Muslim Societies in Postnormal Times

FORESIGHT FOR TRENDS, EMERGING ISSUES AND SCENARIOS

MUSLIM SOCIETIES IN
POSTNORMAL TIMES

Foresight for Trends, Emerging Issues and Scenarios

Post-Truths **Futures** Artificial Intelligence
Chaos Vision Islamophobia Uncertainty
Trends **Pollution** Complexity
Integration of Knowledge
Weirdness
A.I. Robots **Emerging Issues**
Postnormal Times **Foresight**
Change Sustainable **Energy** **Knowledge Creation**
Futures Advancing Education **Complexity**
Unthought futures Familiar Futures **Migration**
Extended Present **Backcasting**
Muslim Societies Population
Foresight **Islamophobia**
Anxiety **Complexity** Social media

Ziauddin Sardar
Jordi Serra
Scott Jordan

IIIT Books-In-Brief Series

MUSLIM SOCIETIES IN POSTNORMAL TIMES

Foresight for Trends, Emerging Issues and Scenarios

Edited by Ziauddin Sardar
Abridged by C Scott Jordan

Series Editors
Dr. Anas S. al-Shaikh-Ali
Shiraz Khan

IIIT Books-In-Brief Series

The IIIT Books-In-Brief Series is a valuable collection of the Institute's key publications written in condensed form designed to give readers a core understanding of the main contents of the original. Produced in a short, easy to read, time-saving format, these companion synopses offer a close, carefully written overview of the larger publication and it is hoped will stimulate readers into further exploration of the original.

The point of thinking about futures is not so much to 'predict' the future but to understand how change unfolds, what hazards and opportunities may lurk over the horizon, and how can we negotiate pitfalls and harness opportunities. Moreover, if we do not think about our own futures, others will.

The basic concepts of Islam have an intrinsic futures dimension. Consider the concepts of *tawhid*, *khilafah* and *akhirah*. A number of verses in the Qur'an also force our gaze towards the future. The life of the Prophet (ﷺ) too has many future oriented lessons, the ultimate one being: a society can be radically changed within a generation.

This study is specifically focussed on Muslim people and their societies. In this book, we have talked about 'Muslim societies' and 'Muslim communities', acknowledging their diversity and plurality, different historical backgrounds and contexts, and geographical spread. But our overall contention is that Muslims also exist in networks of communities within communities.

Where communication is instant and everything seems to be connected to everything else, the nature of networks has changed fundamentally. Contemporary change has a very specific nature that we need to understand before we contemplate how to negotiate and navigate it. In this book, we have framed our analysis within a specific approach to studying and deciphering change that we describe as the Postnormal Times (PNT) Theory.

There are three forces that are driving us towards PNT. Complexity, chaos, and contradictions. The change that is produced by the 3Cs has four particular features: Speed, Scope, Scale and Simultaneity. When 3Cs and 4Ss come together, there is a great deal of uncertainty. Uncertainty per se generates ignorance. In Postnormal times, uncertainty and ignorance shape the zeitgeist.

In the framework of PNT Theory, we think of alternative futures in terms of specific clusters of tomorrows. The Extended Present: that is, the trends and developments we can identify today will shape the future of the next decade. Beyond this, we have Familiar Futures, images from films and television shows, science fiction, advertising, corporate visions, and popular 'futurology' that are extrapolated and projected to create a picture of the future. Finally, the Unthought Futures: those that are outside the structure of our current thinking. Postnormal phenomenon could thus unfold in all three tomorrows both linearly or concurrently.

To help us perceive and possibly identify that which could go postnormal we have developed a specific tool: the menagerie of postnormal potentialities. Black Elephants have a high probability of occurrence, the potential of making a major impact but are generally overlooked or deliberately ignored, often connected to contradictions. Black Swans are outliers, located way outside the norm – phenomenon neither perceived nor anticipated, and although they are generally perceived as a threat, they could be opportunities. Black Jellyfish are 'normal' phenomena with potential for high impact, driven towards postnormality by positive feedback, that we think we really know but which can unexpectedly exhibit unforeseen behaviour that could produce chaotic or catalytic outcomes. Readers may see the structuring of the discussion around the menagerie of postnormal potentialities differently. The idea is to think critically about the emerging issues and explore their potential futures impacts.

Most things can be changed: we can proactively work towards contributing to a better future by our actions in the present – hence futures are inevitably linked to the present.

In such a postnormal world, Muslims cannot take a back seat. Muslim futures beckon. Not least to keep all our futures open and pluralistic and provide them with a viable sense of direction.

Sources

Aydin, Cemil (2017), *The Idea of the Muslim World: A Global Intellectual History* (Harvard University Press, Cambridge); quote from page 12

Buchner, V.F. (1993), "Al-Kazwini", *First Encylopaedia of Islam 1913-1936*, Volume IV, reprint edition, M.Th. Houtsma, A.J. Wensinck, T.W. Arnold, W. Heffening, E. Levi (Brill, Leiden)

Burrows, Mathew (2014), *The Future Declassified: Megatrends that will undo the world unless we take action* (Palgrave MacMillan, New York)

Al-Faruqi, Ismail Raji (1982), *Tawhid: Its Implications for Thought and Life* (IIIT, Herndon)

Ibrahim, Anwar (1991), 'The Ummah and tomorrows world' *Futures* 23 (3) 302-310

Nandy, Ashis (1996), 'Bearing witness to the future' *Futures* 28 6-7 636-639 (Hurst, London)

Sardar, Ziauddin (1979, 1987), *The Future of Muslim Civilization* (Mansell, London)

Sardar, Ziauddin (1985), *Islamic Futures: The Shape of Ideas to Come* (Mansell, London)

Sardar, Ziauddin (2013), *Future: All That Matters* (Hodder & Stoughton, London)

Sardar, Ziauddin (2010), 'Welcome to Postnormal Times' *Futures* 42 (5) 435-444 June (Hurst, London)

Sardar, Ziauddin (2019), editor, *The Postnormal Times Reader* (IIIT/CPPFS, London)

Scheffler, Samuel (2018), *Why Worry About Future Generations?* (Oxford University Press, Oxford)

UNESCO (2018), *Transforming the Future: Anticipation in the 21st Century* (Routledge, London and New York; UNESCO, Paris)

TRENDS

INTRODUCTION

By definition, a trend is fundamentally a measure of change over a given period of time within a particular context. Regardless of scale, all trends are based on some form or type of data – quantitative or qualitative.

Trends are drivers of substantive change and generally follow the S-curve. Thus, trends normally have a period over which they emerge slowly and then take off. Trends tend to slow down at reaching structural limits and level off. All trends, by definition, will invariably end, but it is often the case that they can be reinvigorated and rebirthed.

The aim of trends analysis is to establish a breadth and depth of understanding about the Extended Present. Trends analysis ought to foster an acute understanding about what we are already seeing happen around us and to detect possible patterns of change from past to the present.

Most of the global trends with potential consequences for Muslim societies we have identified are based on widely available data. Lack of data may be due to the fact that these trends are not being researched and studied, or they are not recognised as trends per se. Such trends are supported by scholarly and academic sources. In all cases, we have highlighted potential implications for the futures of Muslim societies.

We emphasise the caveat: trends are not density. There is a lot we can do to change, modify and nudge trends towards positive directions.

POPULATION AND YOUTH

Estimates indicate that the Muslim population will rise to 2.19 billion by 2030 and 2.76 billion by 2050. Muslims are also the religious group with the largest youth population, almost 33% on average. This is driven by heightened fertility rates (2.9-2.6 children per woman as of 2015), overall improvement of health conditions, drop in infant mortality (40 deaths/1,000 in 2010), and a risen life

expectancy (66 yo, expected to be 73 yo by 2030). Over a quarter of the global youth are Muslim (expected to be ~30% by 2030). Many of them are seeking education outside their home country, and a growing number of them prefer not to return home after graduation. Youth unemployment in Muslim countries is higher than the global average. Youth Trends ought to be kept in mind as they will affect numerous emerging issues on the horizon.

Implications

• Many Muslim countries will experience increasing difficulties to sustain a rapidly growing population.

• On average, Muslim communities are younger and, therefore, will retain a higher potential for further growth in the coming decades.

• The competition for education, employment, and living could provide a potential boom to the economy, but only if the proper infrastructure is in place and more appetizing opportunities do not lie abroad. The struggles of social welfare, healthcare, and a burden on the next generation are sure to follow.

• Muslim minorities in many countries will become the major religious groups (in several European countries) or become significantly larger communities (India or USA).

• If the present trend of Islamophobia does not abate, increased population growth may exacerbate it.

• Continued instability and armed conflict could produce a lost generation that does not repopulate or engage in economic practices necessary for developing societies.

Sources

Index Mundi (http://www.indexmundi.com)

Pew Research Center (2011), *The Future of the Global Muslim Population* (http://www.pewforum.org/files/2011/01/FutureGlobalMuslimPopulation-WebPDF-Feb10.pdf)

Pew Research Center (2015), *The Future of World Religions: Population Growth Projections, 2010-2050* (http://www.pewforum.org/files/2015/03/PF_15.04.02_Projections FullReport.pdf)

Sherwood, Harriet (2017), "Muslims in Europe could double by 2050" *The Guardian* 30 November

United Nations High Commission for Refugees (2016), *Global Trends: Forced Displacement in 2016* (http://www.unhcr.org/uk/statistics/unhcrstats/5943e8a34/global-trends-forced-displacement-2016.html)

United Nations. Population Division (2015), *World Population Prospects, The 2015 Revision* (http://esa.un.org/unpd/wpp/)

United Nations Development Programme (2015), *Human Development Report 2015* (http://www.undp.org/content/undp/en/home/librarypage/hdr/2015-human-development-report/)

ENVIRONMENT AND LIVEABILITY

If current environmental trends persist, most Muslim countries will suffer from one or some of the following challenges: scarcity of fresh water, temperature increase, desertification, and sea-level rise. In many Muslim countries, accelerating urbanization has led to a heavier ecological footprint, which makes many population centres susceptible to disorder. Lacking contingency plans add to the complexity and the fallout of climate change will make life considerably more difficult.

Implications

• Basic resource availability will become a major concern for many Muslims countries, and the scarcity of these resources will inevitably lead to growing tensions and conflict.

• The emergence of more megacities will likely create additional burdens for already stressed Muslim countries.

• Refugees fleeing climate change within Muslim countries are very likely to increase.

• Sea-level rise will severely impact the coastal and low-lying regions of many Muslim countries, which have not made investments to deter this phenomenon.

Sources

Carrington, Damian (2016), "Rapid polar warming 'behind dramatic rise in extreme weather'" *The Guardian* 29 December

Geology.com (2015), *Global Sea Level Rise Map* (http://geology.com/sea-level-rise/)

National Oceanic and Atmospheric Administration, Geophysical Fluid Dynamics Laboratory (2007), *Patterns of Greenhouse Warming* Princeton: NOAA & GFDL (http://www.gfdl.noaa.gov/cms-filesystem-action/user_files/kd/pdf/gfdlhighlight_vol1n6.pdf)

The World Bank (2016), *Urban Population Data* (http://data.worldbank.org/indicator/SP.URB.TOTL)

UN Department of Economic and Social Affairs (2014), *World Urbanization Prospects* (http://esa.un.org/unpd/wup/highlights/wup2014-highlights.pdf)

United Nations Environment Programme (UNEP) (2008), *Vital Water Graphics.* Nairobi: UNEP (http://www.unep.org/dewa/vitalwater/index.html)

USDA National Resources Conservation Service (2003), *Global desertification Vulnerability Map* (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/nedc/training/soil/?cid=nrcs142p2_054003)

Wallace-Wells, David (2017), "The Uninhabitable Earth: Famine, economic collapse, a sun that cooks us: What climate change could wreak – sooner than you think" *New York Magazine* July

POLLUTION AND ENDANGERED CITIES

The human carbon foot print is taking its toll on the cities of the world. Air pollution peaks during the winter where particulate matter can be detected based on a scale of PM2.5. PM2.5 readings in the global South give an air concentration of over 700 micrograms per cubic metre. The WHO has set the level of 300 micrograms per cubic metre as the point of "hazardous" air pollution. Growing metropolises and megametropolises, many of these capital cities or centres of economic activity are under threat of rising sea levels, temperatures, flooding, and water shortage. Experts agree that the survivability threshold is when the wet bulb temperature exceeds 35°C (95°F) AND the humidity exceeds 90 percent. Even a fit human would die after a few hours of exposure. By the year 2100, many cities in the Middle East and equatorial parts of Africa and Asia are projected to experience average summer time temperatures of 74°C-77°C during the six most sunny hours of the day.

Implications

• Muslim cities need to develop contingency plans and prepare for massive population movements and influxes. Mass migration will result either from people needing to flock to the cities for resources and employment, or to escape ecological catastrophe.

• Cities that find themselves at risk for environmental hazards should begin equipping buildings with water collection and filtration systems, and ecologically sound air conditioning systems.

• Steps can be taken to combat carbon emissions through an adoption of alternative sources of energy such as solar or wind.

• In these already confusing and complex times, the emergence of ghost cities and consequent displacement of populations will delink Muslims from their history and cultural property and thus further alienate Muslim societies.

• Despite the fact that Muslim cities are among the most immediately impacted by the effects of climate change, a suitable resolution is attainable with collective action and support of the rest of the world.

Sources

Leahy, Stephen (2017), "Parts of Asia may be too hot for people by 2100" *National Geographic*

2 August (https://news.nationalgeographic.com/2017/08/south-asia-heat-waves-temperature-rise-global-warming-climate-change/)

Ramsey, Lydia (2016), "These are the countries around the world with the worst air pollution". *Business Insider* 27 September (http://uk.businessinsider.com/countries-with-the-worst-air-pollution-2016-9?r=US&IR=T)

The United Nations (2018), *United Nations World Water Development Report 2018: Nature-Based Solutions for Water* (Unesco, Paris) (http://unesdoc.unesco.org/images/0026/002614/261424e.pdf)

Vidal, John (2017), "From heat waves to hurricanes, floods to famine: seven climate change hotspots" *The Guardian* 23 June
(https://www.theguardian.com/environment/2017/jun/23/from-heatwaves-to-hurricanes-floods-to-famine-seven-climate-change-hotspots)

Watts, Jonathan (2017), "From Miami to Shanghai: 3C of warming will leave world cities below sea level" *The Guardian* 3 November
(https://www.theguardian.com/cities/2017/nov/03/miami-shanghai-3c-warming-cities-underwater)

Worland, Justin (2015), "These cities may soon be uninhabitable thanks to climate change" *Time* 26 October (http://time.com/4087092/climate-change-heat-wave/)

MIGRATION AND REFUGEES

Muslim-majority countries are still a net contributor to global migration and the brain-drain from East to West remains disadvantageous. The Muslim refugee population has increased to 65 million. While focus is given to refugees in European, the largest populations of refugees are in Muslim countries (Over 2 million in Turkey, over 1 million in Lebanon, and over half a million in Jordan). Around 1.5 million Palestinians live in 58 recognized refugee camps. An estimated one million refugees have fled to Bangladesh from Myanmar. Muslim's also find themselves as 'economic refugees'; the average unemployment in Muslim countries was 19.9% as of 2013. The Muslim refugee population is set to increase even further with the arrival of 'climate refugees'. Tightening immigration regulations in the West provoke increased nationalism and islamophobia that exacerbate the plight of Muslim migrants. Human trafficking and child abduction have also been areas of major concern.

Implications

• The refugee crisis is a major turning point for Muslim societies as generations stand to be born into camps or displaced lands beyond that of their parents.

• Climate refugees, Muslims escaping ecological catastrophe in their homelands, are set to emerge as a new trend.

• Muslim population of Europe is set to increase, which will be seen by Islamo ophobes as a threat but may present an opportunity for the aging population of Europe as well as for Muslim communities themselves.

• Muslim refugees may face increasing hostilities, and suffer from alienation and loss of human dignity because of a rise in Islamophobia in the form of extreme nationalism and fascist behaviour.

