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Research Paper

Islam and Sustainable Consumption

a literature review

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Glossary

Akroh: accountability

Amanah: trust, responsibility

Aql: reason, but also moderation, restraint

Arham: translated by al-Jayyousi as ‘social capital’

Ayat: (lit. proofs or signs) verses of the Qur’an

Adl: the Qur’anic word for ‘justice’

Fasad: corruption, criminality

Fiqh: the body of Islamic legal rulings

Fitrah: an Islamic concept of man’s inner, natural state

Halal: an item or practice permissible under orthodox Islamic law

Haram: an area of a town or city set aside for sacred purposes

Hima: a traditional Islamic legal device for setting aside land as a reserve

‘iffa: moderation

Ihsan: excellence, beauty

Ijtihad: the act of extracting new meanings or rulings from the sacred texts

Insan: humankind

Islamicate: areas where Muslims are culturally dominant

Khilafah: the name given to human vicegerency over the earth

Mafsadah: an Islamic concept of harm

Maqasid al-Shari’ah: higher aims and goals of the Islamic path

Maslahah: an Islamic legal concept denoting the ‘common good’

Mizan: a Qur’anic term denoting balance, harmony

Muhtasib: the one who accounts, a supervisory position in past Islamicate societies

Shari’ah: often misunderstood as ‘Islamic law’, more accurately denotes ‘path’, ‘way’

Tasbeeh: remembrance, prayer

Taskhir: the subjugation of nature to man

Tawhid: an Islamic term for monotheism, or ‘oneness’ of God

Tayyeb: ‘good’, virtuous – distinct from, but related to, ‘halal’ (legal)

Usul al-fiqh: the sources used to derive Islamic legal rulings and principles

Waqf (pl. Awqaf): an Islamic legal institution denoting a foundation

Wudhu: ritual ablutions performed before prayers

Zuhd: asceticism, simple living

Islamic and Sustainable Consumption: a literature review

Introduction

When undertaking a survey of the literature regarding Islam and sustainable consumption, a number of challenges present themselves. The first is definitional – when defining and demarcating what counts as an 'Islamic' response to this question it is important to note that the sheer diversity and decentred nature of 'Islam' precludes neat boundaries.

Islam, ultimately, is what self-identifying Muslims do, and say, and perform, at any one time. Islam, after all, functions as a verb, rather than a noun. Not only space, and time, but the entanglement of individual and group identity adds further dimensions of complexity. Intersecting with this problematic is the contested definition, and relative novelty, of the concept of 'sustainable consumption'. For Tim Jackson, the concept emerged as recently as 1992, arising out of Agenda 21 and the Rio Conference (Jackson:2014, p281). He identified as many as eight mainstream definitions – including ranging from consuming less, consuming differently or consuming efficiently; from protecting the living standards of future generations to protecting the environment – or balancing the two (Jackson:2014, p281). In putting forward an 'Islamic view', one is naturally weighing into these discussions, and taking a position.

The novelty of the concept in international consciousness does not necessarily imply a lack of Muslim engagement with the topic previously, as part of *fiqh* (Islamic law) within a framework of *Shari'ah* (The Path, the Way). This means it is incumbent to consider work which, although not explicitly referencing sustainable consumption, nevertheless references views of nature, ecology and humankind's relationship with material resources which speak to and inform the subject.

Hallaq (2013) and Tripp (2006) described the epistemic imposition involved in transcribing capitalism and modernist economic concepts onto the Islamic societies; how it involved the ripping out of their evolved, holistic legal frameworks the questions of commerce, property and market relations; and their reframing as a distinct, discrete new science, *economics*. This *reordering* aimed at stripping such economic operations of their moral or spiritual qualities – at once modernising, rationalising and secularising them along the lines of colonial modernity (Mitchell:1991). It would be a mistake to romanticise pre-modern, *ante-colonial* Muslim societies. They were sites of economic extraction and ruling class domination. Yet economic questions were part of a wider moral and symbolic order which claimed to check the most rampant excesses and abuses of the wealthy. The onset of the capitalist order aimed at removing these constraints, although not without resistance.

To extract a concept like 'consumption' out of the wider *shari'ah* framework is to uproot it from a wider cosmology, a deeper understanding of Islam's concept of the good life and the just city. Further, it is to delineate and delimit that which has interlocking connections with numerous other aspects of *usul al-fiqh* (Islamic legal philosophy) in a way that elides the contest over sources, history, narratives and *maqasid al-Shar'iah* (goals of Islamic law). Therefore it requires a certain degree of arbitrary choice and therefore cannot presume comprehensiveness. Yet, it is an operation made necessary by events. Consumerism – the phenomenon where the acquisition of goods not only powers economic growth and motors global trade flows (Wiedmann et al:2015, p6274-5), but also comes to define our sense of self, our social and cultural status (Stearns:2006, vii), remains the dominant vector of late capitalism.

It has been called the ‘unchallenged ideology of our times’ (Gabriel and Lang, 2006:p1), and the ‘air we breathe’(Schor, 1998: p24). No longer concerned with mere sustenance, consumption involves identity formation, class consciousness, as well as household budgeting. There is an economics, a sociology, an anthropology, and, most importantly, a politics, of consumption (Miller:1996). Weighing an ‘Islamic’ response to sustainable consumption not only rests on defining sustainability but encapsulating a view of consumption, resting on fundamental assumptions about ecology and political economy.

The relevant literature, therefore, is potentially voluminous. What this review aims for is breadth – to cover work that considers sustainability and consumption in as many forms as possible. It includes work that conceptualises sustainable consumption out of Qur’anic language and symbols; before considering those who believe the existing Islamic legal system contains solutions to this issue. Next, it will review the responses which aimed, and still aim, to frame Islamic views of consumption – sustainable or otherwise – within wider disciplines of Islamic social and political science. The concept of ‘halal’ food, and its intersection with, or alienation from, sustainability must also be considered. Finally, the work of anthropologists to conduct fieldwork amongst Muslim communities to elicit responses and framings of consumption will be presented, together with the literary production of several ‘case studies’ from across the Muslim world. But first, it is necessary to consider that one initial response to consumption, and sustainability, is a spiritual one.

‘Spiritual responses’ to Sustainability

Once again, it is necessary to note that a separation of Islamic being into ‘spiritual’, ‘legalistic’, ‘political’ categories is a thoroughly modern one. The pre-modern lived experience of the Muslim encompassed, and still encompasses, spirituality as an integrated part of the religion. It was impossible to separate the science of the heart, nature or the soul from the science of the law or the book. It remains that most, if not all, Muslim responses to the excesses of capital and consumerism will involve a spiritual appeal, whether the invocation of a ‘moral economy’ to counter the material one, (Tripp 2006) or to begin the work of de-consumerising the individual by focusing on his or her inner state.

It was an Islamic scholar, Seyyed Hossain Nasr, who precociously invoked the idea of ‘spiritual crisis’ as the cause of an environmental catastrophe in 1966 (Foltz:2002, p412). This found an expression too in the 1986 Assisi Declaration, when Dr Abdullah Omar Nasseef, Secretary General of the Muslim World League, provided one of the Muslim voices at the interfaith convention, stating in his submission that values and spiritual ethics would ensure environmental salvation. The ‘nexus’ of values in particular included *tawhid* (unity, oneness of God), *khilafah* (vicegerency of humankind over earth), and *akhroh* (accountability, of humankind before God). A ‘return’ to these lost values would provoke and sustain an environmental consciousness that would inform science, politics and economics, including levels of consumption and use of resources (Nasseef:1986). In a similar vein, a 1993 convocation of the ‘Parliament of the World’s Religions’ emphasised the interconnectedness of all living things, and preached that a return to the value of harmony with nature and the cosmos would bring about respect for ‘the community of living beings, for people, animals, and plants, and for the preservation of Earth, the air, water, and soil.’ (Küng and Kuschel: 1993, p13-14, p26).

Clearly, an intimate connection between the human spirit and nature is imagined, in the form of a causal relationship between spiritual well-being and ecological outcomes. Turkish scholar Said Nursi, writing to his followers in 1950s Turkey, had reminded them that they had ‘a connection and mutual relations with the universe, in particular with regard to sustenance and the perpetuation of the species.’ (Nursi: 2011, p20-1). For Nursi, this was part of an overall unity. ‘If a being has a unity, it can only have issued from a single being, from one hand’ and ‘particularly if it displays a comprehensive life within a perfect order and sensitive order.’ (Nursi: 2011, p19). This perfect, unified being and connectedness between humanity and nature was the starting point for a conception of the relationship between one and the

other; not of domination, instrumentalisation or utility, but connection, oneness and shared destiny.

This is further elaborated by Shams Helminski (Helminski 2006:p373-375), who makes the necessary connection with consumption directly. 'Nature is characterised by a sort of dynamic stasis...(with) a balance to be found' (Helminski:2006, p375) Our untrammelled desires and needs have thrown the stasis radically out of balance, and what is required is 'a paradigm shift' which could 'correct our course' based on a 'recognition of our interdependence (with nature)'. This would involve using less, requiring less; buying less and having 'fewer kids' (Helminski:2006, p373-4). Through a gradual consciousness of our interconnectedness and embeddedness with nature, combined with more accurate consumer information, humans can rediscover and redress the desire for balance, stasis and equilibrium. Spiritually, humans have been overthrown by desire and material wants; the direct result of which is ecological imbalance.

A similar theme of consciousness being the first step on the road to action is raised by Seyyed Shahabeddin Mesbahi (2011), who first laments the gap in the literature of dealing with the environment from a spiritual perspective (Mesbahi:2011, p1) before articulating a conceptual approach that puts sanctity, tradition and experience as the trinity to moving hearts and minds on the ecological question. This methodology should bring Muslims to the point where the 'dust, the tree, the water, the moon, the sun remind the Islamic mystic of the epiphanies of Truth, all of nature and the environment will be protected by the believer gardeners!' (Mesbahi:2011, p66-7). This exalted state advances the relationship between Muslim and nature – rather than being in connection or in interconnected co-operation, nature should be the source of constant revelation, and one that should inform protective and conservational behaviours. 'The tree and the water', as *ayat* (signs of God), should be used with caution, but, moreover, a spirituality derived from nature's signs is not one that needs replenishing with material overconsumption.

The Emirati organisation, the *Tabah Foundation*, published a briefing paper in 2013 that also encouraged a spiritual response. The aim of the work, however, was not environmental 'consciousness' but 'conscientiousness' – a more active, engaged environmentalism that would promote and counterbalance systemic imbalances and injustices. Similarly to Helminski, at the heart of this philosophy, indeed the 'universal principle' is *mizan* (balance) (Hashim Brown:2013, p2). Once again, the view of nature is one of 'homeostasis... a dynamically stable state within a system by means of internal processes that tend to counterbalance disturbances from external influences.' (Hashim Brown:2013, p3) It is the human being's *amanah* (responsibility) to maintain this balance (Hashim Brown:2013, p4) through use of *aql*, normally translated as 'reason', but with echoes of moderation and restraint, which is the operative meaning for the environmentally conscious when it comes to interacting with nature, and with consumption. This moderation is based on an internal balance, and the overthrow or disruption of this balance causes imbalance and catastrophe in the wider world. Recalling Nasr, the environmental catastrophe, and the climatic cliff-edge about to plunge the world into chaos and social collapse is the result of the 'spiritual disaster going on within man' (Hashim Brown:2013, p6).

