drinking, halal/permission, impurity, slaughtering, imitation
48	0.11445	دول حرب بلاد قو جيش حربی قتال إیطالی ثور أورب إنكلیز عسکری قتل أرض خطر صلح سلاح غرب نفوذ عثمانی	Nation, war, army, fighting, Italian, Europe, English, revolution, land, danger, compromise, weapon, west, Ottoman, authority
49	0.11166	حکوم شریع دین اسلام عدل سلطان خلیف سلط طاع جعل ملک قوانین ظلم قضاء أمراء خلفاء حقوق وضع حاکم نظام	Government, sharia, religion, justice, sultan, caliph, authority, king, laws, injustice, judicial, prince, rights, system

Historical analysis of topic distribution

The method has captured various topics which are mostly related in a meaningful way to religious, societal and political situation of *al-Manār*'s worldview. By Glossing the salient themes as reflected in the individual words, we observe reasonably coherent topics in various cases. We notice that there are similar words and terms that are generated together under different sets of topics words. By combining such multiple topics that are in most cases semantically related, we can observe six general overlapping areas in the fifty topics where *al-Manār* showed strong interest **1) Reform and progress:** Topic models 2 (0.086), 4 (0.11836), 11 (0.16928), 15 (0.12389), 24 (0.11748), 25 (0.1298), 31 (0.09072), 39 (0.17271); **2) government, caliphate, its political form and functions:** Topic models 5 (0.10918), 8 (0.0776), 19 (0.08821), 25 (0.1298), 31 (0.09072), 34 (0.08539), 44 (0.0953), 49 (0.11166, **3) Europe and colonialism:** topic models 4 (0.11836), 38 (0.10653), 44 (0.0953), 48 (0.11445); **4) Christianity and missions:** Topic 28 (0.0723), topic 38 (0.10653), **5) Education and upbringing:** Topic models 11 (0.16928), 24 (0.11748), 40 (0.10011), **6) Creation, cosmos and natural sciences:** topic models 13 (0.08756), 20 (0.05822), 21 (0.11666), 37 (0.08641), 41 (0.09975).

High Spikes in historical perspective

In this following experiment we try to check the formal internal validity evaluation of the topics against the historical background of *al-Manār* and its writers. In the following chart, we will try to plot the occurrence of the selected topics over time. We closely look at 16 graphs where spikes are highest in specific years, which indicate that the topics become more frequent in this period. By close reading we shall see how *al-Manār*'s interest in these topics was triggered by specific historical, religious, political or societal

discussions or events. It will be clear that the timeline and tokens of the topics show solid lines indicating each topic's contribution to the corpus in these specific years. Against the historical background of the corpus, we shall see if the dotted line or spike, which indicates the topic's contribution to the highest level, would match with contextual reality of Riḍā's interests and worldviews. As we shall see, to unpack these patterns, we shall use a closer reading by surveying the temporal structure of each topic reflected in the following graphs.

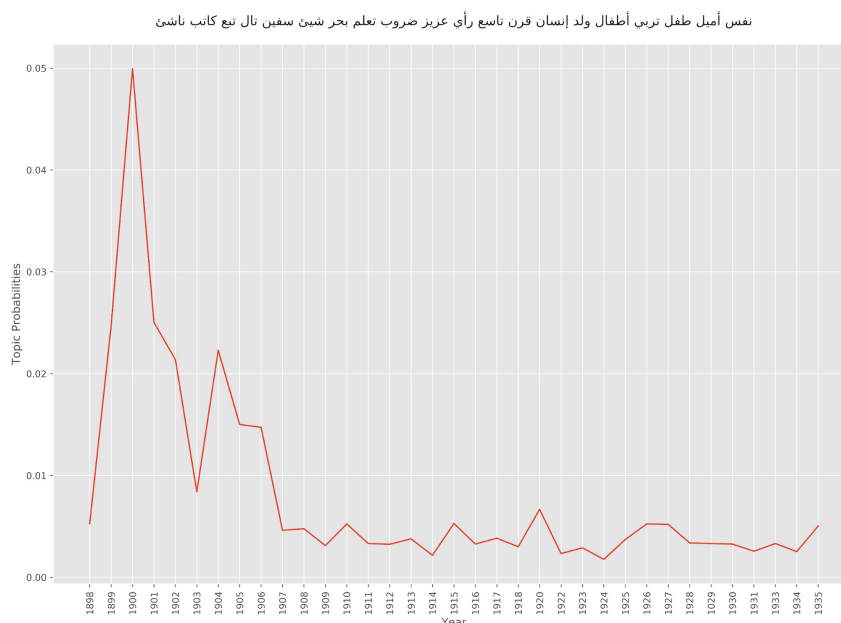


Figure 2. Topic 40 (0.10011)

Topic model 40 (0.10011): *Al-Manār*'s project of religious reform was closely connected with the question of education and upbringing. In the early years of its publication, we notice in the graph that there is a high spike showing this topic. In this period, Riḍā published the Arabic translation of *L'Émile du dix-neuvième siècle* by the French far-left politician and writer Alphonse Esquiros (1812-1876) which was a response to Jean-Jacques Rousseau's *Emile, ou de l'éducation* and the latter's ideas about childhood and physical education.¹⁸ The translation was prepared upon the suggestion of Sheikh Muḥammad 'Abduh by the above-mentioned 'Abd al-'Azīz Muḥammad, a prosecutor at the Tribunal of the town of Zaḳāzīq in the

18 Alphonse Esquiros, *L'Émile du dix-neuvième siècle*, Paris: Librairie Internationale, 1869; Jean-Jacques Rousseau, *Emile, ou de l'éducation*, in: *Oeuvres*, A Paris : chez Defer de Maisonneuve : de l'imprimerie de Didot le Jeune, 1793–[1800], 18 t. in-4°. Frontispiece of vol. 4. Bibliothèque de Genève, HF 1286/4.

Egyptian Delta. Esquiros' work was successively published in a series in *al-Manār* under the Arabic translation of the French title "Amīl al-qarn al-tāsi' 'ashar," and was later published as a book by *al-Manār* Press.¹⁹

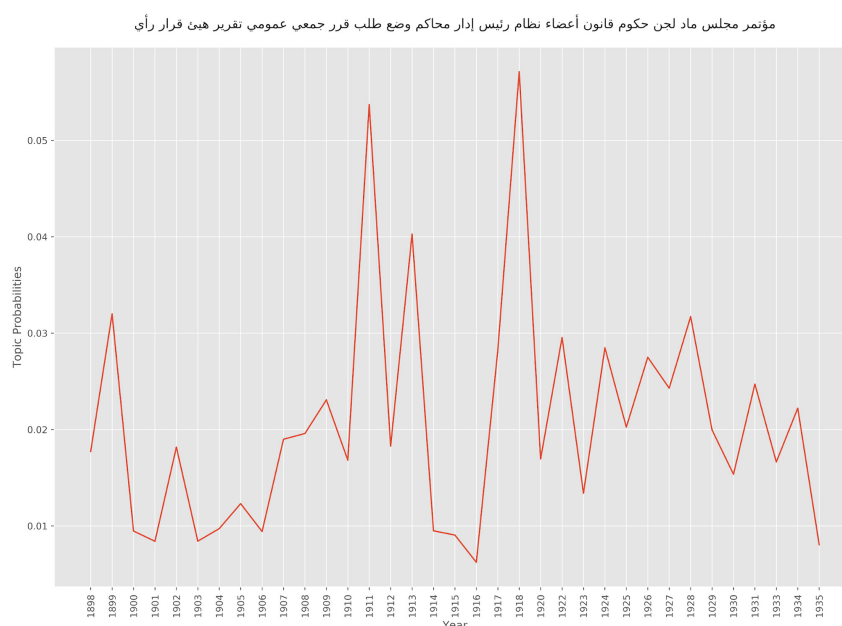


Figure 3. Topic 5 (0.10918)