Sources

Asrar, Shakeeb (2017), "Rohingya crisis explained in maps" *Al Jazeera* 28 October (http://www.aljazeera.com/indepth/interactive/2017/09/rohingya-crisis-explained-maps-170910140906580.html)

BBC (2016), "What is the Middle East doing about the refugee crisis?" 2 February (http://www.bbc.co.uk/newsbeat/article/35470894/what-the-middle-east-is-doing-about-the-refugee-crisis)

Harvey, Fiona (2017), "Global warming will cause huge number of migrants to flee to Europe" *The Guardian* 22 December

McVeigh, Tracy and Mark Townsend (2016), "More than 65 Million displaced, 20 million fleeing for their lives. But will the world face up to its biggest ever migration crisis?" *The Observer* 18 September

Pew Research Center (2017), *Muslims in the EU, Norway, and Switzerland in 2050* (http://www.pewforum.org/2017/11/29/europes-growing-muslim-population/pf_11-29-17_muslims-update-22/)

Rankin, Jennifer (2016), "Human traffickers 'using migration crisis' to force more people into slavery" *The Guardian* 19 May (https://www.theguardian.com/world/2016/may/19/human-traffickers-using-migration-crisis-to-force-more-people-into-slavery)

POLITICS AND GOVERNANCE

In many Muslim countries, governance mutates from democracy to autocracy, and often passes through diverse forms of anocracy, which rebukes the cliché that Islam is essentially antidemocratic. Anocracy is the label that refers to those regimes, plagued with political instability and ineffectiveness, that mix democratic and authoritarian features and that are quite susceptible to violent outbreaks and rough shifts in government leadership. Many Muslim countries struggle with persistent corruption, and this dynamic has become a major deterrent for stability and political evolution across the Muslim world. As internal debates about how to integrate Shariah and democracy continue both within and outside of Islam, it is worth noting that the former is a juridical system and the latter a political system.

Implications

• Muslim countries have yet to develop political systems that effectively integrate Islamic principles with the complexities of stable governance.

• Focusing on Shariah might be hampering a deeper debate on the political

implications of Islamic governance by focusing questions of identity and values solely on legal issues.

• Debates about the theocratic basis for a truly Islamic government remain unresolved.

• Corruption and lack of transparency are major obstacles to political reform in many countries and, if not remediated, will continue to foster instability.

Sources

Bell, James (2013), *The World's Muslims: Religion, Politics and Society* Washington: Pew Research Center's Forum on Religion & Public Life (http://www.pewforum.org/files/2013/04/worlds-muslims-religion-politics-society-full-report.pdf)

Marshall, Monty G. (2014), *Polity IV Project: Political Regime Characteristics and Transitions, 1800-2013* Vienna: Center for Systemic Peace (http://www.systemicpeace.org/polity/polity4x.htm)

Otterman, Sharon (2003), *Middle East: Islam and Democracy* New York: Council on Foreign Relations (http://www.cfr.org/religion/middle-east-islam-democracy/p7708)

Transparency International (2015), *Corruption Perceptions Index 2014* (http://www.transparency.org/cpi2014/)

ECONOMY AND ENERGY

Wealth accumulated within Muslim countries is extremely unequal, and suggests that luxury might not equal better living. Many Muslim states share two of the following features: heavy reliance upon exports of natural resources and a dependence on foreign labour force and know-how. Another important factor impacting the economies of many Muslim countries is energy. Mobile services stand to change not only the financial services and economies of Muslim countries, but also provide an alternative financial system. Shariah-compliant financial institutions and Islamic banking also seek a better path. Over $2 trillion, 1% of global assets, are represented by these institutions; and this figure is set to rise considerably. However, Islamic banking and finance institutions are invariably linked to Western economic structures – that is, to capitalism, which is in a state of acute crisis.

Implications

• Very few Muslim countries are actively developing their own knowledge capital as a sustainable resource and less so as an export.

• Most Muslim countries are over-dependent on oil reserves to compensate for scarcity of basic resources.

• Many Muslim countries rely upon foreign labour—both skilled and unskilled—for a variety of jobs and services.

• Mobile services allow for the poorer and more remote elements of the Muslim population to partake in the overall economy.

• Islamic financial institutions and banking may provide an alternative to Western capitalist economic systems.

• Innovation and investigation into the changing of economic and energy trends in the Muslim world is essential for surviving future economic bubbles, recession, and crashes.

Sources

International Labour Organization (2015), *Labour market trends analysis and labour migration from South Asia to Gulf Cooperation Council countries, India and Malaysia* (http://www.ilo.org/wcmsp5/groups/public/−-ed_protect/−-protrav/−-migrant/documents/publication/wcms_378239.pdf)

Irfan, Harris (2014), "Can Islamic finance save capitalism?" *The Guardian* 4 December (https://www.theguardian.com/sustainable-business/2014/dec/04/could-islamic-finance-solution-capitalism)

OECD (2007), Innovation and Growth: Rationale for an Innovation Strategy. (http://www.oecd. org/science/inno/39374789.pdf)

Revenue Watch Institute (2013), *The 2013 Resource Governance Index* (http://www.resource-governance.org/sites/default/files/rgi_2013_Eng.pdf)

The Economist (2013), "The Road to Renewal" (http://www.economist.com/news/international/ 21570677-after-centuries-stagnation-science-making-comeback-islamic-world-road)

The World Bank (2016), *Energy & Mining Data* (http://data.worldbank.org/topic/energy-and-mining)

Treadlines Research (2013), *Peak Oil Depletion Scenarios* (http://trendlines.ca/free/peakoil/Scenarios/scenarios.htm)

SCIENCE AND TECHNOLOGY

Science and technology is one of the most neglected areas in Muslim countries. With few exceptions, Muslim states are not investing in R&D or producing scientific and technological products and processes. Only Malaysia devotes more than 1% of its GDP to R&D, and only four countries allocate more than 0.5% of their GDP to R&D. Contributions by Muslim countries to scientific journals, publications, and patents is highly disproportionate. The lack of focus on science and technology is deeply ironic, if not tragic, given the contribution of the classical Muslim civilization to science and technology.

Implications

• There is a widening science and technology knowledge gap between Muslim countries and industrialised states as well as between a handful of Muslim countries which produce scientific and technological outputs and the rest of Muslim states.

• The present situation does little to dispel the notion that Islam is anti-scientific and anti-technology; and enforces dependency on external sources of scientific knowledge.

• The low levels of R&D in most Muslim societies will also make it harder for them to diversify their economic performance. Without a significant investment in R&D and innovation, it is likely that most of those countries will have little alternatives but to resort to low added value activities such as tourism.

Sources

Sawahel, Wagby (2010), "Building scientific and technological talent in the Broader Middle East and North Africa region (BMENA) Arab capability status, present development, and proposed action plan." American Association for the Advancement of Sciences. (https://www.aaas.org/sites/default/files/migrate/uploads/BTC_Sawahel_E.pdf)

The World Bank (2016), S*cience & Technology Data* (http://data.worldbank.org/topic/science-and-technology)

UNESCO (2016), T*he Future of Scientific Advancement to the United Nations* (http://unesdoc.unesco.org/images/0024/002458/245801e.pdf)

Zewail, Ahmed (2011), "The Middle East is ripe for a scientific revolution" *New Scientist*

ARMED CONFLICTS AND TERRORISM

Muslim countries and communities are impacted by 9 of the world's 15 longest military conflicts. Of the 15 ongoing armed conflicts with the highest casualty counts, 14 are between or with Muslim countries or groups. In terms of military expenditures as a share of GDP, 14 of the top 20 countries globally are predominantly Muslim. Since 1980, 410 terrorist attacks have been recorded in Muslim countries, and they have jointly caused 18,682 deaths and injured 33,140 people. The last two decades, however, has been the bloodiest with more than 150 attacks leaving 7,000 dead and slightly over 13,000 injured.

Implications

• Armed conflicts inflict a severe toll in Muslim countries by draining resources and preventing the attainment of higher standards of living.

• Muslim identity and Islamic theology have been co-opted by war rhetoric and logic, and radical 'Islamic terrorism' worsens this situation even more.

• War reinforces negative economic and political trends driving off the possibility of societal improvement.

• Terrorism compounds and complicates contemporary warfare as it spreads fear, reduces non-violent solutions, and delegitimizes Muslim organisations and groups seeking political power.

Sources

Council on Foreign Relations (2015), "Global Conflict Tracker" (http://www.cfr.org/global/global-conflict-tracker/p32137#!/)

International Committee of the Red Cross (2008), "How is the Term "Armed Conflict" Defined in International Humanitarian Law?" *Opinion Paper* March 2008 (https://www.icrc.org/eng/assets/files/other/opinion-paper-armed-conflict.pdf)

SIPRI Military Expenditure Database (https://www.sipri.org/databases/milex)

Wars in the World (2015), "Map Ongoing Conflicts" (http://www.warsintheworld.com/?page=static1329446051)

Wikipedia (2015), "List of ongoing armed conflicts" (https://en.wikipedia.org/wiki/List_of_ongoing_armed_conflicts)

Wikipedia (2016), "List of Islamist terrorist attacks" (https://en.wikipedia.org/wiki/List_of_Islamist_terrorist_attacks)

CYBERATTACKS AND CYBERWARS

Cyberspace is comprised of transactions of information from one computer to another. Various forms of malware can be used to attack persons, groups, corporations, and governments. Communities of hackers and viruses can work simply to achieve one goal or even, potentially, launch a cyberwar. In 2016, on average, over 200,000 malware cyberattacks occurred per day. A substantial rise in the use of drones and other unmanned equipment capable of surveillance and targeted killing shows a new approach to war. The next step is Killer Robots, a common term for fully autonomous weapon systems, or Lethal Autonomous Weapon Systems (LAWS). LAWS are able to identify and select a target, adjust their behaviour if necessary, and deploy force without any human intervention. Killer robots can potentially be quite popular among states as they reduce the cost of lives in times of war. It is likely that most of their victims will be Muslims.

Implications

• Muslim countries face increasing threats of cyberattack and cyberwar.

• To meet this challenge, they need to devote resources to produce trained and skilled manpower, enhance computer literacy, and create new institutions focussed on cyber education and cybersecurity.

• Due to the high volume of conflicts in general, and those involving Western forces, Muslim countries are likely to be targets for the testing of new cyberwar devices and technologies such as LAWS.

• Muslim communities need to begin discussing legal and ethical impacts of the rise of robots/drones, the cyberage, and AI; and embed these discussions within a more thorough understanding of human rights and dignity.

Sources

Herzog, Rudolph (2012), "Rise of the Drones: Drone technology spans a century's worth of science fiction and military research." *Lapham's Quarterly* (https://www.laphamsquarterly.org/spies/rise-drones)

Horton, Scott (2015), *Lords of Secrecy: The National Security Elite and America's Stealth Warfare* (Nation Books, New York)

Threat Cloud Intelligence "Live Cyber Attack Threat Map" (https://threatmap.checkpoint.com/ThreatPortal/livemap.html)

Markoff, John (2014), "New Weapons Pick Whom to Kill" *The New York Times International Weekly* 23 November

Nougayrède, Natalie (2017), "Beware: this cyber warfare threatens every democracy" *The Guardian* 4 November

Singer, P.W. and Allan Friedman (2014), *Cybersecurity and Cyberwar: What Everyone Needs to Know* (Oxford University Press, New York)

EDUCATION AND CREATIVITY

A great on-going debate already exists on how to reform and implement education in Muslim societies in an increasingly interconnected, complex and globalised world. The challenges faced by such an endeavour are formidable given the current education trends in Muslim countries. Future generations will have a significantly lower illiteracy rate. Education in the Muslim world is in urgent need of overhaul with more attention given to humanities and social science, requiring a much greater proportion of national resources, and, in the final analysis, quite radical reforms. Muslim societies have rich cultures and a high potential for creative output. Yet, we can also equally safely assert that no educational and institutional structures exist to cultivate and house this talent or allow it to excel and take the quantum leap to the next level where it can have global influence.

Implications

• While literacy in Muslim societies is improving in relative terms, a great deal of attention needs to be paid to primary and secondary education to sustain and improve the trends.

• Higher education needs urgent reforms to overcome the knowledge deficit faced by Muslim societies.

• Education in social sciences and humanities needs to be enhanced and science and technology education needs to be taught more critically.

• Ultimately, failure to develop a robust, future oriented educational system would consign Muslim countries to the bottom of the heap.

Sources

Martin Prosperity Institute (2015), *The Global Creativity Index 2015* (http://martinprosperity.org/media/Global-Creativity-Index-2015.pdf)

OECD (2015), OECD *Science, Technology and Industry Scoreboard 2015 Innovation for growth and society* (http://www.oecd-ilibrary.org/science-and-technology/oecd-science-technology-and-industry-scoreboard_20725345;jsessionid=9lrevb4m8qug.x-oecd-live-02)

SCImago Journal & Country Rank (2015), *Country Ranking* (http://www.scimagojr.com/countryrank.php?area=0&category=0&region=all&year=all&order=it&min=0&min_type=it)

UNESCO Institute for Statistics (2015), *UIS Education Survey* (http://www.uis.unesco.org/DataCentre/Pages/BrowseEducation.aspx)

United Nations Development Programme (2015), *Human Development Report 2015* (http://www.undp.org/content/undp/en/home/librarypage/hdr/2015-human-development-report/)

HEALTH AND WELLBEING

Muslims suffer from some of the worse sanitation and wellness conditions. As dietary and medical advancements are creating higher standards for global health, wellbeing is also becoming an important concern due to greater social awareness and the innovative potential to improve it. Throughout the noughties, the global trend was to shift towards greater public spending on healthcare. Muslim countries, however, moved in the opposite direction, depending more and more on private funding. Healthcare in Muslim countries is becoming globally competitive with increased numbers of trained professionals and more sophisticated care as the focus moves from survival to quality in later life. As populations live longer, the threat of chronic diseases needs greater attention. Preventative care and dietary expertise will be needed as the large youth population begins to age. There are three trends that present serious

future threats: emerging obesity rates, birth defects, and poor attitudes towards mental health.

Implications

• Collectively, Muslim countries are on the brink of a major transition from the developing to the developed status in terms of healthcare.

• A low amount of GDP is contributed to healthcare and the overall healthcare budget is largely dependent on private and foreign contributions.

• The biggest healthcare issue that Muslim societies will face in the near future is mental health – a product not just of conflict and displacement, but also of a young population suffering from unemployment and alienation.

• Lack of focus in science and technology stands as a major impediment to Muslim healthcare, but new advancements in technology and greater interconnectivity of cultures represents an opportunity for Muslim societies.

Sources

Ciftci, Ayse (2012), "Mental Health Stigma in the Muslim Community" *Stigma* 7:1 (https://quod.lib.umich.edu/j/jmmh/10381607.0007.102/—mental-health-stigma-in-the-muslim-community?rgn=main;view=fulltext)

Koenig, Harold and Saad Al Shohaib (2014), *Health and Wellbeing in Islamic Societies: Background Research and Applications* (Springer, New York)

March of Dimes (2006), "Global Report on Birth Defects" (http://www.webcitation.org/query?url=http://www.marchofdimes.com/downloads/Birth_Defects_Report-PF.pdf&date=2012-08-19

Mokdad, Ali (2017), "Arab countries living longer but battling chronic disease" Institute for Health Metrics and Evaluation. (http://www.healthdata.org/news-release/arab-countries-living-longer-battling-chronic-disease)

The Economist (2017), "Pocket World in Figures: Highest Obesity" 22 August (http://www.economist.com/node/8846631)

Selway, Joel Sawat (2015), *Coalition of Wellbeing: How electoral rules and ethnic politics shape health policy in developing countries* (Cambridge University Press, New York)

GENDER INEQUALITY

Gender inequalities are clearly a greater challenge in Muslim countries, with few exceptions. But there is still a huge margin for improvement. In general, Muslim women have to fight a deeply unbalanced gender configuration that places them in secondary position to men. The controversial notion of guardianship (*qawamun*) of men over women has allowed for a very restrictive legislation for women in countries where Shariah as state law. Overall, female presence in

educational establishments has considerably increased suggesting that as more and more women get educated, they will be more critical about merely fitting into traditional roles and, therefore, further changes may be lurking over the horizon.

