2

Islam and Development

Present-Day Socio-economic Situation

In the early nineteenth century, the Egyptian chronicler Abd al Rahman al Jabarti provided valuable insights in his description of the French *Institut d'Egypte:*

> …where the French installed their scholars and housed an excellent library with a wide variety of books, including those written in Arabic and other Islamic languages. [Al Jabarti] seems to have been deeply impressed with the abundance of scientists attached to that establishment, fascinated by their strange equipment and their occasional experiments… Furthermore, he observed with approbation their serious method of work, their courtesy to curious visitors of the native population, and their interest in "educating" intelligent Egyptians who frequented the *Institut* (Abu-Lughod 2011 [1963], p. 37).

Later in the nineteenth century, the Turkish intellectual Ziya Pasha provided this poignant observation:

© The Author(s) 2017
R. Hasan, *Religion and Development in the Global South*,
DOI 10.1007/978-3-319-57063-1_2

> I passed through the realms of the infidels, I saw cities and mansions;
>
> I wandered in the realm of Islam, I saw nothing but ruins (cited in Kuran 1997, p. 45).

The question naturally arises: why, by the nineteenth century, was there such a disparity between the European and Islamic worlds? And, coming up to the present day, why has no Muslim-majority country reached the status of a developed economy? There is a surprising absence of systematic critiques of Islamic doctrines and rituals and their possible deleterious effect on economic and social advancement in the manner, for example, of myriad coruscating critiques and criticisms of Christianity going back centuries that have emanated from Christian Europe. One can hypothesise as to why this is so but any persuasive account must place the nature of Islam and its cultural attributes, including intolerance of apostasy, blasphemy and dissent over doctrinal issues as core factors. We start, however, by providing a summary of the current situation in the Muslim world.

Table 2.1 provides a list of Muslim-majority countries in the world, together with their population, Human Development Index (HDI) rankings and Labour Force Participation Rates.

Pew estimates that "as of 2010 there are 49 countries in which Muslims comprise more than 50% of the population. A total of 1.2 billion Muslims live in these nations, representing 74% of the global Muslim population of 1.6 billion…All Muslim-majority countries are in less developed regions of the world with the exception of Albania and Kosovo, which are in Europe" (Pew 2011, p. 155).

What is immediately of note is that in all but six (Brunei, Burkina Faso, Chad, Kazakhstan, Lebanon and Malaysia) countries, the Muslim population of these 43 countries is over 70%. Hence, nearly three quarters of the world's Muslims live in countries where they are in a strong majority. We can, therefore, assume—and reality tends to confirm this—that in these countries, the influence of non-Muslim ideologies is severely curtailed so that Islamic thinking and doctrines dominate all aspects of society and do not encounter vigorous challenge. This is not to deny the existence of such influence: indeed, we acknowledge that

Table 2.1 Data for Muslim-majority countries (2010 estimates)

	Population	% of Muslims	HDI Ranking	Labour force participation rate (%)	
				Males	Females
Afghanistan	29,047,000	99.80	169	80	16
Albania	2,601,000	82.10	95	65	45
Algeria	34,780,000	98.20	93	72	15
Azerbaijan	8,795,000	98.40	76	69	63
Bahrain	655,000	81.20	44	87	39
Bangladesh	148,607,000	90.40	142	84	57
Brunei	211,000	51.90	30	76	53
Burkina Faso	9,600,000	58.90	181	90	77
Chad	6,404,000	55.70	184	79	64
Comoros	679,000	98.30	159	80	35
Djibouti	853,000	97.00	170	67	36
Egypt	80,024,000	94.70	110	75	24
Gambia	1,669,000	95.30	172	83	72
Guinea	8,693,000	84.20	179	78	66
Indonesia	204,847,000	88.10	108	84	51
Iran	74,819,000	99.70	75	73	16
Iraq	31,108,000	98.90	120	70	15
Jordan	6,397,000	98.80	77	66	15
Kazakhstan	8,887,000	56.40	70	78	68
Kosovo	2,104,000	91.70	n/a	n/a	n/a
Kuwait	2,636,000	86.40	46	83	43
Kyrgyzstan	4,927,000	88.80	125	79	56
Lebanon	2,542,000	59.70	65	71	23
Libya	6,325,000	96.60	55	76	30
Malaysia	17,139,000	61.40	62	75	44
Maldives	309,000	98.40	103	77	56
Mali	12,316,000	92.40	176	81	51
Mauritania	3,338,000	99.20	161	79	29
Mayotte	197,000	98.80	n/a	n/a	n/a
Morocco	32,381,000	99.90	129	76	26
Niger	15,627,000	98.30	187	90	40
Oman	2,547,000	87.70	56	82	29
Pakistan	178,097,000	96.40	146	83	24
Palestinian territories	4,298,000	97.50	107	66	15
Qatar	1,168,000	77.50	31	96	51
Saudi Arabia	25,493,000	97.10	34	76	18
Senegal	12,333,000	95.90	163	88	66
Sierra Leone	4,171,000	71.50	183	69	66
Somalia	9,231,000	98.60	n/a	76	37
Sudan	30,855,000	71.40	166	76	31

(continued)

Table 2.1 (continued)

	Population	% of Muslims	HDI Ranking	Labour force participation rate (%)	
				Males	Females
Syria	20,895,000	92.80	118	73	13
Tajikistan	7,006,000	99.00	133	77	59
Tunisia	10,349,000	99.80	90	71	25
Turkey	74,660,000	98.60	69	71	29
Turkmenistan	4,830,000	93.30	103	77	47
UAE	3,577,000	76.00	40	91	47
Uzbekistan	26,833,000	96.50	116	75	48
Western Sahara	528,000	99.60	n/a	n/a	n/a
Yemen	24,023,000	99.00	154	72	25
Total	1,275,139,000				

Note Labour force participation refers to age 15 and older
Source Population figures from Pew Research Religion and Public Life Project (2011); HDI rankings from the UNDP's (2014b, pp. 160–163); Labour force data from World Bank (2014).

in certain respects it can be significant—as is the case, for example, with Indonesia (which has the largest Muslim population) in regard to Buddhism and Hinduism; or with the Central Asian Republics, which have retained a considerable element of irreligiosity stemming from their communist past. Nonetheless, our fundamental premise is that the link between Islam and the level of development of Muslim-majority countries is palpable and, moreover, is likely to be profound.

Turning to the Human Development Index—a broader index of development than the simple income per capita—that is produced by the United Nations Development Programme (UNDP)[1] for its annual *Human Development Report,* only six Muslim-majority countries came within the Very High Human Development category in 2014 (out of a total of 49 countries in this band): Brunei, Qatar, Saudi Arabia, UAE, Bahrain and Kuwait. Except for Saudi Arabia, they have tiny populations, more akin to towns and cities; the six had a combined population of just 36 million in 2010. Their economies are based on oil exports

[1]The Human Development Index is a composite of Gross National Income per capita, life expectancy at birth, and mean and expected years of schooling.

with high reliance on immigrant labour and all are authoritarian states dominated by ruling families. What boosts their HDI ranking is their extraordinarily high Gross National Income (GNI) per capita: Brunei $71,000, Qatar $119,000 (the highest in the world), Saudi Arabia $52,000, UAE $58,000, Bahrain $32,000 and Kuwait $85,000.[2] Hence, given their peculiarity, they cannot be used as exemplars for other Muslim-majority countries.

Indeed, a weakness of the HDI ranking is that a country such as Saudi Arabia can be categorised as having achieved "very high human development." Take, for example, the summary remarks for Saudi Arabia provided in Amnesty International's report for 2013:

> The authorities severely restricted freedoms of expression, association and assembly and clamped down on dissent. Government critics and political activists were detained without trial or sentenced after grossly unfair trials. Women were discriminated against in law and practice and inadequately protected against domestic and other violence. Migrant workers were exploited and abused. Sentences of flogging were imposed and carried out. Hundreds of people were on death row at the end of the year; at least 79 people were executed. (Amnesty International 2013)

Amnesty's summary remarks for the United Arab Emirates (UAE) Report for 2013 are not much better:

> More than 90 government critics, including human rights defenders, were in detention at the end of the year without charge or trial amid increasing restrictions on the rights to freedom of expression, association and assembly. At least two were prisoners of conscience. Seven of those detained were arbitrarily stripped of their nationality and one was then deported. At least six people faced charges for content they posted on social media. Women faced discrimination in law and practice. Foreign migrant workers continued to be exploited and abused. At least 21 death sentences were imposed; at least one person was executed.

[2]Figures are for 2011 in Purchasing Power parity (PPP) US dollars.

Similarly, GCC Human Rights, a campaigning group highlighting the plight of migrant workers in the Gulf Cooperation Council countries, provides evidence of the most appalling abuse of human rights of non-white migrants, including systematic brutalisation and torture (see GCC website 2014).

Given that the HDI is a composite figure derived from life expectancy at birth, mean and expected years of schooling, and gross national income per capita, a country such as Saudi Arabia can register a relatively high score. But there is clearly a problem with this method of categorisation when such an abusive state is accorded a place in the highest ranking of human development. Part of the problem is that the HDI rankings are unduly generous:

1–49 are designated as Very High Human Development;
50–102 are deemed High Human Development;
103–144 are deemed Medium Human Development; and
145–187 are deemed Low Human Development.