Topic model 5 (0.10918): The two high spikes in this graph refer to 1911 and 1919. By glossing a general topic we see that the key-words refer to “congresses” and their committees and resolutions. In both cases, we note that in 1911, Riḍā was reacting to the Coptic Congress which was convened at Asyūṭ (Southern Egypt) asking for equal rights of citizenship after the assassination of the Coptic Prime Minister Buṭrus Ghālī Pasha in 1910 by a member of the National Party, Ibrahīm Naṣīf al-Wardānī (1886-1910). This period was one of the most critical points in the history of the Muslim-Coptic relations in Egypt under the British colonial power. The Copts had seen his assassination as the culmination of the anti-Christian propaganda by Muslims. The Congress resulted in a petition summarizing Coptic demands, which was presented to the Khedive and the British.²⁰ In response Muslims

¹⁹ See, Zemmin, *Modernity in Islamic Tradition*, p. 129. Esquiros, Alphonse. 1899–1906. “Amīl al-qarn al-tāsi’ ‘ashar [translated by ‘Abd al-‘Azīz Muḥammad],” *al-Manār* 2/38, 598–603, *al-Manār* 2/42, 666–670, *al-Manār* 2/43, 679–682, *al-Manār* 3/11, 253–257, *al-Manār* 3/13, 294–301, *al-Manār* 3/11, 253–257, *al-Manār* 3/15, 345–351, *al-Manār* 3/18, 416–422, *al-Manār* 3/26, 607–610, *al-Manār* 3/30, 737–743, *al-Manār* 4/17, 659–668, *al-Manār* 4/23, 905–910, *al-Manār* 9/8, 626–628. Alphonse Esquiros, *al-Tarbiya al-istiqlāliyya aw Amīl al-qarn al-tāsi’ ‘ashar*, translated by ‘Abd al-‘Azīz Muḥammad, Cairo: Maṭba‘at al-Manār, 1913.

²⁰ See, Umar Ryad, *Islamic Reformism and Christianity: A Critical Reading of the Works of Muḥammad Rasbīd Riḍā and His Associates (1898-1935)*, Leiden & Boston: Brill, 2009, pp. 67-115. Kyriakos Mikhail, *Copts and Moslems under British Control*, London, 1911; S. Sheikaly, ‘Prime Minister and Assassin: Butros Ghali and Wardani,’ *Middle Eastern Studies* 13/1, 1977, pp. 112-123; Moustaḥfa El-Fikī, *Copts in Egyptian politics (1919-1952)*, General Egyptian Book Organization, 1991, pp. 38-45; Muḥammad Ṣāliḥ al-Murrākishī, *Tafkīr Muḥammad Rasbīd Riḍā min Khilāl Majallat al-Manār (1898-1935)*, Tunisian Press: Tunisia and Algeria, 1985, pp. 181-183; Jacques Tagher, *Christians in Muslim Egypt: An Historical Study of the Relations between Copts and Muslims from 640 to 1922*, Altenberge: Oros Verlag, 1998.

organized a congress under the name *al-Mu'tamar al-Miṣrī* (The Egyptian Congress) in Cairo. As a Muslim thinker, Riḍā immediately embarked on responding to the Coptic demands in a series of articles in his journal by which he also supported the Egyptian Congress. Riḍā later collected these articles in his work, *al-Muslimūn wā al-Qibṭ aw al-Mu'tamar al-Miṣrī* (Muslims and Copts or the Egyptian Congress).²¹ In 1918-1919 and in the wake of the end of the First World War, *al-Manār* shed light on the Paris Peace Conference and the Treaty of Versailles and their impact on the future of Arab and Syrian independence.²²

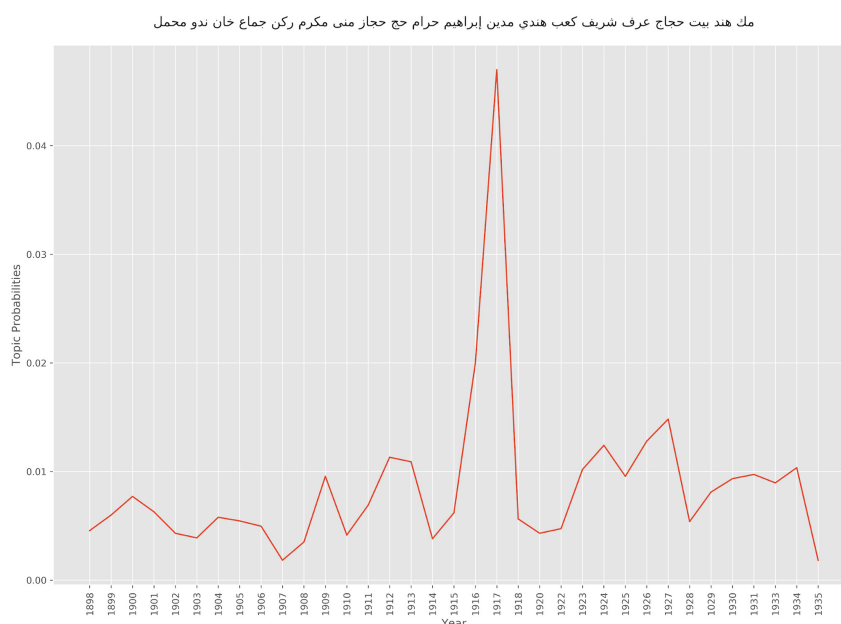


Figure 4. Topic 43 (0.08339)

Topic model 43 (0.08339) contains keywords related to Mecca and hajj sites and rituals. This reflects Riḍā's Pilgrimage journey in 1916 which Rainer Brunner correctly described as one of Riḍā's ways of "conscious self-promotion, against the backdrop of the First World War and the caliphate discussion."²³ From October 1916 to May 1918, Riḍā published 10 serialized

²¹ Rashīd Riḍā, *al-Muslimūn wā al-Qibṭ aw al-Mu'tamar al-Miṣrī*, Cairo: Maṭba'at al-Manār, 1st ed., 1329/1911.

²² See among others, Rashīd Riḍā, "Mustaqbal Sūrya wā sā'ir al-bilād al-'arabiyya", two articles, *al-Manār* 21/1 (December 1918), pp. 33f; 21/2 (March 1919), 91f; "Mu'āhadat al-Ṣulḥ", five articles, 21/3 (May 1919), 138f; 21/4 (June 1919), 189f; 21/5 (August 1919), 257f; 21/6 (October 1919), 291f; 21/7 (April 1920), 371f. More about this see, for example, Elizabeth Thompson, "Rashid Rida and the 1920 Syrian Arab Constitution: How the French Mandate Undermined Islamic Liberalism," in Cyrus Schayegh and Andrew Arsan (eds.), *The Routledge Handbook of the History of the Middle East Mandates*, New York: Routledge, 2015, pp. 244-57; id. *How the West Stole Arab Democracy: The Syrian-Arab Congress of 1920 and the Destruction of its Historic Liberal-Islamic Alliance*, New York: Atlantic Monthly Press, 2020.

