

# An Ottoman response to Darwinism: İsmail Fennî on Islam and evolution

ALPER BILGILI\*

**Abstract.** The Scopes trial (1925) fuelled discussion in the United States on the social and political implications of Darwinism. For the defenders of the 1925 Tennessee law – which prohibited the teaching of Darwinism in schools – Darwinism was, amongst other things, responsible for the German militarism which eventually led to the First World War. This view was supported by İsmail Fennî, a late Ottoman intellectual, who authored a book immediately after the trial which aimed to debunk scientific materialism. In it, he claimed that Darwinism blurred the distinction between man and beast and thus destroyed the foundations of morality. However, despite his anti-Darwinist stance, İsmail Fennî argued against laws forbidding the teaching of Darwinism in schools, and emphasized that even false theories contributed to scientific improvement. Indeed, because of his belief in science he claimed that Muslims should not reject Darwinism if it were supported by future scientific evidence. If this turned out to be the case, then religious interpretations should be revised accordingly. This article contributes to the literature on early Muslim reactions to Darwinism by examining the views of İsmail Fennî, which were notably sophisticated when compared with those of the anti-religious Darwinist and anti-Darwinist religious camps that dominated late Ottoman intellectual life.

## Introduction

Any country where commenting on the laws of evolution or speaking about Darwinism is perceived to be blasphemous has not emerged from the Middle Ages. And [those belonging to] the Middle Ages have no right to exist in the twentieth century. Any head, turbaned or not, has to understand this fact unless it desires to be smashed! ... Kastamonu! If you do not want to be Thessalonica, or Kosovo; if you do not want to witness Muslims being killed, or their honour and chastity exploited; then wake up urgently, and do not desire to kill those who already woke up and who try to awaken you!<sup>1</sup>

So wrote Abdullah Cevdet (1869–1932), a prominent Ottoman ideologue and science popularizer, in his controversial magazine *İctihad* in 1913, in response to the arrest of three teachers for teaching Darwinian evolution in Kastamonu (a city located in northern Anatolia). Cevdet reminded Turkish readers of the suffering which Muslims had endured in Thessalonica and Kosovo, following the Ottoman defeats. Only a country with a scientific world view, he believed, could prevent repetition of such horrors. Yet the

\* Süleyman Şah Üniversitesi, Department of Sociology, Tuzla Leyla Dumankaya Kampüsü, Fatih mah, Eski Ankara Asfaltı, no: 28 34956 Orhanlı/Tuzla İstanbul, Turkey. Email: [abilgili@ssu.edu.tr](mailto:abilgili@ssu.edu.tr).

I am grateful to Gregory Radick for his valuable guidance, and would also like to thank Dominic Berry, Jonathan Topham, Gabrielle White, Aynur Erdoğan, Carl Warom and two anonymous referees for their much-appreciated comments and recommendations. This work was written during postdoctoral research conducted in the School of Philosophy, Religion and History of Science at the University of Leeds.

1 Abdullah Cevdet, 'Kastamonu'da Kurun-i Vusta', *İctihad* (1913) 58, pp. 1271–1274, 1273.

governor of Kastamonu had made a terrible mistake, Cevdet contended, by siding with darkness and ignorance rather than supporting wise and enlightened youth.<sup>2</sup>

Fifteen years later – and three years after the Scopes Trial – a book written by İsmail Fennî (1855–1946) in Ottoman Turkish also argued against laws forbidding the teaching of Darwinism.<sup>3</sup> The main goal of his book was to respond to Ludwig Büchner's *Kraft und Stoff* (1855), which had become a favoured text of Abdullah Cevdet and other Ottoman materialist reformers of the late nineteenth and early twentieth centuries. Yet, despite his belief that scientific evidence ruled out Darwinism, and his warnings about the unwanted consequences of the Darwinian theory for morality, İsmail Fennî embraced a liberal position towards the teaching of evolution – not only because he thought that evolutionary theory and Islam could be reconciled, but also because he believed that scientific development requires freedom, and that no other authority should intervene in this process, no matter what the scientific value of the theory in question.<sup>4</sup>

Despite the vast literature on Darwinism and its reception in nineteenth-century Europe and North America, early Islamic responses to Darwin have been little studied. Moreover, those few works which have focused on Muslim responses have primarily analysed Arab reactions to the theory and have made few connections with the Turkish case.<sup>5</sup> However, as Marwa Elshakry underlined in her recent book *Reading Darwin in Arabic, 1860–1950*, the impact of Turkish political actors on the perception of Darwinism in Arabic-speaking countries was remarkable. For instance, Shibli Shumayyil (1850–1917) – a prominent science popularizer who introduced Darwin to Arab readers – was heavily influenced by the materialist views of the Ottoman elites in Istanbul, whilst Husayn al-Jisr (1845–1909) – a staunch enemy of evolutionary materialism in the second half of the nineteenth century – was funded and supported by the Ottoman Sultan.<sup>6</sup>

There is a modest literature on Ottoman responses to scientific materialism, but it primarily focuses on the general relationship between science and religion; that is, on how Ottoman intellectuals positioned themselves within this allegedly dichotomous relationship. Analyses have been mostly built upon the assumption that Ottoman intellectuals of the late nineteenth and early twentieth centuries were either fundamentalist creationists or adamant defenders of materialism. These histories overlook important and complex

2 Cevdet, op. cit. (1), p. 1273.

3 The Arabic alphabet was used for written Turkish until 1928, at which point it was supplanted by the Latin alphabet. Moreover, as part of this new policy, words of Arabic and Persian origin were replaced by newly introduced Turkish ones. This was mainly motivated by the view that Ottoman Turkish lacked the requirements of a modern language sufficient for enabling scientific progress. See Sabri M. Akural, 'Kemalist views on social change', in Jacob M. Landau (ed.), *Atatürk and the Modernization of Turkey*, Leiden: E.J. Brill, 1984, pp. 125–152, 134.

4 İsmail Fennî, *Maddîyyûn Mezhebinin İzmihlâli (The Collapse of the Materialist Creed)*, [İstanbul: Orhaniye Matbaası, 1928, pp. 110–111.

5 See, for instance, Najm Bezirgan, 'The Islamic world', in Thomas F. Glick (ed.), *The Comparative Reception of Darwinism*, Austin: University of Texas Press, 1974, pp. 375–387.

6 Marwa Elshakry, *Reading Darwin in Arabic, 1860–1950*, Chicago: The University of Chicago Press, 2013, pp. 104, 137–138.

figures in the Turkish experience. This article aims to enrich the existing historiography by examining İsmail Fennî's views on Darwinism. His views on Darwinian evolution will be analysed, especially by focusing on his *The Collapse of the Materialist Creed* (*Maddiyyûn Mezhebinin İzmihlâli*),<sup>7</sup> in which he strove to respond to the materialistic claims of his day by embracing scientific and philosophical arguments. The analysis will include İsmail Fennî's evaluation of Darwinian theory from biological, religious, philosophical and social perspectives. Such an examination is especially justified on the ground that İsmail Fennî's opinions on Darwinism were nuanced, in comparison with the debates that dominated Ottoman intellectual life in the late nineteenth and early twentieth centuries.