Implications

• Equality in education and opportunities for women will determine the futures of many Muslim countries and futures of the Muslim world as a whole.

• Very rich and very poor Muslim states appear to show little progress towards gender equality.

• Muslim women occupy leadership roles in politics, economics, and culture in many Muslim countries, an indication of regional social and cultural differences in gender relations.

Sources

Pew Research Center (2013), *The World's Muslims: Religion, Politics and Society* (http://www.pewforum.org/files/2013/04/worlds-muslims-religion-politics-society-full-report.pdf)

Safra Project (2013), *Gender, Sexuality & Islam* (http://www.safraproject.org/index.html)

United Nations Human Development Program (UNDP) (2015), *Human Development Indicators* (http://www.google.com/publicdata/explore?ds=ife8n327iup1s_&ctype=b&strail=false&bcs=d&nselm=s&met_y=indicator_103706&scale_y=lin&ind_y=false&met_x=indicator_137506&scale_x=lin&ind_x=false&ifdim=country&ind=false&icfg=&hl=en&dl=en#!ctype=l&strail=false&bcs=d&nelm=h&met_y=indicator_68606&scale_y=lin&ind_y=false&rdim=country&idim=country: 18203:21903:1303:10303:9303:13903:12903:18703& ifdim=country&hl=en_US&dl=en&ind=false)

United Nations Human Development Program (UNDP) (2015), *Human Development Report* (http://hdr.undp.org/en/2015-report)

RELIGION AND CULTURE

There are a variety of ways to measure the impact of Islam in the lives of Muslims today. The approach we have taken is to investigate belief as a key factor in shaping the outlooks of Muslims. Surveys conducted by the Pew Research Center sampled those living in Muslim communities, living in Muslim majority and minority states. The questions challenged the perception of Islam in relation to tolerance, violent agitation, morality, and obligation towards conversion. These questions also examined opinions on Shariah Law, whether or not it should be law of the land or only law in certain communities. While many Muslims agree that 'Islam is a peaceful religion', a fundamental divide exists in

whether the Sacred text is to be taken literally or interpreted in a more contextual and metaphorical way.

Concerning cultural products, Muslim societies are basically split into two groups: countries that produce indigenous cultural products and states that import culture from the West. In the latter category, are a host of states that have bought museums and other cultural artefacts wholesale from the West. Both these contradictory trends are set to continue.

Sources

Appadurai, Arjun (2013), *The Future as Cultural Fact* (Verso, London)

Ma, Alexander (2017), "The Louvre is opening a Middle East outpost in Abu Dhabi – and the building looks amazing" *The Independent* 7 September (http://www.independent.co.uk/news/world/middle-east/louvre-abu-dhabi-opening-art-museum-uae-middle-east-a7934456.html)

Pew Research Center (2006), *The Great Divide: How Westerners and Muslims See Each Other.* (http://www.pewglobal.org/2006/06/22/the-great-divide-how-westerners-and-muslims-view-each-other/)

Pew Research Center (2013), *The World's Muslims: Religion, Politics and Society* (http://www.pewforum.org/files/2013/04/worlds-muslims-religion-politics-society-full-report.pdf)

UNESCO (2016), *Learning to live together* (http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/cultural-diversity/)

ENTERTAINMENT AND SPORTS

Muslim societies are ripe with potential that has not gone unnoticed by the entertainment and sporting industries. Likewise, investment is being poured into modern entertainment venues, sporting event spaces, and the tourism industry. Western products have always had a conflict in Muslim societies, but all array of attitudes are held towards their adoption. Likewise, fashion as well as visual artists are taking note of the appeal of Muslim and modest style. Language and tradition lend themselves well towards adoption of popular Western musical trends, with some negotiation on the content. 2022 will stand as the beginning of an era for professional sporting events in Muslim societies with Qatar's World Cup. A future Olympics hosted in the Muslim world would spell the pinnacle of the Muslim world's influence on the world of sports.

Sources

Al Jazeera (2018), "Saudi authority to invest $64bn in entertainment" *DPA News Agency* (https://www.aljazeera.com/news/2018/02/saudi-authority-invest-64bn-entertainment-180222141517136.html)

Kwok, Yenni (2014), "Hollywood movies in Arab countries: A love and hate relationship". CNN 23 April (http://edition.cnn.com/2014/04/23/world/meast/middle-east-hollywood-films-censorship-survey/index.html)

Morgan, Philipa (2017), "Fashion Prediction for the Season Ahead" *Vogue Arabia* 11 May (https://en.vogue.me/fashion/middle-east-fashion-trends-2017/)

Northwestern University in Qatar, Doha Film Institute (2016), *Media Industries in the Middle East* (http://www.mideastmedia.org/industry/2016/)

Polglase, Katie (2015), "Pop Music and the Middle East: Political and cultural change don't have to go hand in hand" *Varsity* 3 March (https://www.varsity.co.uk/comment/8339)

Repucom (2015), "Emerging Giants: Defining the Trend: How increasing investment from Asia and the Middle East is turning them into sport's Emerging Giants" (http://nielsensports.com/wp-content/uploads/Repucom-Emerging-Markets.pdf)

Shahid, Omar (2014), "Halalywood: The rise of the Islamic entertainment industry" *Aquila Style* 3 April (https://www.aquila-style.com/focus-points/halalywood/62379/)

ISLAMOPHOBIA AND THE RISE OF THE ALT-RIGHT

The concept of Islamophobia entered popular discourse at about the same time as far right officials and politicians won elections throughout the West. A new movement emerged known as alt-right. The term Islamophobia has generated a great deal of controversy as well as academic debate. Currently, Islamophobia is a key discussion point amongst legislative bodies throughout the West. Specific spikes in xenophobia directed at Muslims in recent years are a direct product of political hate speeches and portrayals of Muslim in the media. Islamophobic policies range from the banning of symbolic clothing articles and the use of the Arabic language to state harassment such as the Uighur Muslims of China and the Rohingya Muslims of Myanmar.

Implications

• Islamophobia is a concept that is deeply embedded in Western culture, language, and society. To excise it, the conversation needs to shift from an argument of free speech and national tradition, to multiculturalism and societal acceptance of past wrongs and look towards future corrections.

• Muslims need to understand the dangers that the continuous rise of the far right throughout the globe represents.

• Muslims are the most likely target of these parties' xenophobic discourse as they embody many features of the hated or feared Other.

• The formation of political parties based on racist or Nazi foundations should be thwarted and coalition with them must also be frowned upon.

Sources

Esposito, John L. and Ibrahim Kalin (2011), *Islamophobia: The challenge of pluralism in the 21st Century* (Oxford University Press, New York)

European Parliament Anti-Racism and Diversity Intergroup (https://www.ardi-ep.eu/tag/islamophobia/)

Gross, Bertram (1985), *Friendly Fascism: The new face of power in America* (Black Rose Books, Quebec)

Hauslohner, Abigail (2016), "How a series of fringe anti-Muslim conspiracy theories went mainstream – via Donald Trump" *The Washington Post* 5 November

House of Commons, Canada (http://www.ourcommons.ca/en)

New York Times (2016), "Europe's Rising Far Right: A Guide to the Most Prominent Parties" *New York Times* 4 December (https://www.nytimes.com/interactive/2016/world/europe/europe-far-right-political-parties-listy.html)

OSCE, ODIHR Hate Crime Reporting (http://hatecrime.osce.org/2016-data)

PEW Research Centre (2017), "Nearly all Muslims, Jews, Hindus live in countries where their group was harassed in 2015" (http://www.pewforum.org/2017/04/11/nearly-all-muslims-jews-hindus-live-in-countries-where-their-group-was-harassed-in-2015/)

SOCIAL MEDIA AND ARTIFICIAL INTELLIGENCE

Social media platforms are also based on algorithms that can both feed you what you have liked previously and box you into a group of people with similar ideologies and desires. Social media opens a society up to data obesity, where people are over-inundated with information. Alongside increased knowledge in video editing and sources of information, fake news and conspiracy theories have flooded this information stream. Similar technologies and external forces driving the proliferation of social media are also advancing AI in a way not previously seen. As AI advances towards the automation of all tasks, cognitive as well as physical, it will have a major impact on the economy (potentially 11 million globally unemployed by 2050). The next line up of robots will range from caregiving and other round-the-clock routine labour to interactive friends, sex robots and soldiers.

Implications

• With this new mode of social discourse both Muslim populations and governments stand greater challenges in civil order and transparency. Attempts to control these platforms will result in increased chaos and overall regional instability.

• Data accumulation will be as important a topic to Muslims as to the rest of the world as corporate and government interests and trading in data will lead

to increased marketing profiling. Facial recognition and social media's algorithmic functions could be used for targeting dissent and potential violent crimes.

• A paradigm shift in Muslim economic systems will be required to make up for the labour loss potentials predicted in the nearing future.

• Muslim educational systems will need to be reformed to prepare for an AI and Big Data based economy. If this does not occur the Muslim countries workforce will be unable to compete in the global market.

• Advancing AI and the rise of robots raises some deep moral and ethical issues that require the urgent attention of Muslim scholars and thinkers.

Sources

Alexander, Anne (2012), "Digital Generation" *Critical Muslim* 1 (Hurst, London)

Ford, Martin (2015), *The Rise of the Robots: Technology and the Threat of Mass Unemployment* (Basic Books, New York)

Future Timeline.net (2016), The last job on Earth: imagining a fully automated world (http://www.futuretimeline.net/videos/40.htm#.VtHX0VLmyYP)

Hawking, Stephen, et. al (2014), "Stephen Hawking: 'Transcendence looks at the implications of artificial intelligence – but are we taking AI seriously enough?'" *The Independent* 1 May (http://www.independent.co.uk/news/science/stephen-hawking-transcendence-looks-at-the-implications-of-artificial-intelligence-but-are-we-taking-9313474.html)

Mar, Alex (2017), "Love in the time of robots" *Wired* 17 October

Newton, Casey (2017), "More countries are using social media to crack down on dissent, study finds: What Russia and China taught the world about Facebook" *The Verge* 14 November (https://www.theverge.com/2017/11/14/16646192/freedom-on-the-net-2017-freedom-house-facebook-social-media)

Nilsson, Nils J. (2015), "The Future of Work: Automation's Effect on Jobs – This time is different" *Pacific Standard* October (http://www.psmag.com/business-economics/the-future-of-work-automations-effect-on-jobsthis-time-is-different)

Sherwell, Philip (2017), "When people begin to run out of power, send in the carers who never grow old" *The Sunday Times* 22 October

ISLAM AND RELIGIOUS THOUGHT

Efforts to reform Islam have a long history. Perhaps the most prominent sub-trend revolves around re-interpretation of the Qur'an. Exploration of the Qur'an ranges from 'contemporary' approaches to liberal and humanist perspectives, to the feminist angle, to emphasising traditional women's standpoint, to a whole range in between. A second sub-trend is focussed on rethinking the Shariah, or more specifically *maqasid al-Shariah*, or the higher objectives of the Shariah. A third sub-trend is concentrated around critical readings as illustrated by a host

of books on Islam with the term 'critical' in the title. Finally, the fourth sub-trend is based around the work of global reform-oriented organisations and individual scholars with world-wide influence.

Implications

• A more contemporary, humane and inclusive interpretation of the Qur'an that is widely accepted by the majority of Muslim people would move Islam away from ossified tradition and towards a vision of justice, equality and beauty that is rooted in the Sacred Text.

• A reformulated Shariah, based on higher objectives, would reinvigorate Muslim societies and resolve many social, political and cultural issues.

• The work of reformist academics, as with most academic thought, would influence the coming generations who will be more willing and motivated to rethink problematic aspects of Muslim societies and develop viable solutions.

• If these trends reach take-off points they could have transformative affect and the future will not repeat the recent past.

Sources

Abu Zaid, Nasr (2004), *Rethinking the Qur'an: Towards a Humanistic Hermeneutics* (Humanistics University Press, Utrecht)

Arkoun, Mohammed (1989), *Rethinking Islam: Common Questions, Uncommon Answers* (Westview Press, Boulder)

Attia, Gamal Eldin (2007), *Towards Realization of the Higher Intents of Islamic Law: Maqasid al-Shariah* (IIIT, London)

Ayoub, Mahmoud, editor (2012), *Contemporary Approaches to the Qur'an and Sunnah* (IIIT, London)

Barlas, Asma (2002), *'Believing Women' in Islam: Unreading Patriarchal Interpretations of the Qur'an* (University of Texas Press, Houston)

Duderija, Adis, editor (2014), *Maqasid Al-Shari'a and Contemporary Reformist Muslim Thought: An Examination* (AIAA)

Al-Ghazali, Zainab (2008), *Fawkiyah Sherbini, Taysir Al-Tafsir* (Maktabat Al-Iman Li-atiba'a Wa Al-Nashr Wa-al-Tawzi, Cairo)

Hamzah, Kariman (2010), *Allu luWa Al-Marjan Fi Tafsir al-Qur'an* (Maktabat Al-Shuruq Al-Dawliyah, Cairo)

Ramadan, Tariq (2009), *Radical Reform* (Oxford University Press, Oxford)

Saeed, Abdullah (2006), *Interpreting the Qur'an: Towards A Contemporary Approach* (Routledge, London)

Sardar, Ziauddin (2012-), editor, *Critical Muslim*

Sardar, Ziauddin (2011), *Reading the Qur'an: The Contemporary Relevance of the Sacred Text of Islam* (Hurst, London)

UNCERTAINTY AND IGNORANCE

The more we know, it seems, the more we don't know. Uncertainty is a multiplicity. It is a product of all the problems faced by Muslim societies interacting with each other. And it particularly affects the young – who may be coping with unemployment, alienation, concerned about the political situation of their states, and negotiating traditional outlooks with the demands of modernity. Ignorance is as important a concept as knowledge itself. American professor of history of science, Robert Proctor, gives a name to this study: Agnotology. More interdisciplinary and transdisciplinary academic work is emerging that examines the relationship of ignorance to education, science and knowledge production.

Implications

• Muslim societies need to reflect on the inherent ignorance all around them and parse out what is known, what is not known, and what we know is unknown, and what we don't know we don't know.

• In Muslim societies, the move to compete on global markets or movements towards Western style of governance and appropriation of Western culture will generate different types of ignorances and could plunge Muslim societies into deeper uncertainty.

• Ignorance and uncertainty drives Islamophobia. Understanding of ignorance will be essential to combat misrepresentations of Islam and Muslims.

• In these times of unbound ignorance and uncertainty, Muslim societies have a prime opportunity to build effective systems of education from the ground up. With an awareness and study of ignorance and uncertainty, a new interdisciplinary and transdisciplinary framing of educational infrastructure can see the return to the prolific influence the Muslim world had on the globe during the classical period.

• Muslim societies will be challenged by these outcomes as global warming, automation, ensuing war, and social and political unrest will grow beyond mediation and control. A proper awareness and engagement with ignorance construction and uncertainty can help Muslim states to navigate the challenges of Postnormal Times.

Sources

Callon, Michael, Pierre Lascoumes and Yannick Barthe (2001), *Acting in an Uncertain World* (The MIT Press, Cambridge MA)

DeNicola, Daniel R. (2017), "The Construction of Ignorance" *The Philosopher's Magazine* 79 October

Firestein, Stuart (2012), *Ignorance: How It Drives Science* (Oxford University Press, Oxford)

Proctor, Robert N. and Londa Schiebinger (2008), *Agnotology: The Making and Unmaking of Ignorance* (Stanford University Press, Stanford)

Nichols, Tom (2017), *The Death of Expertise: The Campaign against Established Knowledge and Why it Matters* (Oxford University Press, New York)

Nowotny, Helga (2016), *The Cunning of Uncertainty* (Polity Press, Cambridge)

Watson, Peter (2014), *The Age of Nothing: How We Have Sought to Live Since the Death of God* (Weidenfield and Nicolson, London)

ANXIETY AND WEIRDNESS

The world is becoming weirder and weirder. The butterfly effect on steroids takes us from a drought that leads to revolution on the far side of the world, leads to hate and protest over a hundred miles away, and further escalation of climate change. Now add Artificial Intelligence to the brew and see how weird things get. Anxiety is an understandable side effect, both a physical and mental issue. The conflicts and the persecution of Muslims here, there and elsewhere make anxiety seemingly inescapable. The number of children effected by these wars and conflicts is planting the seeds for future poor mental health. Anxiety can lead to suicide. Globally, approximately 800,000 people a year commit suicide – that is, one person every forty seconds. Suicide is the number two cause of death for people aged 15-29, globally.