²³ Rainer Brunner, "The Pilgrim's Tale as a Means of Self-Promotion: Muḥammad Rashīd Riḍā's Journey to the Ḥijāz (1916)", in Michael Kemper and Ralf Elger (eds.), *The Piety of Learning: Islamic Studies in Honor of Stefan Reichmuth*, Leiden & Boston: Brill, 2017, 270-291; Muḥammad Rashīd Riḍā, "Riḥlat al-Ḥijāz", *al-Manār* 19/5 (Oct. 1916), 307-10; 19/8 (Jan. 1917), 466-72; 19/9 (Feb. 1917), 563-74; 20/2 (Aug. 1917), 108-26; 20/3 (Oct. 1917), 150-59; 20/4 (Nov. 1917), 192-98; 20/5 (Jan. 1918), 236-45; 20/6 (Feb. 1918), 276-88; 20/7 (Apr. 1918), 316-28; 20/8 (May 1918), 352-63. Cf. the collected travelogues by Yūsuf 'Ibīsh, *Riḥalāt al-imām Muḥammad Rashīd Riḍā* (Beirut, 1971), 92-210. See also, Richard van Leeuwen, "Islamic Reform and Pilgrimage. The Hajj of Rashid Rida in 1916", in Luitgard Mols and Marjo Buitelaar (eds.), *Hajj. Global Interactions through Pilgrimage*, Leiden: Sidestone Press, 2015, 83-93. About his

articles about the journey which were mixed of his personal religious experience with his political views on the Arab Revolt, the Meccan Sharīf, Prince Husayn ibn ‘Alī, the Arab question of independence under the Ottoman Empire and colonial powers and the end of the First World War.

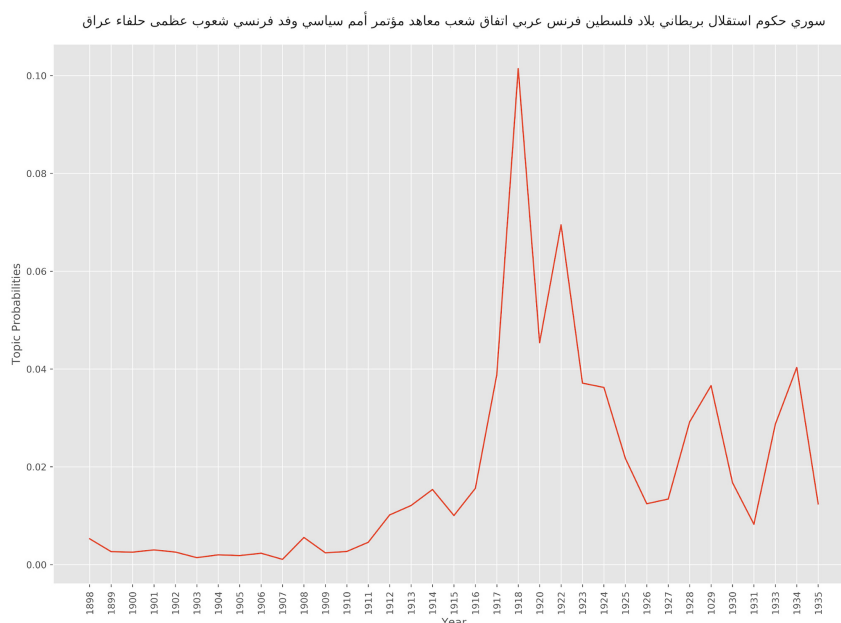


Figure 5. Topic 8 (0.0776)

This **topic model 8 (0.0776)** reflects a similar topic as the previous one. The difference is that it captures other key-terms specifically showing Riḍā's specific treatment of the independence of Syria, Iraq and Palestine from the British and French colonial yoke. The spike is also still somehow high in 1920-1921, which are the years when Riḍā became the vice-president of the Syrian-Palestinian Congress (founded in 1918). This congress commissioned a delegation to travel and represent their political case before the League of Nations in Geneva in the summer of 1921. This should be highlighted against Riḍā's concept of the 'Greater Syria' which sharpened his longing for Pan-Arabism and struggle against the imposition of the French Mandate in Syria.²⁴

views of the First World War, see Umar Ryad, "A German 'Illusive Love': Rashid Rida's Perceptions of the First World War in the Muslim World" in Erik-Jan Zürcher (ed.), *Jihad and Islam in World War I*, Leiden University Press: LUCIS: Debates on Islam & Society, pp. 305 – 328.

²⁴ Marie-Renée Mouton, "Le Congrès syro-palestinien de Genève (1921)," *Relations Internationales* 19, 1979, pp. 313-328. About Riḍā's political ideas and activism, see, for example, Eliezer Tauber, "Three Approaches, One Idea: Religion and State in the Thought of 'Abd al-Rahman al-Kawākibī, Najīb 'Azūri and Rashīd Riḍā," *British Journal of Middle Eastern Studies* 21/2, 1994, pp. 190-198; id., "Rashīd Riḍā and Faysal's Kingdom in Syria," *The Muslim World* 85, 1995, p. 235-245; id., "Rashīd Riḍā as Pan-Arabist before the World War I," *The Muslim World* 79/2, 1989, pp. 102-112; id., "The Political Life of Rashīd Riḍā," *Arabist: Budapest Studies in Arabic* 19-20, 1998, pp. 261-272. Cf. Philip S. Khoury, *Syria and the French Mandate: The Politics of Arab Nationalism 1920-1945*, Princeton University Press, 1987. Philip S. Khoury, "Factionalism among Syrian Nationalists during the French Mandate," *International Journal of Middle East Studies* 13/4, 1981, pp. 441-469.

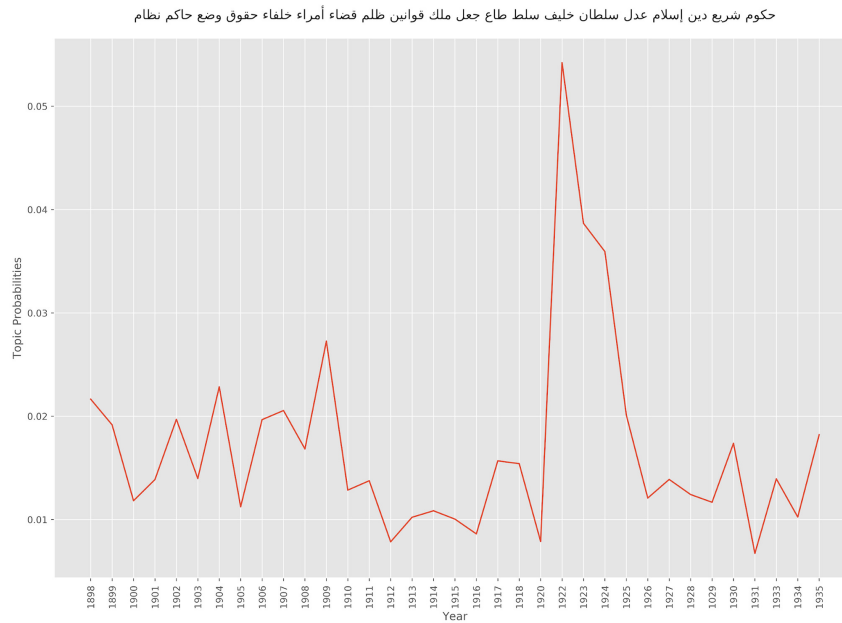


Figure 6. Topic 49 (0.11166)

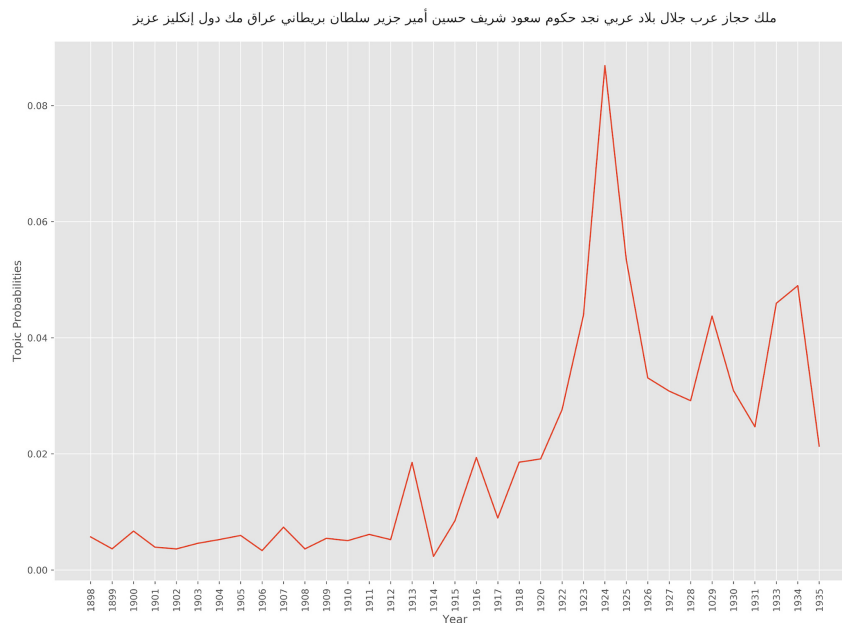


Figure 7. Topic 34 (0.08539)