In order to analyse İsmail Fennî's views on Darwinism properly, one needs to first present a picture of late Ottoman intellectual life. Doing so requires an analysis of the impact of Western scientific discussions on the Ottoman mindset and its particular debt to Büchner, Vogt and other nineteenth-century scientific materialists.<sup>8</sup> After delineating this Western influence, the paper will deal with a related question – namely how and why Ottoman 'social engineers' utilized biological theories. Virtually all of the reformist and revolutionary intellectuals of the nineteenth century held that both the natural world and the social world were governed by similar laws, and thus assumed that scientific discussions had implications for politics as well. This part of the paper reveals how biological theories of the nineteenth century were exploited to pursue political goals in the last decades of the Ottoman Empire. After outlining the political and social atmosphere of the era, the paper will focus on İsmail Fennî's attempts to defend the Islamic faith against materialistic attacks. His analysis of Darwinist theory on scientific grounds will be followed by a discussion of the possibility of reconciliation between it and religion. Finally, after considering the threats that Darwinism might pose to morality, İsmail Fennî's views on the legal prohibition of Darwinism in schools will be discussed.

### Büchnerian Darwinism in Ottoman culture

In his letter to William Graham in 1881, Charles Darwin tried to illustrate the impact of natural selection on the progress of civilizations with the following example:

Remember what risks the nations of Europe ran, not so many centuries ago, of being overwhelmed by the Turks, and how ridiculous such an idea now is. The more civilised so-called Caucasian races have beaten the Turkish hollow in the struggle for existence.<sup>9</sup>

<sup>7</sup> İsmail Fennî's *The Collapse of the Materialist Creed* was published in 1928, five years after the establishment of the Turkish Republic. Still, it is reasonable to call it an 'Ottoman response' given that İsmail Fennî was sixty-eight years old when the republic was founded and that he had been working on the book for at least two decades.

<sup>8</sup> M. Şükrü Hanioglu, 'Blueprints for a future society: late Ottoman materialists on science, religion, and art', in Elisabeth Özdalga (ed.), *Late Ottoman Society: The Intellectual Legacy*, London: Routledge Curzon, 2005, pp. 27–116, 28–32

<sup>9</sup> Charles Darwin to William Graham, 3 July 1881, Darwin Correspondence Database, at [www.darwinproject.ac.uk/entry-13230](http://www.darwinproject.ac.uk/entry-13230), accessed 25 March 2014.

As the naturalist aptly put it, the Ottoman Empire's days of glory were gone and signs of collapse were evident. It was not, however, only the serious loss of land that was raising questions about the future of the old empire. From battlefield to printing technologies, from education to finance, in virtually every field of life Ottoman intellectuals were feeling the superiority of the European powers. Any struggle to regain the former might of the empire would thus inevitably bring the Western experience of Enlightenment into discussion. For many Ottoman intellectuals, there was no point in reinventing the wheel; all they needed to do was to follow the Western path to modernization and Enlightenment. Indeed, even some Islamists of the nineteenth century were defending Westernization in selected areas of life – such as integrating Western science into school curricula.<sup>10</sup> Under such circumstances, it is not surprising to note that a pan-Islamist Sultan such as Abdülhamid II (1842–1918, r. 1876–1909) had leanings towards westernization and modernization. Other radical reformers like Abdullah Cevdet went further and insisted that Western values should be embraced without exception.<sup>11</sup> Reforming the crumbling empire along Western lines was considered inevitable. The question was the magnitude and scope of such reforms.

As mentioned, the Ottoman intelligentsia became familiar with nineteenth-century science through the works of Büchner, Vogt, Haeckel, Draper and other science popularizers.<sup>12</sup> Underlining several points about these is helpful for grasping how Ottoman views concerning science were formed. To start with, in Büchner's and Vogt's writings the lines between science and scientism were often quite blurred. As champions of materialism, their scorn for religion was mingled with glorification of science. Büchner, for instance, in his *Kraft und Stoff*, argued that science 'removes superstition' especially because of the possibilities offered by astronomy and geology.<sup>13</sup> Since science was the ultimate authority in virtually every sphere of life, any other source of knowledge, including religion and even philosophy, should be repudiated.<sup>14</sup> The interest that each had in science was closely related to their anti-religious agenda. For instance, the most popular scientific theory of the day – Darwin's evolutionary theory – was used by Büchner and Vogt because they viewed it as helping to supplant transcendental

10 Niyazi Berkes, *The Development of Secularism in Turkey*, 2nd edn, London: C. Hurst & Co. Publishers, 1998, p. 407.

11 M. Şükrü Hanioglu, *A Brief History of the Late Ottoman Empire*, Princeton, NJ: Princeton University Press, 2008, p. 185.

12 Büchner's *Kraft und Stoff* was one of the most popular books of the nineteenth century. It was translated into seventeen languages in less than two decades. See Frederick Gregory, *Scientific Materialism in Nineteenth Century Germany*, Dordrecht: D. Reidel Pub., 1977, p. 105. Some even argued that Büchner has served the cause of the popularization of science better than any university or academic. See Alfred Kelly, *The Descent of Darwin: The Popularization of Darwinism in Germany, 1860–1914*, Chapel Hill: University of North Carolina Press, 1981, p. 33.

13 Ludwig Büchner, *Force and Matter: Empirico-philosophical Studies* (tr. J. Frederick Collingwood), London: Trübner & Co., 1864, pp. xi, 57.

14 In Büchner and Vogt's materialism, philosophy only matters when it has any relevance to empirical science. Therefore materialism associated with them was considered to be different from the historical materialism of Marx. See Herbert Schnädelbach, *Philosophy in Germany, 1831–1933*, Cambridge: Cambridge University Press, 1984, p. 96. Also see Hanioglu, op. cit. (8), pp. 29–30.

explanations of natural phenomena.<sup>15</sup> This was in spite of their suspicion of Darwin's emphasis on natural selection and their favouring of more Lamarckian accounts of the mechanisms of adaptation.<sup>16</sup> Likewise, Haeckel used Darwinism to support progressives in their fight against conservatives in Germany.<sup>17</sup> Darwin and his theory became a symbol even in contexts where pre-Darwinian evolutionary theories still held sway.<sup>18</sup> As Marx's son-in-law Edward Aveling noticed, so far as the educated layman was concerned, Darwin was the man who proved that human beings were descended from apes.<sup>19</sup> Accordingly, the details of what Darwin actually discovered often mattered less in popular thought than the perceived anti-creationist implications of his theory. As will be illustrated, the Turkish experience was no exception, since Darwinism was also reconstructed – or distorted – by Ottoman materialists to strengthen their cases.

At the close of the nineteenth century, a revolutionary group called the 'Young Turks' began championing materialist views. Despite their interest in scientific discussions, the Young Turks were not scientists. They were educated in modern schools of the Ottoman Empire and/or in Europe, and became familiar with materialist works of the age.<sup>20</sup> Staunch enthusiasts of the Enlightenment and of Western values, as well as of Western science, this group strove for radical changes in Turkish culture and society.<sup>21</sup> The majority of the Young Turks maintained that religion was now superfluous. Moreover, they asserted that the absence in the empire of a scientific world view was having practical political and socio-economic implications, and indeed was leading the empire into political and social quagmires.<sup>22</sup> This view was shared by non-Turkish intellectuals and reformers of the empire as well. With efforts aimed at enlightening the people, and thus at the eventual improvement of society, Arab intellectuals – especially those graduates of Protestant colleges, such as Yaqub Sarruf (1852–1927) and Faris Nimr (1856–1951) – contributed to the spread of scientific knowledge in the Arab

15 Gregory, *op. cit.* (12), p. 178.

16 Indeed, when Vogt translated the controversial *Vestiges* into German, he was not even a believer in evolutionary theory. However, he thought that he could use *Vestiges* against the critics of materialism. See Nicolaas Rupke, 'Translation studies in the history of science: the example of *Vestiges*', *BJHS* (2000) 2, pp. 209–222, 219. The primary reason that prevented Büchner and Vogt from defending natural selection was their belief in progress. They contended that unlike Lamarckian evolutionary theory, natural selection was not supportive of the idea that humanity would necessarily be better off in the future. See Gregory, *op. cit.* (12), pp. 184–185.