A more sensible and realistic set of categories would be High for about the first 30 countries, which would remove the Gulf states from this top category, rather than 49 countries at present (it is also odd that the Very High band includes several East European and Latin American countries), followed by Medium, Low and a new category of Very Low, with most of the world's countries falling within the bottom two categories.

Be that as it may, in the HDI's High category are 12 more Muslim-majority countries (out of 52 countries in this category); 11 are in the Medium category (out of 41 countries); and 15 are in the Low category (out of 42 countries). Therefore, most Muslim-majority countries fall within the bottom two categories. Despite the somewhat flattering nature of the UNDP's HDI ranking system, it is beyond dispute that it is being poor and less developed that characterises the Muslim world. Moreover, none is a developed economy. Indeed, excluding Brunei and the Gulf States, the highest-ranking Muslim-majority country is Malaysia at 62, but its relatively high ranking has much to do with its significant and dynamic Chinese population (see, for example, Barlow and Loh Kok Wak [eds.], 2003). The stark contrast between the

indigenous Muslim Malays and Chinese Malaysians was succinctly provided by Brien Parkinson in a 1967 paper: "so many of [the Chinese] are *trying* to improve their economic lot, *trying* to master their economic environment, and are *willing* to take risks and to innovate, that enables many of them to succeed" (Parkinson 1967, p. 45).

Curiously, while Muslim-majority countries are less developed and congregate in the lower end of the HDI rankings, they have experienced a significant fall in fertility rates since the 1970s. Eberstadt and Shah (2012) show that all 48 Muslim-majority countries and territories witnessed fertility decline during the 1975–1980 and 2005–2010 periods. Moreover, 22 Muslim-majority countries and territories were estimated to have undergone fertility declines of 50% or more during these three decades. Eberstadt and Shah point out the close association between fertility decline and modernisation—that is, rising levels of income per capita, educational attainment, urbanisation and public health—but it is not evident whether the level of modernity in Muslim-majority countries has been sufficient to bring down fertility levels by such a high percentage. Instead, they argue the "critical determinant of actual fertility levels in Muslim and non-Muslim societies alike at the end of the day would appear to be attitudinal and volitional—what Lant Pritchett termed 'desired fertility'" (loc. cit.).

Again, why desired fertility in Muslim-majority countries should have fallen so markedly is not clear. In the developed world, the increasing emancipation of women, including their entering the world of paid work, has been central to falling desired fertility, including in Catholic countries such as Italy and Spain. By contrast, as shown in Table 2.1, the percentage of female labour force participation is very low even by comparison with non-Muslim developing countries and, as stressed earlier, this represents a major obstacle to development. Research needs to be undertaken as to why so many Muslim women, whose role largely remains that of homemakers, and their husbands throughout much of the Muslim world are choosing to reduce family size.

When it comes to freedoms granted to citizens, the situation in Muslim countries is truly abysmal. Thus, in the Economist Intelligence Unit's *Democracy 2016 Index*, no Muslim-majority country is ranked as a "full democracy," and of the 51 countries that are ranked as

"authoritarian," 26 are Muslim-majority (EIU 2017, Table 2, pp. 7–11).[3] In Freedom House's *Freedom in the World 2014* ratings of 195 countries, *only one* Muslim-majority country is rated as "free" (Senegal) out of 88 such countries, whilst 13 are rated "partly free." The remainder are rated "not free" (comprising the majority of the 48 countries for the lowest rating). The ratings are a combination of political rights and civil liberties from "most free" (a rating of 1) to "least free" (a rating of 7). Of the ten countries given the lowest possible rating of seven for both political rights and civil liberties, six are Muslim-majority (Somalia, Sudan, Syria, Turkmenistan, Saudi Arabia and Uzbekistan). The other four countries are Central African Republic, Eritrea, Equatorial Guinea and North Korea (Freedom House 2014). These findings are not unduly surprising given there has been no sustained period of free thinking, dissent from core Islamic doctrines or experimentation in all its multitudinous varieties in the Islamic world.

The *Arab Knowledge Report 2014* (AKR) produced by the United Nations Development Programme provides a summary of all knowledge-related activities in the Arab world—given Islam's dominance of the region, it can be used as a reasonable proxy for the Islamic world as a whole. Scientific research in the Arab world is exceedingly weak, with a lack of culture that supports research and creativity, weakness of research institutions' governance, absence of comprehensive policies for building integrated systems of R&D and weakness of funding and of human resources (UNDP 2014a, p. 103).

Spending on R&D is at the bottom of the global ladder, ranging from 0.03% to 0.73% of GDP—far below the global average of 2.13%. The combined Arab share of world expenditure on scientific research is just 0.5%. The average number of full-time researchers per million citizens is 373, a third of the global average of 1081 (the AKR utilises figures from UN Educational, Scientific and Cultural Organization [UNESCO] for 2010). The average number of publications per million citizens between 2000 and 2008 was a meagre 41, far below the global

[3]The variables used for the calculation of the Democracy Index are electoral process and pluralism; functioning of government; political participation; political culture; and civil liberties.

average of 147 (ibid., pp. 106–108). Such a weak R&D performance is matched by equally weak innovative activity. For example, between 1963 and 2013, Arab countries in total registered 1821 patents; by contrast, Finland, a small, northern European economy, had 19,513 patents registered in the same period (ibid., Table 4.6, p. 112).

What explains the Arab world's poor scientific performance? The report makes various observations but avoids directly dwelling on the role played by Islam; a curious lacuna given the great sweep of Islam in the region. That said, it sensibly stipulates that a culture that is supportive of progress is characterised by the posing of "cognitive models," that is, the perception and understanding of the world is based on experience and rational, logical and philosophical consistency. Such cognitive models are the catalyst for creativity, innovation and the production and employment of knowledge to achieve social and economic prosperity. Furthermore, they accommodate the scientific method, experimentation, and rational philosophy, thereby stimulating R&D, theoretical thinking and technical practices. "As long as society's culture is not rooted in cognitive models that promote the scientific method, scientific thinking and rationality, the scientific culture will be marginalised. Yet society advances with knowledge, science, and innovation—and if there is a gap between the scientific community and the wider society, progress breaks down and, in turn, stifles scientific and rational thinking" (ibid., p. 52).

In regard to the Arab world's profound failures in these endeavours, the report provides a rather weak, inadequate response: "perhaps some of the reasons for the delay in Arab societies lie in the localisation, employment and production of science in the context of an Arab culture that lacks knowledge and cognitive models that reflect 'modernity"' (loc. cit.).

Reasons for Low Development

Thorough and objective analyses to provide an understanding for the sharp divergence between the "realms of the infidels" and the "realm of Islam" have been conspicuous by their absence. Muslim scholars

invariably tend to reject the argument that the backwardness of the Islamic world stems from Islamic beliefs and practices. Ibrahim Ragab (1980), for example, attributes the failure of Muslim countries to a combination of the unique institutional nature of Islam and foreign domination that resulted in stunted institutional development. Such a view ignores the fact that the Islamic world had been stagnant centuries before the colonial powers arrived and begs the question that if Islam's precepts are so special, why were they not able to provide guidance so that progress could be sustained—and sufficiently so to defeat invaders. Such questions are simply not considered, let alone properly answered by Muslim writers. Instead, all manner of apologetics and excuses are provided as soothing balm for the incontrovertible fact of falling behind Europe alongside a longing for a prelapsarian golden age that supposedly existed some thousand or so years ago.

Indeed, Ragab's thesis is little more than shallow propaganda whose net effect is to deflect robust criticisms and critique of the possible overarching influence of an authoritarian belief system. True believers such as Ragab are, *by this very fact*, prevented from conducting an objective and vigorous analysis of the possible encumbrance of Islam on development of societies because to do so would be *haram* (prohibited). Crude apologia of the likes of Ragab are alive and well in the twenty-first century and represent a powerful manifestation of the absence of the Enlightenment in the Islamic world.

The Iranian writer Seyyed Hussein Nasr does not even attempt to provide an explanation for the relative backwardness of the Muslim world; rather, what is important to him is "for development to be closely concerned with religion…[and] that 'non-religious' development will inevitably—and fatally—distract Muslims from what is their 'true'—that is—religious—nature and as a result, seriously undermine their chances of living appropriately" (cited in Haynes 2007, p. 23). Nasr is most hostile to the notion that Islam and science are compatible: "[w]hatever devout Muslim scientists may believe as individuals, they cannot prevent their activity as modern scientists from emptying the Islamic intellectual universe of its content unless this science is shorn away from its secular and humanistic matrix where it has been placed

since the renaissance" (cited in Hoodbhoy 1991, p. 70). Such counsel is a recipe for economic, social, and intellectual backwardness.