Topic model 34 (0.08539) and **topic model 49 (0.11166)** reproduce a similar political category about the turbulent political situation in the Ottoman Empire after the First World War ending with the abolition of the Caliphate. Both topics gain similar keywords, such as “government,” “justice,” “sultan”, “caliph”, “authority”, “king”, “Hijāz,” “Najd,” “peninsula”, “Syria”, Iraq”, “Saudi,” and “Sharif Ḥusayn”. By the end of the First World War, Riḍā became active in stirring Arab independence, opposing any form of European colonial control over Syria and Iraq. In

1922-1923, Rida wrote extensively about the caliphate, which Mahmoud Haddad considered as “the culmination of Rida’s political and religious thought” on his issue. All related articles in this period focused on the subsequent dismantlement of the Ottoman caliphate by the Turkish republican government and the re-imagination of the return of Caliphate in Arabia. In Riḍā’s general view, the caliph should be a mujtahid and a Qurayshite because it was the Arabs who spread the message of the “Arabic Qu’rān” and defended Islam with their “swords.”²⁵ In the same period, *al-Manār* became a platform for many Muslim writers and political thinkers who sympathised with the Caliphate, especially the well-known Indian intellectual Abul Kalam Azad (1888–1958), also leader of the Khilafat Movement, who also shared with Riḍā the belief in the necessity of the caliphate as an institution that enforces Islamic law and protects the boundaries of the Islamic community.²⁶

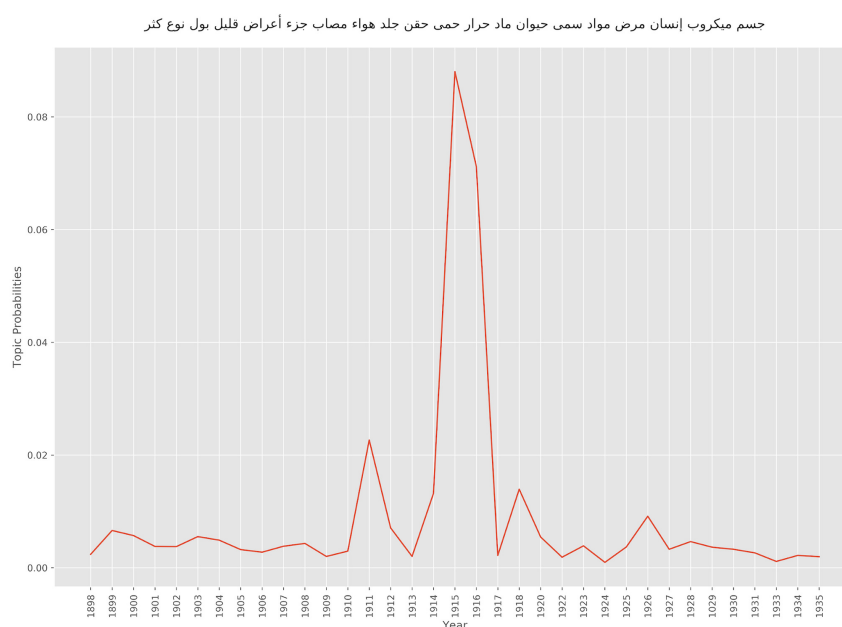


Figure 8. Topic 20 (0.05822)

Topic model 20 (0.05822) shows *al-Manār*’s interests in medical scientific issue, the human body and health. In 1912-1916, the journal provided most extensive discussions about modern sciences, written by Riḍā’s private medical doctor Muḥammad Tawfīq Ṣidqī (1881-1920). Ṣidqī achieved considerable prominence in *al-Manār* due to his writings on various subjects,

25 Mahmoud Haddad, “Arab Religious Nationalism in the Colonial Era: Rereading Rashīd Riḍā’s Ideas on the Caliphate”, *Journal of the American Oriental Society* 117/2 (1997), pp. 253-277. Muḥammad Rashīd Riḍā, *al-Khilāfa aw al-imāma al-‘uzma*, Cairo: Matba‘at al-Manār, 1923. See also, Henri Laoust, *Le Califat dans la doctrine de Rashid Rida*, Beirut: Institut français de Damas, 1938; Malcolm Kerr, *Islamic Reform: The Political and Legal Theories of Muhammad Abduh and Rashid Rida*, Berkeley and Los Angeles: Univ. of California Press, 1966.

26 John Willis, “Debating the Caliphate: Islam and Nation in the Work of Rashid Rida and Abul Kalam Azad”, *The International History Review* 32/4 (2010), pp. 711-732.

especially those related to the reliability of the Sunna, Christianity, and the application of modern medical and scientific discoveries to Islamic concepts.²⁷ Besides, Şidqī became a lecturer at Riḍā's Muslim missionary school of *Dār al-Da'wa wā al-Irshād* (the Society of Islamic Mission and Guidance). It was a boarding school, which was primarily entitled to train two missionary groups of people: the *murshids* (guides) for Muslims, and the *du'āh* (propagators) to defend Islam against missionary attacks. Şidqī was authorized to teach the students in sciences, medical topics and biology, the study of the Bible and the history of the Church. In 1914-1915 12 articles were serialized in *al-Manār* under the title “Durūs sunan al-kā'ināt” (Lessons on the Habits of Created Beings).²⁸

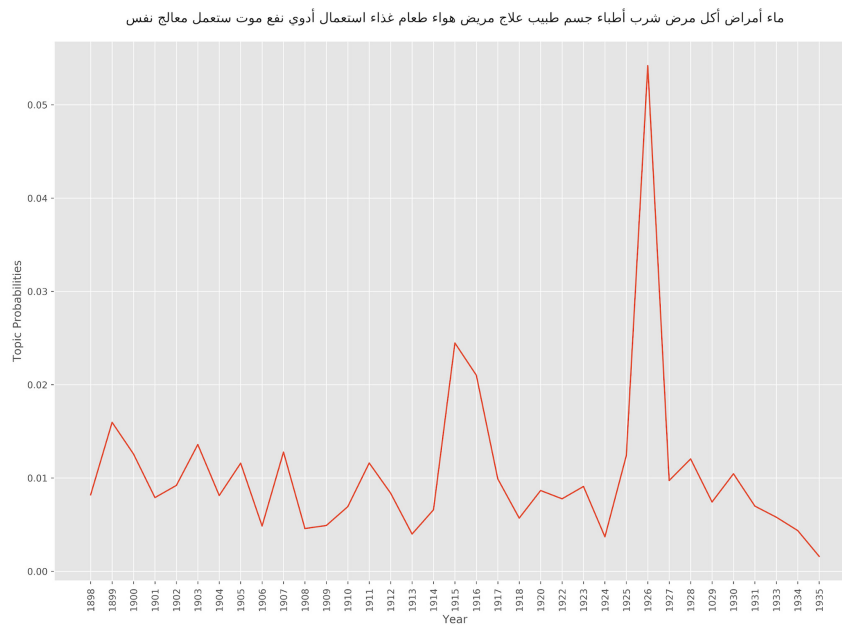


Figure 9. Topic 37 (0.08641)

Topic model 37 (0.08641) is also related to health and diseases. However, the spike goes high in 1926-1928 due to *al-Manār*'s interests in M. K. Gandhi's (d. 1948) and his thoughts on health. In these years, *al-Manār* provided a serialized Arabic translation of Gandhi's work, *A Guide to Health*, prepared by the Indian-born intellectual Abdur Razzaq Malihabadi (d. 1959) under the title “Kitāb al-ṣiḥḥa (Book of health).” As one of Gandhi's most

²⁷ Umar Ryad, *Islamic Reformism*, pp. 234-275; G. H. A. Juynboll, *The Authenticity of the Tradition Literature: Discussions in Modern Egypt*, Leiden: E. J. Brill, 1969, pp. 23-30; see also, Daniel Brown, *Rethinking Tradition in Modern Islamic Thought*, Cambridge University Press, 1999, pp. 67-68.