These principles can be applied more directly to the issue of consumption itself. For Hamza Yusuf, writing a commentary on Imam al-Mawlud's *Matharat al-Qulub* (Purification of the Heart), a metaphor is drawn between the spiritual and the physical heart. Here, the emphasis is on the physical's effect on the spiritual, an inversion of the emphasis placed by Hisham Brown and Nasr. Rather overconsumption of food harms the physical heart and simultaneously, the spiritual heart. 'Those who consume an overabundance of rich foods literally do become hard-hearted with arterial sclerosis, the *hardening* of the arteries...likewise, the spiritual heart may experience what happens to the physical heart' (Yusuf:2004, p28). The key quality for the believer to foster is that of *'iffa* (moderation), a 'relationship' is posited, between 'character and consumption' (Yusuf:2004, p104-5). Building this moderation comes through voluntary fasting which builds

spiritual growth. Yusuf cites the recommendation of Imam Malik that voluntary fasts of three days a month ‘is the best way to maintain a real engagement with hunger.’ (Yusuf:2004, p28). There is a clear belief that the Islamic spiritual tradition contains a repertoire, a technology of the self which can be cultivated to resist overconsumption, to resist and opt-out of *consumerism*.

In an article published in the Malaysian *The Star,* Suzana Samsudin connected ‘self-sacrifice’ with ‘consumption culture’. Self-sacrifice combined with ‘spiritual and ecological values’ is one way to create an ‘Islamic’ culture of consumption. In this vain, recognising that God alone is al-Razzaq (the ‘Sustainer’) tentatively connects the concept of sustainability to one of the *Asma ul-Husna* (names of God). Change will come when Muslims perform an ‘eco-Jihad’, a striving for an environmental cause, and, as with Hamza Yusuf, rediscover a connection to a formerly more austere, ascetic time, rekindling the tradition of *zuhd* (simple, pious living) in Islamic life (Samsudin:2017). Samsudin claims that Malaysia is falling behind on its own stated environmental benchmarks and juxtaposes this with a call for more individuals to rediscover their values and set their own example.

However, it is also important to weigh the claims of the spiritual response against other studies and reports. Whereas the writers previously discussed largely agreed on a ‘spiritual crisis’, writers on sustainable consumption have pointed to an analogous ‘ethical crisis’, the solution to which is changing lifestyles, with individual action such as ‘Buy Nothing Days’ as attempted in the Netherlands and gradual changes which, much like fasting, could shift mind-sets of one person at a time (Robins and Roberts:2006, p39-40). An American study reported that political viewpoints rather than levels of religiosity were much more accurate predictors of attitudes towards the environment (Taylor:2015, p12). Indeed, religion was most effective when the political was present, and explicit, such as in Catholic liberation theology movements which spear-headed environmental activism first in South America, and then in Hispanic communities in North America (Taylor:2015, p14-15). Religion – or spirituality – is not, in this reading, going to ‘ride to the rescue’ without interrogating the imbrications of religion, class and *material* status.

Similarly, it is vital, writes social scientist Michael Maniates, not to ‘individualise’ the challenge of climate change. This ‘individualisation of responsibility’ is a ‘dangerous narrowing’ (Maniates:2002, p45-7). Indeed, it represents a ‘flight from politics’, and co-exists comfortably with a liberal environmentalism which is accepting of a ‘greening’ of consumerism, rather than its rejection and repudiation (Maniates:2002, p52-4). Therefore a critique of the ‘spiritual crisis’ approach to the environment and sustainable consumption would be that it elides the politics of consumption, and the need for sweeping, systemic change through radical emancipatory political projects.

So far the focus has been on *solely* spiritual responses. Others, as will be discussed, combine spiritual language with more collective, political endeavours, or policy initiatives, to effect more general, systemic change. One of the key tensions, or dialectics, in mainstream writing on sustainability and consumption, is the extent to which the change needed is to come from individual agency, one person at a time, or through macro-level shifts in government agendas, technological breakthroughs, or collective consumer action. Yet, if the causes of consumerism are cultural, or ideological, then a spiritual response is in line with other identified responses to modernity. Although Lara Deeb’s study of Shi’a women in Beirut revealed that a cultivation of piety did not necessarily preclude consumerism and modernity (Deeb 2006), Saba Mahmood’s study of the women’s mosque movement in Cairo specifically noted that the creation of a ‘pious subject’ was a direct and conscious attempt to break the logic and power of modern, neoliberal society, and submit the self to discipline, cultivation, and the pursuit of modesty, moderation and patience (Mahmood 2004). If consumerism arose out the values of the Enlightenment (Michaelis:2006, p330-1) and is embedded in the project of modernity, this represents a form of resistance.

In this respect, and with Said Nursi’s *Risalat* beginning a new phase of political Islam which focused on reforming the self, forming an epistemic break with the modernising, secularising Turkish state, the spiritual can be political.

Qur’anic - Conceptual approaches

All Muslims would claim the authority of the Qur’an for their work. However, this work seeks to bring together those authors who base their analysis of sustainable consumption primarily on conceptual building blocks drawn primarily from the Qur’anic text. Some of the relevant Qur’anic words – *tawhid, khalifah*, and *mizan* have already been met in the work of the spiritually-focused writers. Others, such as *fasad* (corruption) and *‘adl* (justice) receive more focus in this section.

A landmark work, Islam and Ecology, published in the same year as the 1992 Rio Summit, began to move the focus towards consumption and its place in an Islamic worldview. ‘We are… consuming non-renewable resources at a very fast rate. The laws of nature are based on its own rhythm; we must learn to operate in accordance with that rhythm.’ (Masri 1992, p6). Corruption, is cited as the major reason for civilizational issues, drawing on Q6:6 , which relates how past civilizations have been destroyed ‘for their sins.’ The work is also focused on pollution, rather than climate change brought about by overconsumption or carbon emissions – it instead reflects early 1990s concerns – deforestation and acid rain – rather than global warming (Masri 1992, p9-11). Yet the focus is on the consumption of resources through the framework of the Qur’an, avoiding excess and imbalance, and attempting to live as the *sahaba* (companions of the Prophet (Peace be upon him (PBUH)) did, understanding that property is ‘on the understanding that we will not damage, destroy or waste what is in our trust’ (Masri:1992, p6). The Earth, used sensibly and sustainably, would be able to provide for all of its population equitably as God is assured as the provider (Masri:1992, p15-6).

The Earth, used sensibly and sustainably, would be able to provide for all of its population equitably as God is assured as the provider (Masri:1992, p15-6). The solution, in this reading, is not a radical restructuring of society, but rather a more rational deployment of the resources bestowed upon the Earth.

The Islamic Foundation for Ecology and Environmental Sciences published a textbook in 2008 which aimed to synthesise six themes of the Qur’an that relate to the environment – *tawhid, khalq* (creation), *mizan, insan* (humankind), *khilafah and fasad*. The interplay of the concepts is that ‘all natural ecosystems of the earth are in ecological balance, which it is incumbent on humans to maintain’ (Khalid and Thani:2008, p26). The food web straddles terrestrial and marine ecosystems and they can be disrupted or changed by changes in environmental conditions. These changes can be natural or caused by humans’ (Khalid and Thani:2008, p27). Environmental problems have been exacerbated by the fact that ‘we know no limits. We have become wasteful… that is, addicted to selfishness and excess’ (Khalid and Thani:2008, p39). A firm conclusion is reached, that ‘no wastage or over-consumption is allowed by Allah’ (Khalid and Thani:2008, p48).

A similar approach is taken by ‘Abd al Majid Najjar, in the *Viceregency of Man* – a universe created in due proportion by Allah, which is harmonious and precise (Najjar:2000, p5) based on an interdependence of species, and a complex but finely tuned web of life (Najjar:2000, p12), reflecting divine *tawhid*. For Najjar, the Qur’an reveals the subjugation (*taskhir*) of the universe to ‘man’, but this is balanced by *khilafah* being humankind’s most important assignment. Humankind is therefore installed as caretaker of this divinely ordained machine – a wise, benevolent dominion over the Earth. Once again, it is only through excess, imbalance or corruption that humankind temporarily lurch the system out of balance, and it is a case of returning to the Qur’anic values of balance and moderation to bring the system back into equilibrium.

[1] Qu’ran, chapter 6, verse 6.

Qur'anic scholar Muhammad Abdul Haleem, writing a thematic guide to the Qur'an, notes the centrality of water in the text (Abdul Haleem:2001, p40). Water is seen as a larger metaphor for proof of God's existence, of God's care and sustenance and even an analogy for life and resurrection themselves. According to the Qur'an, water is a finite resource, not inexhaustible (Q23:18, Q7:31) and the wasting of water is forbidden (Q17:26) (Abdul Haleem:2001, p40). Through the symbol of water, lessons can be drawn on the importance of conserving natural resources and the importance of consuming moderately.

So far, the sample has contained literature which has drawn Qur'anic concepts and language and deployed them, directly or implicitly, into discussions and debates around consuming of resources and living sustainably within creation. These works have largely drawn on the Qur'an for cautionary parables of the fate of previous, wasteful, heedless populations, or have set-up a Qur'anic sensibility which, if adopted, would naturally tend towards careful husbanding of resources and a finite planet. As with the mystical process described earlier, consciousness raising and 'returning' to Qur'anic values are cited as being the most crucial to ensuring sustainable or at least moderate use of the planet's resources, in a manner that is part of either a larger religious Good Life, or in a way that befits the sacrality of the resources themselves. In this manner, they represent Muslim interventions in, or conversations with, the wider ethical conversation about consumption. According to Michaelis, these usually follow three major ethical systems – utilitarianism, Kantian ideas of universal duties, and social contract theory (Michaelis:2006, p331). So far a Qur'anic environmental ethics largely eschews the utilitarian argument in favour of man's duty to God and divine principles, and man's contract with God to serve as vicegerent over the earth. This offers potential for joining with other Abrahamic religions with a similar view of nature (Michaelis:2006, p336) but also other environmental campaigns which aim to disrupt the utilitarian assumptions of 'environmental economics'.

A Qur'anic approach can also be deployed to guide concrete actions and recommended policies towards the environment. A fuller review of the 'Islamic social science' approach to consumption follows, but some authors have emphasised in their analysis the primacy of the Qur'an and will be considered as natural progressions on the work already analysed.

Ibrahim Abdul-Matin's seminal 2010 work, *Green Deen* aimed to offer a practical toolkit for Muslims 'living and practising Islam while honouring the principles that connect humans to protecting the planet' (Abdul-Matin:2010, xvi). 'Deen' is often translated as the 'Islamic religion' or 'way of life'. Once again, the Qur'anic concepts retrieved for use are *tawhid, ayat, khalifah, 'amanah, 'adl and mizan*. These are utilised to formulate the 'six principles of the *Green Deen* (religion)' – understanding the oneness of God (*tawhid*), seeing signs of God in all creation (ayat), being a vicegerent (*khalifah*), or steward, of the Earth, honouring the trust of God to protect the planet *(amanah*), moving towards justice *('adl)* and living in balance with nature *(mizan)*.

In many ways *Green Deen* synthesises the work so far under review. It begins with the self, and consciousness, imploring that the first task of the Muslim environmentalist is to pray, and begin a journey of self-discovery aimed at 'getting right' with nature (Abdul Matin:2010, p12-3), discovering the sacredness of the Earth, and treating the Earth as one large mosque (Abdul Matin:2010, p1). However, having established the spiritual preconditions, the work rapidly moves to a critique of the dominant economic system, which, by preaching a 'model of economic growth by any means necessary' causes the corruption/destruction dialectic cited from the Qur'an (Abdul Matin:2010, p10). Consumption is the key to this dynamic – 'over-consuming can blind us to our role as stewards of the Earth – what in Islam we call being the *khalifah*. Being protectors of the planet means checking our consumption habits.' (Abdul Matin:2010, p26-7). The politics of consumption are addressed – considering two sides of an argument that consumption powers growth on the one hand, whilst it 'assaults' the natural world on the other (Abdul Matin:2010, p28).