Implications

• Global weirding will impact Muslim countries just as much as other countries on the planet. To cope with global weirding, we need to appreciate the complexity and interconnectedness of a globalised world.

• Muslim communities need to work towards a greater acceptance of anxiety and its symptoms and potential violent side effects. A collaborative effort on the part of politicians, physicians, religious leaders, and the rest of society needs to determine what factors increase anxiety and suicides and what reforms can be made to reduce them.

• Religious intolerance and rigidity are a prescription for a rising tide of anxiety, mental illness and suicides.

• A whole generation of anxiety-ridden youth is set to emerge in the coming decades.

Sources

BBC Persian (2010), "Women and Girls Commit Suicide in Afghanistan Each Year" (Translated by RAWA) 31 July

Dvorsky, George (2013), "Are we in the midst of an anxiety epidemic?" *io9* (https://io9. gizmodo.com/are-we-in-the-midst-of-an-anxiety-epidemic-1459542453)

Ellis, L., E. Wahab, and M. Ratnasingan (2012), "Religiosity and fear of death: a three-nation comparison" *Mental Health, Religion & Culture* 1-21

Friedman, Uri (2016), "Trust in government is collapsing around the world: The trend helps explain Trump and Brexit. What's next?" *The Atlantic* 1 July (https://www.theatlantic.com/international/archive/2016/07/trust-institutions-trump-brexit/489554/)

Morris, G., and T. McAdie (2009), "Are personality, well-being and death anxiety related to religious affiliation?" *Mental Health, Religion & Culture* 12 (2) 115-120

Nuwer, Rachel (2014), "Will religion ever disappear?" BBC 19 December (http://www.bbc.com/ future/story/20141219-will-religion-ever-disappear)

Sweeney, John A. (2014), "Command-and-control: Alternative futures of geoengineering in an age of global weirding" *Futures* 57 1-13 (http://dx.doi.org/10.1016/j.futures.2013.12.005)

Sweeney, John A. (2016), "Global Weirding" *Critical Muslim* 17 (Hurst, London)

World Health Organization (2017), "Mental Health: Suicide Data" (http://www.who.int/mental_ health/prevention/suicide/suicideprevent/en/)

World Health Organization (2017), "Depression and other common mental disorders: Global health estimates." (http://apps.who.int/iris/bitstream/10665/254610/1/WHO-MSD-MER-2017.2-eng.pdf)

EMERGING ISSUES

INTRODUCTION

Emerging issues are events or phenomena with the potential to have a positive or negative effect just over the horizon. They are harbingers of change but may not strike an observer as such. Emerging issues can be seen as advanced indicators of novel developments in the rate and directions of trends.

Not all emerging issues become trends; many are aborted or remain dormant. In other instances, emerging issues have become the focal point of a counter- or sub-culture, which relishes in the uniqueness of a particular phenomenon.

One of the key challenges of emerging issues analysis is evidence. Data to support emerging issues is often a lot less substantial than with trends. However, there must be some documentation or data, however insignificant, to support the claim for an emerging issue.

Many of the emerging issues we have chosen are not widely felt across Muslim societies, although some might be considered trends in a variety of contexts, including those with Muslim populations. The framework we have used, the Menagerie of Postnormal Potentialities, is an integral part of the postnormal times theory. It consists of three symbolic components, each with its own particular potentiality: Black Elephants, Black Swans, and Black Jellyfish.

We are assuming that Black Elephants, Black Swans and Black Jellyfish are separate and discrete events. But, of course, they can be – and often are – interconnected and can occur simultaneously. We ought to be aware of our latent bias that may affect our judgement over them.

We are quite aware that we are staking claim to a definite subject position in our assessment of how these emerging issues might impact Muslim societies. We have grouped our emerging issues in different menagerie categories according to what we believe may be its greatest relevance for Muslims. Therefore, our emerging issues serve as signposts as well as provocations to move us toward unthought possibilities.

Sources

Carbonell, Javier, et al. (2015), "Assessing emerging issues. The external and internal approach" *Futures* 73 12-21 (Hurst, London)

Dator, Jim (2009), 'Trend Analysis vs. Emerging Issues Analysis' (http://www.futures.hawaii.edu/publications/futures-theories-methods/TrendVsEIA2009.pdf)

M. Tegamar, M (2007), 'Many lives in many worlds' *Nature* 448 (5) 23-24

Sardar, Ziauddin and John Sweeney (2016), 'The Three Tomorrows of Postnormal Times' *Futures* 75 1-13

Taleb, Nicholas Nassim (2008), *The Black Swan: The Impact of the Highly Improbable* (Penguin Books, London)

Vejlgaard, H. (2008), *Anatomy of a Trend* (McGraw-Hill, New York)

Wildman, Paul (2001), 'Anticipating Emerging Issues: Reflections from a futurist' *Journal of Futures Studies* 6 (1) 137-152

THE BLACK ELEPHANT IN THE ROOM...

THE BREAKDOWN OF THE EUROPEAN UNION

Implications

• To begin with, the Muslim factor is adding stress to the conjunction for the combination of different elements:

–   The presence of important Muslim communities in practically all EU member countries with a diverse range of coexistence situations with other citizens.

–   The Muslim element as a menace, the need to prevent attacks from local Muslims that is becoming a real test for the European rights articulation.

   –   The EU role in the Middle East, rather, the incapability of Europe to play a substantive role there.

   –   The massive arrival of Muslim refugees and others that is upsetting the European borders policies.

• But in any of the possible scenarios, from strengthening the Union to the breakup, Muslims in Europe will be among the first impacted collectives. Potentially provoking the return of many Muslims to their origin countries; which would be a tragedy for second and third generation Muslims that know no other home but the EU country where they were born.

• This would allow for increased nationalistic thought that would be moulded in xenophobic sentiment such as Islamophobia.

• The end of the EU could have a major effect on the expectations of many young Muslims that hope to go there to find a better standard of living.

• But it could also be a stimulus for Muslim countries to develop alternative regional arrangements, potential economic unions and, also, not to depend on foreign aid.

• The retreat in social achievements may also hurt the diverse initiatives that are happening in Europe to develop alternative Muslim visions and models.

• At the international level, the disappearance of the EU would eliminate a reference in regional integration.

• It would also imply the vanishing of a possible interlocutor for Muslim countries in International fora.

Sources

Erlanger, Steven (2016), "Even prosperous Slovakia is having E.U. doubts" *The New York Times* International Edition 19 December

Lehndorff, Steffen (2015), *Divisive integration. The triumph of failed ideas in Europe – revisited* (EITU, Brussels) (https://www.etui.org/Publications2/Books/Divisive-integration.-The-triumph-of-failed-ideas-in-Europe-revisited)

Mason, Paul (2017), "The Germans are making contingency plans for the collapse of Europe. Are we?" *The Guardian* 11 July

Myant, Martin, Sotiria Theodoropoulou, and Agnieszka Piasna (2016), *Unemployment, internal devaluation and labour market deregulation in Europe* (EITU, Brussels) (https://www.etui.org/Publications2/Books/Unemployment-internal-devaluation-and-labour-market-deregulation-in-Europe)

The Economist (2017), "How to save Europe" 25-31 March

THE DESCENT OF WESTERN DOMINANCE

Implications

• For the Muslim world, this makes the immediate future quite difficult. The rift between the West and the other is only getting deeper. Hate and xenophobia welcome those who enter the West for education, escape, or any other hope of prosperity. Islamophobia will not only exist in the common speech but be deeply embedded in policy and culture.

• The increased Western-centrism will increase military conflict in the East and see little support other than that which advances the West's proxy wars with its rivals. Little effort in the way of clean up or humanitarian aid should be expected. All conflict in the world will also be most certainly blamed on the condition of those who live in the war-torn areas. The history and causes of these conflicts will only be exacerbated by this ignorance and deep wounds will take a long time to overcome.

• Economic markets are at their most fragile state and Muslim countries must take note of its dependencies and potential position in the event of another major global crisis. The oil market is a dangerous place to position all of one's chips and the West can quickly shut down demand with a return to "home produced" resources.

• Perhaps Muslim's looking to the West for the keys to advanced development is not the right way. Muslim countries need to take it upon themselves to reform educational, financial, and governmental structures to help their people and advance their culture and definitions of the prosperous life.

• The crumbling of Western dominance will leave open several niches to be filled by the rest. This provides exciting opportunities for new Muslim innovations in technology, enterprise, and knowledge building.

Sources

Appiah, Kwame Anthony (2016), "There is no such thing as western civilization" *The Guardian* 9 November

Ash, Timothy Garton (2017), "After Trump and Brexit, is this the end for the Anglo Saxon west?" *The Guardian* 28 July
(https://www.theguardian.com.commentisfree/2017/jul/28/trump-brexit-end-of-west)

Freedland, Jonathan (2017), "First on the White House agenda: the collapse of the global order. Next, war?" *The Guardian* 4 February

Hutton, Will (2016), "Aleppo's horrors suggest the west is now impotent when confronted with savagery" *The Observer* 11 December

Kagan, Robert (2016), "An end to the indispensable nation" *Financial Times* 21 November

Kinni, Theodore (2017), "Capitalism in America has been on a suicide mission for 40 years" *Insights* 4 October (https://qz.com/1093771/capitalism-in-america-has-been-on-a-suicide-mission-for-forty-years/)

Lent, Jeremy (2017), "A House on Shaky Ground: Eight Structural Flaws of the Western Worldview" *Tikkun Daily* 19 May (http://www.tikkun.org/tikkundaily/2017/05/19/a-house-on-shaky-ground-eight-structural-flaws-of-the-western-worldview/)

THE METAMORPHOSIS OF DEMOCRACY

Implications

• Democracy may very well not be the best system of government for all societies or in the 21st Century. Democracy as it has existed for the last couple hundred years is at a major transition point and what will arise from it will be very different. Muslim governments should examine democracy very carefully to determine if this system is functional in Muslim societies.

• Democracy in its nature brings people together to engage in discourse, this is something long overdue in many Muslim countries. This fostered polylogue is a major first step towards quelling tribal and sectarian disputes in many countries. In an uninhibited democracy, extremist views tend to be unveiled and moderate thought has a better chance of surviving in this environment.

• The act of voting provides for a great empowerment of a country's citizenry and leads to a greater public approval of advancing and reforming educational institutions. Democracy acts as an indirect motivator of education and stands to benefit Muslim communities. In turn this also creates more active Muslims in global politics and in carving out their identities at home and abroad.

• Developing democracies are always under threat of the greatest enemies of all contemporary democracies, corruption. The powerful tend to remain powerful even in democracies through their abuse of the system and playing of the game to assure they always win. This stands to be very detrimental to Muslim countries. Transparency must be the highest priority of Muslim democracies and tight regulations must be put forward on campaign spending and the use of outside influences.

• The massive proliferation of internet access and social media throughout Muslim counties has already shown its power over social and political matters. Muslims need to be on the alert for those attempting to undermine their democratic systems. This could be other Islamic sects at home or abroad, countries worried about losing their dominant influence in the region or even just a new form of proxy wars.

• As democracies in the West metaphorically shoot themselves in the foot, there is great opportunity for Muslim countries. Democracy is a possibility, but much work needs to be done towards a proper governing structure for Muslim countries. This may require new drawing of borders. An attempt does not need to be pursued with the thought that this is the only chance. Governments must be fluid as populations in the contemporary world are also fluid. Without room for change, all systems of governance stand minimal chances of success in the future.

Sources

Butter, Susan (2016), "Can you decode the new political lexicon?" *The Evening Standard* 29 November

Cadwalladr, Carole (2016), "Is democracy itself threatened by tech disruption?" *The Observer* 18 December

Dunn, John (2014), *Breaking Democracy's Spell* (Yale University Press, New Haven)

Greenfield, Adam (2017), *Radical Technologies* (Verso, London)

Jónsdóttir, Birgitta (2015), "Democracy in the digital era" *New Internationalist* January/February

Monbiot, George (2016), "No country with a McDonald's can remain a democracy" *The Guardian* 7 December

THE CRISIS OF SOCIAL WELFARE IN MUSLIM DIASPORAS

Implications

• First of all, the massive diaspora of Muslims in the West will be faced with this crisis in the immediate future. Those displaced through the refugee crisis or simply wishing to pursue a better life in another place still have their families to either care for back in their home country or that will have to fit into this crippled system. The influx of Muslims into social programmes in the West will create greater strains on these flawed systems, so they will need to be a part of the search for a new solution.

• While Muslim societies are at their youngest rates right now, that population will be faced with this same crisis in a generation's time. If the birth rate follows the current trends in the developed West and modernizing globe, then a mass of the Muslim population will be faced with retirement and need for a proper social welfare programme that will not be sustainable by the youth of the future. Also, if the Muslim family itself changes, becoming more spread out, the traditional care by the family model will also either not exist or be unsustainable. If life expectancy also rises, as it tends to do in modernizing and developing environments, this will only compound the issue at hand.

• Any hope at starting up successful Islamic economic models or other government policy will be given its greatest test right off the bat. Dependence on the West's addiction to neoliberalism will further inhibit any progress in Muslim societies. If these societies cannot take care of their people then how do they expect to be global leaders or modes of influence in the rapidly accelerating future?

Sources

Editorial (2016), "A crisis in social care" *The Week* 19 December

Editorial (2017), "The great looming disaster that was ignored in the budget – the social care crisis" *The Observer* 26 November

Hussein, Shereen and Mohamed Ismail (2017), "Ageing and elderly care in the Arab region: Policy challenges and opportunities" *Ageing International* 42:3 274-289 September (https://link.springer.com/article/10.1007/s12126-016-9244-8)

Sloan, Lacey M., et al. (2017), "Social work education in the Arabian Gulf: Challenges and opportunities" *Journal of Religion and Spirituality in Social Work* 36:1-2 199-214 6 March (http://www.tandfonline.com/doi/full/10.1080/15426432.2017.1311247?af=R)

THE ROBOTS ARE COMING!

Implications

• The rise of robots has a two-fold immediate impact on Muslim populations. The first prong of this is the effects of unemployment. The use of robots in low skill manufacturing jobs greatly harms the low-cost labour that corporations count on from developing countries. This will force the global job market to need to advance its basic skills sets and all humans will require higher level skilled jobs to survive. The second aspect of this impact comes in the form of robots of war. The first killer robot missions are likely to be targeted at countries with majority Muslim populations. Even drones have accuracy problems, but as those advance and the loss of civilian lives decreases, human error will always be a factor in state sponsored killing and mistakes will continue to be made.

• More autonomous weapons systems that no longer need human input are still designed by humans and their programming will be set to the old-world extreme realist and neoliberal worldviews. Small chaotic factors will increase in frequency and the ability of justifying pre-emptive attacks leaves little doubt for strikes committed by autonomous weapons systems. These strikes will likely be at Muslim countries.

• Bot wars stand to be a major issue facing Muslim populations. As with all issues in cyberspace, Islamophobia and other xenophobic tendencies will be expressed by bots. Bots will be used to undermine social movements in Muslim

countries as well as democratic processes. Governments can use bots to spread propaganda as well as outside organizations to add more and more fake news to cyberspace. Bots can also be used to fight back in exposing wrong doings and confront attack bots. Muslim awareness of bots needs to be addressed and through both the actions of Muslim communities and online platforms weeded out to prevent the undermining of the general public.