However, Abu-Lughod (op. cit., p. 163) argues that when confronted with the might of the European powers, it is wrong to think that nineteenth century Arabs were solely interested in, and impressed by, their technology and military machinery so as to better resist them. While this was necessary, they also showed a keen interest in the basis for their advanced status, that is, politics, education, social organisation and literature. Indeed, Western superiority was accepted in all fields except religion, with the implication that reforms must be made within the Islamic Sharia laws. Moreover, it was never considered that Western advances had occurred without recourse, or in opposition, to Christianity and that Europe had proceeded to increasingly become a secular society. Abu-Lughod makes the striking point that for Arab Muslims "any society *could* be secular was too bizarre to be comprehended" (ibid., p. 164). We may further aver that at no point in the Muslim world—with the exception of Ataturk's Turkey—was there even the sense that adherence to the Sharia might be a significant obstacle to technological, scientific and military advances to enable catching up with the West.

As noted in Chap. 1, the UNDP does not explicitly include culture and religion in its annual *Human Development Reports.* Indeed, even in the *Arab Development Report* (2009) and *Arab Development Challenges Report* (2011) dealing with countries with an overwhelming Muslim population, there is no discussion of the role of Islam. This is a troubling and most unfortunate state of affairs. A rare scholar who has investigated the reasons for the Muslim world's relative economic, political and social backwardness is Timur Kuran. In a seminal 1997 paper, Kuran provides an incisive summary of the different theories that link Islam with economic development. The first is the *economic irrelevancy theory*, which argues that the underdevelopment of the Muslim world is not related to Islam. This is the view of theorists such as Maxime Rodinson (for whom the impact of European imperialism was crucial) and Eric Jones, who argues that what is important are the material circumstances for development rather than the beliefs and values of Muslims, which do not provide an obstacle (ibid., p. 47).

Rodinson's understanding of Islam was rooted in the Marxian materialist conception of history whereby what is of decisive importance in Muslim societies are the economic base and the social forces of production. Accordingly, he was critical of the approach which he termed "theologocentrism" that locates all empirical phenomena of these societies to Islam (Rodinson 2006 [1980], p. 104). But the danger of such reasoning is that it underplays the role of religion on the economic base. Given the long history of stagnation of the Muslim world, such a theoretical framework is found wanting and, moreover, can readily be used as apologetics to explain away the centuries-old problems.

As already noted, European colonisation of the Middle East began many centuries after the demise of the Islamic world. Focusing solely on "material circumstances" being right for development (excluding prolonged, generalised wars or violent revolutions, these remain largely constant) simply evades the possible debilitating aspects of the religion. Jones argues that what is key are the reasons why Europe overcame obstacles to development. Such an approach discounts Weber's thesis and by extension an important contributory factor for East Asia's rise in the latter part of the twentieth century as being rooted in Confucian thinking and practice—as we shall explore in Chap. 5. The economic irrelevance theory appears to be a pretext not to investigate the possible link between the poor development of the Muslim world and Islamic theology.

The second is the *economic advantage theory*, which holds that Islam is, rather than a hindrance, *conducive* to economic development and verses from the Koran (1988) are cited in support. For example:

> Then, when the service of prayer is finished, scatter in the land, and seek God's bounty, and remember God frequently; haply you will prosper (62:10)
>
> …but seek, amidst that which God has given thee, the Last Abode, and forget not thy portion of the present world; and do good, as God has been good to thee (28: 77)

Assuming that this is an accurate translation, there is nothing in these verses to suggest, let alone provide clear injunctions, that productive work is being encouraged. Indeed, "scatter in the land" is consistent

with *conquest* of other people's land, the foundation of the Islamic empire, whilst the meaning of "forget not thy portion of the present world; and do good, as God has been good to thee" is difficult to gauge and, moreover, hardly constitutes the call for a better understanding and improvement of the material world. On the contrary, there are verses in the Koran which militate against striving to understand the natural world, that is, to discover the universal laws that underpin its workings. For example:

> He shall not be questioned as to what He does (21: 23)
>
> The Jews have said, "God's hand is fettered." Fettered are their hands and they are cursed for what they have said (5: 69)

The implication of these verses is that Allah cannot be constrained (fettered) by fixed laws that limit His capacities. *Ipso facto*, laws cannot be immutable as they can be changed according to Allah's wishes. After all, the meaning of Islam is submission to Allah. It is this that can have the result of a certain hesitancy by Muslims—if not a complete shunning—in investigating and discovering the laws of the natural world and, by so doing, improve the condition of humans. In consequence, the scientific endeavour—with its basis in doubt, questioning, experimentation, reasoning and innovation—is necessarily curtailed.

Kuran makes the important point that "there is no inherent conflict between the economic successes of early Islamic civilisation and the proposition that Islam discourages economic development" given that the early successes could have been due to mixing cultures brought about by conquests, conversions and political reorganisation (op. cit., p. 48). This is, moreover, borne out by the fact that as conquests diminished and halted so too did economic, social and scientific advancement. Raphael Patai draws the following conclusion in regard to the Arab Muslim world:

> The fact remains that under traditional Islam, efforts at human improvement have rarely transcended ineffectuality. In general the Arab mind, dominated by Islam, has been bent more on preserving than innovating, on maintaining than improving, on continuing than initiating. In this

> atmosphere, whatever spirit of research and inquiry existed in the great age of medieval Arab culture became gradually stifled; by the fifteenth century, Arab intellectual curiosity was fast asleep (Patai 1976, pp. 154–155).

Indeed, this dating might be on the generous side given that Pervez Hoodbhoy (2007, p. 49) argues that "no major invention or discovery has emerged from the Muslim world for over 700 years". Indeed, the attitude to inquiry in the modern Muslim world is antithetical to the pursuit of knowledge as Hoodhoy proceeds to argue in regard to universities:

> Most universities in Islamic countries have a starkly inferior quality of teaching and learning, a tenuous connection to job skills, and research that is low in both quality and quantity. Poor teaching owes more to inappropriate attitudes than to material resources. Generally, obedience and rote learning are stressed, and the authority of the teacher is rarely challenged. Debate, analysis, and class discussions are infrequent (ibid., p. 52).

This conclusion is supported by research conducted by the Task Force on Science at the Universities of the Muslim World, which finds that the volume of science publishing from Muslim countries has grown in the period 2006–2015, but the overall state of research there remains poor. Though the number of published papers divided by each country's GDP per capita has also been growing, especially in Egypt, Iran, Pakistan and Turkey, scientists do not cite those papers as often as those published in other nations. "Research spending, while having slightly picked up in recent years, is still dismal." Muslim countries still have a small number of researchers per capita. For example, UN Educational, Scientific and Cultural Organization (UNESCO) data shows that Muslim countries have 600 researchers per million people on average, compared with 1000 in Brazil, 4000 in Spain and 9000 in Israel (SciDevNet 2015).

The third thesis is the *economic disadvantage thesis,* which posits that Islam is a hindrance to economic development, and was a conclusion that was widely held by influential Europeans in the colonial era. For example, Ernest Renan argued that early Islam and its propagators were hostile to science and philosophy: "Liberals who defend Islam do not

know it. Islam is an indistinguishable union of spiritual and temporal, it is the reign of dogma, it is the heaviest chain that humankind has ever borne" (Renan 1883, p. 8). Lord Cromer opined that "Islam cannot be reformed, that is to say reformed Islam is Islam no longer; it is something else" (cited in Kuran 1997, pp. 50–51). John Stuart Mill was also scathing about both Hinduism and Islam, and thought them inferior to Christianity. In "The Subjection of Women," he provides the following forthright view:

> To pretend that Christianity was intended to stereotype existing forms of government and society, and protect them against change, is to reduce it to the level of Islamism or Brahminism. It is precisely because Christianity has not done this, that it has been the religion of the progressive portion of mankind, and Islamism, Brahminism, etc., have been those of the stationary portions; or rather of the declining portions. There have been abundance of people, in all ages of Christianity, who tried to make it something of the same kind; to convert us into a sort of Christian Mussulmans, with the Bible for a Koran, prohibiting all improvement: and great has been their power, and many have had to sacrifice their lives in resisting them. (JS Mill 2008 [1869], p. 521)

Precisely the same sentiments were shared by Winston Churchill 30 years later, as conveyed in a devastating passage in *The River War*:

> How dreadful are the curses which Mohammedanism lays on its votaries! Besides the fanatical frenzy, which is as dangerous in a man as hydrophobia in a dog, there is this fearful fatalistic apathy. The effects are apparent in many countries. Improvident habits, slovenly systems of agriculture, sluggish methods of commerce, and insecurity of property exist wherever the followers of the Prophet rule or live. A degraded sensualism deprives this life of its grace and refinement; the next of its dignity and sanctity. The fact that in Mohammedan law every woman must belong to some man as his absolute property—either as a child, a wife, or a concubine—must delay the final extinction of slavery until the faith of Islam has ceased to be a great power among men.
>
> Individual Muslims may show splendid qualities…but the influence of the religion paralyses the social development of those who follow it. No

> stronger retrograde force exists in the world. Far from being moribund, Mohammedanism is a militant and proselytizing faith. It has already spread throughout Central Africa, raising fearless warriors at every step; and were it not that Christianity is sheltered in the strong arms of science, the science against which it had vainly struggled, the civilisation of modern Europe might fall, as fell the civilisation of ancient Rome. (Churchill 1899, pp. 248–250)

Kuran argues against the notion of the fatalism of Islam despite recognising that the Koran is deemed to be unquestionable and timeless by Muslims, and downplays the significance of Sura 6:115:

> The word of your Lord is complete, in truth and justice
>
> There is none who can change His words

In other words, Islamic doctrines have been adjusted, reconstructed and reinterpreted, meaning that such change to the religion can be brought about to make it amenable to the modernisation of society. History—and empirical evidence—has simply not borne this out; where it has occurred has been at the margins. It is, of course, true that, in keeping with other religions, some changes to the doctrines have been made, there are different interpretations of the core holy texts—and these form the basis of the different sects. But the question remains as to the *extent* of change to the core tenets that is permissible given that, at a certain point, change invalidates the tenet in question. Indeed, what is remarkable is that there is considerable agreement over much of the meaning of the Koran throughout the Muslim world.