Ultimately, a *Green Deen* rejects overconsumption which has led to 'depleted oceans, nutritionless food, and nonstop expansion of development and markets, all unbalancing the earth.' (Abdul Matin:2010, p29). Abdul Matin takes the socio-cultural aspects of consumption seriously, of how 'solace' is found 'in material goods,' and how people derive value from the consumer impulse (Abdul Matin:2010, p30-32). This reflects a dense literature, traceable to Erich Fromm's To Have or To Be of 1976, to Alan Durning's *How Much is Enough (*1992) Juliet Schor's *The Overspent American* (1998) which identify the cultural imperatives of over-consumption, the function of consumerism in capitalist society. For Tim Jackson, over-consumption is part of a 'social psychology' which eludes rational choice theory (Jackson:2005, p4-5). For Abdul-Matin, these socio-cultural drivers of consumption can be addressed by Islam – by building a relationship and sense of worth driven by connection with God, and with fellow humans, this driver of consumerism can be negated and neutralised (Abdul-Matin:2010, p32).

Although *Green Deen* is systemic and holistic in its identification of the problem, building on a Qur'anic vocabulary to frame the debate on consumption in cosmic, global terms, the solutions it proposes are not only modest, but determinedly refuse to challenge existing and dominant systems. Although capitalism is identified and derided, alternatives such as socialism and communism are similarly attacked as being un-Islamic (Abdul Matin:2010, p30, p35). Although colonialism is singled out as being an original motor of consumerism, praise is reserved for the Indonesian government (Abdul Matin:2010, p38-9), even as it deepens the colonial process in West Papua to facilitate the extraction of natural gas, minerals and palm oil (Vidal:2008). Despite the Green Deen being 'neither socialist or capitalist' (Abdul Matin:2010, p36) the recommendations are firmly within the Obama administration's abortive 'Green Jobs' agenda, part of the American Recovery and Reinvestment Act (2009) which was designed to save American capitalism after the 2008 crisis. Although there is an exhortation to decarbonise, to wean society off 'hellish' fossil fuels, (Abdul Matin:2010, p77), and endorsements of consuming energy sustainably (Abdul Matin:2010, p86-8), the use of wind power (Abdul Matin:2010, p94-5) the primary locus of change is the individual. The individual must take shorter showers and conduct mindful wudhu (ablutions), (Abdul Matin 2010:p138-140), eat organic halal food (Abdul Matin:2010, p149) and grow their own food where possible (Abdul Matin:2010, p162). Otherwise, business is set to provide the solutions, with 'halal entrepreneurs' set to unlock new products, markets and possibilities for sustainable consumption (Abdul Matin:2010, p179). Mosques can partake in this endeavour by placing a solar panel on the roof and reducing the use of Styrofoam during iftar (breaking of the fast), (Abdul Matin:2010, p64-9). How resources and products are used and consumed should be a moral foundation of Muslim societies and communities, and be part of the conversation of economic and social justice, (Abdul Matin:2010, p188), yet firmly within the acceptable bounds of American political orthodoxy.

Similarly, the 2014 work by 'Islamic Economists' Hossein Askari, Zamir Iqbal and Mirakhor Abbas strives to build outwards from the Qur'an to frame the issue of sustainability and draw solutions. *Israf* (translated as 'excessive consumption') is cited as an explicitly Qur'anic condemnation of wasteful excess (Askari et al:2014, p181-2). The answer should be modest living, limiting only to needs and emphasising a sharing with 'current and future generations' (Askari et al:2014, p181). The Qur'an and its demand for 'rule-compliance' is the centrepiece of the argument, and that the social solidarity provided by Qur'anic rules should be emphasised and built into every policy decision. The beneficiaries of this would be all humanity, not simply Muslims (Askari et al:2014, p183-5). Once again, the implications of this Qur'anic worldview are fairly modest, if practical and pragmatic – that resources should be brought under state ownership, with proceeds of their

[1] Qu'ran, chapter 6, verse 6.

sale and exploitation set aside for 'future investment funds', (Askar et al:2014, p185-6), a process already underway in Gulf states such as Kuwait, with its 'Future Generations Fund', or Bahrain or Qatar with their sovereign wealth funds. It could, of course, incentivise extraction of resources to maximise funds for future generations, and poses no direct threat to the global circulation of goods and systemic consumerism that brought us to brink of crisis.

The question of growth has been alluded to and is one of the key tensions in sustainability debates – whether the aim should be 'sustainable' economic growth or 'de-growth', or a third option – growth in human capabilities, as opposed to material power (Jackson:2017). Abdul Matin endorsed a 'green growth' approach (Abdul Matin:2010, p44), whereas Niamir-Fuller et al's 2016 contribution to the United Nations Environment Programme (UNEP) endorses the 2030 'Agenda for Sustainable Development' which enshrines the right of 'every country (to) sustained, inclusive and sustained economic growth and decent work for all' (Niamir-Fuller:2016, p6), amongst the wider goals of the Agenda. This is to be achieved through 'reasonable consumption patterns', 'culturally sensitive family planning' and 'repairing and restoring degraded resource' (Niamir-Fuller:2016, p17). This is linked to the Qur'anic injunctions against wastefulness, 'thoughtless consumption and extravagance' (Niamir-Fuller et al:2016, p20-1). In this reading, the Qur'an provides the symbology and metaphysical support frame for the UNEP goals of growth fuelled through moderate consumption, 'an inclusive Green Economy', albeit one that is cited as being more socially just (Niamir-Fuller: 2016, p25-8). The growth paradigm is accepted, but must be adjusted by a Qur'anic commitment to moderation.

Therefore the emergent themes of the Qur'anic-conceptual discourse is that the Qur'anic revelation provides the language and tools to both reconnect with nature, with God, and through this assume a more responsible, careful stewardship of resources, production and consuming; carving a green vision for growth in line with the current priorities of the international community, whose emphasis can change from 1992 to 2017, but with Qur'anic principles generally malleable enough for this shift. The principles of *tawhid* and *khilafah* can be compatible with individualised responses or national, international growth agendas. Mizan can be employed as a gradualist call for restoring balance. *'Adl* can be a call for thinking of future generations in today's transactions.

Of course these are more radical, if marginal to the current debates. The Iranian Revolution was tied up in narratives of over-consumption as a symbol of the Shah's decadence and the general fall of Iranian society (Stearns:2006, p134-5). For Ali Shar'ati, an ideologue of the revolution, tawhid meant more than recognising the oneness of God in nature, but rather called for classless society, an erasure of class distinctions. His reading of the Qur'an called for an egalitarian society, for avenging the death of Abel which brought property, hierarchy and exploitation into the world (Shariati:1979). This would be an example of using the Qur'an to address the problem of consumption, and wider issue of capitalism, in a revolutionary, systematic way. Shari'ati's example throws into relief the relative moderation of the current discussion.

Fiqh-led Approaches

Before addressing the 'Islamic social science' production of the 1970s onwards, a related approach to the Qur'anic-led method are those who see in the body of existing *fiqh* legislation, or in the wider goals of *shari'ah* the legal tools or policy fixes necessary to reorder society along more sustainable lines, and in tune with ecological balance.

For Y. Mawil Izzi Dien (1992), all of our actions spring from the ethical foundations of *shari'ah* (Izzi Dien:1992, p25).

In moving from shari'ah to fiqh, Izzi Dien finds institutions in the classical legal tradition that can be resurrected and applied to monitor consumption and retune our ecological position. In the Islamic Empires, the muhtasib (lit. 'one who accounts') was a state official charged with regulating and inspecting commercial measures and market prices. However, this role could be reprised in the modern age, a government position tasked with 'caring for the environment' (Izzi Dien:1992, p33), and ensuring there is no waste, excess or environmental abuse.

In the same collection, another *fiqhi* institution is highlighted, that of the *haram* ('sacred sanctuary'). Usually this term refers to the boundaries and borders of a mosque, shrine or other sacred space, such as the 'haram' that demarcates the mosque complexes in Mecca and Medina. Yet it could find a much wider application. Islamic law contains a range of different land categories, including developed lands, undeveloped lands, and *harim* (pl. of *haram*) which could provide flexible and applicable responses to the problems caused by economic growth and expansion (Dutton:1992, p52-3). The primary purposes of these land categories would be to ensure sufficient land is under cultivation, but also allows for protection and preservation of areas (Dutton:1992, p55-6). Famously, the Prophet (PBUH) decreed that trees cannot be cut down in Medina's *haram* zone, yet this has not prevented a massive, continual mega-development of the site for the demands of modern consumerism, complete with malls, hotels and fast food restaurants. The literal reading of the hadith has thus obscured intention, yet the argument would be an ecologically-literate, ethically driven interpretation of the Prophet's wish would allow for zones to be set up which can be development-free or developed sustainably, and this could be written up in Islamic law citing precedent and textual support.

This suggests the issue that authors using this approach regularly cite – that Islamic law contains the answers for climate change and sustainability, if only its long-formulated statutes would be properly enforced and adopted.

For Fazlun Khalid, Islam already contains the solutions to water shortages, land conservation, preservation of wetlands, green belts and protection of species, yet 'much of the traditional institutions and laws associated with sound environmental practice in Islam have fallen into disuse (Khalid:2002, p332). This 'latency' principle, that the answers are already there, dormant in Islamic (errantly synonymous here with 'Sunni') legal traditions but ready to be activated and applied, revolves largely around property rights. Orthodox Sunni tradition offers a diverse range of perspectives on property, which is believed to belong ultimately to God, but with the working assumption that circumscribed and conditional this-world property rights are enshrined in Islamic law. Some of these conditions allow for sustainability – such as the common ownership (and thus democratic control) of natural resources, the controlled use of scarce resources, with the aim of serving the general welfare (Khalid:2002, p335), and these principles give rise to a number of institutions.

Some would not necessarily tend to sustainability, such as a reading of *'iqta* (land grant) which would open up new and existing lands for development (Khalid:2002, p335-6). The institution of *harim* is revisited, as are *hima* (defined as special reserves or conservation zones) and *awqaf* (trusts), under which parks, nature reserves, water courses, forests and so forth could receive permanent protected status (Khalid:2002, 335-6). Once again, a *muhtasib* of a hypothetical and actually-existing Islamic state would ensure compliance and good practice (Khalid:2002, p336). It is to be lamented that globalisation and the advent of modern nation-states have rent asunder these traditions and these solutions (Khalid:2002, p336-7) but a greater engagement by Islamic scholars and an updating of these institutions would be sufficient for the Islamic world to begin redressing the ecological catastrophe and setting the means of production and modes of consumption on more sustainable footings (Khalid:2002, p338-9).

For Abu-Sway (1999), Islamic law also furnishes legal rulings that would mitigate the effects of unsustainability. There are rulings derived from hadith scriptures that would prohibit the waste of water and the pollution of land (Abu-Sway:1999, p30-1), and every tree or plant must be felled with justification – deforestation for mass consumption cannot be vindicated (Abu-Sway:1999, p30). The chief concern is air quality and pollution, and even noise pollution can be dealt with by verses of the Qur'an (citing 31:19, Abu-Sway:1999, p34-6). The foundation of this is the injunction to protect life, property and religion which are three of the core values of *maqasid al-Shar'iah* with added objectives of equality and freedom (Abu-Sway:1999, p36-7).

The objectives of protecting life, property and progeny are utilised by Hasan (2006), in his work for the *Journal of Islamic Economics*. Sustainability meaning long-run growth, balanced against 'inter-generational equity' and the restriction of pollution, (Hasan 2006:p5) is to be achieved with recourse to 'rapid economic growth' which will render Muslims stronger 'materially, and morally' to fulfil the lofty goals of *shari'ah* (Hasan 2006:p7). Growth is an absolute necessity to alleviate poverty in this reading, yet consumer-driven growth can only bring about debt – financial and ecological. 'Shari'ah alone,' Hasan concludes, 'provides the natural law for mankind to regulate social behaviour...(as) this regulation demands spiritual growth not material, contentment not greed, patience not haste, moderation not maximisation, balance not tilt, cooperation not competition...' (Hasan 2006:p16). Clearly, a zero-level of material growth is required to activate and enable the spiritual growth of shari'ah to begin to take hold.