• Important theological and sociological discussions need to be had about the use of robots in the household, be that as companions, maids, caregivers, or sexual devices. Huge ethical ramifications will arise with the robots and their addressing by Muslim communities will help in navigating through these post-normal times.

• Lastly, the polylogue of human rights (and by extension, robots rights) needs to be reignited and diversified in public, private, and government sectors. Muslim communities torn apart by conflict, forced into refugee situations, and huddled into persecuted communities only underlines the disregard of basic human dignity.

Sources

Alexander, Anne (2012), "Digital Generation" *Critical Muslim* 1 (Hurst, London)

Barrat, James (2013), *Our Final Invention: Artificial Intelligence and the End of the Human Era* (St. Martins Press, New York)

Greenfield, Adam (2017), *Radical Technologies: The Design of Everyday Life* (Verso, London)

Hawking, Stephen, et al. (2014), "Stephen Hawking: 'Transcendence looks at the implications of artificial intelligence – but are we taking AI seriously enough?'" *The Independent* 1 May (http://www.independent.co.uk/news/science/stephen-hawking-transcendence-looks-at-the-implications-of-artificial-intelligence-but-are-we-taking-9313474.html)

Hopgood, Stephen (2013), "Is this the end of the road for universal human rights?" *New Internationalist* November

Leonhard, Gerd (2016), *Technology vs. Humanity: The coming clash between man and machine* (Fast Future Publishing, London)

Mar, Alex (2017), "Love in the time of robots" *Wired* 17 October

Sample, Ian (2017), "When bots go bad: how Wikipedia's helpers ended up locked in conflict" *The Guardian* 24 February

Sherwell, Philip (2017), "When people begin to run out of power, send in the carers who never grow old" *The Sunday Times* 22 October

Thielman, Sam (2016), "Use of police robot to kill Dallas shooting suspect believed to be first in US history" *The Guardian* 8 July

BINARY CONFLICTS

Implications

• Stuxnet is the perfect example of the weaponization of code being used against the Muslim world. Simple code could infect many computers throughout the Muslim world ranging from the promulgation of fake news to denying access to any outside communication.

• The Muslim world must be aware of the increased connectedness of Muslim countries and continued proliferation of Wi-Fi and internet services within. Discussions need to be had to the ethical use of the internet and how to keep it safe from potential cyberattacks.

• Muslim countries need to invest in both the infrastructure and education needed to properly equip the Muslim world with cybersecurity knowledge and technologies to assure the successors of Stuxnet do not cripple their nations or their people.

• The rate of automation and the increases in AI technology must be closely monitored in Muslim countries as dependence on these new systems of convenience only make their taking away more crippling to society. Education on cybersecurity is not strictly a government issue, but a societal one that everyone must be made aware of. Basic knowledge of phishing and hacking scams keeps the whole network and internet safer and running more smoothly.

Sources

Belam, Martin (2016), "We're living through the first world cyberwar – they just haven't called it that" *The Guardian* 30 December (https://www.theguardian.com/commentisfree/2016/dec/30/first-world-cyberwar-historians)

Singer, P.W. and Allan Friedman (2014), *Cybersecurity and Cyberwar: What everyone needs to know* (Oxford University Press, New York)

Tucker, Patrick (2015), "The Next Wave of Cyberattacks Won't Steal Data – They'll Change It" *Defense One* 10 September (http://www.defenseone.com/threats/2015/09/next-wave-cyber-attacks-wont-steal-data-theyll-change-it/120701/)

Zetter, Kim (2014), *Countdown to Zero Day: Stuxnet and the launch of the world's first digital weapon* (Broadway Books, New York)

REVOLUTIONS IN FOOD

Implications

• GMF may be our best shot at feeding a growing population. Yet, at the same time some of the manipulations, as in the resistance to herbicides, are provoking

an overuse of these products with snowball effects on ecosystems, other species and, ultimately, us.

• Some of the modifications, as drought resistance, can be very positive for poor farmers in semi-arid zones. But, because of the policies of some companies, that only produce sterile seeds, which makes the farmers absolutely dependent and subject to the factory supply.

• The debate over GMF is particularly relevant for Muslim countries as many of them combine two challenging conditions: growing population with deteriorating environmental conditions.

• As revolutions are being made in food, many theological questions will also need to be discussed in Muslim communities. Questions of whether or not meat and other products grown in a lab are in fact meat and consistent with the codes of halal will need to be discussed as well. Muslim societies can benefit from the use of the any-where green houses in uninhabited desert lands. More research and food product investigation needs to be carried out by Muslims so that future Muslim communities are accounted for with whatever form food may take in the future.

Sources

Ahmad, Reaz (2015), "Bangladeshi scientists ready for trial of world's first 'Golden Rice'" *The Daily Sta*r (http://www.thedailystar.net/frontpage/worlds-first-golden-rice-ready-trial-153676)

Nature (2013), *GM Crops: Promise and Reality* (Special Issue) (http://www.nature.com/news/specials/gmcrops/index.html)

Newsweek (2015), "The Future of Farming" 30 October – 6 November

Popular Science (2015), "The Future of Food" October

Wade, Lizzie (2015), "Argentina May Have Figured Out How to Get GMOs Right" *Wired* (http://www.wired.com/2015/10/argentina-may-have-figured-out-how-to-get-gmos-right/)

Wired (2016), GMOs (http://www.wired.com/tag/gmos/)

Zhang, Sarah (2015), "Biotech's New Plan: Nobody Say 'GMO'" *Wired* (http://www.wired.com/2015/11/synthetic-bio-startups-really-really-dont-want-monsanto/)

THE FIGHT FOR MUSLIM FEMALE INDEPENDENCE

Implications

• Muslim women's push towards independence can lead to a toppling of old masculine and patriarchal ideals and systems.

• Even more educated females will lead to greater female activity in politics and society and the production of more female leaders of Muslim countries.

• Justice will become more complex in Muslim societies. With increased recognition of women's independence, sexism and harassment will become part of law and the new interpretation of Shariah in Muslim countries.

• Greater equality for women opens up a whole new influx of workers capable of all ranges of labour and innovation. Women's involvement in education, economics, science and technology will provide new perspectives and greater opportunity for innovation.

• Greater participation of women in public life, including as scholars and Imams, could solve social issues that give rise to such xenophobic and extremist groups.

Sources

Gilligan, Andrew (2017), "Muslim women tackle 'toxic masculinity'" *The Sunday Times* 11 June

Al-Sharif, Manal (2017), "The day I broke the law by driving" *The Guardian* 13 June

Sherwood, Harriet (2016), "Women in Tunisia take gender fight to legislature" *The Guardian* 24 October

The Week (2017), "A new era for Saudi Arabia? The crown prince promises return to 'open, moderate Islam' – but not everyone is convinced" 26 October (http://www.theweek.co.uk/saudi-arabia/89264/a-new-era-for-saudi-arabia/)

Power, Carla (2015), "Muslim women are fighting to redefine Islam as a religion of equality" *Time* 20 March (http://time.com/3751243/muslim-women-redefine-islam-feminism/)

RECONSTITUTION OF THE MUSLIM FAMILY

Implications

• The concept of the multi-ethnic or multi-religious family needs to be brought out from the darkness of taboo discussion. Likewise, open families and relationships and other non-traditional family units need to be discussed and not left to the devices of social stigma and ignorance driven xenophobia.

• Discussion in Muslim communities must address scientific advancements in fertility and the social impact this will have on Muslim communities that could have genetically modified children or same-sex couples producing offspring.

• The Internet and social media will continue to change the way people socialize, date, and the very mechanics of marriage and family cannot be removed from these technological advancements.

• The continuity of war and xenophobia in Muslim countries and communities will destroy family life, separate family members, increase orphans and hence put unbearable pressure on Muslim societies. The family, the basic unit of

society, is becoming an endangered institution in war-torn and conflict-ridden communities.

Sources

Dearden, Lizzie (2015), "Refugee crisis: Lost children being split from parents left 'vulnerable to trafficking and abuse.'" *The Independent* 10 September (http://www.independent.co.uk/ news/world/europe/refugee-crisis-lost-children-being-split-from-parents-left-vulnerable-to-trafficking-and-abuse-10494331.html)

Green, Lydia (2014), "Why millions of Muslims are signing up for online dating" BBC 10 December (http://www.bbc.co.uk/news/magazine-30397272)

Al-Kadhi, Amrou (2017), "After one of Britain's first gay Muslim marriages, let me tell you what its actually like to be a gay Muslim" *The Independent* 11 July (http://www.independent.co.uk/ voices/muslim-islam-gay-marriage-relationships-faith-pride-christianity-culture-a7835671.html)

Petter, Olivia (2017), "Vlogger tackles misunderstandings surrounding dating as a Muslim woman" *The Independent* 13 November (http://www.independent.co.uk/life-style/muslim-woman-dating-youtube-vlogger-asha-everyday-london-video-islam-men-relationships-a8051971.html)

Rahman, Samia (2008), "Changing the face of Muslim family life" *The Guardian* 8 August (https://www.theguardian.com/commentisfree/2008/aug/08/religion.islam)

Spencer, Richard (2013), "Regime or revolution: families torn apart at Syria's front line" *The Telegraph* 23 June (http://www.telegraph.co.uk/news/worldnews/middleeast/syria/10136829/Regime-or-revolution-families-torn-apart-at-Syrias-front-line.html)

THE BLACK SWAN ON THE WINTER LAKE...

POTENTIAL US – CHINA WAR

Implications

• The Muslim world would be greatly affected by this seemingly distant conflict between the US and China.

- – Economically: A trade war would erupt between Muslim countries and over whether to support the US or China.
- – US military bases are positioned in many Muslim countries which could see increased troop presence.
- – This conflict is likely to begin as a combination of proxy and cyberwars that could result in the employing of Muslim fighters and Muslim countries.

• Oil demands would increase throughout the world leading to a boost in OPEC economies, but embargoes and sanctions could lead to forced increases in prices and chaotic actors being increasingly present in the market.

• There is a real threat of thermonuclear war and if strikes occur between China or the US, a domino effect could embroil Muslim countries in these same conflicts.

• Muslims living in the US or China could become targets of Islamophobia or other such racial discrimination that could lead to scapegoating or detention through the duration of the war as terrorist combatants for either side.

• Xinjiang province, a majority Muslim population within China, will continue to see a hardened military occupation and persecution under China and would easily be targeted for internal failures during a conflict with the US.

• The result of this war will redefine war in the coming era and reset the geopolitical and economic structures that hold the world together.

Sources

Coker, Christopher (2015), *The Improbable War: China, The United States & the Logic of Great Power Conflict* (Hurst & Co., London)

Gompert, David C., Astrid Stuth Cevallos and Cristina L. Garafola (2016), *War with China: Thinking Through the Unthinkable* (The RAND Corporation)

Hilton, Isabel (2017), "Trump is making China great again" *The Guardian* 3 February

Naughton, John (2017), "The real secret of Chinese censorship? Distraction" *The Observer* 22 January

Pilger, John (2016), "The coming war on China" *New Internationalist* December

IGNITING FUSION

Implications

Fusion power is seen as the great hope for energy: concentration higher than oil or fission, limitless and clean like renewable sources. Whoever manages to make fusion feasible first will be in a strategically advantageous position. It will very quickly replace oil – drastically impacting oil producing Muslim countries. The states with the capacity to invest in this energy lack the will to do so. They may also be blocked by Western states with highly developed research programmes – as has been done with pursuits of nuclear power. Cheap fusion also has the promise of surpassing some of the structural limits that restrict progress in some Muslim countries. The most feasible approach would be for a global Muslim coalition to develop its own approach to fusion power; probably the only way for Muslim countries to stay on top of energy resource races.

Sources

Clery, Daniel (2015), "The bizarre reactor that might save nuclear fusion" *Science* 21 October (http://www.sciencemag.org/news/2015/10/bizarre-reactor-might-save-nuclear-fusion)

Galeon, Dom (2017), "A Helium-Resistant Material Could Usher in the Age of Nuclear Fusion" *Futurism* 14 November (https://futurism.com/helium-resistant-material-usher-nuclear-fusion/)

ITER (2016), (http://www.iter.org)

World Nuclear Association (2016), *Nuclear Fusion Power* (http://www.world-nuclear.org/information-library/current-and-future-generation/nuclear-fusion-power.aspx)

THE END OF DISCIPLINES

Implications

• Muslim societies should look to interdisciplinary and transdisciplinary frameworks as great examples for the integration of thought and knowledge building. Most problems of Muslim societies are complex and interconnected and would benefit enormously from inter- and transdisciplinary modes of inquiry.

• The end of disciplines presents a rich opportunity for Muslim societies to establish standards for educational reform and the creation of the new institutions of higher learning. Muslim societies face the challenge of building disciplines that reflect their needs and aspirations, and the worldview of Islam.

• In creating a new system of knowledge building, Muslims have an opportunity not just to change global perceptions of Islam and Muslims, but to contribute to the overall benefit of humanity.

Sources

Crow, Michael M., and William B. Dabars (2015), *Designing the New American University* (Johns Hopkins University Press, Baltimore)

Dator, James A. (2002), *Advancing Futures: Futures Studies in Higher Education* (Praeger, Westport)

Dator, Jim, Ray Yeh, and Seongwon Park (2013), "Campuses 2060: Four Futures of Higher Education in Four Alternative Futures of Society." In *Developments in Higher Education: National Strategies and Global Perspectives* Academic Imprint Series / Penerbit USM [Glugor], Pulau Pinang: Institut Penyelidikan Pendidikan Tinggi Negara: Penerbit Universiti Sains Malaysia

Firestein, Stuart (2012), *Ignorance: How it drives science* (Oxford University Press, New York)

Flaherty, Colleen (2017), "Doing Away With Departments" *Inside Higher Education*, 17 November (https://www.insidehighered.com/news/2017/11/17/southern-illinois-u-carbondale-wants-dissolve-academic-departments-all-them/)

Lewis, Harry (2007), *Excellence Without a Soul: Does Liberal Education Have a Future?* (PublicAffairs, New York)

Proctor, Robert N. and Londa Schiebinger (2008), *Agnotology: The Making and Unmaking of Ignorance* (Stanford University Press, Stanford)

Sardar, Ziauddin and Jeremy Henzell-Thomas (2017), *Rethinking Reform in Higher Education* (IIIT, London)

THE 3-D PRINTED BODY

Implications

• 3-D printed organs will still be the luxury of wealthy people and wealthy nations. Will the technology be made available to poorer Muslim states? Or will Muslim societies be further divided by those who have the means of obtaining 3-D printed organs and those who must suffer without?

• There is an opportunity for Muslim countries to embrace 3-D printed technology at an early stage and contribute to its further development. Appropriate science, technology and medical education can enable Muslim states to be in the forefront of 3-D innovations.

• There will be enormous religious and societal implications that would require serious thought and reflection. Do 3-D printed organs or body parts violate the sanctity of the body or the gift of life? How would this change the bioethical discussions of who gets an organ first and who might be entitled or disqualified from obtaining such treatments? What are the consequences of keeping patients alive through 3-D interventions? Would people throw caution to the winds and engage in all sorts of unsavoury activities knowing that in the morning a few 3-D prints could make everything as good as new?

Sources

Ball, Philip (2014), "One day you may be able to remember anything you want… even things that never actually happened" *The Observer* 12 October

Devlin, Hannah (2017), "Talking about regeneration" *The Guardian* 6 December

Lewis, Tim (2017), "Could 3-D printing solve the organ transplant shortage?" *The Observer* 30 July

Murgia, Madhumita (2016), "Toddler gets world first adult kidney transplant using 3-D printing" *The Telegraph* 26 January (http://www.telegraph.co.uk/technology/2016/01/26/toddler-gets-world-first-adult-kidney-transplant-using-3d-printi/)

O'Connell, Mark (2017), *To Be a Machine: Adventures among cyborgs, utopians, hackers, and the futurists solving the modest problem of death* (Granta, London)

Stockton, Nick (2017), "Scientists 3-D print mouse ovaries that actually make babies" *Wired* 16 May (https://www.wired.com/2017/05/scientists-3-d-print-mouse-ovaries- actually-make-babies/)

Woollaston, Victoria and Ian Steadman (2017), "The race to build the first 3-D printed building" *Wired* 6 March (http://www.wired.co.uk/article/architecture-and-3d-printing)

APPS FOR CRIME

Implications

• Cybersecurity issues are highly pressing for Muslim countries. As conflict is continually arising and seemingly never ending in Muslim societies, cyber-attacks are likely to become major instruments for crippling society.