Kuran criticises WA Lewis's assertion that some religious precepts are hostile to economic development but "explains neither how such precepts arise nor why they persist". But there is no mystery: the precepts are what comprise any religion and if the values of any religion in a society are strong, their influence on worldly affairs will accordingly also be profound. Moreover, such precepts persist because of strong indoctrination—a core aspect of most religions—and concomitant conditioning into the religious *habitus*. Kuran acknowledges that the literal meaning of Islam is submission and that the Koran has verses that can reasonably

be interpreted as counselling fatalism (e.g., 33: 35: "Believing men and women have no choice in a matter after God and His apostle have decided it") and, moreover, belief in an interventionist deity implies a reluctance to question the status quo (op. cit., p. 50).

Having pointed to important elements in Islam that provide an explanation regarding the underdevelopment of Muslim societies, Kuran unnecessarily retreats by arguing that no major religion is free of fatalistic elements. This is certainly true but there are significant variations; we shall discuss Hinduism and Christianity in later chapters. The point, however, is that in a rigidly religious society where dissent is punishable for the "crimes" of blasphemy and apostasy, fatalism takes a vice-like grip on the minds of adherents to virtually preclude any challenge to the array of tenets and rituals. This has been the indubitable reality of the Islamic world—one which militates against a mindset that encourages a questioning, doubting, sceptical, rational, reasoned, evidence-based approach that are a *sine qua non* for economic and social advancement.

Kuran's is an odd approach: despite acknowledging the legitimacy of theories which argue that Islam is and has been an impediment to progress, he views them as being "unsophisticated"—a somewhat derisory description of the core argument that the sustained and profound backwardness of the Muslim world vis-à-vis Europe is incontrovertible and that Islam, the bedrock on which these countries and societies have long stood, is central to a satisfactory explanation. But he then proceeds to give the example of a Turkish authority—Niyazi Berkes—who linked every social advance in Turkey to a retreat of Islam, and of Turkish leaders (especially Atatürk) who had substantial exposure to Western philosophies implementing modernisation campaigns (op. cit., p. 52). Furthermore, he pointedly asks the rhetorical question: "Why did the Muslim demand for books grow too slowly to make the printing press an economically unviable technology until the eighteenth century, when Jewish refugees from Spain began printing books for Ottoman Jews as early as 1493? One does not have to appeal to fatalism, scripture, or the religious establishment to sense that the answers to such questions must have a religious dimension" (i.e., are rooted in Islam) (ibid., p. 53).

Drawing on Ibn Khaldun's observation that Muslim states were typically founded by nomadic warriors motivated by the promise of booty and glory, Kuran makes the important point that the emphasis on conquest discouraged the creation of new wealth and that without conquest, states would decay because they lacked an internal engine for change: "So, insofar as the emphasis on conquest discouraged the creation of new wealth, religion [that is, Islam] would have restrained intensive economic growth" (ibid., p. 55). Kuran draws attention to the fact that educational reform was curtailed by it being associated with hostility to Islam and concludes that "[t]he forgoing interpretation amounts to saying that the relative openness of the West's public discourse created an engine of growth that the Islamic world, because of its…constraints, failed to develop" (ibid., p. 67).

Despite the millennium–long period of stagnation, and despite providing reasons to think so, Kuran explicitly rejects the thesis that Islam is inherently inimical to economic development (loc. cit.). The novelty thesis of the absence of a public discourse in the Muslim world is a rather weak explanation for such manifest failure; moreover, public discourse is a function of a society's intellectual and political milieu which, in turn, is closely related to the values and norms that emanate from Islam.

Max Weber argued that in Islam, it was the coexistence of patrimonial domination with a sacred law tradition and *qadi*-justice which produced conditions that were unfavourable for the emergence of a rational capitalist relations system (Turner 1974, p. 109). "As long as religious courts had jurisdiction over land cases, capitalistic exploitation of the land was thus impossible, as, for instance, in Tunisia…The whole situation is typical of the way in which theocratic judicial administration has interfered and must necessarily interfere in the operation of a rational economic system" (Weber 1968 [1922], p. 823). The operative word here is "rational"—any government can, and many have indeed done and continue to do so—interfere irrationally in an economic system but this is inevitable in a theocracy given that its basis is in supernatural dogma which, by definition, is not rational or subject to reason.

In a 2004 paper, Timur Kuran examines the reasons for the economic ascent of religious minorities (notably Christians and Jews) under Muslim rule, locating the core reason as residing in their ability to opt out of Islamic laws:

> Under the Islamic system of governance, non-Muslim subjects were allowed to conduct business outside the jurisdiction of the Islamic court system and, absent Muslim involvement, to seek adjudication in autonomous courts. This choice of law gave Christians and Jews a huge advantage as the West developed the legal infrastructure of the modern economy. Minorities advanced economically simply by adopting Western business methods, forming economic alliances with westerners, and using Western courts to settle disputes. Traditionally denied the same choice of law, Muslims could not take advantage of modern institutions as individuals; they had to wait for collectively generated legal forms, and the delay left them economically handicapped. (Kuran 2004, pp. 476–477)

Ipso facto, Islamic laws and courts had a detrimental effect on the economy. Kuran brings together and elaborates upon his key arguments in his 2011 book *The Long Divergence: How Islamic Law Held Back the Middle East.* The concluding chapter "Did Islam inhibit economic development" summarises the factors that played "prominent roles" in the Middle East's underdevelopment. These are: Koranic rules of inheritance discouraged the formation of large and long-lived partnerships as the number of heirs would be large, so merchants and investors formed small, short-lived partnerships; the permissibility of polygyny meant that merchants with more wives (up to four) had more heirs, hence their estates rarely survived as they were divided into many small shares; ban on *riba* (interest) chokes off credit; the absence of co-operation (trusts)—in pre-modern Middle East, *waqfs* were dominant, that is producing property to provide a service in perpetuity. Because it could not easily remake its internal rules, its rigidity was detrimental to economic change; choice of law was limited to non-Muslims (as noted above); and the prohibition of apostasy limited freedom of expression and criticism—the same applies to blasphemy.

In a 2013 paper, Kuran locates the Middle East's poor performance in all *political indices*: it is highly corrupt by global standards (see below), it suffers from poor ratings in the World Bank's rule of law index, and in the civil liberties of Freedom House. He proceeds to draw the following insightful conclusion:

> [S]everal of the region's traditional economic institutions, all part of Islamic law, hindered its political development by limiting checks and balances, preventing the formation of organized and durable opposition movements and keeping civil society weak. They include Islam's original tax system, which failed to protect property rights; the *waqf,* whose rigidities hampered the development of civil society; and the region's private commercial enterprises, whose small scales and short lives prevented the development of private coalitions capable of bargaining effectively with the state. These institutions contributed to extensive corruption, low trust, nepotism, and high tolerance for law breaking. Such features help to sustain modern Middle Eastern autocracies. They also keep the region's democracies flawed and unstable. (Kuran 2013, p. 396)

It is undeniable that at its peak, Islamic civilisation produced genuine advances in science and the pursuit of knowledge—for example, Niall Ferguson (2011, pp. 51–52) argues that "[t]he West owes a debt to the medieval Muslim world, for both its custodianship of classical wisdom and its generation of new knowledge in cartography, medicine, and philosophy as well as in mathematics and optics". Similarly, in *The Rise of Early Modern Science,* Toby Huff amasses considerable material to conclude that "in mathematics, astronomy, optics, physics, and medicine, Arabic science was the most advanced in the world. In different fields it lost the lead at different points in time. But it can be said that up to until the Copernican revolution of the sixteenth century, its astronomical models were the most advanced in the world" (Huff 2003 [1993]), p. 52).

In *The Golden Age of Islam*, the French scholar Maurice Lombard begins his book by cogently making the case that the period from the middle of the eighth century to the middle of the eleventh century represented the zenith of the Muslim era—its golden age—during these 300 years it provided the driving force behind economic and cultural life and was characterised by prodigious urban activity (Lombard 1975, p. 1, 7). By contrast, "the west was a void—an area in which all commercial and intellectual activity had ceased after the decline and fall of Rome and the subsequent barbarian invasions" (ibid., p. 1). This much is true but Lombard's focus is almost entirely on trade and communications of the expanding Muslim empire to the neglect of a discussion on what the golden age is renowned for, that is, its great thinkers.