17 Pietro Corsi and Paul J. Weindling, 'Darwinism in Germany, France and Italy', in David Kohn (ed.), *The Darwinian Heritage*, Princeton, NJ: Princeton University Press, 1985, pp. 683–729, 693–694. Also see Mario A. Di Gregorio, *From Here to Eternity: Ernst Haeckel and Scientific Faith*, Göttingen: Vandenhoeck & Ruprecht, 2005, p. 87.

18 Giuliano Pancaldi, *Darwin in Italy: Science across Cultural Frontiers* (tr. Ruey Brodine Morelli), Bloomington: Indiana University Press, 1991, pp. 157–158.

19 Kelly, *op. cit.* (12), p. 32.

20 Erik-Jan Zürcher, 'The Young Turks: children of the borderlands?', in Kemal Karpat and Robert W. Zens (eds.), *Ottoman Borderlands: Issues, Personalities, and Political Changes*, Madison: University of Wisconsin Press, 2003, pp. 275–285, 283.

21 Hilmi Ziya Ülken, *Türkiye'de Çağdaş Düşünce Tarihi*, 2nd edn, İstanbul: Ülken Yayınları, 1966–1979, p. 202.

22 M. Şükrü Hanioğlu, 'Garbcılar: their attitudes toward religion and their impact on the official ideology of the Turkish Republic', *Studia Islamica* (1997) 2, pp. 133–158, 134.

provinces. They considered science to be a tool in the creation of social progress superior to any other institution, including the state.<sup>23</sup>

The Young Turk movement substantially shaped late nineteenth- and early twentieth-century Turkish politics. It aimed to re-establish constitutional rule, which had first been introduced in 1876 but suspended two years later by Sultan Abdülhamid II. In 1889 the Young Turks established a secret society in the Royal Medical School to achieve this political goal – one which would later evolve into the Committee of Union and Progress (İttihat ve Terakki Cemiyeti). They succeeded in dethroning Sultan Abdülhamid II in 1908 and subsequently established constitutional rule. However, by 1912 the rule of the Committee of Union and Progress had transformed into a one-party dictatorship.<sup>24</sup> Throughout those political crises, the Young Turks were very cognizant of the fact that religion could also be used as a potent tool, for challenging the Sultan's authority (by arguing that the Sultan was not religious enough), for modernizing the empire, for fighting against Western imperialism, and for introducing materialist views into the empire.<sup>25</sup> The use of religion to promote materialistic views might seem bizarre unless we also consider the Young Turks' projection of Turkish society. They contended that the potential risks of fighting directly against Islamic doctrine could outweigh the potential gains, and thus that the only way to persuade the masses about the truth of materialism was to turn it into an Islam-friendly philosophy.<sup>26</sup> Abdullah Cevdet, for instance, presented the Quran as a pro-evolutionary and even pro-Darwinian divine text, and asserted that references to evolution and Darwinism within the Quran were apparent to the enlightened.<sup>27</sup> Moreover, the Young Turks underlined the Islamic references to 'reason' and worldly matters, and made a distinction between 'genuine Islam' and 'invented Islam'.<sup>28</sup> Yet such efforts were calculated, for they believed that once materialism was introduced, religion – whether reformed or not – would eventually fade away.<sup>29</sup>

The Young Turks did not completely disguise their scorn of religion. Cautious avoidance of overt anti-religious sentiment had its limits, since they were ultimately aiming to replace religion with materialism. The books translated into Turkish by the Young Turks serve to reveal their attitudes about the compatibility of science and religion.<sup>30</sup> Examining the views mentioned in those books would inevitably raise questions about the Young Turks' opinions about Islam. As followers of the Büchnerian idea that societal problems cannot be solved unless religion is first demolished, the Young Turks

23 Elshakry, op. cit. (6), pp. 59–61, 73–74.

24 Zürcher, op. cit. (20), pp. 276–7.

25 See Şerif A. Mardin, 'Ideology and religion in the Turkish Revolution', *International Journal of Middle East Studies* (1971) 3, pp. 197–211, 207; M. Şükrü Hanioglu, *Preparation for a Revolution: The Young Turks, 1902–1908*, New York: Oxford University Press, 2001, p. 306; and Hanioglu, op. cit. (8), p. 27.

26 Hanioglu, op. cit. (8), pp. 27–28.

27 Cevdet, op. cit. (1), p. 1273.

28 Berkes, op. cit. (10), pp. 378–379.

29 M. Şükrü Hanioglu, *Atatürk: An Intellectual Biography*, Princeton, NJ: Princeton University Press, 2011, p. 56.

30 Those books include materialist works like Büchner's *Kraft und Stoff* and Ernst Haeckel's conferences on 'Monism', as well as Reinhart Dozy's critique of the Prophet Muhammed, which was translated into Turkish as *Tarih-i İslamiyet* (The History of Islam). See Ülken, op. cit. (21), pp. 202, 239–241.

frequently ended up defending any body of learning (such as ancient Greek philosophy) or scientific theory (such as Darwinism) that could directly or indirectly shatter religion's authority.<sup>31</sup> This became even more clearly evidenced once the Young Turks came to power in 1908, given the resultant sharp drop in the Young Turk references to religion between 1908 and 1923.<sup>32</sup> The process of secularization that would be inherited by the Founders of the Turkish Republic was intensified during this period.<sup>33</sup>

Nonetheless, contrary to common wisdom, late Ottoman discussions concerning science were not reduced to a war between secular modernist materialists and an Islamist Sultan. Despite their anti-religious mentality, the Young Turks did their best to avoid direct confrontation with religion.<sup>34</sup> Moreover, in light of some of his vital reforms, Sultan Abdülhamid II could, in many respects, be depicted as a modernist Sultan. More importantly, there were more than two sides to the dispute. Although few in number, late Ottoman intellectuals like İzmirli İsmail Hakkı (1869–1946), Ahmed Midhat (1844–1912) and Filibeli Ahmed Hilmi (1865–1914) tried to reconcile science with Islam and dismantle materialistic views.<sup>35</sup> They opposed the view that science and religion were necessarily foes, and argued that Islam differed from Christianity in its attitude towards modern science. Ahmet Midhat, for instance, referred to Draper's controversial *History of the Conflict between Religion and Science* (1874) in order to show that Islam was compatible with evolutionary theory.<sup>36</sup>

Despite the reconciliation efforts undertaken by some late Ottoman thinkers, the materialistic and scientific world view succeeded in triumphing over the religious one amongst the elites. As a result, 'faith in science usurped the position of religious belief; thus "science" became endowed with a transcendent meaning'.<sup>37</sup> This new world view had inescapable implications for the social reforms undertaken in virtually every sphere of social life as the six-century-old empire was being replaced by a secular republic in 1923. The majority of republican intellectuals had inherited the specious 'science-versus-religion' dichotomy and sided with the 'scientific' camp. H.G. Wells's work *The Outline of History: The Whole Story of Man* (1920), for instance, had a great impact on Turkish reformers and especially on Mustafa Kemal Atatürk (1881–1938), who ordered the book to be translated into Turkish.<sup>38</sup> This policy was a reflection of Atatürk's

31 Hanioglu, op. cit. (8), pp. 28–31.

32 Hanioglu, op. cit. (25), p. 306.

33 Mardin, op. cit. (25), p. 208.

34 Abdullah Cevdet, for instance, even after translating Dozy's highly critical work on the Prophet Muhammed, argued that Dozy, as a man of knowledge, was closer to Islam than his critics since Islam praised knowledge and good deeds which would benefit all. See Hanioglu, op. cit. (8), pp. 48–49.