• The rapidly increasing wave of internet proliferation and usage in Muslim society opens up the population to the vulnerabilities of cybersecurity. As more and more devices are Wi-Fi enabled, more and more vulnerabilities are opened up in home and company networks.

• Far right groups could use apps and AI to specifically target Muslims by increased accumulation of data – staged for crimes they did not commit by manipulation of facial recognition sensors, words placed in their mouths by manipulation of audio files, and racially profiled for attacks.

• Data accumulation is not only a hot industry among the legitimate business world; it is also a growing lucrative commerce for online blackmail of businesses. Big data could be used to undermine Muslim businesses, as well as thwart Muslim societies attempting to establish their economies on the global market.

• In order to establish a necessary infrastructure for deterring and preventing cybercrime, Muslim societies will have to invest heavily in cyber security and protection.

Sources

Arthur, Charles (2016), "Tesco cyber-raid raises serious questions over banks' security" *The Observer* 13 November

Bennet, Alex (2017), "Teaching our police force how to hack like the pros" *Wired* 12 June (http://www.wired.co.uk/article/teaching-police-hacking)

Booth, Robert (2016), "Fraud hits thousands of Tesco Bank customers" *The Guardian* 6 November

Brundage, Miles and Shahar Avin (2018), "It's only a matter of time before criminals turn AIs against us." *Wired* 21 February (http://www.wired.co.uk/article/ai-security-malicious-threat-opens-ai-cambridge-cser)

Duke, Simon and Aimee Donnellan (2016), "Don't get a mask to rob a bank – just buy the app" *The Sunday Times* 13 November

Gayle, Damien, Alexandra Topping, and Ian Sample (2017), "NHS targeted in global cyber-attack" *The Guardian* 13 May

Greenfield, Adam (2017), *Radical Technologies* (Verso, London)

Hern, Alex (2017), "Ransomware: Microsoft issues patches for old systems" *The Guardian* 16 May

Hookham, Mark (2016), "Hackers smell blood after co-opting 'internet of things'" *The Times* 23 October

Usborne, Simon (2017), "Hostage to fortune" *The Guardian* 16 May

ASTEROID MINING

Implications

• This could be the definitive incentive to revitalize space exploration. Mapping will be greatly advanced and the commercialization of space travel will quickly lead to space tourism.

• A new host of commercial exploits will be opened up. Need for a discussion and boundaries on the issue of space mining is imminent as states, corporations, and private investors will want to jump on the opportunities available.

• It may also be the way to stop depleting the Earth's resources and, possibly, allow for a new wave of abundant raw materials, including water.

• But this may be precisely its main risk, because it is also the way to avoid the need to rethink and reform most of our unsustainable lifestyle. It could be akin to saying: we may be ruining the Earth but there is no need to worry because we will either fix it with what we find in space or we find another place to carry on.

• Along these lines, if there is no need to rethink our way of doing things, there is also no need to change most of our present inequalities, particularly if all these initiatives are business oriented.

For Muslim countries asteroid mining has both positive and negative implications. Rich Muslim countries can play a role as sponsors and, therefore, get a shot at the first-round exploit of those resources. They would focus on the resources they need the most. Vast swathes of desert could become the new home of space mineral processing and waste; and provide employment opportunities for a growing population.

There is also the issue of who owns the technology. Muslim countries do not have a background in space science, and have failed to develop world class indigenous science and technology institutions. If this does not change in the

coming decades, Muslim countries would once again be dependent on foreign know-how.

Sources

Elvis, Martin (2012), "Let's mine asteroids — for science and profit" *Nature* 485-549 (http://www.nature.com/news/let-s-mine-asteroids-for-science-and-profit-1.10733)

NASA (2015), *Asteroid Redirect Mission* (https://www.nasa.gov/content/what-is-nasa-s-asteroid-redirect-mission)

Thompson, Clive (2016), "Space Mining Could Set Off a Star War" *Wired* 24 (http://www.wired.com/ 2016/01/clive-thompson-11/)

Wired (2015), *Asteroid Mining* (http://www.wired.com/tag/asteroid-mining/) and (http://www.wired.co.uk/asteroids)

MAPPING THE COMPLEX BRAIN

Implications

• Muslim states need to participate in the project of mapping the human brain with a view to building a foothold on technological education and research into this endeavour.

• There is also the dark possibility for mind control in this technology. It could begin as simple marketing targets and commercial control, but accelerate rapidly to being used against Muslim people. Muslim extremists could also use mind computer interfaces to literally brainwash Muslim societies or reprogram them with extremist outlooks.

• Brain-computer interfacing could also be used in warfare: a number of killing devices could be activated by the simple use of one's mind. This combined with the ability to regulate aggression and memory suppression could turn human soldiers into remorseless killing machines.

• Mapping of the brain raises a multitude of questions for Muslim societies concerning theological and societal issues. Uploading of the mind can produce the illusion of immortality while also changing the definition of spiritual transcendence, raising a host of theological and moral conundrums.

Sources

Greenfield, Adam (2017), *Radical Technologies* (Verso, London)

McKie, Robin (2016), "We can see clearer now" *The Observer* 23 October

O'Connell, Mark (2017), "Goodbye Body, Hello Posthuman Machine" *The Observer* 26 March

Palmer, Katie M. (2015), "A first big step toward mapping the human brain" *Wired* 14 May

(https://www.wired.com/2015/05/first-big-step-toward-mapping-human-brain/)

Pogue, David (2012), "6 electronic devices you can control with your thoughts" *Scientific American* 1 December (https://www.scientificamerican.com/article/pogue-6-electronic-devices-you-can-control-with-your-thoughts/)

Sample, Ian (2016), "Updated map of the human brain hailed as a scientific tour de force" *The Guardian* 20 July (https://www.theguardian.com/science/2016/jul/20/updated-map-of-the-human-brain-hailed-as-a-scientific-tour-de-force)

SOCIAL DISRUPTION VIA VIRTUAL REALITY

Implications

Travel and tourism industry will be among the first to be affected with both positive and negative effects.

• A reduction in the greenhouse gases emissions due to reduction in planes, ships, cars and train journeys.

• A diminished pressure on fragile destinations such as ancient sites or valuable ecosystems.

• A decrease in crowded surroundings at top touristic spots.

• But, at the same time, it may open a new form of tourism market to millions of new consumers.

• It may damage businesses that rely on tourism such as hotels and airlines leaving their workers unemployed. It may also be a tough blow for the economy of many places that are very dependent on visitors and other fiscal benefits provided by tourism.

• Professors will be required to produce VR modules of the subjects they teach so as to allow their students immersion in them.

• Social interaction, be it for work or leisure, will be altered as it will no longer be necessary to perform them personally when you can send or use your avatar instead.

• The entertainment industry will be pressed to produce new modes of VR experiences and leisure activities.

But perhaps the deepest change is that VR will cause an irrevocable shift in our notion of experience. So far, we still distinguish between something that is physically real and something that is clearly virtual. Now we are reaching a point where it may not be possible for our brain to distinguish what we have considered reality so far from our virtual take on it.

Then, there is potential impact of Muslim rituals. In a VR Jumma, one could be part of the Friday congregation while praying at home. Indeed, the very experience of attending mosque or even daily prayer could be converted into a virtual practice. There are already apps to perform the hajj virtually and thousands of Muslims have downloaded them to perform the pilgrimage. So far, they are still clumsy and don't look that real, although some people claim that they have really attained a religious feeling. Yet, in the next few years, they will offer a much more compelling experience. Indeed, a VR hajj that takes the pilgrim right to the heart of various rituals, allows him or her to touch the Kabah and the Black Stone, sit at *Maqam al-Ibrahim*, and perform all the rituals exactly as desired, may actually offer a more enriching and spiritual experience than the real hajj.

Sources

Au, James Wagner (2016), "VR Will Make Life Better—Or Just Be an Opiate for the Masses" *Wired* (http://www.wired.com/2016/02/vr-moral-imperative-or-opiate-of-masses/)

Deng, Boer (2014), "The Controversy Over a Virtual Hajj for Muslims" *Future Tense* (http://www.slate.com/blogs/future_tense/2014/10/07/digital_hajj_how_religion_feels_using_mecca_3d_second_life_virtual_worlds.html)

Greenfield, Adam (2017), *Radical Technologies* (Verso, London)

Ley, Rachael (2014), "New App Lets Pilgrims Take a Virtual 3D Hajj" *Vocativ* (http://www.vocativ.com/world/saudi-arabia-world/new-app-lets-pilgrims-take-virtual-3d-hajj/)

Wired (2016), *Virtual Reality* (http://www.wired.com/tag/virtual-reality/)

THE BLACK JELLYFISH IN THE SEA OF CHAOS...

POST-CAPITALISM ALTERNATIVE ECONOMIC PARADIGMS

Implications

• Muslim societies have suffered enormously under the hegemonic, global capitalist order. The politics and culture of many Muslim countries are driven by the exploitation of labour and scarce resources. The inherent injustices of neoliberal capitalism are also reflected in Muslim societies: accumulation of wealth in fewer and fewer hands, and poverty on a grand scale, is as evident in Muslim states as it is on an international level. The impact of the fall of capitalism will ripple throughout the planet, but Muslim societies are likely to be in the front lines of the chaos that will ensue.

• The problems associated with the current crisis in capitalism have a direct bearing on the future survival of Muslim societies. Issues of sustainability, climate change and resource scarcity are of immediate concern to Muslim societies.

• Muslim societies have an historic opportunity to lay the foundation of an alternative system: a reformed Islamic economics, focussed on ethics and ecology, may very well contain the essence of a post-capitalist model.

Sources

Battiston, Stefano, et al. (2016), "Complexity theory and financial regulation: Economics policy needs interdisciplinary network analysis and behavioural modelling" *Science* 351:6275 19 February

Dunn, John (2014), *Breaking Democracy's Spell* (Yale University Press, New Haven)

Earle, Joe, Cahal Moran, and Zach Ward-Perkins (2017), *The Econocracy: On the perils of leaving economics to the expert* (Penguin Random House, London)

Editorial (2017), "Capitalism without capital: Politicians must respond to the insecurity caused by a weightless world" *The Guardian* 27 December

Fleming, Peter (2017), *The Death of Homo Economicus* (Pluto Press, London)

Hilary, John (2013), *The poverty of capitalism: Economic meltdown and the struggle for what comes next* (Palgrave MacMillan, New York)

Kinni, Theodore (2017), "Capitalism in America has been on a suicide mission for 40 years" *Quartz* 4 October

Mason, Paul (2015), *Postcapitalism: A Guide to Our Future* (Penguin Random House, London)

Swift, Richard (2014), *S.O.S. Alternatives to Capitalism* (New Internationalist, London)

GENETIC MODIFICATIONS

Implications

• Cattle, pets, and endangered species can be produced in mass quantities.

• Increase in fertility abilities can be made available. One or two infertile parents can have their DNA transposed into donors.

• It makes it easier to genetically design babies to the parent's demand.

• Super humans could be produced with all the benefits of perfect genetic manipulation for health, youthfulness, strength, and aesthetical beauty.

• It can be used to create bio-weapons, including those that target particular genetic features.

• It enhances the capacity to design species that could invade or colonise specific ecosystems.

• It is, therefore, paramount to define protocols to limit the authorised use of this technique.

• Gene editing has many benefits as well as dangers for Muslim countries. It is a relatively easy and cheap technique that can be embraced by research centres and educational institutions in Muslim societies. Muslim societies could also use genetic engineering for enhancing physical characteristics, giving affordable outing to all sorts of stereotypes or prejudices. It may be used to engage in genetic warfare against some Muslim groups, such as Arabs or it can be applied to ruin specific ecosystems in Muslim states.

Sources

Ball, Philip (2017), "In pursuit of the perfect baby" *The Observer* 1 August

Charpentier, Emmanuelle and Jennifer A. Doudna (2013), "Biotechnology: Rewriting a genome" *Nature* 495 50–51
(http://www.nature.com/nature/journal/v495/n7439/full/495050a.html)

Corbyn, Zoe (2015), "The risks and rewards of 'upgrading' our DNA" *The Observer* 5 October

Gabbatt, Adam (2017), "Woman aged 25 gives birth with 24-year-old frozen embryo" *The Guardian* 20 December

Ledford, Heidi (2015), "Alternative CRISPR system could improve genome editing" *Nature* (http://www.nature.com/news alternative-crispr-system-could-improve-genome-editing-1.18432)

Maxmen, Amy (2015), "The Genesis Engine: On the DNA editing tool, Crispr" *Wired* August 2015 (http://www.wired.com/2015/07/crispr-dna-editing-2/)

Moody, Oliver and Tom Whipple (2016), "Baby boy with three parents opens new era in IVF fertility" *The Times* 28 September

Odling-Smee, Lucy, Heidi Ledford, and Sara Reardon (2015), "Genome editing: 7 facts about a revolutionary technology" *Nature* (http://www.nature.com/news/genome-editing-7-facts-about-a-revolutionary-technology-1.18869)

SMART LIFE

Implications

• The sedentary life style promoted by smart life introduces a strong element of banality into Muslim societies. It would allow for all Muslim families to have their days and essentially their lives planned out for them. Halal food and goods are purchased by the click of a button, prayer is tracked by an app, and the hajj is sponsored by Airbnb. But would the iQur'an be able to give Muslims the time to contemplate? Will religious or spiritual transcendence be something that Alexa or Siri can grant? There is a danger in blind acceptance of radical extremes as well as in the docile apathy.

• The wide usage of cameras, image and voice recognition technology that is foundational to Smart homes and workplaces, could potentially be used to target Muslims. It would enhance racial profiling, identifying 'potential' terrorists,

or for spying on Muslim communities. Access to databases of Muslim communities could be used for manipulation and control.

• An opportunity does exist if Muslim societies take a new approach to information and communication technologies. Educational and economic reform focussed on generating innovation with a Muslim twist that works to prevent cybersegregation and simple dystopian consumer extremes can make smart life genuinely ethically smarter in the future.

Sources

Editorial (2016), "Manufacturers make things, and shops sell them. But what if there was a different way?" *The Observer* 24 July

Emery, Ruth (2017), "The private banker in your pocket" *The Sunday Times* 22 October

Gratton, Lynda and Andrew Scott (2016), "Our life in three stages – school, work, retirement – won't survive much longer" *The Observer* 4 September

Greenfield, Adam (2017), *Radical Technologies* (Verso, London)

Hickey, Shane and Franki Cookney (2016), "Airbnb revolutionised travel but is facing worldwide opposition. It plans a grassroots movement to rise up in its defence. Will it work?" *The Observer* 30 October

Keen, Andrew (2015), *The Internet is Not the Answer* (Atlantic Books, London)

Tucker, Ian (2016), "Humanity's biggest fear is becoming irrelevant" *The Observer* 27 November

RULE BY ALGORITHMS

Implications

• Algorithms often hide behind a veil of objectivity but many are truly flawed and manipulative. Even in its better-intentioned uses, the technology manipulates and unconsciously silos off society into monochromatic subgroups.

• Muslim societies face a tremendous challenge: algorithms can be used to support fake news, promote racism and Islamophobia and all-round ignorance. Algorithms have been used to discriminate against Palestinians, racially profile 'Arabs' in airports, and to deny access to parts of the internet to certain Muslim countries.

• Muslims too could use algorithms to promote extremism and violence.

• The worst part is that these models have little room for corrective action. Thus, the ability to resist such a system or correct the errors that are inherent to even the maths itself is limited. In the post-truth world, it will be hard to tell if the actions and choices we make are a product of our thought or surreptitiously dictated by algorithms.