There are also criticisms of this approach and this outlook. For Jafari and Sandicki, in their critical collection on marketing and consumption in Islam, they decry a reductionism and essentialisation of Shari'ah, as a monolithic entity reflecting the views of one, united 'ummah' (Jafari and Sandicki:2016).

This is a fantasy of marketers, or, as Roy was to argue, a function of globalisation and post-modernity (Roy:2006). Transposing relatively uncritically the dominant ideas of consumption and business ethics over to an imagined, stable and depoliticised, de-historicised conception of 'Islamic law' is reductive, and part of a logic of neoliberalism to expropriate and re-appropriate religious and cultural symbols (Jafari and Sandicki:2016).

Similarly, Syed Naqvi, a long-standing critic of Islamic economics and the approach of Islamising the social sciences in general – the subject of the following section – co-authored a work which was strongly of the view that Islamic law created a wholly separate moral economy that negated individual freedoms in return for collective goals, and was focused much more on redistribution and egalitarianism than property rights and growth (Naqvi et al:1992, p157-8). The implications for consumerism were vast – the Earth was bounteous and Allah the great sustainer – any hunger, disparity of allocation or environmental damage was down to humankind's unchecked, selfish nature – the *shari'ah* was there to constrain homo economicus, rather than reform or recalibrate them. The *shari'ah* could not be made to work with consumerism, let alone capitalism, and no amount of retooling of its traditional armoury of legal institutions, uprooted from their holistic, interconnected context and pasted onto on unjust system, would change that.

i. Islam and the social science view of consumption

As has been noted, the 1970s initiative to launch a new discipline entitled 'Islamic Economics' involved a negotiation with, and accommodation to, neoclassical and increasingly, neoliberal economic assumptions (Sardar:1985 e.g.). It was a new form of economics which readily made peace with the idea of global finance, modernist notions of development and the opening up of markets and financial products.

Consumption in Islamic Economics

Before the 'sustainable' turn, the original conference which launched Islamic Economics in Mecca in 1976 was content to endorse the Fordist/Keynesian post-war consensus of stable work, welfare and growth which allowed for the mass consumption of consumer goods. The Islamic economic system was to be designed to effect 'an increase in aggregate demand' (Kahf:1981, p32-3) with large resources set aside for 'growth and development' (Kahf:1981, p32-3). Another goal was *falah* (success), but this too was to be defined by consumer choice, (Kahf:1981, p23), with the only innovation being the recognition that utility had a dual meaning – utility in this life and the next. Once informed of this inter-dimensional information, consumers could make rational choices to maximise utility – with the assumption that their welfare, and thus consumption demands, would ever rise.

Izzi Dien, proposed that consumerism was forbidden, based as it was on the prohibited quality of envy (Izzi Dien:2000:p130-1.) Consumption and all commercial activity must 'maximise the utility of wealth for the benefit of the community' (Izzi Dien:2000:p130-1) and do so in a way that regenerates and circulates. Utilisation is for continuity and for sustainability, 'not for exhaustion' (Izzi Dien:2000, p131) which would presumably preclude fossil fuels and other non-renewables from use.

For Hasanuz Zaman, a new macroeconomics could be constructed out of the Qur'an. For the purposes of this review, it is notable that it is argued that 'the Qur'an does not approve of under-consumption just as it disapproves of over-consumption.' (Zaman:1999, p228). A moderate level of consumption should be aimed for, 'according to the means of the people, neither less nor more.' (Zaman:1999, p341). Whereas over-consumption and excess brought ruin and distance from God, under-consumption 'betrays a true reflection of the economic condition of society,' (Zaman:1999, p341) and reduces the circulation of wealth, commodities, profit, reinvestment and growth. A Qur'anic macroeconomics is therefore just as tied to consumption and consumer circuits of goods, than a conventional, even modified, macroeconomics seems to be.

The market can be further embedded in Islamic economics to incentivise and prioritise more sustainable consumption. An accountancy model proposed by M.A. Choudhury allowed for pricing and value to build in intergenerational costs (Choudhury:2004, p109-10). The market is to be retooled, reweighted in order to prioritise basic needs and 'life-sustaining goods' rather than consumer goods and trinkets (Choudhury:2004, p109). The market is the solution, once adjusted and reframed to take account of its current failures. The added Islamic component – *tawhid* – acts as a *deus ex machina* to ensure that people behave responsibly and act with a unity of knowledge (Choudhury:2004, p27).

A recent work on the Islamic concept of sustainable manufacturing embedded the *maqasid al-Shari'ah* deep in the process. The rationale was that 'Islam offers great advantage for environmental conservation, protection and sustainable development alongside sustainability in society and economy. The recent global environment crisis has brought Islam into the limelight. The crisis offers an opportunity for Islam to become a significant option... for the global manufacturing industries' (Zain et al:2017, p2). As well as the general principles of *maqasid*, the two imperatives to increase *maslaha* (well-being) and reduce *mafsadah* (harm) are also to be over-arching goals to the manufacturing process. Despite this, and despite recognising the importance of the environment and ecological damage at every level, even forming the basis of economic activity, the outcomes desired in the model are 'wealth accumulation and management.' (Zain et al:2017, p6). It is imperative that all parties to economic transactions 'enjoy financial benefits' (Zain et al:2017, p6). Sustainability is left to consumer choice, who must choose to purchase environmentally friendly products where possible and recycle and re-use afterward (Zain et al:2017, p6). Despite, then, incorporating *shari'ah* and *usul al-fiqh* in concepts such as *maslaha*, it is striking that the end result is similar to any neoliberal, trickle-down approach.

For al-Jayyousi the concepts of *mizan¸ ihsan* (excellence/beauty), *arham* (translated as 'social capital'), and *tasbeeh* (remembrance, prayer) are utilised to build a 'process' of sustainability (al-Jayyousi:2016 p14) in combination with knowledge, good governance, public interest and ijtihad in a conceptual matrix (al-Jayyousi:2017, p15). People's natural state (*fitrah*) must be balanced against diversity of communities and the diversity of nature, by using the *tawhidi* principle of many-in-one (al-Jayyousi:2017, p16-19). Once grounded in Qur'anic values, sustainability is to be achieved in a kinder, gentler capitalism – in which Islam 'prescribes a free market based on supply and demand' (al-Jayyousi:2017, p28) but lower consumption and *zuhd* (asceticism) is encouraged (al-Jayyousi:2017, p31), and where property rights are enshrined, but capitalism's excesses are tamed and worker's rights protected, amongst other measures to sure general welfare and equity (al-Jayyousi:2017, p71-4, p87). Although the capitalist system is not under threat under al-Jayyousi's system, it does seem to preach a return to a more Keynesian system upon which Islamic Economics (warmly cited as a forebear) was originally founded, but updated for a 'networked, interdependent world' and adjusted for lower consumption rates.

An Islamic consumer theory was offered by Rahnema and Nomani (1994). The project is to design a new *homo islamicus*, avoiding both profligacy and miserliness in consumption, strictly moderate in desires, and forged against the consumerist impulse which is 'repugnant to the rational Islamic man' (Rahnema and Nomani:1994, p84-5). Instead, rather than take a utilitarian approach which abstracts wants and needs, desires are broken up into 'real needs' and false, unacceptable ones.

Necessities, for the reproduction of life; conveniences, for comfort and solace are acceptable, but luxuries and refinements must be considered with extreme caution (Rahnema and Nomani: 1994, p86). The demand curve is therefore totally redrawn, and the Muslim should be immune to price changes – for they are instead considering costs and benefits on a moral plane (Rahnema and Nomani:1994, p87). The definition of moderate consumption is then described, from those within Islamic Economics who believe the Islamic consumer should simply maximise utility and satisfaction (Mannan), to those who consider consumption should be indexed against the average of the population. Other models include that households should only be limited by their own means, to a final model which proposes consumption be coupled with intention – buying products to be useful in the service of God being no sin, and therefore there being no limits to purchasing commodities *in the way of God* (Rahnema and Nomani:1994, p87-9). These four models span the range from Spartan collectivism to engineering the pious consumer *par excellence*.

Sustainable Development

As the dominant discourse shifted towards more 'sustainable' and ecologically sound ways of accumulating capital, so did the discourse in Islamic economics. There was a repertoire of Islamic symbols and what Tripp may refer to as an 'alphabet' of an authentic Islamic language that could justify these shifts. Sustainable development was one of them.

After all, 'sustainable development is not a new concept to Muslims' (Aburounia and Sexton:2006, p758). The Qur'an and the hadith furnish the examples that allow for development to proceed balancing 'environmental, social and economic dimensions. It means the balance of *consumer welfare, economic efficiency* (and) *ecological balance*.' (Aburounia and Sexton:2006, p763, emphasis added). This concept of balancing competing 'environmental, social and economic dimensions' is argued too by al-Kholi in the *Journal of Islamic Economics* (Al-Kholi:2005, p37). However, a clearer argument around transnational justice is offered, arguing that Islamic countries are faced disproportionately with the effects of over-consumption, and therefore should be offered financial compensation and reparation, a huge transfer of wealth to make up for the effects of unsustainable consumption.(al-Kholi:2005, p39).

For Umer Chapra, one of the founding fathers of Islamic Economics, sustainable development became the heart of the Islamic economic mission (Chapra:2008, p11), with an emphasis on human development (Chapra:2008, p33), an approach that would help to promote 'simple living' and 'the reduction of wasteful and conspicuous consumption' (Chapra:2008, p24). This was built on the belief that conspicuous consumption was wasteful and unproductive (Chapra:2000, p308). However, it was important to retain the basic assumptions of micro- and macro-economics – the source code of capitalism – with modification (Chapra:2000, p375).

A convergence between global trends towards sustainable development, and consumption, and the attempt to frame such ideas in an Islamic way can be seen in the work of Nawal Ammar in his writings on 'Islam and Deep Ecology' (2000). After building on *tawhidi* interconnectedness and establishing an instrumental view of nature as an arena for humans to perform good deeds and earn the hereafter (Ammar:2000, p199), a programme for protecting resources and using them sustainably is put forward – resources should be used in a balanced way, nature should be treated with kindness, and not 'distorted', natural resources should be shared, and nature conserved (Ammar:2000, p202). This, the author admits, reflects perfectly the World Bank's own rhetoric on sustainable development (Ammar:2000, p203), yet the essential Islamic ingredient is the belief that corruption and spiritual decline also play a role in developments in nature. Further divergences are offered by the fact that the Islamic legal code posits three principles – reduction of waste, partnership in use and enterprise, and exchange or consumption through use value, rather than supply or demand (Ammar:2000, p203-4). In a radical, but not sustained or fully unfolded departure from neoclassical economics, supply and demand is denounced as usury (Ammar:2000, p204).

Public Policy

In terms of a public policy agenda resting on Qur'anic or *fiqhi* values, Akhtaruddin Ahmad (et al) in a 1997 work sets an agenda based on the interconnectedness of creation and the *rubibuyyah* (lordship) of creation (Ahmad et al:1997, p10). The main concerns are water consumption, air pollution, soil pollution and deforestation, caused by people making mischief upon the earth – by overconsumption beyond natural limits (Ahmad et al:1997, p18, p110-1). As well as proposing the correction and purification of moral decline through the application of *zakah*, (Ahmad et al:1997, p111), there is a four-point policy programme to deal with unsustainable consumption, resting on regulation of production and consumption; equitable distribution of income worldwide; and a return to 'honest simple living' in the family home (Ahmad et al:1997, p112). This is to be effected partly by a tie-up between the Organisation of Islamic Conference and the World Muslim League, and similar multinational Islamic leagues to create international regulations and standards (Ahmad et al:1997, p172), to be tasked primarily with turning existing protocols and agreements into shari'ah compliant legislation (Ahmad et al:1997, p177), a 'legal and theological strategy'. Final policy proposals include a reduction in waste and pollution of water and fields, an end to air pollution, a push for Muslims to recycle, conserve species, and to use non-renewables, such as fossil fuels, 'responsibly' (Ahmad et al:1997, p194-5).