²⁸ Muḥammad Tawfīq Şidqī, “Durūs sunan al-kā'ināt”, 12 articles, vol. 17/11 (October 1914), 17/12 (Nov. 1914); 18/1 (February 1915), 18/2 (March 1915), 18/3 (April 1915), 18/4 (May 1915), 18/5 (June 1915), 18/6 (July 1915), 18/7 (August 1915), 18/8 (September, 1915), 18/9 (October 1915), 18/10 (November 1915). The series was published in 1930 by *al-Manār* Press.

popular works, it contained “his thoughts on issues concerning health, such as celibacy, diet, and his complete rejection of modern medical practices of consulting doctors and vaccination.”²⁹

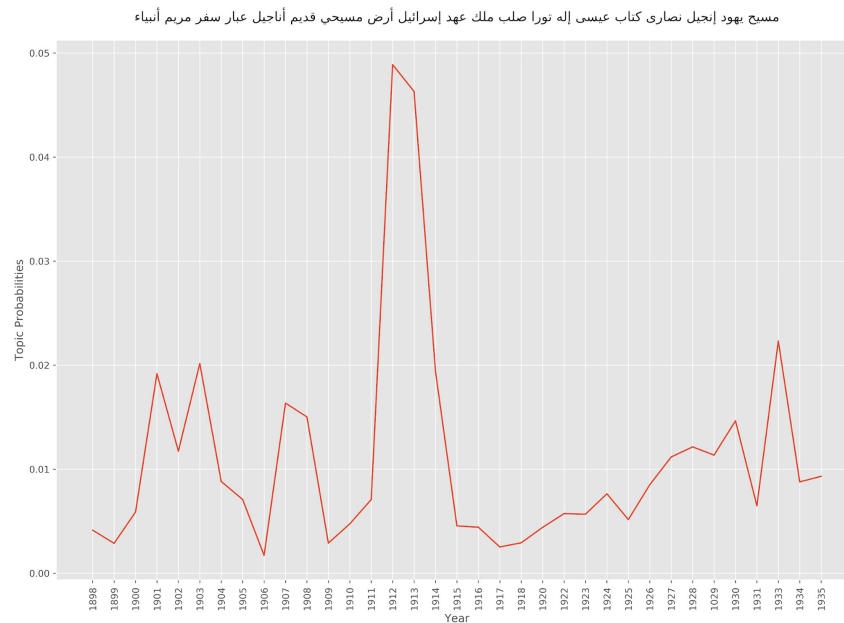
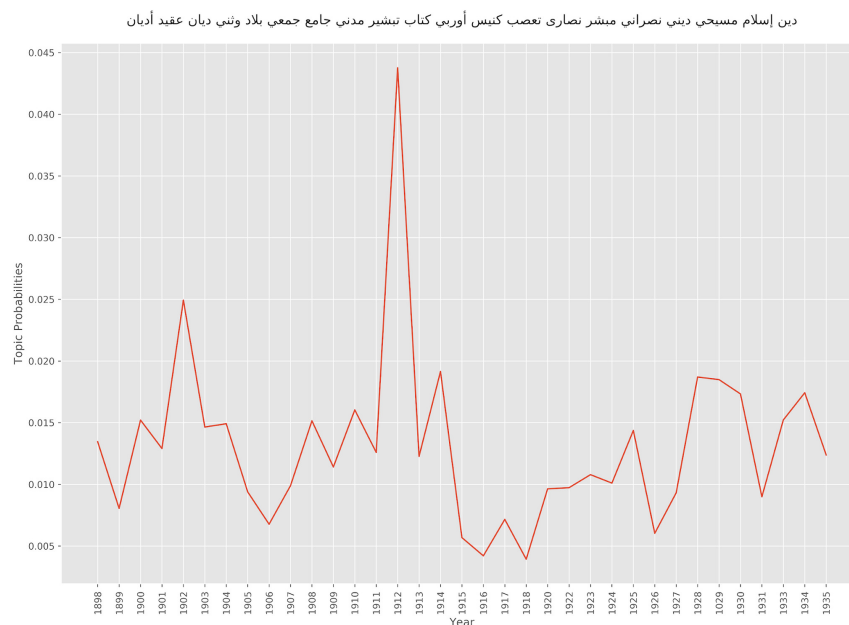


Figure 10. Topic 28 (0.0723)



²⁹ For more analysis, see, Roy Bar Sadeh, “Debating Gandhi in *al-Manār* during the 1920s and 1930s.” *Comparative Studies of South Asia, Africa and the Middle East* 38, no. 3 (2018): 491–507.

Figure 11. Topic 38 (0.10653)

Topic model 28 (0.0723) and **topic model 38 (0.10653)** capture themes related to Christianity, Christian missions, the Bible, the church and religious fanaticism, which have become dominant between 1911-1915 according to the two graphs. The reason for this historical fact is again the emergence of the above-mentioned Tawfīq Ṣidqī on the stage of *al-Manār* and his prolific contributions to Muslim polemics against Christianity and Christian missionary activities of his time. In his response to missionary writings on Islam, Ṣidqī used western works on Biblical criticism, and introduced them to the readers of *al-Manār*. He referred to western writers, such as the Englishmen Walter Richard Cassels (1826-1907), John Mackinnon Robertson (1856-1933) and many others.³⁰

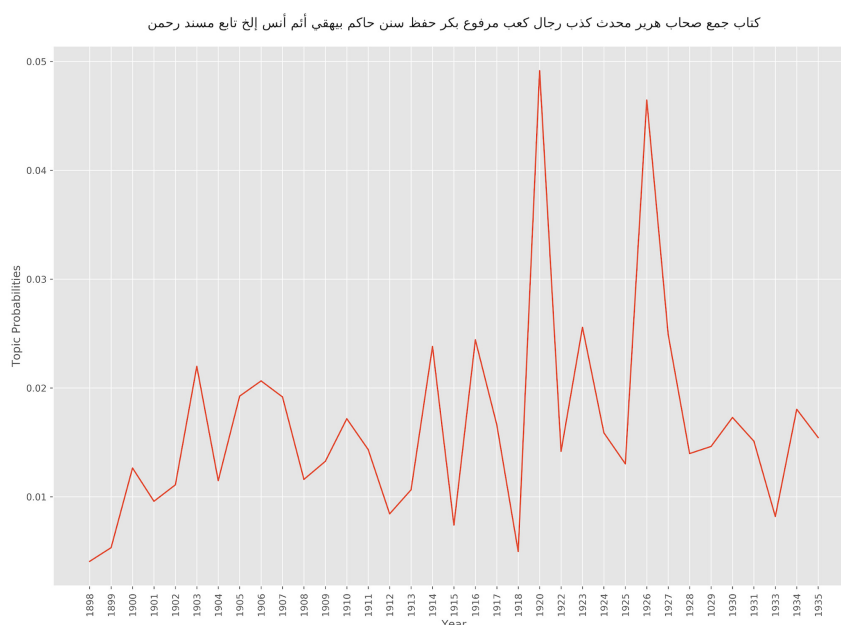


Figure 11. Topic 17 (0.09762)