35 For analyses of how Islam and science were reconciled by those authors' works see M. Alper Yalcinkaya, 'Science as an ally of religion: a Muslim appropriation of "the conflict thesis"', *BJHS* (2011) 2, pp. 161–181; M. Sait Özervarlı, 'Alternative approaches to modernization in the late Ottoman period: İzmirli İsmail Hakkı's religious thought against materialist scientism', *International Journal of Middle East Studies* (2007) 1, pp. 77–102; and Amit Bein, 'A "Young Turk" Islamic intellectual: Filibeli Ahmed Hilmi and the diverse intellectual legacies of the late Ottoman Empire', *International Journal of Middle East Studies* (2007) 4, pp. 607–625.

36 Yalcinkaya, op. cit. (35), p. 174–175.

37 M. Şükrü Hanioglu, *The Young Turks in Opposition*, New York: Oxford University Press, 1995, p. 11.

38 Zafer Toprak, *Darwin'den Dersim'e: Cumhuriyet ve Antropoloji*, İstanbul: Doğan Kitap, 2012, pp. 177–178.

admiration for science. On one occasion, the founder of the republic told the scientific ideologue Abdullah Cevdet that he would realize Cevdet's dreams.<sup>39</sup> This helps to explain some of Atatürk's statements, such as that the new republic's 'guide in political, social, and educational life will be science' and that 'seeking any guide other than science is thoughtlessness, prevarication, and ignorance'.<sup>40</sup>

Biology ranked high among those natural sciences that would be used for guidance. The uses of evolutionary theory, and of biology in general, extended beyond religious debates, and they were soon transformed into weapons employed in the battle against the *ancien régime*. Even the decline of the Ottomans was explained on 'biological' grounds. In the Ottoman Empire slave concubines were used to bear the sultans' children, who in turn would become sultans in the future. Abdullah Cevdet argued that because of their slave ancestry sultans' children lacked the biological and social features required for leadership.<sup>41</sup> In another example, Atatürk's adopted daughter Afet İnan (1908–1985) analysed skulls of 64,000 Turks and allegedly proved that the Turkish race ranked at the top of the evolutionary scale.<sup>42</sup> Moreover, two prominent institutions established by Atatürk in the early 1930s – namely the Turkish Historical Research Committee and the Society for Research on the Turkish Language – championed ethnic theories which asserted that Turks were a Western race and that the Turkish language was the mother of all languages.<sup>43</sup> Biology – and Darwinism in particular – had become a tool to be exploited by late Ottoman and early republican reformers for social and political purposes. Meanwhile, biological theory had transformed into an anti-religious doctrine in the eyes of Ottoman intellectuals, be they secular or religious, especially due to the ultra-secular views of the Young Turks who introduced Darwinism to Turkish readers. It was in this climate that İsmail Fennî wrote books that aimed to defend the Islamic faith against attacks launched by Turkish and Western materialists. His evaluations of Darwinism were part of his 'Enlightenment' mission which aimed to equip Muslim intellectuals in their campaign against scientific materialism.

### İsmail Fennî on Darwinism

İsmail Fennî – who adopted the last name Ertuğrul following the Turkish Surname Law of 1934 – was born in Tarnovo (now Bulgaria) in 1855, into a notable family. After

39 Hanioglu, op. cit. (8), p. 83.

40 In the first proverb, quoted in Berkes, op. cit. (10), p. 466, Atatürk uses the Islamic concept for 'guide', *mürşid*, which in the Ottoman context was associated with specifically religious guidance for salvation. The second proverb was quoted in Hanioglu, op. cit. (29), p. 53.

41 Atila Doğan, *Osmanlı Aydınları ve Sosyal Darwinizm*, İstanbul: İstanbul Bilgi Üniversitesi Yayınları, 2006, pp. 180–181.

42 Toprak, op. cit. (38), pp. 339–341. The research started in 1937 as part of İnan's PhD thesis – which was pursued in Geneva University – and was completed in 1939. Prime Minister İsmet İnönü ordered the ministers of health and education to support İnan's research. Doctors, teachers and other government civil servants were trained and hired by the government to measure skulls. Nazan Maksudyan, *Türklüğü Ölçmek: Bilimkurgusal Antropoloji ve Türk Milliyetçiliğinin Irkçı Çebresi 1925–1939*, İstanbul: Metis Yayınları, 2005, pp. 94–96.

43 Mehmet Döşemeci, *Debating Turkish Modernity: Civilization, Nationalism, and the EEC*, New York: Cambridge University Press, 2013, pp. 63–65.



finishing secondary school, he attended a madrasa (a traditional Islamic religious school) and was simultaneously trained in accounting. During the Ottoman–Russian war of 1877–1878 he moved to Istanbul and was educated in a language school.<sup>44</sup> Such four-year schooling was designed to teach foreign languages like French and Arabic, as well as courses like history and international law, to the prospective civil servants of the empire.<sup>45</sup> Not satisfied with those two languages, İsmail Fennî decided to learn another prominent Western language and studied English privately for four years. Well versed in several foreign languages, he thus had the tools to analyse Western and Eastern sources on science, philosophy and religion. İsmail Fennî worked as the accounting officer in the ministry of domestic affairs until the Young Turk revolution of 1908, after which he retired to write his books defending the Islamic creed against severe materialist attacks. He died in Istanbul in 1946 at the age of 91.<sup>46</sup>

In his works, İsmail Fennî frequently noted that Muslims were about to face a crisis of faith. The cure for this crisis, he believed, was to wrestle with the questions of faith at an intellectual level. Undergirding this position was the idea that sole reliance on the classical sources of Islam would fail to persuade non-believers, especially in the age of ‘reason’.<sup>47</sup> As Özerverli noted, the classical Islamic arguments taught in traditional Islamic theological schools were outdated, and even the most prominent Ottoman theologians were not capable of responding to criticisms raised by Western thinkers and their Ottoman followers.<sup>48</sup> Büchner’s *Kraft und Stoff*, for instance, was a serious attack on religious faith, and had to be responded to by way of references to Western scientific

44 Süheyl Ünver, ‘Büyük Üstad İsmail Fenni: Kendi Kalemile Hal Tercümesi’, *İslâm-Türk Ansiklopedisi Mecmuası* (1947) 73, pp. 14–15. Following the Ottoman–Russian war of 1877–1878, Ottomans experienced a serious loss of territory in the Balkans, and Bulgaria became autonomous. This was a dramatic moment within Ottoman history, since the Balkans bore great importance for Ottoman intellectual and political life. Zürcher, for instance, noted that 48 per cent of the post-1908 Young Turk leaders were born in the Balkans. See Zürcher, op. cit. (20), p. 281.