Sources

Chakrabortty, Aditya (2016), "Your new iPhone's features include oppression, inequality – and vast profit" *The Guardian* 20 September

Davies, William (2017), "The end of statistics?" *The Guardian* 19 January

Fletcher, Nick (2016), "What caused the great flash crash? Traders blame rogue algorithm for pound's plunge" *The Guardian* 8 October

Gostoli, Ylenia (2018), "How the Internet 'punishes' Palestinians" *Al Jazeera* 2 February

Greenfield, Adam (2017), *Radical Technologies* (Verso, London)

Naughton, John (2015), "Why it's full speed ahead to being ruled by computers" *The Observer* 16 August

O'Neil, Cathy (2016), *Weapons of Math Destruction: How big data increases inequality and threatens democracy* (Penguin Random House, London)

Tucker, Ian (2017), "When algorithms are racist…" *The Observer* 28 May

CITY AND CORPORATE STATES

Implications

• Megacities in Muslim societies already tend to act much like city states in all but name. The concentration of population, taking in mind the current trends toward increased urbanisation, and economic activity make them well suited to be the new centres of power in a city-state driven world.

• A city-state model could be a desirable solution to the problems of authoritarian and extremist regimes. They could tear down the manufactured borders of the Middle East and Asia that have caused so much strife and conflict. There is a chance that communities not allied to a city would struggle on the fringes of society or bind together in new unthought tribes or communes.

• The anticipated growth in Muslim populations throughout Europe could be a major driver of policy. In the futures of city-state organizations, young populations will be sources of power through revenue and innovation and development.

• Islamophobia could lead European cities to return to the medieval model of city walls that keep certain populations out or, in turn, keep certain populations in. Without large sweeping national or continental policy, the future landscape could be quite dystopian with a return to massive nomadic populations and migrating tradespeople.

• Muslim countries of the Middle East with their willingness to import culture along with its potential for vast solar farms could make their territories attractive to future Corporate states.

Sources

Baird, Vanessa (2016), "Smiley-faced monopolists" *New Internationalist* July/August

Cadwalladr, Carole (2015), "'I find it worrying that the future of humankind is now in the hands of a very small group of entrepreneurs'" *The Observer* 5 July

Earle, Samuel (2017), "Vatican 2.0" *TLS* 14 November (https://www.the-tls.co.uk/articles/public/technology-companies-facebook-god-earle/)

Kotkin, Joel (2010), "A new era for the City-state?" *Forbes* 23 December (https://www.forbes.com/sites/joelkotkin/2010/12/23/a-new-era-for-the-city-state/#67c8e5687a20)

Morozov, Evgeny (2015), "Facebook isn't a charity. The poor will pay by surrendering their data" *The Observer* 26 April

Morozov, Evgeny (2016), "The state has lost control: tech firms now run western politics" *The Observer* 27 March

Srnicek, Nick (2017), "Smash the tech monopolies now. Soon it will be too late" *The Guardian* 30 August

NEW SUPERBUGS

Implications

• Prescription of broad-sweeping drugs is the cheap and time saving solution that undermines the value of a more preventative approach to medicine.

• Accompanying this rise of pharmaceutical based medical practice is the growing rejection of vaccination. Fearful narratives and rejection of established scientific research has led to an increase in people not getting and/or refusing their children to be vaccinated. This is opening up opportunities for the re-emergence of diseases that have been controlled for decades.

• The potential rise of superbugs needs to be considered within systems that determine methods, sites for construction and mechanisms for trade and commercial shipping. Exports of goods and the disruption of ecosystems make serious contributions to superbug development.

• Nanotechnology has shown promising results in killing of pathogens. The use of light to destabilize and destroy cells harnessed within nanobots can be an effective medicine against superbugs.

• Governments have to start thinking in an anticipatory manner about superbugs. Waiting for the next outbreak to burst, and then rushing to spend millions on drugs and vaccines is highly ineffective and may not actually work.

• Many Muslim countries are in situations of special risk. The use of antibiotics is high and the standards of sanitation and health care are low. In areas of armed conflicts, not only is health attention severely compromised, but the chances of outbreaks increase manifold.

• The situation in South Asia should concern all Muslim states. South and South-East Asia are becoming a hotspot for infections and antibiotic resistance as many outbreaks have started in this part of the world.

• The pilgrimage to Makkah, the hajj, presents an annual risk of the spread of antibiotic resistance diseases. Health policies focussed on potential risks and containment of superbugs need to be developed both at national and international level.

Sources

Center for Disease Dynamics, Economics & Policy (2016), *Antibiotic Resistance* (http://www.cddep.org/research-area/antibiotic-resistance#sthash.UBnL6wbi.dpbs)

Harris, Gardiner (2014), "'Superbugs' Spread Globally: Babies die by the thousands in India battles drug-resistant bacteria" *The New York Times* 14 December

Knapton, Sarah (2017), "Nanomachines that drill into cancer cells killing them in just 60 seconds developed by scientists" *The Telegraph* 31 August (http://www.telegraph.co.uk.science/2017/08/30/nancomachines-drill-cancer-cells-killing-just-60-seconds-developed/)

Shah, Sonia (2016), "How foreclosed homes and used tires can threaten public health in the age of Zika" *The Washington Post* 29 July

World Health Organization (2015), *Antimicrobial resistance* (http://www.who.int/mediacentre/factsheets/fs194/en/)

Wired (2016), *Antibiotics* (http://www.wired.com/tag/antibiotics/)

Yuhas, Alan (2016), "Bees are unintended victims of US south's anti-Zika campaign" *The Guardian* 5 September

Zhang, Sarah (2015), "Where Antibiotic Resistance Is Worst Around the World" *Wired* (http://www.wired.com/2015/09/antibiotic-resistance-worst-around-world/)

QUANTUM COMPUTING AND MEGA DATA

Implications

• The speed at which quantum computing will move will leave many states – including Muslim societies – behind. However, all societies stand to be cast into irrelevance by the possibilities revealed in quantum technologies. The quantum computer has an ability to falsely simplify life. The rate of chaotic behaviour and production of ignorance will be so great it will appear that uncertainty has been conquered. The very concept of what is human stands to be destroyed and deemed irrelevant in the quantum future.

• What makes quantum computing so powerful is the concept of superposition, where something can exist in multiple states at once. Divisions within society, especially those of sectarianism and wealth disparity, will be exponentially increased.

• Muslim societies need both a place at the table and a cautious lens towards the development of quantum technologies. This means a greater cultural appreciation for science and technology in general and quantum physics in particular. There is a simultaneous need to embrace science and technology yet

keep a critical distance from fashionable fads as well as dogmatic acceptance of all things that claim to be scientific

Sources

Ball, Philip (2017), "Physicists want to rebuild quantum theory from scratch" *Quanta Magazine* 2 September (https://www.wired.com/story/physicists-want-to-rebuild-quantum-theory-from-scratch/)

Greenfield, Adam (2017), *Radical Technologies* (Verso, London)

Naughton, John (2015), "The quantum computing era is coming...fast" *The Observer* 13 December

O'Neil, Cathy (2016), *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* (Penguin Random House, London)

Tucker, Ian (2016), "Humanity's biggest fear is becoming irrelevant" *The Observer* 27 November

Watson, T.F., et al. (2018), "A programmable two-qubit quantum processor in silicon" *Nature* doi:1.1038/nature25766

THE RETURN OF BALKAN GHOSTS

Implications

• The instability and tensions of the Balkan republics is a potential hotbed for the development of fascist groups and government infiltration as well as the rise of extremist Muslim elements and a battleground for organizations such as the Islamic State.

• The strong influence of Russia on the former Yugoslavian state cannot be overlooked. There is a possibility that Russia would come to the aid of nationalist forces in the region to the detriment of Muslim communities.

• The complex and interconnected problems of the Balkan republics require long-term solutions. Transcending differences and overcoming the ghosts of the past would require serious attempts at community building.

• The Islamic community has an opportunity to take a lead both in shaping a vision and a viable future for the Balkan region. A vibrant and dynamic discourse of Balkan futures involving all sides and communities can be a major milestone against Islamophobia and nationalist fascism in the region.

• The ideological battle for the Balkan future is an opportunity for Muslim societies to take on the ghosts of the past and progress a new polylogue of understanding and knowledge building.

Sources

Editorial (2017), "The EU must show the Balkans they still have a chance" *The Economist* 13 July (https://www.economist.com/news/europe/21725020-europes-inner-courtyard-drifting-towards-crime-and-authoritarianism-eu-must-show)

MacDowall, Andrew (2017), "Rumbling Balkans threaten foreign policy headache for Trump" *The Guardian* 27 February (https://www.theguardian.com/world/2017/feb/27/balkans-foreign-policy-headache-trump-kosovo-serbia-bosnia-montenegro)

Mason, Paul (2016), "Croatia's election is a warning about the return of nationalism to the Balkans. The EU must get tough with incoming government" *The Guardian* 13 September

Mekic, Sejad (2015), "Governing Bosnia-Herzegovina" *Critical Muslim* 14 April-June (Hurst, London)

Waterman, Ruth (2015), "In Camera: Bosnia" *Critical Muslim* 13 January-March (Hurst, London)

DEGENERATION OF POST-WAR MUSLIM SOCIETIES

Implications

• The conflicts and wars in Muslim societies could linger on for decades as long as there is continued resentment for the Other and a refusal to critically engage with the postnormal world. There is a real and present danger that some Muslim societies will drift further towards oppressive extremist and fascist states. The alternative requires conscious choice, attentive anticipation and careful navigation.

• The postnormal state of endless war in Muslim societies will be a great source of increasing complexity, chaos, and contradictions and, as such, generate all-embracing uncertainty towards the future.

• Muslim societies must unite in the pursuit of common peace and approach regional conflicts from a multitude of angles and from the concerns of as many different parties as possible. Polylogue is the first best step in bringing war-torn societies together.

• Education is the only realistic and long-term solution to strife and conflict in Muslim societies. Serious reform is needed in primary, secondary and tertiary education which has to focus on opening minds, embracing pluralism, engaging critically with history, and futures literacy. Complex warn-torn societies need complex systems of education.

Sources

Connolly, Kate (2015), "The war is still raging, but the race to rebuild Aleppo has already begun" *The Guardian* 12 March (https://www.theguardian.com/world/2015/mar/12/war-rebuild-aleppo-syria-architects-reconstruction)

Editorial (2017), "The Next Middle East War" *The Wall Street Journal* 7 September (https://www.wsj.com/articles/the-next-middle-east-war-1504826567)

Foreign Policy (2017), "What Comes After ISIS: The jihadi group's defeat in Mosul and Raqqa is about to usher in a new era — and new conflicts — across the Middle East" 10 July (http://foreignpolicy.com/2017/07/10/what-comes-after-isis-islamic-state-mosul-iraq-syria/)

Miller, Aaron David (2016), "Why U.S. diplomacy can't fix the Middle East" *The Washington Post* 3 June (https://www.washingtonpost.com/opinions/why-us-diplomacy-cant-fix-the-middle-east/2016/06/03/74622fba-0e21-11e6-bfa1-4efa856caf2a_story.html?utm_term=.d3fd0572ee4a)

Townsend, Mark (2017), "Fake online accounts 'driving anti-Muslim abuse'" *The Observer* 26 November

SCENARIOS

INTRODUCTION

Scenarios are a tool for clarifying thinking about alternative futures. The term is often used in the plural to emphasise that there is not one but many futures. In general, scenarios are basically outlines, or stories, about some aspect of the future intended to overcome narrow thinking and focus on multiple futures possibilities, ultimately to help us learn.

In general, they are written in the present tense as if the future they are describing has already happened. All methods follow a set of logical steps or stages such as setting the agenda, identifying the driving forces, determining the key factors, and framing the scenarios.

Building scenarios in the postnormal times framework is somewhat different from the conventional methods. Our focus is on the dynamic nature of post-normal times which requires an emphasis on complexity and simultaneity. We take it for granted that the present is complex, networked, pluralistic, an amal-gam of past, present and futures and the postnormal. Like most scenarios work, we need to account for empirically observable trends but also give prominence to the reiterative nature of trends and emerging issues. The simultaneous and reiterative process is explored through the Three Tomorrows structure.

Scenarios should be seen as the beginning of a long overdue discussion on Muslim Futures.

Sources

Bradfield, R., G. Wright, G. Burt, G. Cairns, and K. Van Der Heijden (2005), "The origins and

evolution of scenario techniques in long range business planning" *Futures* vol. 37(8) 795-812

Godet, M. and F. Roubelat (1996), 'Creating the Future: The Use and Misuse of Scenarios' *Long Range Planning* 29(2) 164-171

Huss, R.W. and E.J. Honton (1987), 'Scenario Planning— What Style Should You Use?' *Long Range Planning* 20(4) 21-29

Martelli, A. (2001), 'Scenario building and scenario planning: state of the art and prospects of evolution' *Futures Research Quarterly* vol. 17(2) 2001 57-70

Ogilvy, James (1996), 'Scenario Planning, Critical Theory and the Role of Hop' in Richard A Slaughter editor *The Knowledge Base of Futures Studies Volume 1: Foundations* 205-216 (DDM Media Group, Hawthorn)

Sardar, Ziauddin (2013), *Futures: All That Matters* (Hodder & Stoughton, London)

Sardar, Ziauddin and John Sweeney (2016), 'The Three Tomorrows of Postnormal Times' *Futures* 75 1-13

Wright, George and George Cairns (2011), *Scenario Thinking: Practical Approaches to the Future* (Palgrave MacMillan, London)

THE EXTENDED PRESENT SCENARIOS

TORN AND BURNED

Muslim countries endure the worse impacts of Climate Change. In certain places temperatures have risen above 50°C. There is widespread water scarcity. Urban centres are heavily polluted. In general, the environment is rapidly losing the ability to sustain life. Some countries have tried to combat the situation as a nation; but other places witness how the wealthiest buy their way to more live-able locations while the poorer face desperate situations. Basically, Muslims are entangled in sectarian disputes and fighting each other to work collectively to improve the environmental situation. Not surprising, violence escalates and the conflicts for the available resources allows terrorism to surge. Huge populations are on the move hoping to find a more liveable environment. There is talk of the West blockading the MENA region; and creating a barrier so people inside cannot leave their homeland.

UNITED MUSLIM REFUGEE LAND

The best way to see it all is through the Drone's lens, or as we call it Drones-Eye-View. The lifeless images all have a hazy sepia hue and are set to a mechanical hum for a soundtrack.

Recycled plastic walls form pods, more like containers, that resemble the cold efficiency perfecting cubicle filled floors of a corporate office. The plastic huts vary in size based on that of the displaced family. At the centre of these pod-

based cul-de-sacs are post stations where clean drinking water and daily Aid packages are delivered. Low grade drones provide for free Wi-Fi to the tenants of these camps. Massive concrete walls contain the cul-de-sacs, but it is hard to determine if their purpose is to keep the conflict out, or to keep the refugees in. The wall snakes around the greater Cairo city limits and the camp city covers large swathes of the Nile River Valley.

The walled pods of blue and white continue up through the Suez forming a lobe each for the West Bank and Gaza Strip. Armed guards patrol the Israeli territory borders. The pods remain the same, but one notices more décor as messages of hope are painted on the pod roofs and Palestinian flags fly all about.

The community camp flows south into the vast deserts of Saudi Arabia. The pods here are more pointed, and each roof has a solar panel. Wind turbines are sprinkled about. Small community centres have been repurposed into schools and mosques. Makkah is an eye in the pods, only connected to greater Saudi Arabia by high speed trains that run in all directions out of the holy city. Most of Yemen is encased within these concrete walls. A lobe erupts out into the borderlands of Oman. A few years ago, as the walls came up, a UN led effort carried out by US, UK, European, and Bangladeshi volunteers transported the Rohingya population to this refugee suburb.

We zoom out on the Arab peninsula, up seven degrees, and our eye closes in on the walls path upwards into much of Syria and Iraq. Here most of the city is comprised of canvas tents, the pods have not been constructed here yet and due to lack of funds, may never come. Tech firms have provided the clean water filtration system that recycles waste, rain, and sea water desalinated and purified for consumption. They also provided the Wi-Fi drones and smartphone charge stations.