Topic 17 (0.09762), which is related to the position and authenticity of the Ḥadīth, jumps higher in 1920 and in 1925-1926, although it was relatively present in the previous years. The prominence in 1920-1921 can be explained that the young Egyptian Ḥadīth scholar and orator Muḥammad ‘Abd al-‘Azīz al-Khūlī (1892-1931) had published five long articles in a serial format under the title “Tārīkh funūn al-Ḥadīth (the history of the sciences of Ḥadīth)” in which he discussed the meaning, position, scholars, canons and history of

³⁰ All his polemical contributions were published in separate treatises by Al-Manār Press. See, for example, Muḥammad Tawfīq Ṣidqī, *Dīn Allāb fī kutub anbiyā’ih*, Cairo, 1912; Muḥammad Tawfīq Ṣidqī, “Naẓariyyatī fī ‘aqīdat ṣalḥ al-masīḥ wa-qiyāmatih,” *al-Manār*, 16/2 (February 1913) 113-29 & 16/3 (March, 1913) 193-216 (in two parts). Muḥammad Tawfīq Ṣidqī, “Naẓra fī kutub al-‘ahd al-jadīd wa-l-kutub al-naṣrāniyya,” *al-Manār*, 16/1-8 (1913); Muḥammad Tawfīq Ṣidqī, *Naẓra fī kutub al-‘ahd al-jadīd wa-‘aqā’id al-naṣrāniyya*, Cairo, 1913; Rashīd Riḍā & Muḥammad Tawfīq Ṣidqī, *‘Aqīdat al-Ṣalḥ wa-l-Fidā’ wa-yalībā Naẓariyyatī fī ‘aqīdat ṣalḥ al-masīḥ wa-qiyāmatih*, Cairo, 1935, pp. 83-160.

the Prophetic traditions in Islam.³¹ As for the second high spike marked in 1925, we closely read that a critical note was sent to Riḍā by a certain ‘Abd al-Raḥman al-Jamjamūnī, a habitual reader of Riḍā’s journal from Egypt, blaming Riḍā for his suspicion of the traditions narrated by the Muslim Yemeni traditionists Wahb ibn Munabbih and Ka’b al-Aḥbār, who were considered to be the earliest authorities on Isrā’iliyyāt narratives in Islam. This triggered a debate between al-Jamjamūnī and Riḍā on *al-Manār*’s pages on these historical figures and their authority in Ḥadīth. On the basis of the branch in Ḥadīth traditional studies known as al-Jarḥ wā al-Ta’dīl (the criticism and declared acceptance of hadith narrators), Riḍā classified their historical narratives as weak. Jamjamūnī was, on the other hand, of the view that their status in Islam should be firmly maintained due to their piety, since any discredit to them would endanger the authenticity of Ḥadīth in general. In addition to the continuous debate in that year, Riḍā allowed Jamjamūnī to spell out his views on the issue in details in two serialized articles under the title “Mabḥath fī al-Jarḥ wā al-Ta’dīl.”³²

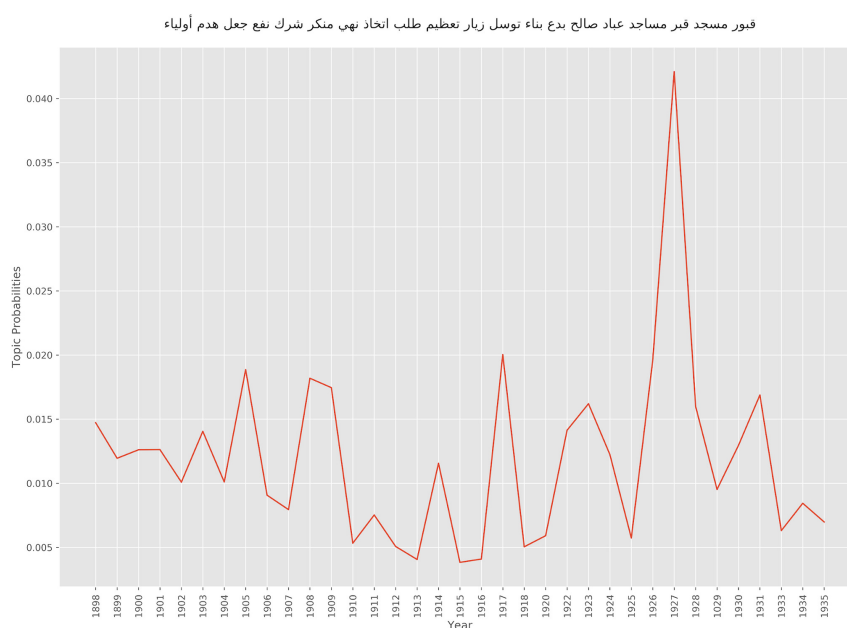


Figure 12. Topic 32 (0.08782)

Topic model 32 (0.08782) deals with the visitation and veneration of holy shrines and tombs which became dominant in 1927-1928 on the basis of serialized articles containing a debate between the Iraqi Shī‘i scholar Sayyid Mahdī al-Kāẓimī al-Qazwīnī (1865-1940) and the Sunni salafī Moroccan

31 Muḥammad ‘Abd al-‘Azīz al-Khūlī, “Tārīkh funūn al-Ḥadīth” 5 articles, vol. 22/1 (December 1920), 22/2 (January 1921); 22/3 (February 1921), 22/4 (March 1921), 22/5 (April 1921).

32 ‘Abd al-Raḥman al-Jamjamūnī, “Mabḥath fī al-Jarḥ wā al-Ta’dīl,” *al-Manār*, two articles, 27/5 (August 1926), pp. 377- & 27/6 (September 1926), pp. 459-.

scholar Taqī al-Dīn al-Hilālī (1894-1987)³³ about the erecting of shrines and mosques on the sites of the tombs of family members of the Prophet or pious venerated figures, where people commemorate or observe prayers besides. In general, Riḍā was a fierce opponent of the visitation of the tombs and the cult of saints in Islam.³⁴

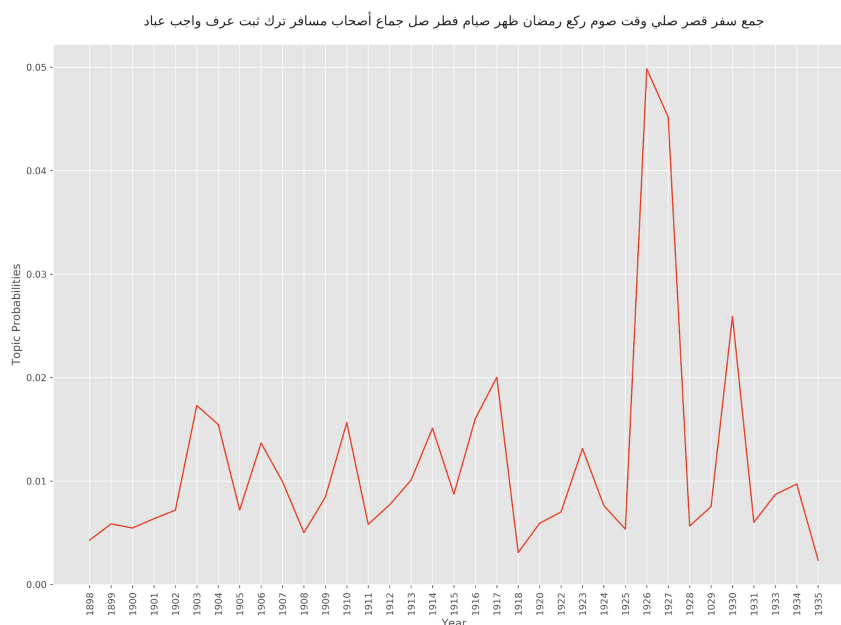


Figure 13. Topic 0 (0.08243)