Another student of the original founding cast of Islamic Economics, Munawar Iqbal, proposes a sustainable development which is based on the achieving of basic needs and then an equitable sharing of surplus beyond that (Iqbal:2005, p15), which balances individual freedom which 'must be respected' against social interest. The way to change consumption patterns is through 'tax-subsidy policies' combined with 'social awareness campaigns' (Iqbal:2005, p15). As with Zaman, Islam is to steer a middle course between excessive and under consumption (Iqbal:2005, p18), a balanced consumption of useful, virtuous goods 'which will be reflected in the production pattern'.

The role of marketing policy in shaping green consumerism amongst Muslim consumers is the subject of a 2014 study by Siti Hassan, which took as its focus the growing Malaysian middle-class. According to his research, the level of 'religious commitment indirectly impacts consumers' likes and dislikes towards certain things,' (Hassan:2014, p384) and can therefore be instrumentalised to guide religious Malays towards sustainable consumption. Religious values can guide green purchases, and the government, aiming for sustainability, should craft policies and campaigns around such values, connecting them to consumer choices (Hassan:2014, p392).

Meccanomics: The rise of an Islamic bourgeoisie

A final note would go to Vali Nasr's work on *Meccanomics*. Although not solely aimed at the question of consumption, it is useful for outlining a vision for Muslim consumers which utterly negates the environmental consequences, and instead proposes a future of the expansion of Muslim capital. After asserting that 'capitalism is alive and thriving in the Middle East,' (Nasr:2008, p13), Nasr goes on to suggest that increased capitalism and Muslim piety are not only compatible but intimately connected – 'piety is shaping consumption. Those who live by Islam also demand Islamic goods; not just *halal* food and headscarves, but Islamic... consumer goods. This upwardly mobile class *consumes Islam as much as practicing it* (emphasis added), demanding the same sorts of life-enhancing goods and services as middle-classes everywhere.' (Nasr:2008, p14). 'The bottom line is: a billion consumers have clout.' (Nasr:2008, p15). The reason for optimism, therefore is a huge new market for consumerism, and new, pious Muslim consumers. There is no reference to sustainability or the effect on the planetary capacity of a billion new religious consumers, or the pessimism described in Islam being 'consumed'. However, perhaps it is the logical end point to approaches to consumption that fail to contend with the capitalist model in a systematic way, and Islamise the form, rather than question the ethical content, of consumption.

Halal

A short discussion on halal is essential, given that it is the primary technology governing the legitimate consumption of meat products in the Islamic world. What is notable is the separation of a fusion that was once considered automatic – that of *halal* (permitted) and *tayyeb* (good). A separation has been engineered, whereby meat products can be considered *halal* without being considered *tayyeb* and this has massive ramifications for sustainable consumption. If tayyeb meat was to include being sustainable, with minimal ecological damage left in its wake, the entire architecture of Muslim meat consumption would have to change. As it is, *halal* meat can be factory farmed, unsustainably fed, its real economic and ecological cost externalised; meat consumption can continue unabated, and even grow amongst Muslim consumers, and the planet can be stretched to breaking point. One of the most fascinating crucibles for this contest of *halal* is Malaysia, where a number of studies have been carried out by would-be marketeers to investigate how best to sell halal meats and ensure Malaysia is, in the vision of former Prime Minister, a 'global halal hub' (Badawi:2004).

A raft of studies have shown that halal is often not sustainable. A 2016 survey of 600 small and medium sized halal enterprises (SME) in Malaysia found that many did not incorporate environmental standards, including sustainability, due to the high costs and complexity involved (Ali:2016, p310). Whilst it was found that halal certification could include sustainable practices, these were unlikely to be translated into practice amongst Malaysian SMEs (Ali:2016, p313). A similar study from 2014 showed that halal companies acted as 'utility maximisers' – seeking profits and competitive advantage rather than thinking collectively of the whole 'farm to fork' process (Manzouri et al:2014, p9198-9199), a capitulation to capitalist logic rather than the spirit of divine command.

A 2004 guidebook to producing halal products, known as 'the guide' to halal (Bergeaud-Blackler et al:2016, p5) used by many multinational companies and fast food outlets offers no mention to sustainability, even to ecology or the impact of meat consumption; nor do its appendices – samples of halal standards from across the United States and Asia (Riaz and Chaudry:2004). Although there are few studies comprehensively tracing the intersection – or lack of – between sustainability and the concept of halal (Razalli et al:2012, p34), it is clear that despite 84.8% of respondents in a 2012 survey of the hospitality industry believing halal was synonymous with 'green' (Razalli et al:2012, p38), in fact there was no connection, with environmental standards having nothing to do with halal certification (Razalli et al:2012, p35). Elsewhere, in an Indonesian survey, the most important factor for consumers when judging whether meat was halal was simply the absence of pork and alcohol (Soesilowati:2010, p156).

There is a diversity of opinion amongst Muslims about the virtues of consuming halal. A Malaysian survey from 2015 showed that consumers 'still look at (the) Halal process from the religious aspect and not in terms of sustainability (Rezai et al:2015, p664). A study in a 2016 marketing journal compared halal certification unfavourably with Fair Trade – 'the provision of halal… food is often complex, misunderstood, and poorly executed' (White et al:2016, p388). Most people in Malaysia agreed that their perception of halal and what it constituted was based, along with family, on what they heard in TV, radio and internet advertisements (Raufu and Naqiyuddin Bakar:2014, p16). Given the opportunity, availability and means, Muslims in Jakarta and Melbourne, it was found, would eat halal meat seven times a week (Jusmaliani and Nasution:2009, p8) without questioning the sustainability of that choice. A dangerous breach has opened up – and been created and constructed by state and commercial interests – between halal and *tayyeb*.

The process of top-down creation of the Muslim consumer who would not have too high a standard of sustainability of meat products is detailed in Tayob's work of 2016. Here, in South Africa, certification agencies played a role in creating a halal market, and were able to set the definition, including deliberately obscuring the meaning of *tayyeb* to ensure sales (Tayob:2016, p72, p81). Elsewhere, *tayyeb* has been described as simply 'hygienic', a radical narrowing of the concept (Halim:2014, p72). Yet there is a move to bring sustainability to meat consumption through operationalising the *tayyeb* concept, and restoring the symbiosis of halal and *tayyeb*. Examples of this will be shown in the case studies section, but in the US there have been examples of an 'eco-halal' movement that aims to produce traceable, sustainable, organic meat under the 'halal and tayyeb' label (Arumugam:2011).

A report on factory farming by *Compassion in World Farming* noted Islamic scripture's stated commitment to tayyeb and ruled it incompatible with factory farming (D'Silva:2015, p7-8). In Iran, following the revolution, efforts were made to produce 'authentic' halal food against the mass production of factory methods (Attar et al:2016, p189), although Iranians still consume on average 10kg more poultry annually than the world average (Attar et al:2016, p211). In Morocco, which furnishes a number of sustainable case studies, an ethnographic study found that amongst female consumers in Marrakech the concept of *tayyeb* was integral to consumer choice (Graf:2016, p254) – based on food's origins and a collective mentality to sharing food - and took its place in a symbolic universe that privileged *beldi* (local) food over *rumi* (foreign) imports (Graf:2016, p275), which would also privilege locally sourced, sustainable food products over high carbon-footprint, high food mile products by definition.

The contest over halal and its separation from *tayyeb* – and thus possibilities of sustainable consumption – is a story of globalisation; of corporations driving for scaleable standards (Fischer:2016, p3), and of 'global assemblages' forging out of a complex nexus of state, market, religion and corporate interest (Fischer:2016, p21). As most studies are keen to establish, the global halal industry could be worth more than $632bn annually (Bergeaud-Blackler:2016, p1) and therefore the onus, the logic, is on increased consumption of meat to ever more standardised – and thus diminished – criteria. Muslims, increasingly mobile and diasporic, rely on certifying agencies to direct them to halal products – the rupture between halal and *tayyeb* is therefore of immense importance (Fischer:2008b, p831), for sustainability, as it results in a lost opportunity for global sustainable meat standards, when Islamic scripture and tradition clearly has the symbolic resources to lead the way. Instead, halal definitions have been led by the market – a constructed market – in which state governments are hoping to take advantage of a globalised imaginary of the *'ummah'* as a huge market for mass meat consumption under their halal, but not yet *tayyeb*, still less sustainable, certification (Bergeaud-Blackler:2016, p8-9).

Anthropological Fieldwork

Understanding consumption means considering a complex net of causation for why people use up resources or make purchases in certain ways. One important consideration is the role of consumption in shaping identity. A number of anthropological studies have focused on Muslim populations to identify what drives their consumption behaviour, including a literature on the relative sustainability of their practices. It is therefore important to consider these ethnographies for the insights they provide on why Muslims consume in the ways they do, and to ascertain the relative role of religion in shaping sustainable behaviours.

Fieldwork undertaken in Damascus in 2006 found that rather than Islamic piety functioning as a site of resistance to consumerism, an Islamic consumer was being engineered, in the wake of the 'liberalisation' of the Syrian economy. New consumer goods were being created, aimed at an Islamic market, to aid public displays of piety. These included mass produced mobile phone cases and wristbands with Islamic messages, or Saudi biscuit companies using du'a (supplications) in their advertising slogans (Kokoschka:2009, p228-234). Piety was seen as a source of symbolic capital, and adab (good manners) could be attained by moral performance, which was partly sustained and exhibited by making such 'pious purchases' (Kokoschka:2009, p227). The 'consuming Muslim is the alternative to the austere, strict Muslim,' the study found (Kokoschka:2009, p239). The manifestation of public piety through purchasing represented the transformation of the Islamic project from a collective, political, emancipatory one to an individualised, consumerist, privatised one, which neatly fit the demands of global capital (Kokoschka:2009, p226).

For Johan Fischer, studying the consuming habits of middle-class Malays in London, consumption of halal products was part of class and cultural identity formation (Fischer:2011, p52). Diasporic uncertainty over food choices led to 'new stringency within the logics of halalisation' (Fischer:2011, p58). Global capitalism, it seems, 'had made peace with cultural diversity,' ensuring that 'under globalisation, these processes (of halal consumption) are intensifying' (Fischer:2011, p16-7). Nestle and Coca-Cola both received halal certifications from the Malaysian state, whereas Tesco in Slough prided itself on having the largest halal section in Britain (Fischer:2011, p11, p20, p128-9). All of this happened whilst avoiding a connection with organic production (Fischer:2011, p14) which might have necessitated lower profit margins or lower volume, or responsible, sustainable consumption. Instead, an identity based on consumption is formed, which, as in the Syrian example, poses no challenge, and even facilitates, capitalist growth.

Raymond Lee hypothesised the retooling of religion in late capitalism as 'an international salvationary market' (Lee:1993, p35). The disenchanted conditions of post-modernity have created ready consumers for religious solutions and spiritual products, off-the-shelf salvation, producing an 'expanding religious market' (Lee:1993, p37) and the commodification of products, practices and spiritual technologies that were previously embedded in wider social systems and part of holistic, organic worldviews. Now they can be packaged, standardised and marketed around a 'globalised ummah'. For Lee, religion did not stand in the way of consumption, religion – in his study the 'Islam of Malays' – had become consumption.