45 Ünver, op. cit. (44), p. 15. For a detailed analysis of Ottoman language schools see Sezai Balcı, ‘Osmanlı Devleti’nde Modernleşme Girişimlerine Bir Örnek: Lisan Mektebi’, *Ankara Üniversitesi Dil ve Tarih-Coğrafya Fakültesi Tarih Araştırmaları Dergisi* (2008) 44, pp. 77–98, 87–88.

46 Ünver, op. cit. (44), pp. 14–15.

47 İsmail Fennî’s major work *The Collapse of the Materialist Creed* was published in 1928. *Küçük Kitapta Büyük Mevzular* (Big Questions in a Small Book), which was published in 1934, was a shorter and simpler version of *The Collapse of the Materialist Creed* written in a dialogue form. *Lügatçe-i Felsefe* (Dictionary of Philosophy) was published in 1927, and comprised Western and Eastern philosophical traditions. *Vahdet-i Vücut ve İbn Arabi* (Unity of Being and Ibn Arabi) was another work Fennî penned to delineate his mystical interpretation of Islam. In *HakikatNurları* (Lights of Truth) he dealt with orientalist critiques of Islam and aimed to show the consistency of the Quran. Other than these books, Fennî translated several books into Turkish that could potentially equip Muslim elites and masses in their campaign against modern critiques of religion. The books he translated into Turkish were not limited to religion since he believed that an ideal Muslim should be informed about philosophy, arts and politics as well. The books he translated include Paul Janet’s *The Materialism of the Present Day*, Oliver Lodge’s *Life and Matter*, Montaigne’s *Essays*, John Stuart Mill’s *On Liberty*, and Aesop’s *Fables*. However, those books were not published during his lifetime due to economic difficulties. See Osman Özkul, ‘İsmail Fenni Ertuğrul ve Felsefi Görüşleri’, MA thesis, İstanbul Üniversitesi, 1989, pp. 17–22; and S. Hayri Bolay, *Türkiye’de Ruhçu ve Maddecî Görüşlerin Mücadelesi*, Ankara: Nobel, 2008, pp. 161–162.

48 Özerverli, op. cit. (35), p. 93.

works and Western philosophy. Ottomans were on the brink of religious and moral catastrophe, İsmail Fennî believed, unless materialist claims were seriously dealt with.

The Quran, İsmail Fennî argued, could not play the role of a scientific book as a means of acquiring knowledge about nature. It was, rather, a guide to metaphysical and ethical issues.<sup>49</sup> Like Christian natural philosophers of the Scientific Revolution, he tried to reconcile God's work with God's words, and where they seemed to be in tension, he offered to revise the interpretation of the latter with reference to the former.<sup>50</sup> He believed that the Quran was not intended to inform Muslims about astronomical facts when it mentioned the creation of the heavens. Rather its aim was to remind believers about the glory of God.<sup>51</sup> The Quran could not be used as a guide in scientific matters, and yet this did not mean that science and matters of faith were totally separate spheres. Several verses and Hadiths (supposed sayings of the Prophet Muhammed), he noted, motivated Muslims to deal with science.<sup>52</sup> It was thanks to these verses and Hadiths that science ranked as a religious calling. Moreover, İsmail Fennî claimed, Quranic verses could be better understood in the light of scientific data. He referred to the verse in which Muhammed was taught that the mountains did not stand still but rather moved as clouds did. This verse, İsmail Fennî asserted, could make sense only after the scientific discovery of the rotation of the Earth.<sup>53</sup>

Despite being an eager enthusiast for science, İsmail Fennî warned against scientific arrogance, a common trait, he thought, amongst Western and Turkish scientific materialists of the period. He acknowledged that scientists had achieved much towards improving the quality of human life, yet he also cautioned that they should know the limits of their expertise and focus only on empirical phenomena. He asserted that questions such as the existence of God, or the eternity of matter, transgressed the boundaries of science because those questions could not be answered by empirical investigation. Büchner, İsmail Fennî claimed, held a metaphysical position in asserting that God did not exist and that matter was eternal.<sup>54</sup> Because they were unaware of their own ontologies, materialists floundered in their ability to find metaphysical answers within the scientific enterprise.<sup>55</sup>

As mentioned above, Abdullah Cevdet and the Young Turks held that Darwinism was a matter of civilization.<sup>56</sup> Resistance to evolutionary theory characterized the *ancien*

49 İsmail Fennî Ertuğrul, *İman Hakikatleri Etrafında Suallere Cevaplar*, İstanbul: Sebil Yayinevi, 1978, p. 65.

50 Although far from being dominant among Islamic scholars, such a position was shared by several nineteenth-century intellectuals such as Sayyid Ahmad Khan, Hasan al-Attar, Al-Tahtawi and Muhammad Abduh. They had similar opinions on the level of the trust one should invest in science and also on the reconciliation of science and religion. See Martin Riexinger, 'Responses of South Asian Muslims to the theory of evolution', *Die Welt des Islams* (2009) 2, pp. 212–247, 217–219; and John W. Livingston, 'Muhammad 'Abduh on Science', *Muslim World* (1995) 3–4, pp. 215–234, 216–220.

51 Fennî, op. cit. (4), pp. 449–450.

52 Fennî, op. cit. (4), pp. 422–423.

53 İsmail Fennî, *Hakikat Nurları*, İstanbul: Sebil Yayinevi, 1994, p. 390.

54 Fennî, op. cit. (4), pp. 419–422.

55 Ironically, just before the publication of *The Collapse of the Materialist Creed*, in 1927 Lemaitre proposed a theory later to be called the 'Big Bang' which would blur the distinction between 'metaphysical' and 'empirical' questions.

56 Cevdet, op. cit. (1), p. 1273.

*régime*, whilst the Young Turks sought a scientific *Weltanschauung* that would obviate the problems the empire was then facing.<sup>57</sup> Because it had implications for the ‘religion-versus-science’ debate, evolutionary theory came to be perceived as an invaluable tool in these broader sociopolitical disputes. The reformers’ hope was that if Darwinian evolution was proved right, religious belief – which they held responsible for the sociopolitical problems – would automatically be falsified. For that reason, Darwin became a symbol of the war between conservatives and secularists. İsmail Fennî, who also held Darwinism to be of vital importance, was not satisfied with the extant dichotomy between religious anti-Darwinians and anti-religious Darwinians, and instead forged a different path.

İsmail Fennî was not trained as a scientist, and therefore the majority of his scientific arguments concerning Darwinism were far from being original for any nineteenth-century reader of Western literature. Still, his evaluations were quite crucial, since previous Turkish evaluations had failed to understand the gist of the theory that differentiated it from Lamarckism and other evolutionary theories.<sup>58</sup> This was, as Doğan has noted, mainly because it was through French literature that Turkish intellectuals learned of Darwinian evolution; the French confusion on the subject was inherited by the Ottoman intellectuals when the literature was translated into Turkish. In fact, this confusion did not constitute a great problem for the majority of Ottoman intellectuals, since they were less interested in the real mechanism behind the evolutionary process than they were in discovering the ancestors of human beings.<sup>59</sup>

İsmail Fennî, on the other hand, offered a more nuanced analysis that can be summarized as follows:

- 1 Darwinism is refuted by the contemporary scientific evidence.
- 2 Evolutionary theories, including Darwinism, are not anti-religious unless supplemented with a rejection of divine design.
- 3 Islam can be reconciled with Darwinism.
- 4 Darwinism might constitute a threat to morality.
- 5 Despite its major flaws, teaching Darwinism should not be banned, since scientific development requires freedom.