In line with the consensus, Lombard argues that epoch of the golden age lasted until the eleventh century, after which the centre of gravity of the ancient world was no longer in the cities of the Muslim world but moved westwards and became established in the mercantile cities of Italy and Flanders, and in the trade fairs of Champagne. Economic power, the force of material expansion and creative activity were to be for centuries the privilege of Western Europe (ibid., pp. 237–238).

However, there are critics who dispute the extent of the advances made under Islam. Thus, the Hungarian priest and physicist Stanley Jaki (1990, pp. 44–45) argues that "the improvements brought by Muslim scientists to the Greek scientific corpus were never substantial…Eager curiosity, however plentiful in Muslim realms, was not enough for a breakthrough toward a viable science…the curiosity in question excelled in copying but not in originality". Rodney Stark concurs and expands upon this view in his 2014 book *How the West Won* in which he argues that "to the extent that Muslim elites acquired a sophisticated culture, they acquired it from their subject peoples" (*dhimmis*), that is, Judeo-Christian/Greek culture of Byzantium, heretical Christian groups such the Copts and Nestorians, Zoroastrian Persia and mathematics from Hindus. He then asserts that "not only did dhimmis originate most 'Arab' science and learning, but they even did most of the translating into Arabic" (ibid., p. 295). Stark's conclusion, though uncompromising, naturally flows from these assumptions:

> What has largely been ignored is that that culture could not keep up with the West because so-called Muslim culture was largely an illusion, resting on a complex mix of dhimmi cultures. As soon as the dhimmis were repressed as heretical, that culture would be lost. Hence, when Muslims stamped out nearly all religious non-conformity in the fourteenth century, Muslim backwardness came to the fore…By the end of the fourteenth century only tiny remnants of Christianity and Judaism remained scattered in the Middle East and North Africa, having been almost completely destroyed by Muslim persecution. And as the dhimmis disappeared, they took the "advanced" Muslim culture with them. What they left behind was a culture so backward that it couldn't even copy Western technology but had to buy it and often even had to hire Westerners to use it. (ibid., p. 298, 302)

What Stark ignores is the argument that many of the major thinkers of the Islamic "golden age" were, in fact, Muslim heretics (or, more accurately, free thinkers) and invariably hostile to religion and, for some, this included Islam.[4] Pevez Hoodbhoy (1991, Chap. 10) cites the five most important as being Al-Kindi (801–873), Al-Razi (865–925), Ibn Sina [Avicenna] (980–1037), Ibn Rushd [Averroes] (1126–1198), and Ibn Khaldun (1332–1406). The Saudi reformist thinker Ibrahim Al-Buleihi goes as far as to assert that the achievements of the likes of Al-Kindi, Al-Razi, et al.:

> …are not of our own making and those exceptional individuals were not the product of Arab culture but rather Greek culture. They are outside our cultural mainstream and we treated them as though they were foreign elements. Therefore we don't deserve to take pride in them since we rejected them and fought their ideas. Conversely when Europe learned from them it benefited from a body of knowledge which was originally its own because they were an extension of Greek culture, which is the source of the whole of Western civilization (cited in Reilly 2015, p. 125).

The purported advances of the golden age seemed not to have impressed Max Weber who deemed Islam to be the very opposite in character to Puritan Protestantism and de facto rooted in feudalism; as such, it did not possess the wherewithal to understand and control the world:

> The role played by wealth accruing from the spoils of war and from political aggrandizement in Islam is diametrically opposed to the role played by wealth in the puritan religion. The Muslim religion depicts with pleasure the luxurious raiment, perfume and meticulous beard-coiffure of the pious. [This] stands in extreme opposition to any puritan economic ethic

[4]Hostility to the ideas of such "heretics" could reach book-burning levels. Driss Habti gives the example of Ibn Rushd: "The political tensions during the rule of the Almohads in his [Ibn Rushd's] lifetime did not seem to affect his productive appetite and relative peace and prosperity. His version of criticism applied Plato's theories to his own time, discussing the areas where the system in Cordoba failed. He considered, at some point, that it was tyrannical from 1145 onwards during the reign of his patron, the sultan. The corollary was his arrest and exile to Marrakesh, *while his books were burned*" [italics added by RH]. The reason why he gained disfavour is probably owing to his pledge to rationalism and frank social criticism (Habti 2011, p. 83).

> and thoroughly corresponds with feudal conceptions of status…Islam displays other characteristics of a distinctly feudal spirit: the obviously unquestioned acceptance of slavery, serfdom, and polygamy; the disesteem for and subjection of woman; the essentially ritualistic character of religious obligations; and finally the great simplicity of religious requirements and even greater simplicity of the modest ethical requirements… It directed the conduct of life into paths whose effect was plainly opposite to the methodical control of life found among the Puritans, and indeed, found in every type of asceticism oriented toward the control of the world. (Weber 1968 [1922], pp. 624, 626)

Huff (op. cit., p. 53) makes the insightful observation that what became known as the natural sciences in Europe were called the foreign sciences by Muslims. By contrast, "Islamic sciences" were those devoted to the study of the Koran, *hadith, fiqh* (legal knowledge), *kalam* (theology), poetry, and the Arabic language. Genuine scientific advances made were often to aid the fulfilment of religious duties. For example, arithmetic became important because of the need to divide inheritances, and timekeepers found it necessary to use geometry and trigonometry in order to calculate the direction to Mecca for prayer.

Why no sustained advances in sciences that led to a scientific revolution occurred in the Arab Muslim world has aroused much curiosity. Many reasons have been provided which Huff summarises as "racial factors, the dominance of religious orthodoxy, political tyranny, matters of general psychology, economic factors, and the failure of Arab philosophers to fully develop and use the experimental method". The twelfth and thirteenth centuries saw the rise of mysticism which, in turn, spawned religious intolerance, especially for the natural sciences and the substitution of the pursuit of the occult sciences in place of the study of the Greek and rational sciences (Huff, ibid., pp. 53–54). Huff reaches the following cogent conclusion:

> To be sure these Arab philosophers did develop Platonist philosophical views that were offensive to the religious elite of Islam, but they did not elaborate the rationalistic or mechanistic worldview that the European Platonists of the twelfth century built on Plato's edifice. Even more in contrast, the dialectical theologians of Islam, the mutakallimun, could

> not embrace the naturalistic image of nature composed of causal forces of nature and, above all, would not tolerate the idea that events described in the Quran could be explained by naturalistic accounts, as Thierry and William of Conches had attempted in the case of the Christian Scriptures in twelfth-century Europe. (Huff, ibid., p. 103)

Thus, Muslims were not seriously interested in understanding and controlling the world by theorising, experimentation and innovation to improve efficiency and technology. Nor have they been much interested in intellectual developments outside the Muslim world; an arresting example of this is that Spain translates more books in a single year than the entire Arab world has in the past *thousand years* (Reilly 2015, p. 6).[5] Fazlur Rahman makes the striking claim that under Islam reasoning and criticism had ended during the eleventh century: "A people that deprives itself of philosophy necessarily exposes itself to starvation in terms of fresh ideas—in fact it commits intellectual suicide" (cited in ibid., p. 2).[6]

Robert Reilly uses Rahman's remark for the title of his book *The Closing of the Muslim Mind: How Intellectual Suicide Created the Modern Islamist Crisis* (2015). In regard to why such a "suicide" took place, why there was a rising intolerance of scientific enquiry, and of the reaching of a dead end of science in Islam, Reilly locates the "closing of the Muslim mind" in the defeat of the Mutazilite sect—which had allowed reason and critical thinking to flourish especially under the reign of the Caliph al-Mamun (813–833)—by the rival Asharite sect in the eleventh century. Mutazilite intellectual forays offended the Asharite (Sunni) orthodoxy for whom there was no need for *ijtihad* (interpretation) of the Koran which had allowed some leeway in the former's thinking; rather what was paramount was application of the law (*taqlid*). Within this strict architecture in Sunni Islam, all human actions were categorised as "duty" (*fard*); "recommended" (*mandub*); "permitted" (*mubah*);

[5]This needs to be tempered by the fact that during and after the colonial era, the educated Arab elites used English or French.

[6]In stark contrast, in *Lost History: The Enduring Legacy of Muslim Scientists, Thinkers, and Artists*—a most sympathetic and rather uncritical work on Islamic civilisation—Michael Hamilton Morgan argues that "the enlightened Muslim leadership of the early empire enables the rise of the various golden ages…the enlightened ideal, strong and often dominant from

"reprehensible" (*makruh*); and "forbidden" (*haram*) (ibid., pp. 44–45). Reilly lays a crucial role in this outcome to the Asharite's leading thinker Imam al-Ghazali and his assault on reason and philosophy (ibid., Chaps. 2–4). This is a persuasive observation but is countered by the rejoinder that the Mutazilite reading of the scriptures had become too far removed from orthodoxy—the appeal to *ijtihad* can only be taken so far—so that there was always the likelihood that it would be challenged and overturned, which is precisely what occurred.