This clearly has deep implications for those studying Islam and the possibility of sustainable consumption, demanding a response that encompasses globalisation and the post-modern condition. Yet it is not an uncontested proposition, and the diversity of the Muslim world and variety of Islamic experiences must be emphasised. In a study of Muslims in Tabriz, Iran, published in 2007, the more religious people seemed to be, the less consumerist were their habits (Godazgar:2007, p404). This, however, reflected a generational split – veterans of the Iranian Revolution were much more likely to eschew consumerism and had low rates of consumption themselves; compared with those below 27 – who, for example, 'consumed' three and a half hours of satellite TV per day – but also had wildly divergent views on the ethics of consumption (Godazger:2007, p408). Once again, as Iran liberalises its economy and opens up to Western capital, this generational shift can only be expected to accelerate, with further opportunities for religious commodities to help engineer vast new Islamic markets for consumer goods.

Consumption, anthropologists have found, plays a large role in identity formation of Muslims worldwide, and is part of status negotiations across a wide variety of contexts Muslims find themselves in.

A recent study of why some UK Muslims celebrate Christmas found that 'religious minorities selectively engage with religious, cultural and market derived consumption narratives surrounding celebrations indicative of another dominant religious/societal group' (Khan et al:2017, p290). In that example, a minority position was negotiated through consumption. In a famous study of the Damascus bourgeoisie, Christa Salamandra found that elite Damascenes protected their cultural and social capital in the wake of nouveau riches by practises of consumption – either by conspicuously consuming 'good taste' products, choosing to eat in 'traditional' restaurants marketed by Western hotel companies, or ensuring one was seen to eat the most elaborate and expensive foods for iftar during Ramadan (Salamandra:2004, p49, p75-6, p96). Once again, consumption was the main agent of identity formation and status negotiation, how an elite class maintained its position in the face of insurgent competition.

In Turkey, Navaro-Yashin's ethnography found commodification and mass consumption a phenomenon that united both 'Islamists' and 'secularists'. Whereas secularists could buy mass produced Ataturkist baubles, the 'veil' was commodified and turned into a consumer product – mass produced, with a constant production of new lines for each 'season' encouraging regular repurchasing, and a premium for foreign-made products (Navaro-Yashin:2002, p82-4). When malls were opened in the rapidly neoliberalising atmosphere of the 1980s, they were derided by Islamists for exposing the gaps between rich and poor, yet huge Islamic clothing corporations grew, such as Tekbir Inc, located in a complex near the Fatih Mosque (Navaro-Yashin:2002, p94). Opportunities in the liberal economy were available to Muslims too, a new 'believing class' of Islamic bourgeois became a vast new market for Islamic consumer products (Navaro-Yashin:2002, p113) and through these products newly enriched Turkish Muslims were unable to consolidate their class position whilst also shoring up their religious capital (Navaro-Yashin:2002, p110-1). Mass consumption practices colonised the symbols of piety, modesty and restraint.

A further study by Fischer in Malaysia underlined the centrality of consumption to Muslim identity formation – who went so far as to conclude that 'modern Malay Muslim identity in Malaysia is unimaginable outside the context of the emergence of a wide range of conflicting understandings and practices of consumption,' in which the Malaysian state's 'presence is... ubiquitous.' (Fischer:2008a, p9). The Malaysian state, in Fischer's thesis, has set about the deliberate process of creating a Muslim consumer market (Fischer:2008a, p29) and aimed to use halal consumption as a way of fostering Islamic identity (Fischer:2008a, p35-6). 'New forms of consumption have displaced older forms of loyalty and provided the state with new technologies of constructing loyalty, reverence, contingency and dependence.' (Fischer:2008a, p44). Food consumption, 'the closest one can come to a core symbol in the everyday lives of Malay families' (Fischer:2008a, p86) was 'a crucial class conditioner' (Fischer:2008a, p95). Halal consumption, in an age of mass consumption and corresponding unease, becomes a method of purifying the act of consuming, of assuaging consciences, of erasing potentially complex issues of the sustainability of large-scale meat production, fast food industries or mass produced religious commodities (Fischer:2008a, p229).

In China, Chinese Muslims demonstrated 'through the commodities they consumed... that they wanted to modernise and were capable of modernising themselves' (Gillette:2000, p222-3). Consumption was a way 'of producing social and cultural identities' (Gillette:2000, p16), and Chinese Muslims could consume to produce an image of modernity, but one laden with a specific identity, through the consumption of Arabic goods and fashions (Gillette:2000, p230). 'Consumption,' Gillette concludes, 'provides individuals and groups with opportunities to actively create self-images and influence how they are perceived.' (Gillette:2000, p235). Once again, this could be crucial for understanding how *Muslims* (as opposed to *Islam*) engage with consumption, how ethical or ecological concerns, not least sustainability, must compete with more immediate concerns of social and cultural imperatives especially, but not exclusively, if Muslims are in a minority position, as the Chinese Muslim study demonstrates.

Further ethnographic studies were conducted at the level of the household, this time in Cairo. Increasing attention is being paid to the household as the node of consumption (Anderson et al:1994, Jackson et al:1995, Druckman and Jackson:2009, Seaman et al:2014). For Singerman and Hoodfar (1996), understanding the household in Egypt was the key to understanding Egypt's political economy. Hoodfar focused on consumption in her ethnography of 62 households in lower-income neighbourhoods of Cairo (Hoodfar:1996, p3), and found that Islam did not have an impact on consumption decisions (Hoodfar:1996, p14). Rather the onus was on better housing or more business opportunities, and then acquisition of appliances, clothes and better food (Hoodfar:1996, p18-9). Yet the acquisition of consumer goods was not for their own sake or for aggrandisement, rather it was as a form of social security – appliances could be lent or shared with neighbours creating webs of obligation that could be utilised when the consumer fell on harder times in the future (Hoodfar:1996, p20-2), a form of informal social insurance.

It is important to note in these studies the breach that has opened up between religious consumption and environmental concerns, not to mention sustainability. A 2006 study of students in Cairo found that 56% of students 'felt a sense of helplessness about environmental problems,' (Rice:2006, p386). combined with a lack of faith in the government to lead on environmental renewal (Rice:2006, p387). Instead, 'the principles contained within the religion of Islam that concern pollution, public health, natural resource management and ecological values are relevant but rarely promoted in Egypt' (Rice:2006, p388). The missed opportunities were Friday sermons which rarely touched on ecological matters or called to sustainable consumption.

The victims of environmental damage caused by mass consumption, such as Muslims living in Mali, tended to see the desertification caused either by God as a test, or as punishment for depraved locals, or the result of international conflict in a landmark study (Bell:2014, p295). This called for local knowledge to incorporated with religious traditions to move the conversation to sustainable practices across Africa, (Bell:2014, p303-4), rightly prioritising education without forgetting that Mali is the recipient, rather than the producer, of climate change. Yet it reveals the belief in several studies that populations are amenable to religious sustainable consumption messaging – a 2017 study of the Egyptian food industry found that 'consumers are willing to pay extra money for a sustainable brand' (Shaban and El-Bassiouny: 2017, p184), providing the extra cost is marginal and the quality is higher.

These case studies provides valuable insights into the lived experience of consumption amongst disparate groups of Muslims across the world. It is important to note the conclusion of Fischer, that 'no single theory was able to capture the immense complexity involved in modern religious consumption' (Fischer:2008a, p226), but also to place the topic of consumption at the micro, consumer or household level – as almost all of these studies have - in the context of globalisation, political economy and the inescapable structural context of deepening neoliberalism.

Halal

As well as academic studies and theoretical literature, several practical examples of sustainable production and consumption have emerged in Muslim communities, either at the national, state level or at the local, individual level. This section will focus on the *literary* production of these initiatives, and attempt to place them in a wider context where necessary.

State initiatives

In 2014, the Government of Dubai published a report into 'sustainable development' which deployed the conventional arguments that the tools for sustainability were already latent in Islamic tradition – be it in the story of Yusuf storing up food for the coming famine in the Qur'an (cited as a case of intergenerational fairness, Killawi:2014, p14) or the example of Umar ibn Khattab advocating careful use of water (Killawi:2014, p15-6), 'Islam brought forth the same notions (of sustainability) fourteen centuries earlier than we as people did' (Killawi:2014, p11). The programme for sustainability is detailed and rests on sustainable consumption. There is to be careful use of paper, increased recycling, a reduction in electricity usage and increased use of public transport over private cars (Killawi:2014, p27-52). Moreover, sustainable consumption – another concept specifically inscribed in Islam since its inception – 'everybody is responsible for implementing the concepts of sustainability and eco-preservation when making various purchases,' with an explicit link made to excessive consumption and environmental damage (Killawi:2014, p53-4). Residents of Dubai are encouraged to buy local products, seasonal fruits and vegetables and use solar energy (Killawi:2014, p56). The report is not sanguine or naïve about the current situation, however – 'Most of what we eat or wear is imported; our water is artificially distilled; our air is conditioned; and our transportation is done by car. All of that is certain to increase the ecological footprint of this country' (Killawi:2014, p69-70). Despite this, it is hoped that Dubai can become a model sustainable society in the future (Killawi:2014, p69-70).

Unfortunately, of course, Dubai remains one of the least sustainable localities on Earth. In the year prior to the cited study, it was found that Emirati residents consumed more energy per head than almost any others globally – even more than US citizens (Rahman:2013).

Two years after the study, the average UAE resident consumed an average of 550 litres of water per day compared with the world average of between 170 and 330, according to a 2016 report of the *Khaleeji Times*. A 2017 report found that half of this went to water garden lawns (Al Wasmi:2017). A more recent report also revealed that in the area of consumer goods, such as beauty and cosmetic products, the UAE is the 7th largest consumer per capita in the world (Clowes:2017). Exhortation by government report is clearly not enough in and of itself

A more *soi-disant* 'international' approach was claimed by the 'Islamic Declaration on Climate Change', issued after the International Climate Change symposium held in Istanbul in 2015 (Schaefer:2016, p11). Drafted by academics, it was signed by a number of Islamic faith leaders and policy-makers (Schaefer:2016, p11). Accepting the general consensus of climate change, it lamented corruption being caused in the Earth by man's excesses. It called on Muslim oil-producing states to phase out production and transfer wealth to aid less developed countries cope with the effects of climate change; to redirect focus to elevating the status of the poor and to invest in developing a 'green economy' (Schaefer:2016, p13). It calls on corporations to shoulder more of the responsibility for the costs of their production (Schaefer:2016, p14) but also for Muslims worldwide to integrate environmental demands into their practice (Schaefer:2016, p14). This declaration, if acted upon, 'could have massive ramifications for mitigating the climate crisis' (Schaefer:2016, p14). Yet the declaration has no writ, or force of law, or popular mass movement behind it. It is, no more, although certainly also no less, than the call for the discussion within Muslim communities to begin.

Morocco furnishes a number of examples of state initiatives and community organisations working towards the same goal. A 2016 government initiative aimed to 'green' 600 of the state's mosques (Neslen:2016), by installing solar panels and geothermic heating panels, and paid for by the Moroccan and German governments (Neslen:2016). Electricity could be cut by up to 40% in the refitted buildings and it could be rolled out to more of the country's 15,000 mosques (Neslen:2016). State ministries have also sought to partner with private sector companies to stimulate investment in 'sustainable value chains', as part of wider 'Green Morocco Plan', led by agribusiness – including examples of how to cut farm fuel use by 40% - although the €155 million committed to the project (Zgheib:2017) is small, and the embedding of the private sector deep.

Morocco too provides examples of grassroots sustainable production. 'Marrakech Organics' is an organic olive farm in the Ourika Valley, and also functions as an ecological training centre. Its focus is on permaculture, which it defines as 'permanent agriculture' in harmonious integration with the natural landscape; with sustainable human settlement built into the food production system (Marrakech Organics:2017). The agricultural process is designed to regenerate soil, as opposed to degrading it; conserve and reuse water; recycle all waste; avoid chemical fertilisers and other products of 'Big Agro'; be energy efficient; and train people in the holistic manner in which the farm operates (Marrakech Organics:2017).