I turn now to briefly analyse each of these positions in more detail.

#### *Darwinism is refuted by the contemporary scientific evidence*

*The Collapse of the Materialist Creed* was a work written primarily against Büchner’s claim that there was no supernatural power akin to God. Büchner asserted that he had explained evolutionary mechanisms similar to Darwin’s before Darwin had. He

<sup>57</sup> Hanioglu, op. cit. (22), p. 134.

<sup>58</sup> Sometimes they were mistaken about the content of Darwin’s theory. Abdullah Cevdet, for instance, inaccurately claimed that Charles Darwin witnessed the enlargement of a friend’s head, once the friend started reading books. Toprak, op. cit. (38), p. 298.

<sup>59</sup> Doğan, op. cit. (41), p. 213.

had a great admiration for Lamarck, calling him ‘the true father of the evolutionary philosophy’.<sup>60</sup> Yet he also praised Darwinism for its potential to render divine design obsolete.<sup>61</sup> This was one of the reasons that motivated İsmail Fennî to appeal to Western critiques that allegedly falsified Darwinism.

İsmail Fennî’s work made several references to a version of what has since become known as ‘the irreducible complexity argument’ against Darwinian evolutionary theory. He argued that certain biological organisms could not have emerged as a result of minor successive changes, and thus that they could not have been a product of a Darwinian evolutionary mechanism. Like other uses of the irreducible complexity argument, this was an attempt to respond to the famous challenge posed by Darwin in the *Origin*, in which he stated that demonstration of any organ not ‘formed by numerous, successive, slight modifications’ would falsify his theory.<sup>62</sup> İsmail Fennî pointed to animal instincts, asserting that these were so complex they could not have been formed by minor modifications. He claimed that instincts had to exist, and to be perfect, from the onset of the organism’s creation. Otherwise, he claimed, they would have been utterly useless and thus would not have contributed to the survival of the organism.<sup>63</sup>

İsmail Fennî’s second example concerned bodily organs, and the manner in which they work in harmony with other parts of human body. He argued that a single change in any one of these organs would destroy the harmony between them, unless other parts of the body had also simultaneously undergone beneficial modifications.<sup>64</sup> He also referred to the French physiologist Charles Richet and his claim that complex phenomena like consciousness could not be produced by minor modifications guided by blind mechanisms.<sup>65</sup> Thus, İsmail Fennî argued, the probability of natural selection producing such complex biological organisms exhibiting these characteristics was extremely low.

In questioning the scientific validity of Darwinism, İsmail Fennî frequently tried to bolster his arguments by quoting directly from Louis Agassiz, the Harvard naturalist who was one of the prominent opponents of Darwinism during the second half of the nineteenth century. He especially used Agassiz’s argument that Darwinian theory was inadequate in explaining the fossil record in different layers of the earth.<sup>66</sup> Such items of empirical evidence, as well as many others he cited in his book, would sweep away Darwinism – so İsmail Fennî believed.

60 Ludwig Büchner, *Force and Matter, or Principles of the Natural Order of the Universe with a System of Morality Based Thereon*, New York: Peter Eckler, 1891, pp. 164–165.

61 Büchner, op. cit. (60), pp. 178–179.

62 Charles Darwin, *On the Origin of Species by Means of Natural Selection*, London: John Murray, 1859, p. 189.

63 Fennî, op. cit. (4), pp. 89–90.

64 Fennî, op. cit. (4), p. 90.

65 Fennî, op. cit. (4), p. 104.

66 Fennî, op. cit. (4), pp. 91–92. As Sepkoski noted, Darwin himself was not satisfied by the evidence based on the fossil record. Indeed, palaeontology was not used to evidence Darwinian mechanisms and processes until the mid-twentieth century. See David Sepkoski, ‘Evolutionary paleontology’, in Michael Ruse (ed.), *The Cambridge Encyclopedia of Darwin and Evolutionary Thought*, Cambridge: Cambridge University Press, 2013, pp. 353–360, 353.

*Evolutionary theories, including Darwinism, are not anti-religious unless supplemented with a rejection of divine design*

To show that Darwinism and ‘design’ were not mutually exclusive, İsmail Fennî referred to several passages in the *Origin of Species* that mentioned the creator or creation by law.<sup>67</sup> If Darwinism posed a threat to faith, İsmail Fennî argued, Darwin himself would have been the first to lose his faith. Yet several references to the creator and creation in the *Origin of Species* had shown that Darwinism and belief in God were compatible. Even if Darwinian theory proved to be correct, it would not serve a materialistic metaphysics as Büchner had claimed. God had options, İsmail Fennî argued, and he might have chosen to create by means of evolutionary mechanisms.<sup>68</sup>

İsmail Fennî also referred to the Quranic concept of *sünnetullah* (meaning ‘God’s way’), and argued that God created the universe by using certain laws. His laws were unchangeable and nature did not work arbitrarily, but in his obedience.<sup>69</sup> Büchner had questioned the argument that a supreme and omnipotent God had created the Earth and all other creatures through natural cause by arguing that it would be a waste of time and energy. In response, İsmail Fennî resorted to a story about the Prophet Solomon and his teacher to show that natural causes were not necessarily alternatives to God’s handiwork. In the story, Solomon shared with his teacher his desire to witness a miracle. His teacher told him to look at the ways nature worked. Nature worked very slowly, he said, yet this fact did not change its miraculousness.<sup>70</sup>

İsmail Fennî, then, questioned the popularity of Darwinism amongst materialists, by highlighting Darwin’s direct references to a creator and the ‘grandeur’ in his design. The materialists embraced Darwinism, he argued, since they hoped that it could render any reference to a supernatural designer superfluous.<sup>71</sup> However, İsmail Fennî suggested, such a position was not embraced by Darwin himself. To emphasize Darwin’s disagreement with materialists over the anti-theistic implications of Darwinism, İsmail Fennî referred to Clémence Royer’s criticism of Darwin. Royer – a staunch materialist – had declared her dissatisfaction with Darwin’s inability to perceive the atheistic implications of his own theory by criticizing him in the prologue of her French translation of the *Origin*.<sup>72</sup>

67 Fennî, op. cit. (4), pp. 92–93.

68 Fennî, op. cit. (49), pp. 22–24.

69 Fennî, op. cit. (4), pp. 464–465. It must be noted that by using the concept of *sünnetullah* (God’s way), İsmail Fennî implies that natural laws are not self-sufficient but rather dependent on God. For a brief discussion on the nature of ‘creation by law’ in Islamic theology see Frank Griffel, *Al-Ghazālī’s Philosophical Theology*, Oxford: Oxford University Press, 2009, pp. 133–141; and David B. Burrell, ‘Creation’, in Tim Winter (ed.), *The Cambridge Companion to Classical Islamic Theology*, Cambridge: Cambridge University Press, 2008, pp. 141–160.