But suppose the Mutazilites had survived the onslaught from the Asharites; would the outcome have been significantly different? Perhaps a more open, tolerant, less dogmatic environment may have been provided which would have been more conducive for the development of the Muslim mind based on reason and critical thinking. But the duration of the period for such relative intellectual freedom, and the extent to which Islamic doctrine would be challenged and repudiated, is a moot point. In the final analysis, everything must go back to—and be ratified by—the Koran and *hadith*. Reformers in Islam have always been confronted with the fact that the Koran does not provide unequivocal guidance and sanction to reason and freedom of thought—and given that the religion means "submission" to the will of Allah, the literalist interpretation can always trump flexible versions. This sets a strict upper limit to the flourishing of reason and thought; including under extended Mutazilite rule.

This is, naturally, a highly contentious issue but not entirely germane for our purposes. What is undeniable is that the supposed "golden age" of Islamic science—from whatever source—was relatively brief and, by the twelfth century, was on the wane. This suggests that either it was Islamic strictures that were suppressing science and quest for knowledge or, at the very least, were unable to stimulate them. Accordingly, the period of advancement was an outlier and attributable to peculiar, exogenous factors such as the decisive role of heretics or of non-Arabs and non-Muslims. If there are endogenous factors within Islam that

---

Footnote 6 (continued)

the seventh to fifteenth century, will always be there even if lost to history or deep in the background" (Morgan 2008, p. 254).

are a hindrance to science and innovation, what precisely are these? Somewhat surprisingly, this crucial hypothesis has not been the subject of rigorous investigation.

Whereas the Catholic Church had (until 1966) a list of prohibited books (*Index Librorum Prohibitorum*), Islam's prohibitions arguably extend even further to include a de facto list of prohibitions on thoughts and actions deemed to be *haram* (forbidden/sinful). Orwellian typology (from his *1984*) is most apposite here: any viewpoint that is critical of Islamic doctrines and practices is deemed a "thought crime" and is prevented by a most complete indoctrination from a very young age. Where thought crime does occur, a firm policy of "crime stop" becomes operational by recourse to severe sanctions to the point of capital punishment as prescribed under Sharia law. Under such strictures, conformity and stagnation are inevitable with the concomitant, in the words of Robert Reilly "closing of the Muslim mind" (Reilly 2015).

Health and Economic Impact of Religious Duties

Islam is a demanding religion requiring a considerable amount of time and effort on the part of believers to fulfil duties of worship. The core duties are known as the Five Pillars of Islam (Gordon 2003, provides a concise summary of the core tenets of Islam). Two of these are not physically burdensome, these being the profession of the faith (*shahada*; the First Pillar) by adhering to the dictum "There is no God but Allah and Mohammed is his messenger" and *zakat* or almsgiving (the Third Pillar). The Fifth Pillar is the requirement (for those able to do so) to undertake the *hajj,* the pilgrimage to the holy city of Mecca at least once in a lifetime. Owing to the expense involved, only a small proportion of the world's Muslims are able to fulfil this duty. The physical demands of the *hajj* are not unduly burdensome for the able-bodied but can put a severe strain on the weak and infirm. However, owing to the large numbers attending and often poor health and safety measures, there has, over the years, been considerable loss of life during *hajj* [for example, in 1990, 1426 pilgrims were killed in a stampede and in

2004, 244 pilgrims were killed at al-Jamarat (The Guardian 2006); and in 2015 more than 2000 pilgrims were crushed to death (BBC News 2015)].

The other two pillars are indeed burdensome. The Second Pillar is the requirement to pray five times a day: at dawn, at midday (on Fridays, in a mosque), in the afternoon, in the evening and at sunset. Each prayer is preceded by ritual cleaning. This means that approximately 1–2 h is devoted to prayers each day and every day—and two of the prayers (midday and afternoon) fall within the normal working day and will have a direct impact on the flow and productivity of work. Taken in totality across countries and regions where there are significant Muslim populations, the undertaking of prayers has a significant, deleterious, effect on aggregate output and efficiency.

The Fourth Pillar is the injunction to fast during daylight hours (whereby no food, drink, smoking, or sexual activity is permitted) during the lunar month of *Ramadan*, that is, 29 or 30 days.[7] This is the most burdensome and necessarily debilitating requirement, whose health and economic impacts are significant (children, the ill, and elderly are, however, exempted). There is mounting evidence to show that fasting in the month of Ramadan has a negative effect on health which, in turn, has an adverse impact on productivity and economic output. In regard to health, using data from the Indonesian Family Life Survey (2000) Van Ewijk et al. (2013, p. 729) find that:

> Adult Muslims who had been in utero during Ramadan were slightly thinner than Muslims who had not been in utero during Ramadan… Those who were conceived during Ramadan also had smaller stature, being on average 0.80 cm shorter than those who were not exposed to Ramadan prenatally. Among non-Muslims, no such associations were found. This study suggests that exposure to Ramadan during pregnancy may have lasting consequences for adult body size of the offspring.

Almond and Mazumder (2011, p. 56) provide similar findings:

[7]This discussion of Ramadan is an elaboration of Hasan (2015).

> Among births to Arab parents in Michigan, we find prenatal exposure to Ramadan results in lower birth weight. Exposure in the first month of gestation also reduces the number of male births. Turning to long-term 'fetal origins' effects, we find Muslims in Uganda and Iraq are 20% more likely to be disabled as adults if early pregnancy overlapped with Ramadan. Estimated effects are larger for mental (or learning) disabilities. Our results suggest that relatively mild prenatal exposures can have persistent effects.

Reyn Van Ewijk (2011, p. 1256) points to an array of long-term health problems resulting from Ramadan fasting:

> Observing the Ramadan fast during pregnancy may cause considerable negative health effects on the offspring, irrespective of the stage of pregnancy in which Ramadan took place. Such effects are not limited to the health outcomes around the moment of birth that were shown in earlier research. Indeed, some effects get stronger, or only show up, when the offspring gets older. Exposure to fasting before birth is associated with a poorer general health. It also increases a person's chances of developing symptoms that are indicative for serious health problems such as coronary heart disease and type 2 diabetes and, among older people who had been exposed during certain stages of gestation, may lead to anemia. People who had been exposed on average have a higher pulse pressure. A lower percentage of males among those born during, and in the months after Ramadan, suggests a higher incidence of miscarriages and perinatal death.

In a survey of fasting during pregnancy of Muslim (Bangladeshi and Pakistani) mothers in England and the academic performance of their children, Almond, Mazumder and van Ewijk found that fasting in the first 3 months of pregnancy significantly reduces the academic test scores of children at age 7. Thus, "despite its brevity, exposure to Ramadan during an exceptionally sensitive developmental period exerts meaningful and persistent effects on human capital accumulation" (Almond et al. 2011, p. 1, 15).

Similar findings are obtained from the Indonesian Family Life Survey by Muhammad Majid: Ramadan exposure in utero has adverse and persistent effects, not just during adulthood but during earlier stages of life as well. The exposed children perform more child labour, score 7.4% lower on cognitive tests and 8.4% lower on maths test scores. As adults, the exposed children work 4.7% fewer hours per week. These effects are unsurprisingly strongest in the more religious families—though some three quarters of pregnant Muslim women are estimated to fast—but are insignificant for non-Muslims (Majid 2015, p. 48).

In a study of Muslim industrial workers in Germany during Ramadan, Schmahl and Metzler (1991, p. 219) summarise their findings thus:

> Heat stress during such abstinence represents a substantial health hazard. In the Federal Republic of Germany where numerous Moslems, particularly of Turkish origin, perform heat work and other heavy labour, we observed moderate to severe health disturbances in such labourers during Ramadan, e.g.: tachycardia, severe headaches, dizziness, nausea, vomiting and circulatory collapse. The severe dehydration of these workers was demonstrated by substantial increases in their hematocrit, serum protein, urea, creatinine, uric acid and electrolyte imbalance. Because of the evidence of the substantial health hazard to Islamic workers in such situations, we have strongly urged employers to refrain from assigning Islamic workers to heat work or heavy daytime work during Ramadan; we have therefore limited systematic studies of health problems during Ramadan to persons performing only moderate work. Even under these conditions signs of dehydration were found in the 32 labourers monitored. Some of these labourers also had to interrupt their observance of Ramadan due to health problems, e.g.: acute gout due to serum uric acid increase, or circulatory insufficiency. In light of the observed potentially harmful pathophysiological effects, the danger of dehydration of Islamic workers due to heat work during Ramadan should be taken very seriously.