This model of ground-up, small-scale, privatised sustainable production can be seen amongst Western Muslim communities too. In the US, the *Dayemi Tariqa,* a 'Sufi' religious movement of Bangladeshi origin, runs a network of farms, with its flagship being Dayempur Farm in Illinois (Finnegan:2011, p73).

Returning to the land, and the politics of space have long occupied the minds of US Muslims (Finnegan:2011, p73). It is considered important by its activists to have physical land to effect revolutionary change (Finnegan:2011, p76), and the purpose of the farm is to practice the ideals of sustainable production, producing around 1,000 lbs of product per year from 2.5 acres of cultivated land (Finnegan:2011, p74). The activists are encouraged to forego possessions and attachments (Finnegan:2011, p74). The farm is focused on providing the basic needs of the community sustainably (Finnegan:2011, p75) and is part of a larger network of the group's schools, clinics and community centres (Finnegan:2011, p73).

In the UK, notable examples include Abraham Organics and Willowbrook Farm, both offering organic or near-organic halal produce, closing the gap between halal and *tayyeb*. In the case of Willowbrook, slaughter of animals is on a small-scale and meticulously carried out (Miller:2017) with the emphasis on living in balance with the land. In Belgium a similar initiative founded in 2010 named 'Green Halal' aims to build a wider network of organic-halal producers in the Low Countries, with the aim of promoting a 'green Islam, a new Islamic ethic', which actively seeks to break with market forces and promote less meat consumption (Istasse:2016, p427). Green Halal goes further than other case studies cited in not only promoting moderation, balance and ecologically-aware wudhu but also veganism, during Ramadan (Istasse:2016, p430). As of 2016, Green Halal had only 30 members, drawn from 15 middle-class households (Istasse:2016, p427). Indeed, the scaleability of initiatives and expanding of models such as Willowbrook, Abraham Organics and Green Halal remains to be seen, in terms of being attainable to the mass of working-class Muslims that make up communities in the UK and Europe. Otherwise, the phenomenon of food 'ghettoisation' emerges, where only the middle-classes can afford to eat sustainably and healthily (Goodman and Goodman:2001, p97).

Finally, a number of organisations are aiming to change both environmental consciousness and the ecological impact of Muslim communities beyond food specifically. The UK-based Muslim Action for Development and Environment (MADE) issues a 'Green Up Toolkit' aimed at 'Greening' communities (MADE:2017). It celebrates green mosques in the UK, and calls on Muslims to 'green up your deen' by saving energy, conserving water, recycling, consuming ethically – by eating less and using Fair Trade ingredients (MADE:2017, p20-1). It offers awards to reward good practice (MADE:2017, p22-3) and encourages the joining of wider environmental struggles. The Islamic Foundation for Ecology and Environmental Sciences (IFEES) offers a similar menu in its 'Green Guide for Muslims', which encourages eating local food, reducing water consumption – and, importantly, its unnecessary heating and cooling – and careful use of electricity and lighting, transport and so on (IFEES:2015, p5-17). An opening statement declares it the requirement of Muslims to live considerately and responsibly, and ostensibly posits that climate change is the result of a world, and a humankind, out of balance (IFEES:2015, p1). Finally, the London Sustainability Exchange cited the Green Mosque Project in London as aiming to correct for the class dimensions of climate change, by directing its efforts to the working class Muslim communities of London's East End. Six mosques were engaged, with 16 more interested (LSx:2014, p1) with 532 volunteers recruited and up to 18,000 people reached (LSx:2014, p2). There was an emphasis too on knowledge production, linking Islam and the environment in an effective way (LSx:2014, p4).

Finally, perhaps the most promising example of sustainability in the Muslim community in the UK, in terms of tying together the political, economic and cultural challenge climate change presents is *Wisdom in Nature*.

Of all, Wisdom in Nature is the most explicitly political project, aimed at changing the way not just nature is conceived, but the way political decisions are made and how community activism is done, drawing on the principles of deep democracy and sociocracy. Amongst the tendency to embed firmly with liberal economic logic and facilitate sustainable growth, Wisdom in Nature tends more towards epistemic disruption with the dominant economic system, as part of the full-spectrum response required by climate change – sustainable consumption and systemic change.

Conclusion

The division at times has been necessarily arbitrary. All Muslims would claim the authority of the Qur'an, for example, and some writers could move neatly between the categories outlined above, within their work. This attempt to categorise by their predominate focus has aimed to demonstrate the breadth of approaches and bring as many different studies as possible together for comparison. One major approach has been to begin with first principles – placing the environment in its cosmological relationship with humankind and its creator, or beginning with the Qur'anic terminology as the building blocks to interpret our interaction with nature. A second has been to revive or adapt Islamic legal rulings to contemporary social questions, or synthesise them with reigning social scientific ideas or public policy orthodoxies. The case studies and anthropological fieldwork demonstrate the uneven adoption of a synthetic way of approaching sustainability issues amongst contemporary Muslims.

This review has examined works which centre the spirit, the scripture, the state, or the system. In doing so, they have taken a position on the nature of the crisis itself, and whether the systemic, organic crisis represented by climate change requires a suitably holistic, radical response from Muslims.

References

Abdul Haleem, M. (2001) *Understanding the Qur'an: Themes and Style.* New York: IB Tauris

Abdul-Matin, I. (2010) Green Deen: *What Islam Teaches about Protecting the Planet*. Oakland: Berrett-Koehler

Aburounia, H. and Sexton, M. (2006) *Islam and Sustainable Development*. Salford: University of Salford.

Abu-Sway, M. and Sachedina, A. (1999) Islam: *The Environment and Health*. Islamic Medical Association of South Africa

Ahmad, A. et al (1997) *Islam and the Environmental Crisis*. London: Ta-Ha Publishers

Al-Jayyousi, O.R. (2016) *Islam and Sustainable Development*: New Worldviews. London: Routledge

Al-Kholi, S.F. (2005) *On Islam's Attitude towards Sustainable Development*. Journal of King Absulaziz University: Islamic Economics institute 18(1):35-40

Al-Wasmi, N. (2017) *Lawned gardens account for half of UAE's water consumption per capita, say experts*. The National. [Online] Available from: https://www.thenational.ae/uae/lawned-gardens-account-for-half-of-uae-s-water-consumption-per-capita-say-experts-1.1807

Ali, M.H. and Suleiman, N. (2016) *Sustainable food production: Insights of Malaysian halal small and medium sized enterprises*. International Journal of Production Economics 181:303-314

Ambali, A.R. and A.N. Bakar (2014) *People's Awareness on Halal foods and products: Potential issues for Policy-makers.* Procedia Social and Behavioural Sciences 121:3-25

Ammar, N. (2001) *Islam and Deep Ecology*. In Barnhill, D.L. and Gottlieb, R.S. (eds.) Deep Ecology and World Religions. New York: SUNY Press

Anderson, M., Bechhofer, F., Gershuny, J., (1994) T*he Social and Political Economy of the Household*. Oxford: Oxford University Press

Arumugam, N. (2011) *The Eco-Halal Revolution: Clean Food for Muslims*. [Online]. Available from: http://www.unstunnedhalal.com/articles/view/?id=3

Askari, H, Iqbal, Z. and Mirakhor, A. (2014) *Challenges in Economic and Financial Policy Formulation*: An Islamic Perspective. Basingstoke: Palgrave MacMillan

Attar, M. et al. (2016). *Remembering the Spirit of Halal: the Iranian perspective*. In Bergeand-Blackler, F., Fischer, J., and Lever, J. (eds.) Halal Matters: Islam, politics and markets in global perspective. London: Routledge

Badawi, A.A. (2004) *Window to the Global Halal Network. Koleksi Arkib Ucapan*: Ketua Eksekutif [Online]. Available from: http://www.pmo.gov.my/ucapan/?m=p&p=paklah&id=2880

Bell, D. (2014) *Understanding a 'Broken World'*: Islam, Ritual, and Climate Change in Mali, West Africa. Journal for the Study of Religion, Nature and Culture 8(3)

Chapra, M.U. (2000) *The Future of Economics: An Islamic Perspective*. The Islamic Foundation

Chapra, M.U. (2008) *The Islamic Vision of Development in the Light of Maqasid al-Shariah*. International Institute of Islamic Thought 15(1).

Choudhury, M.A. (2004) *The Islamic World-System: a study in polity-market interaction*. London: Routledge

Clowes, E. (2017) *UAE has seventh highest beauty product consumption per capita in the world. In Gulf News*. [Online] Available from: https://gulfnews.com/business/sectors/retail/uae-has-seventh-highest-beauty-product-consumption-per-capita-in-the-world-1.2014317

References

Deeb, L. (2006) *An Enchanted Modern: Gender and Public Piety in Shi'i Lebanon*. Princeton: Princeton University Press

Druckman, A. and Jackson, T. (2009) T*he carbon footprint of UK households 1990–2004: A socio-economically disaggregated, quasi-multi-regional input–output model*. Ecological Economics 68(7):2066-2077

D'Silva, J. (2015) *Religion and Factory Farming*: A briefing by Compassion in World Farming. Compassion in World Farming.

Durning, A.T. (1992) *How much is enough? The consumer society and the future of the earth*. Earthscan

Dutton, Y. (1992) *Natural Resources in Islam*. In Khalid, F., and O'Brien, J. (eds.) Islam and Ecology London: Cassell.

Finnegan, E. (2011) *Case study: images of 'land' among Muslim farmers in the US*. In Bauman, W., Bohannon, R., and O'Brien, K., (eds.) Grounding Religion: A Field Guide to the Study of Religion and Ecology. London: Routledge

Fischer, J. (2008a) *Proper Islamic Consumption: Shopping among the Malays in Modern Malaysia*. Denmark: NIAS Press.

Fischer, J. (2008b) *Religion, science and markets: Modern halal production, trade and consumption*. European Molecular Biology Organization

Fischer, J. (2011) *The Halal Frontier: Muslim Consumers in a Globalized Market. Basingstoke*: Palgrave MacMillan.

Foltz, R. (2002) Nasr, Seyyed Hossein. In Munn, T. et al (eds.) *Encyclopedia of Global Environmental* Change. New Jersey: Wiley

Fromm, E. (2014) *To have or to be?* London: Bloomsbury

Gabriel, Y. and Lang, T. (2006). T*he Unmanageable Consumer*: Second Edition. California: Sage

Gillette, M.B. (2000) Between Mecca and Beijing: *Modernization and Consumption among urban Chinese Muslims*. Stanford: Stanford University Press

Godazgar, H. (2007) *Islam Versus Consumerism and Postmodernism in the Context of Iran*. Social Compass 54(3)

Goodman, D. and Goodman, M. (2001) *Sustaining Foods: Organic Consumption and the Socio-Ecological Imaginary*. In Cohen, M.J. and Murphy, J. (eds.) Exploring Sustainable Consumption: Environmental Policy and the Social Sciences. Oxford: Pergamon

Graf, K. (2016) Beldi matters: *negotiating proper food in urban Moroccan food consumption and preparation*. In Bergeand-Blackler, F., Fischer, J., and Lever, J. (eds.) Halal Matters: Islam, politics and markets in global perspective. London: Routledge

Halim, A.A. et al (2014) *Consumer Protection of Halal Products in Malaysia*: A Literature Highlight. Procedia Social and Behavioural Science. 121: 68-78.

Hallaq, W. (2013) *The Impossible State: Islam, Politics, and Modernity's Moral Predicament New York*: Columbia University Press

Hasan, Z. (2006) *Sustainable development from an Islamic Perspective: meaning implications and policy concerns*. Journal of King Absulaziz University: Islamic Economics institute 19(1): 3-18

Hashim Brown, J., (2013) *Metaphysical Dimensions of Muslim Environmental Consciousness*. Tabah Foundation.