70 Fennî, op. cit. (4), pp. 478–479.

71 Fennî, op. cit. (49), p. 22.

72 Fennî, op. cit. (4), p. 93.

*Islam can be reconciled with Darwinism.*

Throughout his work, İsmail Fennî abstained from using religious texts as weapons against Darwinism. He argued that creation in the Quran could be interpreted in different ways, and that some verses are quite open to an evolutionary interpretation. Yet, İsmail Fennî added, in order to so reinterpret those verses one had to have a solid foundation; that is, robust scientific evidence in favour of Darwinism. Islam, İsmail Fennî claimed, was not hostile to genuine scientific theories.<sup>73</sup> If Darwinian theory was supported by scientific data, he argued, a Muslim must revise his interpretation of religious texts rather than opposing the scientific fact on the basis of his understanding of those texts.<sup>74</sup>

Despite the argument advanced by some Muslim intellectuals that Islam is more compatible with Darwinism than Christianity is – compared to Book of Genesis, the narratives of the creation of plants, animals and human beings, and of the Flood, are less detailed in the Quran, and thus open to multiple interpretations – the Quran does include several verses that may be construed as descriptions of special creation.<sup>75</sup> İsmail Fennî tried to show that even these could be reconciled with Darwinism. His first example regards the creation of Adam and the several Quranic verses that state that man was created out of clay. İsmail Fennî noted that these verses did not necessarily refer to direct creation. Even if God had created man by evolutionary mechanisms, he could still be a creation made out of clay. That is to say, if God had created animals and plants – or any earlier simpler form of living being – from clay, and if man evolved from those beings, then God could be said to have created man out of clay by means of evolutionary mechanisms.<sup>76</sup>

The next example to which İsmail Fennî referred regards the expulsion of Adam and Eve from paradise (*jannah* in Arabic). According to the orthodox Muslim interpretation, Adam and Eve were tempted by Satan to eat the forbidden fruit, and were therefore expelled from paradise. Some argued that if such an interpretation were true, then it would be hard to reconcile with evolution, since in that case Adam and Eve would have been created in paradise rather than by earthly evolutionary mechanisms. Yet, İsmail Fennî pointed out, *jannah* may be otherwise interpreted as ‘garden’, and thus the passage may be alternatively understood as making reference to the expulsion of Adam and Eve from a particular earthly location. Indeed, some prominent Islamic scholars had already interpreted the verses in this way, although they had never considered its implications for the creation of human beings.<sup>77</sup> By employing such an interpretation, İsmail

73 Fennî, op. cit. (4), pp. 111–112.

74 In a similar vein, in his *The Incoherence of the Philosophers*, eleventh-century, Muslim philosopher Al-Ghazālī claimed that an attempt to refute scientific theories with references to, and in the name of, religion could be inimical to religious faith. Al-Ghazālī, *The Incoherence of the Philosophers* (tr. Michael E. Marmura), Utah: Brigham Young University Press, 2000, p. 6.

75 Martin Riexinger, ‘Religion: Islam’, in Ruse, op. cit. (66), pp. 499–504, 499–500. For discussions on the compatibility of evolutionary theories and the Quranic verses see Nidhal Guessoum, *Islam’s Quantum Question*, London: I.B. Tauris, 2011, pp. 303–323; and Caner Taslaman, *Evrin Teorisi, Felsefe ve Tanrı*, 6th edn, İstanbul: İstanbul Yayınevi, 2013, pp. 327–376.

76 Fennî, op. cit. (4), p. 112.

77 Fennî, op. cit. (4), pp. 112–113.

Fennî claimed, one might hold that God created Adam and Eve on Earth by employing evolutionary processes, instead of creating them directly as human beings in Heaven.

*Darwinism might constitute a threat to morality*

A common criticism of Darwinism has been motivated by the fear that its redefinition of man's place in the universe may threaten social and moral codes and legitimize wars between nations. Some even blame Darwin for promoting slavery, racism and racial wars with his subtitle to the *Origin*, 'The preservation of favoured races in the struggle for life'.<sup>78</sup>

With regard to the moral implications of Darwinism, İsmail Fennî seemed to embrace a similar position to that of William Jennings Bryan, who portrayed Darwinism as a theory that praised and bolstered 'deathly struggle'.<sup>79</sup> İsmail Fennî argued that human beings were superior to animals, and that if one failed to see the crucial differences that separated the two, one would naturally conclude that human beings would be capable of performing any immoral action.<sup>80</sup> He claimed that materialistic ideologies reducing human beings to mere animals were responsible for bloodshed and misery. Whilst İsmail Fennî did not claim that Darwinian evolutionary theory would necessarily bring about such misery and bloodshed, he concluded that humanity could expect such outcomes if evolutionary theories were interpreted in an atheistic manner. This potential threat posed by materialistic theories was, he argued, the main reason behind the 1925 Tennessee law banning the teaching of evolution.<sup>81</sup>

*Despite its major flaws, teaching Darwinism should not be banned, since scientific development requires freedom.*

İsmail Fennî understood the ban on teaching of Darwinism in Tennessee and several other states to have been motivated by concerns about its moral consequences. Yet he did not support the ban. He maintained that Darwinism, like any other scientific theory, could be taught at schools as long as the arguments both for and against it were underlined and analysed objectively.<sup>82</sup> To bolster his case, he reiterated the impact of natural sciences on the populace. The improvement of life by the natural sciences was, he claimed, related to the way that science had been freely conducted. Therefore science had to be free.<sup>83</sup> Mistakes, incorrect theories, views and speculations

78 Adrian J. Desmond and James R. Moore, *Darwin's Sacred Cause: Race, Slavery and the Quest for Human Origins*, London: Allen Lane, 2009, p. xix.

79 Stephen Jay Gould, *Bully for Brontosaurus*, London: Vintage, 2001, p. 421.

80 Fennî, op. cit. (4), pp. 113–114.

81 Fennî, op. cit. (4), p. 114.

82 Fennî, op. cit. (4), pp. 110–111

83 It might be that İsmail Fennî's views on freedom were, at least partly, shaped by John Stuart Mill. As mentioned before, Fennî translated Mill's *On Liberty* into Turkish as part of his project of enlightening Muslims. Mill, in this monumental book, warned against the threat of 'the tyranny of majority', and reminded the reader that 'the majority of the eminent men of every past generation held many opinions now known to be erroneous'. See John Stuart Mill, *On Liberty*, Boston: Ticknor and Fields, 1863, pp. 13, 41.

were all part of the scientific enterprise. Without them science would be incomplete. Appealing to this general principle, İsmail Fennî concluded that no matter how weak the scientific proofs of Darwinism might be, the theory should not be banned by any extra-scientific authority since, like any other theory, it could help us in reaching the truth. 'It would be a contradiction', İsmail Fennî noted, 'to search for the truth whilst at the same time being scared of it'.<sup>84</sup>

It is tempting to speculate about other reasons behind İsmail Fennî's tolerant attitude towards teaching Darwinism. After all, he argued that Darwin's theory lacked any scientific warrant and was responsible for the bloodshed in Europe. What factors, other than the intellectual freedom required by science, made him think that Darwinism should not be removed from the curriculum? Certainly Darwin's references to the creator in the *Origin* had a role in shaping İsmail Fennî's position towards the theory. Moreover, the traditional Islamic scholars who proposed a kind of evolutionary theory, as well as then-contemporary defenders of Darwinism within Islamic circles, may have influenced his tolerant attitude. Although he did not mention any of those classical or modern Islamic scholars in the context of evolution or Darwinism, he made several references in *The Collapse of the Materialist Creed* to Muhammad Abduh (1849–1905), the grand mufti of Egypt who in the late nineteenth century had asserted that Islam could be reconciled with Darwinism.<sup>85</sup> İsmail Fennî's abiding belief in natural laws might constitute yet another contributing factor to his position. He appealed to Quranic verses which claimed that God created the universe by means of natural laws. From this perspective, evolutionary mechanisms could be seen as part of the creation through natural laws.<sup>86</sup>

## Conclusion

Büchner's arguments in *Kraft und Stoff* had tremendous impact upon the secular reformers of late Ottoman and early Republican Turkey. The Turkish translation of the book sold approximately 2,250 copies in two years, while Büchner's prominent Turkish disciple Abdullah Cevdet's monthly journal *İctihad*'s circulation reached between three

Although Mill did not refer to such, his concerns could also apply to scientific theories. Modern views concerning the scientific status of any theory, one might argue, could be altered by future evidence, and thus scientific theories should not be banned by the current power holders, even if they represent the majority of society. Indeed, Jennings Bryan's first speech in the Scopes Trial exemplifies the relevance of the concept of the 'tyranny of majority' to the debates about evolution, since he frequently referred to majority's disapproval of Darwinism to fortify his case. See Jeffrey P. Moran, *The Scopes Trial: A Brief History with Documents*, Boston: Bedford/St Martin's, 2002, p. 119.