In the Muslim world, one word encapsulates the economic reality of Ramadan: "slowdown"—meaning that less work is done and more slowly. This is highlighted in a 2009 article for *Jordan Times* by Mohammad Ghazal:

> According to associate professor of sociology at Balqa Applied University, Hussein Khuzaii, leniency on the part of government and employers causes poor productivity. "Employers tend to be lenient during Ramadan in giving leave to workers and turning a blind eye if they come to work late." With the start of Ramadan, the Cabinet decided to set official working hours during the holy month from 9:00 am to 2:00 pm instead of 8:00 am to 3:00 pm. According to a decision by the Central Bank of Jordan, working hours for bank employees are from 8:30 am to 2:00 pm in Ramadan compared to 8:00 am–3:00 pm at other times. Additionally, classes in schools were cut by 10 min each and private sector companies began closing their doors an average of one hour earlier each day…"There is laziness among employees in Ramadan and slow business during the month adds to that," Amer Obeidat, who directs a travel agency, said yesterday. (Ghazal 2009)

Using country-level panel data, Campante and Yanagizawa-Drott (2013, p. 3) show that "Ramadan fasting has a robust negative effect on output growth in Muslim countries, whether measured by GDP per worker, GDP per capita or total GDP, and whether measured in yearly rates or aggregated up to 5-year periods". By contrast, and unsurprisingly, they find no effect on GDP growth in non-Muslim countries.

A survey by the growth strategy research and advisory firm Dinar Standard (2011, p. 5) estimates that in the Organisation of Islamic Conference countries (OIC)—now renamed as Organisation of Islamic Cooperation—the working day is reduced on average by 2 hours during the month of Ramadan. If we assume 21 working days in a month, this translates to a loss of 42 working hours. There is no indication that these hours are made up during the rest of the year. If, on average, 1700 h are worked during the year, this loss represents a 2.5% reduction in output per year. But productivity also declines not only from the physical strain of fasting but from the disruption to the flow and organisation of work. It is reasonable to assume that decline in productivity would further reduce economic output—to a total fall by at least 3% each year, which can be termed the "Ramadan fasting effect." This represents a significant annual recessionary impact. To this can be added the health and social care costs of disabilities and infirmities in children and adults conceived during Ramadan fasting.

Though the *Dinar Standard's* report is entitled "Productivity in Ramadan," it is no such thing given that no attempt to measure the impact on productivity is undertaken. The authors do state that "detailed analysis of economic impact should be undertaken by each government" (loc. cit.). It is revealing that Muslim-majority countries have never undertaken this important task, doubtless for ideological reasons as they do not wish to draw attention to a significant negative impact of Ramadan on their economies. What is more surprising is that international organisations such as the World Bank, IMF and UNDP have also not carried out this important research; perhaps because of its sensitive nature.

An article in *Arab News* in July 2013 stated that businesses want *more* working hours in Ramadan and suggested that productivity declines by as much as 35–50% as a result of shorter working hours and the change in lifestyle during the month. An HR officer is quoted as saying: "[i]n most companies, whether in Saudi Arabia or other Arab countries, decisions and vital meetings are postponed until Ramadan is over". This results in lower productivity and losses for businesses (Arab News 2013).

Campante and Yanagizawa-Drott (op. cit.), however, also show that Ramadan increases subjective well-being (SWB) among Muslims. But the use of SWB with respect to authoritarian doctrines, including religions, ought to be treated with great caution (especially under autocratic regimes). As has been previously stressed, the inculcation of religion among the young is, in reality, brazen indoctrination, so that veering away from the faith is sanctioned by threats and exclusion. This is especially true for Muslim-majority countries where apostasy and blasphemy are simply intolerable. Conversely, adhering to the tenets and rituals of the faith is expected and approved by the family, wider community and (it is hoped) by the almighty. To do otherwise risks bringing shame and dishonour to the family, clan and society at large. So, it naturally follows that when asked by researchers about fulfilling religious duties, the believers deem this to be a gracious cause for improving well-being even if the duty in question—such as month-long fasting—is demonstrably harmful to the person's health.

Let us consider an extreme example to emphasise this important point. Suppose a devout Hindu woman insists that following her husband's death, she fulfils the duty of *sati* on his funeral pyre. If she is permitted to do so, we can surmise that up to the point of her death, her SWB has increased. But, according to civilised, humane norms, such a result must be dismissed as perverse. In India, the practice has been outlawed since 1829 and the Indian Sati Prevention Act 1988 further criminalises any type of aiding, abetting and glorifying of *sati*. But does this imply that Hindu women who are denied this right have suffered a reduction in their SWB following their husbands' death? Again, even if such women believe this to be so, this is a perverse result. The moral of this example is that it is perhaps best that economists do not dabble in issues that are beyond the fruitful reach of the "dismal science."

Accordingly, the supposed positive subjective well-being effects of Ramadan are a flawed indicator of genuine well-being. Medical science (which is far more robust than economics) has long made clear that regular intakes of food and drink are a *sine qua non* for good health and soundness of mind.

Low Status of Women

When the UN's Universal Declaration of Human Rights was adopted in 1948, only Saudi Arabia refused to sign it. Muslim-majority countries are also signatories to international conventions protecting women and children—including the Convention on the Elimination of All Forms of Discrimination against Women, regarded as the international bill of rights for women. But as the World Bank posits, "these promises and agreements provide no guarantee when the domestic rule of law is weak, when laws and regulations to ensure constitutional rights and international treaties are absent, and when political considerations supersede good intentions" (World Bank 2001, p. 100). This is precisely the situation regarding women in the Muslim world.

The Global Gender Gap Report, introduced by the World Economic Forum (WEF) in 2006, "provides a framework for capturing the magnitude and scope of gender-based disparities around the world. The index

benchmarks national gender gaps on economic, political, education and health-based criteria and provides country rankings that allow for effective comparison across regions and income groups and over time" (WEF 2014). Out of 142 countries surveyed for the 2014 Report, *only one Muslim-majority country comes in the top 50* (Kazakhstan at 43). In stark contrast, *18 out of the bottom 20 countries are Muslim-majority*—these are: Tunisia, Bahrain, Turkey, Algeria, Oman, Egypt, Saudi Arabia, Mauritania, Guinea, Morocco, Jordan, Lebanon, Iran, Mali, Syria, Chad, Pakistan, and Yemen (the other two countries are Côte d'Ivoire and Ethiopia). In light of this, the findings by Steven Fish on the status of women in Islam are unsurprising:

> Whether we focus on status in public life, popular attitudes, or structural iniquities in well-being, females tend to fare relatively poorly in places where Muslims predominate. In none of the results is Islam associated with better status for females relative to males, and in most of the analyses, it is clearly correlated with inferior conditions for females. (Fish 2011, p. 201)

The Middle Eastern and North African countries—overwhelmingly Muslim-majority—have, at 20%, the lowest female participation rate in employment. This is significantly lower than the next lowest region South Asia at 32% (which includes Muslim-majority Bangladesh and Pakistan, together with a large Muslim population in India). This contrasts with the rest of the world where female participation is generally over 50%, excepting Europe and Central Asia at 46% (World Bank 2014, Table 2.2). Such extremely low percentages of women at work are a consequence of Muslim culture and religion which regard women as primarily homemakers, and this inevitably has a deleterious impact on a nation's economy and of fully utilising the talents of women. In Islam, men and women have different roles. Husbands are responsible for their wives as is made clear in the Koran 4: 38:

> Men are managers of the affairs of women for that God has preferred in bounty one of them over another, and for that they have expended of

> their property. Righteous women are therefore obedient, guarding the secret of God's guarding.

One consequence of this injunction is that it acts to prevent girls from attending school and women from entering the world of paid work.

Corruption

In the 2014 *Global Corruption Perceptions Index* (which ranks countries and territories based on how corrupt their public sector is perceived to be) of 175 countries and territories, compiled by Transparency International (TI) (2014), 7 out of the bottom 10, and 10 out of the 20 most corrupt countries are Muslim majority,[8] whilst no Muslim majority country is in the top 20 least corrupt countries.

All religions make great claims for morality with the oft-repeated refrain that religion provides the bedrock for an ethical society without which humanity would descend into chaos and untold misery. Corruption is ordinarily considered an immoral, unethical practice in most religions and Islam is no exception (see, for example, Jabbar 2013) as attested by several verses in the Koran that seem to inveigh against it:

> And expend in the way of God; and cast not yourselves by your own hands into destruction, but be good-doers; God loves the good-doers (2: 191)

> Those who devour the property of orphans unjustly, devour Fire in their bellies, and shall assuredly roast in a blaze (4: 10)

> God commands you to deliver trusts back to their owners; and when you judge between the people, that you judge with justice. Good is the admonition God gives you; God All-hearing, All-seeing (4: 61)

> O believers, be you securers of justice, witnesses for God. Let not detestation for a people move you not to be equitable; be equitable—that is

[8]The 20 most corrupt countries are Cambodia, Myanmar, Zimbabwe, Burundi, Syria, Angola, Guinea-Bissau, Haiti, Venezuela, Yemen, Eritrea, Libya, Uzbekistan, Turkmenistan, Iraq, South Sudan, Afghanistan, Sudan, Korea (North) and Somalia.

> nearer to godfearing; and fear God; surely God is aware of the things you do (5: 11)

Indeed, Steven Fish (2011, p. 119) argues that "Muslims are not unusually prone to corruption." Yet, despite condemnation and Koranic injunctions, corrupt behaviour has not been constrained in the Muslim world and given that the union of Islam and democracy has either been non-existent or, at best, tenuous, more open and accountable governments have been well nigh absent in Islam's history. As in the quotation from Kuran (2013) above, the Middle East's traditional economic institutions, all part of Islamic law, "contributed to extensive corruption, low trust, nepotism, and high tolerance for law breaking".