Topic model 0 (0.08243): In 1926- 1927, where the spike is highest, the topic focuses on the religious ritual question of shortening the daily obligatory prayers and the exemption of fasting the month of Ramadan during travel. Riḍā started publishing a series of eleven articles containing a treatise by the well-known medieval Muslim scholar Aḥmad Ibn Taymiyya (1263-1328) under the title: “Qā’ida jalīla fīmā yat’laq bi-aḥkām al-safar wa-l-iqāma (A Glorious base in what is related to the rulings of travel and dwelling),”³⁵ which is the second volume of the author’s famous work *Majmū‘at al-Rasā’il wa-l-masā’il* which Riḍā edited and published in his Manār Press in five volumes.³⁶

33 About Taqī al-Dīn al-Hilālī, see for example, Umar Ryad, “A Salafi Student in Orientalist Scholarship in Nazi Germany: Taqī al-Dīn al-Hilālī and His Experience in the West”, in Götz Nordbruch and Umar Ryad (eds.), *Transnational Islam in Interwar Europe: Muslim Activists and Thinkers*, New York: Palgrave Macmillan, 2014, pp. 107-156

34 Yitzhak Nakash, “The Visitation of the Shrines of the Imams and the Shi’i Mujtahids in the Early Twentieth Century”, *Studia Islamica* 81 (1995), pp. 153-164. -313; “Mas’alat al-qubur wa al-mashāhid ‘ind al-shī’a: munāẓara bayna ‘ālim shī’i wā ‘ālim sunni”, *al-Manār*, 7 articles, 28/5 (June 1927), 349-67, 28/6 (August 1927), 439-49, 28/7 (September 1927), 516-33, 28/8 (October 1927), 593-601, 28/9 (November 1927), 684-92, 28/10 (January 1928), 776-81, 29/1 (March, 1928), 57-62.

35 Aḥmad Ibn Taymiyya “Qā’ida jalīla fīmā yat’laq bi-aḥkām al-safar wa-l-iqāma”, *al-Manār*, 11 articles, 27/5 (August 1926), 347f; 27/6 (September 1926), 427f; 27/7 (October 1926), 513f; 27/8 (November 1926), 593f; 27/9 (December 1926), 663f; 27/10 (January 1927), 755f; 28/1 (march 1927), 41f; 28/2 (April 1927), 121f; 28/3 (May 1927), 186f; 28/ 4 (May 1928), 272f; 28/5 (June 1927), 334f.

36 Aḥmad Ibn Taymiyya, *Majmū‘at al-Rasā’il wa-l-masā’il*, edited by Rashīd Riḍā, 5 vols., Cairo: Al-Manār, 1922-1930.

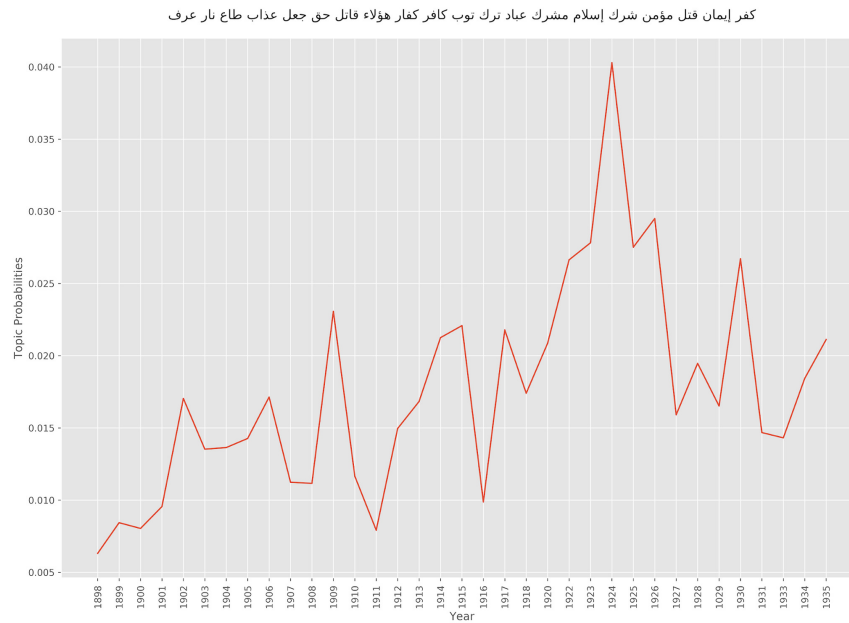


Figure 14. Topic 14 (0.11272)

This topic 14 (0.11272) focuses on the question of unbelief (*shirk* and *kufr*) and faith in general. This topic is dominant in the corpus, but the spike jumps higher in 1924. We assume that it is connected to Riḍā's debating, among others, about the question of mixed marriage between Muslims and non-Muslims,³⁷ and the above discussions about the Shī'ī veneration of saints, as well as the critical views by Ibn Taymiyya about the Sufi's and their religious practices and behaviour.

37 Al-Manār, "Taḥrīm al-Muslimāt 'alā ghayr al-muslimin", 25/3 (March 1924), 222f; 25/4 (May 1924), 314f.

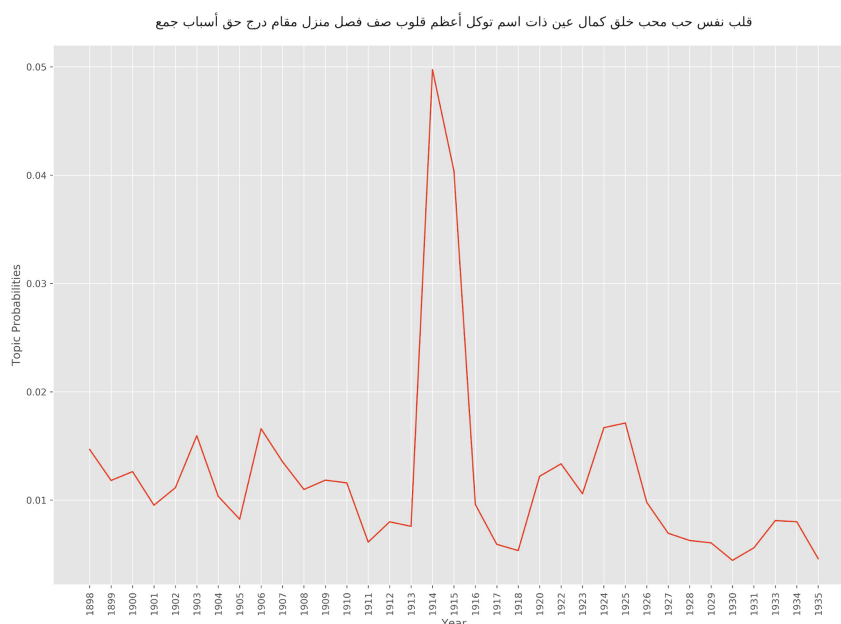


Figure 15. Topic 42 (0.11586)

Topic model 42 (0.11586) contains such keywords as “heart”, “self/soul”, “love”, “creation”, “status/ rank”, “causes”, “truth”, and “unity,” which all have spiritual-psychological as well as physical meanings. We observe that the spike gets higher roughly in the years between 1913-1916. Studying the articles in *al-Manār* closely, we can conclude that many of these combined terms are broadly used in two serialized sets of articles: 1) the above-mentioned article series, *Durūs fī sunan al-kā'ināt*, by the Egyptian medical doctor Muḥammad Tawfīq Ṣidqī, and 2) serialized articles containing extracts from the well-known classical work *Madārij al-Sālikīn* (Ranks of the Divine Seekers) by the medieval Damascene religious scholar Ibn Qayyim al-Jawziyya (d. 751/1350). Ṣidqī focuses on biological issues related to the body, heartbeats and blood circulation. *Madārij al-Sālikīn*, on the other hand, contains as a critical commentary on an earlier Sufi classic by the spiritual master and scholar Abū Ismā'īl 'Abdullāh al-Anṣārī of Herat (1006–1088). *Madārij al-Sālikīn* aims to revitalize spiritual Qur'anic foundations from a Sufi point of view by means of a hundred stations that could help the aspiring seeker on the path to God.³⁸ Few examples of these spiritual stations include “fear,” “repentance,” “sincerity”, “purification”, “trust,” “submission”, “gratitude,” “will”, “certainty”, “knowledge,” “wisdom”, “purity”, “life”, and “love”, which come close to the core meaning of the topic model.