84 Fennî, op. cit. (4), pp. 110–111.

85 Elshakry, op. cit. (6), p. 175.

86 Throughout his works, İsmail Fennî tried to refrain from commenting on political discussions in Turkey. Still it must be noted that İsmail Fennî published most of his works in the early decades of the republic during the period of a one-party dictatorship. Such an atmosphere would not have provided favourable conditions for a writer who defended the Islamic creed given that Atatürk, and the early cadres of the republic, were heavily influenced by the Young Turk attitudes towards religion. Yet one should not jump to the hasty conclusion that İsmail Fennî's views on teaching Darwinism in schools must have been shaped by political concerns, especially once his steadfast anti-materialistic ambitions are taken into consideration.



thousand and four thousand copies.<sup>87</sup> It was through Büchner's book that Darwin's ideas were introduced to Turkish readers and, as a result, the way Büchner presented Darwin shaped early reactions. Religious circles slammed Darwin's theory as anti-religious and immoral. Despite the fact that they had barely any idea about its details, the secular elites interpreted belief in the theory of evolution as a requirement of modernity and embraced it.<sup>88</sup> The arguments of İsmail Fennî analysed in this article muddy any clear distinction between these anti-religious Darwinist and anti-Darwinist religious camps. As a critic of Darwinism, İsmail Fennî evaluated the theory on scientific and philosophical – rather than merely metaphysical – grounds. His eagerness to show the reconcilability of Darwinism and Islam, and even more importantly his opposition to the legal prohibition on the teaching of evolutionary theory, make his position exceptional at the time. It even remains unusual in the present day, when regular attacks are launched on Darwinism from religious circles in Turkey.<sup>89</sup>

Assessing the exact impact of İsmail Fennî's views on the formation of the Turkish religious mindset is not an easy task, not least due to the lack of proper citations in popular Turkish works of the late Ottoman and early republican era.<sup>90</sup> That being said, his works were discovered and republished in the 1970s, most probably as a reaction to the increasing 'Marxist threat' in the country, which rekindled an interest in anti-materialist literature amongst religious circles.<sup>91</sup> In the mid-1990s – approximately seven decades after its first publication – *The Collapse of the Materialist Creed* was 'translated' into modern Turkish, and published along with Fennî's other works. The book was not published for any historical purposes. The aim, the publisher claimed, was to inform and support religious generations in their campaign against materialism.<sup>92</sup> In a similar vein, popular Muslim cleric Fethullah Gülen (1941–), whose thinking is influenced by İsmail Fennî's work, claimed that he would not approve any attempt to revise Quranic interpretations even if Darwinism proved to be true, since Darwinism was in no way compatible with Quranic verses.<sup>93</sup> Those responses of İsmail Fennî's followers are at odds with his emphasis on the necessity of revising religious interpretations in the light of new scientific evidence. İsmail Fennî's arguments against Darwinism seem to have prevailed whilst his

87 Hanioglu, op. cit. (8), p. 81.

88 See Cevdet, op. cit. (1), pp. 1271–1273; and Doğan, op. cit. (41), p. 336.

89 As Numbers notes, Turkish creationism, which has a substantial impact on the Muslim anti-Darwinian camp, is based on American evangelical creationist literature – excepting, of course, the biblical references. See Ronald L. Numbers, *The Creationists*, Berkeley: University of California Press, 1993, p. 335. Also see Guessoum, op. cit. (75), pp. 314–323.

90 Hanioglu, op. cit. (8), p. 28, argues that 'blatant plagiarism' defines the dominant writing practice of the age.

91 Riexinger, op. cit. (75), p. 501. Also see Deniz Peker, Gulsum Gul Comert and Aykut Kence, 'Three decades of anti-evolution campaign and its results: Turkish undergraduates' acceptance and understanding of the biological evolution theory', *Science and Education* (2010) 6–8, pp. 739–755, 741.

92 See Sebil Yayinevi, 'Takdim' (Foreword), in İsmail Fennî Ertugrul, *Materyalizmin İflası ve İslam*, İstanbul: Sebil Yayinevi, 1996, p. 7.

93 For İsmail Fennî's impact on Gülen's thought see Hamdullah Öztürk, 'Fethullah Gülen'in Kaynakları', *Zaman Gazetesi*, 13 December 2004, at [www.zaman.com.tr/yorum\\_fethullah-gulen-in-kaynaklari\\_120833.html](http://www.zaman.com.tr/yorum_fethullah-gulen-in-kaynaklari_120833.html), accessed 13 May 2014. Also see M. Fethullah Gülen, *Yaratılış Gerçeği ve Evrim*, İstanbul: Nil Yayınları, 2003, p. 15, for Gülen's reflections on Islam and Darwinism.

recommendations concerning the relationship between science and religion have sunk into oblivion.<sup>94</sup>

İsmail Fennî's reflections on Darwinism have had broader political implications for Islamic societies. Early disciples of Darwinism in Arabic-speaking societies, as well as in Turkey, were defenders of scientific materialism. At the same time, they were defenders of freedom of speech and related liberal values. Abdullah Cevdet, for instance, fought a prolonged war against the Ottoman Sultan and was exiled several times,<sup>95</sup> whilst early Arab defenders of Darwin – namely Sarruf and Nimr – moved to Egypt because they thought that there they would be free from Ottoman censorship.<sup>96</sup> On the other hand, religious defenders of the Sultan (and the caliphate), such as Abdullah Cevdet depicted in the Kastamonu incident with which we began, did not seem to be tolerant of the teaching of Darwinism within schools. Thus one might argue that İsmail Fennî's defence of the teaching of Darwinism complicates the picture further, given that he was a religious intellectual and by no means a political reformist. As has been argued, he thought that Darwinism, like other scientific theories, could only be judged in the light of scientific evidence. Any other authority would harm the scientific process, since even false theories help scientists get closer to the truth. He did not see any reason against teaching Darwinism so long as the arguments for and against the theory were presented – a suggestion which called for freedom rather than state censure. In this respect, he showed that one did not need to serve an anti-religious political agenda in order to defend scientific freedom against extra-scientific authorities.

94 Recent studies reveal resistance to evolutionary theories in Turkey. Surveys conducted in thirty-two European countries, Japan and the United States on the public acceptance of evolution have shown that Turks are the least likely to accept a biological evolutionary theory. See Jon D. Miller, Eugenie C. Scott and Shinji Okamoto, 'Public acceptance of evolution', *Science* (2006) 5788, pp. 765–766.

95 Ülken, op. cit. (21), p. 241.

96 Elshakry, op. cit. (6), p. 72.