Whilst in Islam the pre-Islamic age is referred to as *jahilya* (state of ignorance), it is indubitably the case that so many aspects of Muslim societies are also very much akin to the same *jahilya.* Certainly, there is incontrovertible evidence that not only is the religion unconducive to economic development and growth, in fundamental respects, it acts as a brake on this endeavour.

References

Abu-Lughod, I. (2011 [1963]). *The Arab rediscovery of Europe: A study in cultural encounters.* London: Saqi Books.

Almond, D., & Mazumder, B. (2011). Health capital and the prenatal environment: The effect of Ramadan observance during pregnancy. *American Economic Journal: Applied Economics, 3*(4), 56–85.

Almond, D., Mazumder, B., & van Ewijk, R. (2011). *Fasting during pregnancy and children's academic performance* (NBER Working Paper 17713). Cambridge MA, December.

Amnesty International. (2013). *Annual report 2013: Saudi Arabia.* http://www.amnesty.org/en/region/saudi-arabia/report-2013.

Arab News. (2013). *Businesses want more working hours in Ramadan*. July 23. http://www.arabnews.com/news/458892.

BBC News. (2015). Hajj deaths "almost triple" official Saudi toll, 19th October, http://www.bbc.co.uk/news/world-middle-east-34576035.

Barlow, C., & Loh Kok Wak, F. (Eds.) (2003). *Malaysian economics and politics in the new century*. Cheltenham: Edward Elgar.

Campante, F., & Yanagizawa-Drott, D. (2013). *Does religion affect economic growth and happiness? Evidence from Ramadan* (NBER Working Paper 19768) December, Cambridge MA.

Churchill, W. (1899). *The river war: An historical account of the reconquest of the Soudan* (Vol. II). London: Longmans, Green & Co.

Dinar Standard. (2011). *Survey of productivity in Ramadan*, November. http://www.dinarstandard.com/wp-content/uploads/2013/05/2011-Productivity-in-Ramadan-Report.pdf.

Eberstadt, N., & Shah, A. (2012). Fertility decline in the Muslim world. *Policy Review,* Hoover Institution, June 1. http://www.hoover.org/research/fertility-decline-muslim-world.

Economist Intelligence Unit (EIU). (2017). *Democracy index 2016*. http://pages.eiu.com/rs/783-XMC-194/images/Democracy_Index_2016.pdf.

Ferguson, N. (2011). *Civilization: The west and the rest*. London: Allen Lane.

Fish, S. (2011). *Are Muslims distinctive? A look at the evidence*. New York: Oxford University Press.

Freedom House. (2014). *Freedom in the World 2014,* 'Ratings'. https://freedomhouse.org/sites/default/files/FIW%202014%20Scores%20-%20Countries%20and%20Territories.pdf.

GCC Human Rights. (2014). http://www.gcchumanrights.org/.

Ghazal, M. (2009, September 10). Productivity suffers during holy month. *Jordan Times*. http://jordantimes.com/productivity-suffers-during-holy-month.

Gordon, M. (2003). Islam. In M. Coogan (Ed.), *World religions*. London: Duncan Baird.

Habti, D. (2011). Reason and revelation for an Averroist pursuit of *Convivencia* and intercultural dialogue. *Policy Futures in Education, 9*(1), 81–87.

Hasan, R. (2015, 3rd July). Counting the cost of Ramadan. *The Guardian Economics Blog*. http://www.theguardian.com/business/economics-blog/2015/jul/03/cost-ramadan-counted-muslim-fasting-month.

Haynes, J. (2007). *Religion and development: Conflict or cooperation?*. Basingstoke: Palgrave.

Hoodbhoy, P. (1991). *Islam and science: Religious orthodoxy and the battle for rationality*. London: Zed Press.

Hoodbhoy, P. (2007). Science and the Islamic world: The quest for rapprochement. *Physics Today,* 49–55.

Huff, T. (2003 [1993]). *The rise of early modern science: Islam, China, and the West.* Cambridge: Cambridge University Press.
Indonesia Family Life Survey. (2000). World Bank. http://microdata.worldbank.org/index.php/catalog/1043.
Jabbar, S. (2013). Corruption: Delving into the muddy water through the lens of Islam. *Journal of Financial Crime, 20*(2), 139–147.
Jaki, S. (1990). *The savior of science*. Edinburgh: Scottish Academic Press.
Koran. (1988). *Translated with an Introduction by A.J. Arberry*. Oxford: Oxford University Press.
Kuran, T. (1997). Islam and underdevelopment: An old puzzle revisited. *Journal of Institutional and Theoretical Economics, 153*(1), 41–71.
Kuran, T. (2004). The economic ascent of the Middle East's religious minorities: The role of Islamic legal pluralism. *The Journal of Legal Studies, 33*(2), 475–515.
Kuran, T. (2011). *The Long Divergence: How Islamic Law Held Back the Middle East,* Princeton and Oxford: Princeton University Press.
Kuran, T. (2013). The political consequences of Islam's economic legacy. *Philosophy and Social Criticism, 39*(4–5), 395–405.
Lombard, M. (1975). *The golden age of Islam*. Amsterdam: North Holland.
Majid, M. (2015). The persistent effects of in utero nutrition shocks over the life cycle: Evidence from Ramadan fasting. *Journal of Development Economics, 117,* 48–57.
Mill, J. S. (2008 [1869]). *The subjection of women, in on liberty and other essays* (pp. 471–582). Oxford: Oxford University Press.
Morgan, M. (2008). *Lost history: The enduring legacy of Muslim scientists, thinkers, and artists*. Washington: National Geographic Society.
Parkinson, B. (1967). Non-economic factors in the economic retardation of the rural Malays. *Modern Asian Studies, 1*(1), 31–46.
Patai, R. (1976 [1973]). *The arab mind.* New York: Charles Scribner's Sons.
Pew Research Religion and Public Life Project. (2011). *Muslim population by country*. http://www.pewforum.org/2011/01/27/table-muslim-population-by-country/.
Ragab, I. (1980). Islam and development. *World Development, 8,* 513–521.
Reilly, R. (2015). *The closing of the Muslim mind: How intellectual suicide created the modern islamist crisis*. Wilmington: ISI Books.
Renan, E. (1883). *Islam and science: A lecture* (Sally P. Ragep, Trans.). 2011. http://www.mcgill.ca/islamicstudies/files/islamicstudies/renan_islamism_cversion.pdf.
Rodinson, M. (2006 [1980]). *Europe and the Mystique of Islam,* trans. by Roger Veinus, London: IB Taurus.

Schmahl, F., & Metzler, B. (1991). The health risks of occupational stress in Islamic industrial workers during the Ramadan fasting period. *Polish Journal of Occupational Medicine and Environmental Health, 4*(3), 219–228.

SciDevNet. (2015). *Science in the Muslim world improved but still dismal*. November 16. http://www.scidev.net/global/r-d/news/science-muslim-world-research-funding.html.

The Guardian. (2006). A history of hajj tragedies. January 13. http://www.theguardian.com/world/2006/jan/13/saudiarabia.

Transparency International. (2014). *Corruption perceptions index 2014.* http://www.transparency.org/cpi2014/results.

Turner, B. (1974). *Weber and Islam: A critical study*. London: Routledge and Kegan Paul.

UNDP. (2009). Arab Development 2009, http://www.arab-hdr.org/publications/other/ahdr/ahdr2009e.pdf.

UNDP. (2011). Arab Development Challenges Report 2011, http://www.undp.org/content/dam/undp/library/corporate/HDR/UNDP-ADCR_En-2012.pdf.

UNDP. (2014a). *Arab knowledge report 2014: Youth and localisation of knowledge*. Mohammed Bin Rashid Al Maktoum Foundation. http://www.undp.org/content/dam/rbas/report/UNDP-GENERAL-REPORT-ENG.pdf.

UNDP. (2014b). *Human development report 2014*. http://hdr.undp.org/en/content/human-development-report-2014.

Van Ewijk, R. (2011). Long-term health effects on the next generation of Ramadan fasting during Pregnancy. *Journal of Health Economics, 30,* 1246–1260.

Van Ewijk, R., Painter, R., & Roseboom, T. (2013). Associations of prenatal exposure to Ramadan with small stature and thinness in adulthood: Results from a large Indonesian population–based study. *American Journal of Epidemiology, 177*(8), 729–736.

Weber, M. (1968 [1922]). *Economy and society: An outline of interpretive sociology,* (Vol. 2). In G. Roth, & C. Wittich (Eds.), New York: Bedminster Press.

World Bank. (2001). *Engendering development through gender equality in rights, resources, and voice*. Washington: World Bank and Oxford University Press. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2001/03/01/000094946_01020805393496/Rendered/PDF/multi_page.pdf.

World Bank. (2014). *World Development Indicators 2014*. Table 2.2 Labor force structure. http://wdi.worldbank.org/table/2.2?tableNo=2.2.



http://www.springer.com/978-3-319-57062-4

Religion and Development in the Global South

Hasan, R.

2017, XIII, 225 p., Hardcover
ISBN: 978-3-319-57062-4