38 Ibn Qayyim al-Jawziyya, *Ranks of the Divine Seekers: A Parallel English-Arabic Text*, Translated, annotated and introduced by Ovamir Anjum Leiden & Boston: Brill, 2020; Ovamir Anjum, “Sufism Without Mysticism? Ibn Qayyim al-Ġawziyyah’s Objectives in *Madārij al-Sālikīn*”, *Oriente Moderno* 90/1, 2010, pp. 166–188.

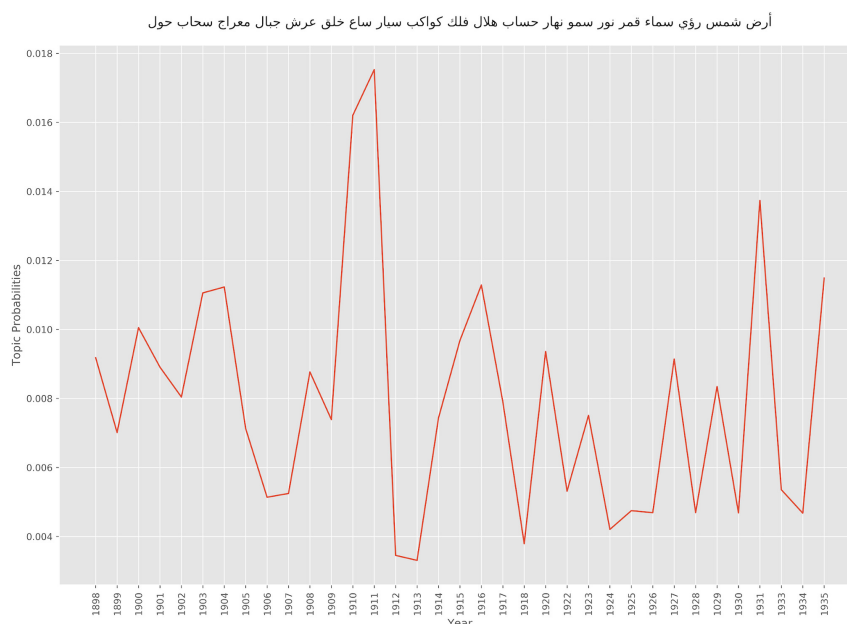


Figure 15. Topic 13 (0.08756)

Topic model 13 (0.08756) combines keywords that are related to the cosmos and nature including sun, sky, moon, mountains, clouds, universe, planets as well as the Prophet's *mi'rāj* (Ascension to Heavens). We see that the subject is dominant throughout the corpus with the spike getting higher roughly during 1908-1911, 1931 and 1935. By 1908 Ṣidqī had published four serialized articles under the title “*al-Qurʾān wā al-ʿIlm* (Qurʾān and Science)” in which he tried to interpret the Qurʾān from the perspective of language, history, geography and medicine, and also to answer what he saw “allegations” of Europeans against the Qurʾān and some of its verses related to nature and cosmos.³⁹ In 1931-1935, we can observe these keywords in various contexts. For example, in the summer of 1930 a huge debate was triggered by the publication of the materialist glossed exegesis of the Qurʾān by the Azhari Sheikh Muḥammad Abū Zayd, a former student of Riḍā, under the title *Al-Hidāya wā al-ʿIrḥān fī Tafsīr al-Qurʾān bil-Qurʾān* (Guidance and Abundant Knowledge in the Exegesis of the Qurʾān by means of the Qurʾān),⁴⁰ in which Abū Zayd strongly maintained that the cosmic and natural laws are fixed, a view by which he would reject the miracles mentioned in the Qurʾān. In three serialised articles Riḍā vehemently attacked Abū Zayd as an “atheist” and a “neo-Bāṭinī,” polemically belittling him for using excessive esoteric (*bāṭin*)

39 Muḥammad Tawfīq Ṣidqī, “*al-Qurʾān wā al-ʿIlm*,” *al-Manār*, 11/3 (May, 1908), 208f, 11/4 (May 1908), 281f, 11/5 (June 1908), 361f, 11/6 (July, 1908), 441f. See, Daniel A. Stolz, *The Lighthouse and the Observatory: Islam, Science, and Empire in Late Ottoman Egypt*, Cambridge: Cambridge University Press, 2018.

40 Muḥammad Abū Zayd, *Al-Hidāya wā al-ʿIrḥān fī Tafsīr al-Qurʾān bil-Qurʾān*, Cairo: al-Bābī al-Ḥalabī, 1349 A.H. /1930.

interpretation of the Qur'an.⁴¹ 1932 Riḍā had another fierce controversy with the anti-Wahhābi Azharī Sheikh Yusūf al-Dijwī (d. 1946) regarding many religious issues, including Riḍā's critical approach to the ḥadīth [narrated by al-Bukhārī (3199), and Muslim (250)] maintaining that before sunset the sun "prostrates beneath the Throne of God" and waits for permission to come back again to rise the next day. Riḍā was of the view that this ḥadīth was not in common sense with the scientific fact that the sun rotates on its own self; and that this hadith has been also critically studied by many Muslim traditionists, such Ibn Ḥajar al-ʿAsqalānī (1371-1449) and Ibn Ḥajar al-Haytamī (1503-1566).⁴²

Conclusion

Al-Manār's topics were automatically generated based on patterns of word (co-)occurrence, accompanied by a close interpretation of the model results. Our experimentation with topic modeling on *al-Manār*, a well-defined corpus with abundant historical background details available in secondary sources, focused on studying fluctuating topics over time, particularly those experiencing higher prominence during specific periods. We examined keywords not solely as isolated words but as broader religious and political topics, revealing clear thematic debates within the world of *al-Manār*. The experiment yielded historical patterns that aligned with digital results, providing robust observations of various religious, political, and intellectual concerns within Muslim reform during Riḍā's life.

Notably, high spikes in topic prominence demonstrated a temporal dimension in the corpus, indicating alignment with specific periods and increased interest in the discussed issues. Given our reliance on prior knowledge of *al-Manār* as a homogeneous corpus, the unique results of the study are closely tied to the quantitative computational method, rather than presenting surprising factual reconstructions of Riḍā and his worldviews. While the distant reading approach confirmed known topics, it also uncovered new subjects that merit further research, such as Riḍā's debates with al-Jamjamūnī on Ḥadīth and Abū Zayd on his Qur'anic exegesis.

The study affirmed that, when used correctly and in conjunction with closer reading, topic modeling can serve as a valuable tool for researching the history and contents of the Arabic press. This method allows for the exploration of a broader range of corpora from other Arabic newspapers and magazines, which should undergo preprocessing for distant digital research and automated content analysis before undergoing in-depth close reading.

41 Rashid Riḍā, "Ilhād jadīd fī al-Qurʾān wā dīn jadīd bayna al-Bāṭiniyya wā al-Islām", *al-Manār*, 3 articles, 31/9 (June, 1931), 673f; 31/10 (July 1931), 753f; 32/1 (October 1931), 33f.

42 *Al-Manār*, 32/11 (December 1932), 785f

Data repository: <https://doi.org/10.7910/DVN/T0X9UX>

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