Hassan, S.H. (2014) *The role of Islamic values on green purchase intention*. Journal of Islamic Marketing 5(3)

References

Helminski, S. (2006). Sustainability. In Helminski, C. (ed.) *The Book of Nature: A Sourcebook of Spiritual Perspectives on nature and the environment*. The Book Foundation

Hoodfar, H. (1996) *Survival Strategies and the Political Economy of Low-Income Households in Cairo*. In Singerman, D. and Hoodfar, H. (eds.) *Development, change, and gender in Cairo: The View from the Household*. Bloomington: Indiana University

Iqbal, M. (ed.) *Islamic perspectives on Sustainable Development* (Palgrave Macmillan, 2005)

Islamic Foundation For Ecology And Environmental Sciences (IFEES) *IFEES Eco-Islam*. [Online] Available from: http://www.ifees.org.uk

Istasse, M. (2016) *Green halal: how does halal production face animal suffering?*. In Bergeand-Blackler, F., Fischer, J., and Lever, J. (eds.) Halal Matters: Islam, politics and markets in global perspective. London: Routledge

Izzi Dien, M.Y. (1992) *Islamic Ethics and the Environment*. In Khalid, F., and O'Brien, J. (eds.) Islam and Ecology. London: Cassell

Izzi Dien, M.Y. (1995) *The Environmental Dimensions of Islam*. Cambridge: Lutterworth Press

Jackson, S. and Moores, S. (eds.) *The Politics of Domestic Consumption*: Critical Readings. New Jersey: Prentice Hall.

Jackson, T. (2005) *Towards a 'Social Psychology' of Sustainable Consumption*. [Online] Available from: http://www.researchcatalogue.esrc.ac.uk/grants/RES-332-27-0001/read

Jackson, T. (2014) *Sustainable Consumption*. In Atkinson et al (eds). Handbook of Sustainable Development. Cheltenham: Edward Elgar

Jackson, T. (2017) *Prosperity Without Growth: Foundations for the Economy of Tomorrow.* London: Routledge

Jafari, A., and Sandicki, Ő. (eds.) (2016) *Islam, Marketing and Consumption: Critical perspectives on the intersections*. London: Routledge

Jusmaliani and Nasution, H. (2009) Re*ligiosity Aspect in Consumer Behaviour: Determinants of Halal Meat Consumption*. Association of Southeast Asian Nations Marketing Journal I(2).

Kahf, M. (1981). *A Contribution to the Theory of Consumer Behaviour in an Islamic Society*. In Ahmad, K. (ed.) Studies in Islamic Economics. Islamic Foundation

Khalid, F.M. (2002) *Islam and the Environment*. In Munn, T. et al (eds.) Encyclopedia of Global Environmental Change. Oxford: Wiley

Khalid, F. and Thani, A.K. (2008) *Teachers Guide Book for Islamic Environmental Education*. The Islamic Foundation for Ecology and Environmental Sciences.

Khan, A., Lindridge, A. and Pusaksrikit, T. (2017) *Why some South Asian Muslims celebrate Christmas*: *Introducing 'acculturation trade-offs'*. Journal of Business Research 82:290-299

Khaleeji Times (2016). *550 litres of water used per day by a UAE resident*. [Online]. Available from: https://www.khaleejtimes.com/550-litres-of-water-used-per-day-by-a-uae-resident

Killawi, R.L. (2009) *Sustainable Development from Islamic Perspective* (Government of Dubai, 2014)

Kokoschka, Alina '*Islamizing the Market? Advertising, Products and Consumption in an Islamic framework in Syria*. In Pink, Joanna (ed.) Muslims in the Age of Mass Consumption. Newcastle upon Tyne: Cambridge Scholars Publishing

Kűng, H. and Kuschel, K.J. (eds.) (1993) *A Global Ethic: The Declaration of the Parliament of the World's Religions*. SCM Press Ltd

Lee, R.L.M. (1993) *The Globalization of Religious Markets: International Innovations, Malaysian Consumption*. Journal of Social Issues in Southeast Asia 8(1)

References

LSX (London Sustainability Exchange) (2014) *Green Mosques*. [Online] Available from: http://www.lsx.org.uk/projects/green-mosques/

Mahmood, S. (2005) *The Politics of Piety: The Islamic Revival and the Feminist Subject*. Princeton: Princeton University Press

Maniates, M. (2002) *Individualisation: Plant a tree, buy a bike, save the world?*. In Princen, T., Maniates, M., Conca, K. (eds.) Confronting Consumption. MIT Press

Manzouri, M. et al. (2014) *Increasing Production and Eliminating Waste through Lean*: Tools and Techniques for Halal Food Companies. Sustainability 6(12):9179-9204.

Marrakech Organics (n.d.) *Marrakesh Organics* [Online] Available from: https://marrakeshorganics.com/

Masri, A.H.B.A. (1992) *Islam and Ecology.* In Khalid, F., and O'Brien, J. (eds.) Islam and Ecology. London: Cassell

Mesbahi, S.S. (2011) *Method and Mysticism: Cosmos, Nature and Environment in Islamic Mysticism*. Fons Vitae.

Michaelis, L. (2006). *Ethics of Consumption*. In Jackson, T. (ed.) *The Earthscan Reader in Sustainable Consumption*. Earthscan

Miller, A. (2017) *Eating your ethics: Halal meat*. Sustainable Food Trust.

Miller, D. (ed.) (1996) *Acknowledging Consumption: A review of new studies*. London: Routledge

Mitchell, T. (1991). *Colonising Egypt. Berkeley*: University of California

Muslim Agency for Development Education (2015) *Green Up Toolkit*. [Online] Available from: http://www.muslimclimateaction.org.uk/wpcontent/uploads/2015/05/GreenUpMyCommunityToolkit.pdf

Najjar, A.M A.L (2000) The Vicegerency of Man: *Between Revelation and Reason, A critique of the Dialectic of the Text, Reason and Reality*. International Institute of Islamic Thought (2)

Naqvi, S.H.N., Beg, H.U., Ahmed, R. and Nazeer, M.M. (1992) *Principles of Islamic Economic Reform*. In Jomo K.S. (ed.) *Islamic Economic Alternatives: Critical Perspectives and New Directions*. Basingstoke: Macmillan

Nasr, V. (1986) Meccanomics: *The March of the New Muslim Middle Class*. London: Oneworld

Nasseef, A.O. (1986) *The Asssisi Declaration.* [Online] Available from: http://www.arcworld.org/downloads/THE%20ASSISI%20DECLARATIONS.pdf

Navaro-Yashin, Y. (2002), *Faces of the State: Secularism and Public Life in Turkey*. Princeton: Princeton University

Neslen, A. (2016) *Morocco to switch on first phase of world's largest solar plant*. In The Guardian Newspaper [Online] Available from: https://www.theguardian.com/environment/2016/feb/04/morocco-to-switch-on-first-phase-of-worlds-largest-solar-plant

Niamir-Fuller, M., Őzdemir, I. and Brinkman, J. (2016) *Environment, Religion and Culture in the Context of the 2030 Agenda for Sustainable Development*. United Nations Environment Programme

Nursi, S. (2011). *Nature: Cause and effect?* Sözler.

Rahman, S. (2013) *UAE's per capita energy consumption among the highest*. Gulf News [Online] Available from: https://gulfnews.com/business/economy/uae-s-per-capita-energy-consumption-among-the-highest-1.1171313

Rahnema, A. and Nomani, F. (1994) *Islamic Economic Systems.* London: Zed Books

Razalli, M.R., Abdullah, S. and Youssef, R.Z. (2012) *Is Halal Certification Process "Green"?*. The Asian Journal of Technology Management 5(1):33-41

Rezai, G., Mohamed, Z. and Shamsudin, M.N. (2015) *Can Halal Be Sustainable? Study on Malaysian consumers*. Perspective Journal of Food Products Marketing 21:6

Rice, G. (2006) *Pro-Environmental Behavior in Egypt: Is There a Role for Islamic Environmental Ethics?*. Journal of Business Ethics 65(4).

Robins, N. and Roberts, S. (2006) *Making Sense of Sustainable Consumption*. In Jackson, T. (ed.) The Earthscan Reader in Sustainable Consumption. Earthscan

Roy, O. (2007) *The Failure of Political Islam*. New York: IB Tauris

Salamandra, C. (2004) *A New Old Damascus: Authenticity and Distinction in Urban Syria*. Bloomington: University of Indiana Press

Samsudin, S. (2017). *Islam and Sustainable Consumption. The Star Online*. Available from: https://www.thestar.com.my/opinion/columnists/ikim-views/2017/05/09/islam-and-sustainable-consumption-if-we-recognise-that-the-ecological-crisis-is-a-reflection-of-a-sp/

Sardar, Z. (1985) I*slamic Futures: The Shape of Ideas to Come*. Mansell.

Schaefer, J. (2016) *Motivated for Action and Collaboration: The Abrahamic Religions and Climate Change*. Geosciences 6(3):31

Schor, J.B. (1998) *The Overspent American: why we want what we don't need*. New York: Harper Perennial

Seaman, J., Sawdon, G., Acidri, J. and Petty, C. (2014) *The Household Economy Approach: Managing the impact of climate change on poverty and food security in developing countries*. Climate Risk Management (4):59-68

Shaban, Y. and El-Bassiouny, N. (2017) T*he Many Facets of Sustainable Consumption, Anti-Consumption, and Emotional Brand Attachment in Egypt*. African Journal of Business and Economic Research (AJBER) 12(1)

Shariati, A. (1979) *On the Sociology of Islam*. Berkeley: Mizan Press.

Singerman, D. and Hoodfar, H. (eds.) (1996) *Development, change, and gender in Cairo: The View from the Household*. Bloomington: Indiana University

Soesilowati, E.S (2010) *Business Opportunities for Halal Products in the Global Market: Muslim Consumer Behaviour and Halal Food Consumption*. Journal of Indonesian Social Sciences and Humanities (3)

Stearns, P.N. (2006) *Consumerism in World History: the Global Transformation of Desire*. London: Routledge

Taylor, B. (2015) *Religion to the Rescue (?) in an Age of Climate Disruption*. Journal for the study of Religion, Nature and Culture 9(1)

Tayob, S. (2016) '*O You who Believe, Eat of the Tayyibāt (pure and wholesome food) that We Have Provided You'— Producing Risk, Expertise and Certified Halal Consumption in South Africa*. Journal of Religion in Africa (46)

Tripp, C. (2007) Islam and the Moral Economy: The Challenge of Capitalism. Cambridge: Cambridge University Press

Vidal, J. (2008) *Shattered illusions*. The Guardian Newspaper [Online] Available from: https://www.theguardian.com/environment/2008/mar/19/fossilfuels.indonesia

White, G.R.T., Samuel, A. (2016) *Fairtrade and Halal Food Certification and Labeling: Commercial Lessons and Religious Limitations*. Journal of Macromarketing 36(4):388-399

Wiedmann, T. et al (2015) *The material footprint of nations*. In Proceedings of the National Academy of Science 112(20):6271

Yusuf, M. (2004) *Purification of the Heart: Signs, symptoms, and cures of the spiritual diseases of the heart: translation and commentary of Imam al-Mawlud's Matharat al-Qulub*. Starlatch Press

Zain, S. et al (2017) *Sustainable Manufacturing framework from Islamic Perspective*. Institute of Physics Conference Series: Material Science and Engineering 184(1):12054

Hasan-uz-Zaman (1999) *Economic Guidelines in the Qur'an*. International Institute of Islamic Thought

Zgheib, N. (2017) *Developing sustainable value chains in Morocco. The European Bank for Reconstruction and Development*. [Online] Available from: http://www.ebrd.com/news/2017/developing-sustainable-value-chains-in-morocco.html

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