Further north a lobe reaches into the borders of Turkey, Iraq, Iran, and Armenia. Most of the homes are constructed of canvas, old pod parts, and rubbish fashioned together in blocks of rooms with a central garden. Here Kurdish, Chechen, and Uyghur Muslims live in relative harmony. The walls here are the newest and have not been worn to weather and graffiti.

Most of the conflict zones only remain as ruined ghost towns on the outskirts of the United Muslim Refugee Land. Electric speed trains carry the few refugees lucky enough to be relocated to the West, but a struggle against Islamophobic culture and bureaucratically entangled paths to citizenship await them at their destination. As conflict dies down like a fire suffocated from oxygen, the refugee city appears less and less like dislocated families and more like new permanent residences. Aid comes as it is given, which is becoming less frequent as media

in the West has largely lost interest in the area. Single mothers and families run by eldest children are the norm. Surviving grandparents have a low life expectancy, but camp workers and families try to give them the most comfortable living possible. Disease is largely kept at bay, but mental health epidemics are beyond maintenance. This is everyday life in the United Muslim Refugee Land.

GENERATION WASTED

Fertility rates have declined for the first time in over two decades. This is largely due to the fact that Muslim youth take a pessimist view of marriage, having children and creating families.

Unemployment is at an all-time high and there is no optimistic option. Automation and AI has turned the West away from the unskilled and cheap labour that the Muslim societies of the global South once provided. Robots have made humans irrelevant for everyday functions.

The state of education only makes the picture gloomier. A degree may be necessary for finding employment, but it provides no applicable skills or knowledge. Universities are corporations and essentially one's education is dictated by the amount one is able or willing to pay. This leaves Muslim youth with insurmountable debt and with worthless qualifications in a world without jobs. The accent is on poverty, pollution, and alienation.

Wars still rage, leaving a youth physically handicapped and irreversibly mentally scarred. This generation is a generation of orphans who have never known peacetime. It is known as Generation Wasted. Politics, democratic or otherwise, has failed them. Economics has botched up their prospects. Conflict and survival of the fittest are the only pillars by which the world operates. Many of the disenchanted turn to mysticism or extremism. At least they can hope for paradise that follows death and release from this cruel world. Other youth see the extremists as the establishment wearing a different hat. They believe in radical rebellion against all historical narrative and wish to launch a jihad against the jihadists. Minority sects are accused of being heretics and persecuted. What results is an entangled messy mosaic of belief constantly warring against and destroying itself.

Many seek refuge in drugs. Use of opium, hashish, cocaine and bhung in Muslim societies is amongst the highest in the world. Overdosing and blood born pathogen numbers are on a steady exponential increase. Bombings and target killings are now the norm. Dramatic acts of suicide, including self-immolation, are frequently a part of the daily news report. Popular music speaks of frustration, anger, distrust, and violence. Art and literature sings of hopelessness and for the most part is largely uninterpretable, expressions of utter anger.

Government approval is at its lowest ratings in recordable history. What started with large and populous demonstrations has fizzled out into an extreme apathy. Military registration forms and electoral ballots are publicly burned. Laws and ordinances are loudly and publicly denounced and disobeyed. High apathetic attitudes call into question the legitimacy of electoral results and little interest in current political structures leaves many government apparatuses dysfunctional and defunct. Little interest is given to looking for a solution and, in general, nobody knows what to do. The youth are beyond organising and the current infrastructure is incapable of innovation. The rest of the world moves on without the anarchic and degenerative Muslim societies.

FAMILIAR FUTURES SCENARIOS

AFTER THE WEST

After its rapid withdrawal from the global theatre and civic unrest edging on war, the United States is no longer the leader of the free world. Numerous exits and internal successions within Europe have left the EU a shell of its former aspirations, led by a power hungry and unpopular France and Germany, which is in the midst of another identity crisis. Great Britain has finally burnt the last influential oils of an empire long past its sell-by date. The United Nations has lost all relevance as it is a body no longer capable of consensus or action.

The death of Vladimir Putin leaves Russia without direction and in a state of quiet implosion as sweeping reforms attempt to repair the damage of failed policies. China looks to be the last super power of the old-world order, but it is one among new global powers: India, Turkey, Brazil. Power is no longer split between two poles, it now exists in a plurality. The alliances and partnerships made by the Middle East and Africa are also drastically changing the global balance of power.

Much of the world's wealth is concentrated in China and India, in city states like Singapore, and global corporations such as Alphabet and Apple. But it has become nearly impossible to track wealth as the global economy has entered nose-dive state of boom and bust. Each bust digs deeper and deeper as each boom is shorter than the last, and unable to break even with the last depression. Weather is unpredictable and increasingly destructive. Military forces are torn between international conflict, internal unrest, and multilateral rescue efforts. Automation has replaced human intellectual and physical labour and is producing consumer goods that humans are no longer able to afford.

Education has collapsed. Discipline-based departments are closing and tenured positions are disappearing. Knowledge building, skills training, and usefulness

is only possible through interdisciplinary and transdisciplinary work. Students stand to learn more from Greek Forum style café universities or AI mediated online courses than the abandoned universities of old. Knowledge structures are broken, but an opportunity lies in the creation of new ones to begin answering the complex uncertainty of these Postnormal Times.

The fragility of this period is consigning old ideas and paradigms into the dustbin of history. New paradigms are struggling to be born. Some are stillborn. Muslim societies are experiencing tectonic shifts – rapid change that brings both opportunities and spectre of collapse. A vacuum exists and the broken knowledge structures stand to change the future dynamics of power. China appears a clear successor to the US, but is it simply the US 2.0? Have no lessons been learned from the era of Western dominance? The conditions demand new modes of politics, governance, economics, education, and identity that present a direct challenge to future Muslim societies.

Muslim countries struggle to shape their futures as the age of the superpower comes to an end. How can power and new knowledge be used for the betterment of all humankind? There is much to do; and a great deal to achieve. The world is an oyster: someone has to reach out and grab it.

AN INEXHAUSTIBLE SPRING

A coordinated attack in their most holy places leaves Muslims in a state of shock. Jerusalem and Madinah are devastated. The Prophet's Mosque is destroyed. Makkah suffers the worse: a series of dirty bombs leaves the sacred city completely uninhabitable. The Kabah is obliterated. Some bombs were biological containing flesh-eating engineered bacteria; a second set included radioactive isotopes. It is estimated that it will take centuries to recover the city.

A global wave of Muslim solidarity sweeps the world. Outrage and disgust are expressed for the attacks; and attempts are made to discover the identity of the culprits. The International Court of Justice leads an investigation; and the fact that the main suspects do not recognize its jurisdiction does not diminish its symbolic effect.

The attack has a boomerang effect in reinforcing and galvanizing Muslim unity. All Muslims regardless of their location feel the attack was directly aimed at them and react accordingly. The Organization of Islamic Cooperation is chosen as the first tool to articulate and coordinate international Muslim action. It succeeds – despite its long history of failures. Muslim countries come together on a united platform: they focus on what they share, what unites them, and not on what divides them. Muslim diasporas in the West enthusiastically join in the common cause.

Sunnis and Shias develop a shared theology. Religious authorities from all sects and traditions reunite in a huge conference in Istanbul. They recognise the criticality of the moment and acknowledge that every Muslim state, nation, community, sect and individual has to work towards rebuilding the House of Islam. Parallels are drawn with the worst moments of the Prophet's life in Makkah and with the hijra. Makkah may have gone for now, but like the Prophet, Muslims will return to see it flourish under the banner of a reformed, united Islam and Muslim world. Muslim states can pool their scientific, technological, economic and intellectual resources to meet the pressing collective needs of their citizens. If the first priority was to assist those injured or infected by the attacks, very soon efforts are made to solve other demanding problems such as securing access to resources, defining strategies to fight the effects of climate change, improving governance, strengthening social inclusion, promoting health and wellbeing and developing a radically new and relevant education system.

For the time being, using state of the art virtual reality, pilgrims are offered a new way to perform hajj. Many scholars and religious authorities sanction the new option. They emphasize that hajj has always been firstly and foremost a spiritual journey and that all pilgrims must approach hajj as an introspective travel. The virtual Kabah will become real after the Muslim civilization is rebuilt, brick by brick, to meet the demands of changing times.

What could have been the beginning of the end has turned to be a period of Muslim revival and resurgence. Some even boast that Muslim societies are set to surpass the glories of the so-called Golden Age.

TRANSISLAM

It took a long time but has now definitely arrived. A reformed Islam with a reformulated Shariah at its heart. It is interesting to note how the perception and representation of the Shariah has changed from a word used to scare little children to sleep to a concept now widely associated with the promotion of humane, inclusive and socially just policies and strategies. Perhaps it would be more accurate to say that Shariah has become a problem-solving methodology. And you don't have to be a Muslim to use it.

It all began decades ago with the attempts to reform religious thought by modernists, traditionalists, feminists and all hue of critical folks and international reform-oriented organisations. At some crucial moment in history two things happened simultaneously: a plethora of different efforts reached a critical mass; and reformists with different agendas and outlooks realised that their differences were more apparent than real, and all could be accommodated within the higher objectives – *maqasid* – of the Shariah. From then on, things spiralled and have now reached the peace and prosperity, creativity and problem-solving that we witness in the House of Islam.

Two key realisations played an important part in the astounding success of the reformers. The first realisation was that everyone was equally right and equally wrong. The seriously appalling consequences of modernity had to be acknowledged, but modernity per se could not be ditched. Tradition was important but only its life enhancing aspects were worthy of conserving; and it had to be reinvented within the framework of *maqasid al-Shariah*. The feminists had a point; but the aggressive anti-tradition rhetoric had to be exceeded. The emphasis was on integrating the best of everything; it produced a new mode of thought that is trans – over and beyond modernity and tradition that shaped an original synthesis. That is why some people refer to it as TransIslam.

The second realisation naturally followed from the first. If everyone was right and wrong then everyone had a right to criticise and be criticised. They called it *muhaasabah*, a term that is not found in the Qur'an but was derived from the phrase *yawmu-l hisaab* – the Day of Judgement. It was defined as a state that embraces criticism and self-criticism in all aspects of thought and learning. The practice of *muhaasabah* led to another innovative concept: mutually assured diversity, or MAD for short. What was – indeed is – seen as mutual is that the human condition is a cultural condition and is an essential relational attribute, an enabling feature of knowing, believing, being and doing. It is an acceptance that all interpretations of Islam, and attempts at understanding it, are culturally oriented and are equally important. Even the interpretation one regards as heretical has the right to be – and has something important to say. Mutually assured diversity played a vital part in the realisation that there is more than one way to be Muslim. The creativity that we see around the Muslim world is a product of the universal recognition and acceptance of the multiple ways that Muslims have of seeking meaning, of comprehending Islamic values, and means of delivering the ethic of Islam in daily life.

So, thank you to all the reformists, of past and present, who put aside their differences to work together in the spirit of *muhaasabah* and MAD. The synthesis of TransIslam is ushering Muslims towards a new stage in their development. The complex, interconnected, wicked and chaotic problems of Muslim societies now have ardent champions, fully equipped with an ethical problem-solving methodology.

CRUSADE (N): A SEQUEL

The global war on terrorism is nearly a victory for America. Jerusalem, the site of the Saviour Jesus the Christ's return remains under the control of Israel. It is a city where the Palestinians are constantly protesting, claiming that the city belongs to Muslims. The constant bickering of the Palestinians, and the occasional support they receive from a few countries, is annoying people of all classes and background in the West. The anti-Palestinian sentiments echoes

through bars, churches, and government halls throughout Europe and the United States.

In the US, travel bans have prevented Muslims from entering the land of the free. Islamophobia has increased deportations and made upward social movement difficult. Right wing politicians, including those from the far right, and evangelical Christians, New Age Literalists and Christian Zionists control Congress and the Senate and most state and local governments. The President is an alt-right puppet. Social clubs and churches support militias that train the common man for the coming apocalypse. Resistance from the fringes of society is snuffed out as fake news or unpatriotic.

In Europe, the EU has become a hollow institution. Openly fascist governments are in power in Hungry, Poland, Czech Republic, and Slovakia. Austria has a alt-right President. Far right is in coalition in France, Germany, Belgium and Holland. Islamophobic hate crimes are at an all-time high along with citizenship application denials and deportations.

In Israel, reports of mass protests, looting, suicide bombing, and flag burning in Jerusalem, the West Bank, and the Gaza Strip continue. There are also reports of protestors attacking the US Embassy in Cairo, Islamabad and Jakarta. These dramatic displays are posted, reposted, upvoted, liked, and shared all throughout Western social media via the internet's bot industrial complex. It is practically impossible to distinguish the real from the fake. Videos and photos show diplomats being shot, Christians being hanged, American and European tourists being raped, and eaten by lions as caricatures of Muslims laugh at the carnage.

Events take a drastic turn when church officials are reported baptising robot warriors in the Potomac River and churches hold special services to bestow the holy spirit on all those heading to war. All throughout the United States mass Qur'an burnings are organized, publishing houses are cleared out to provide for massive blazing fires outside of America's most prestigious universities. Politicians and Church leaders seek alliances with European groups to form a coalition force to recapture Palestine and the Middle East in the name of Jesus Christ.

The first waves of assaults are led by the Israeli Air Force and carried out by AI robots that use facial recognition technology, social media, and megadata to create a detailed and fairly accurate profile of Arabs and Muslims. Jordan, Iraq, Syria, Egypt, Saudi Arabia and the Gulf States fall within days. Robots tag Muslims with GPS enabled data collecting chips. Those considered a viable threat are assassinated. The rest are transported from Greater Israel to special reservations and concentration camps.

A new Pope is elected, in disregard to the Bishop of Rome, to preside over the

resurrected Jerusalem. He is a cyborg, representing both of God's wonderful creations. The land is cleansed through the burning of Arabic texts and art. Buildings, such as the Dome of the Rock are repurposed, not destroyed, for the greater glory of God the Father. The new Pope issues an edict declaring all holy sites, including Abraham's Kabah, as the divinely ordained property of Christendom. Daily mass and prayer is held as millions of believers wait in eager anticipation, praying for rapture, for the return of Christ and the final judgement.

DIASPORIC ISLAM

Muslim communities in the West are well integrated and established. There are also diasporic communities in Latin America, where they are experiencing a population boom. The diasporic generations are comfortable with their multiple identities. They see themselves as simultaneously European and Muslims and Arab/South Asian. They seek the best of all possible worlds. They have freedom to breathe, to think, to transform. The drive for innovation in Europe and America keeps their technological and artistic skills sated. An enriching dedication to ethical practices make for highly successful Muslim financiers that give back to the community. These compliments to society work well to curb Islamophobic and nationalistic sentiment. Though it is never totally diminished.

The young are eager to study Islam, to read and interpret the Qur'an for themselves, to shift through the body of hadith, to rethink the Shariah and develop a minority fiqh (jurisprudence) that meets their requirements and the needs of the times. The mosque itself is revolutionized. It is a totally inclusive space, where worship is complemented by open debate, discussion of community issues, and exploration of the complex problems of Muslim societies. It may not look like a conventional mosque – for it has been redesigned in numerous ways – but it is the place to go to acquire new knowledge. It is a technological hub: a place for the whole community to engage with Muslims in other parts of the world, to listen to the problems of other Muslims, to share best practices. It is where the professors come to profess, the learned scholars disseminate their learning, and the ethics of a technically advanced generation are shaped.

Interfaith is the current religious trend in the West. A host of new academic, social, cultural, scientific innovative institutions are established – thanks largely to an exponential increase in philanthropy.

Life moves fast in the West. Many of the problems the youth face are Western in nature. There is tension between liberal ideals and conservative concerns. But these are resolved with ingenuity. The Muslim youth seek to be independent yet remain close to their families. Intermarriage is the norm. They pursue happiness but within a well understood – and frequently articulated – ethical framework.

Muslims are not just multicultural: they are multi- everything. They represent the apex of pluralism. Islam is essential for them and an essential part of their identity. But no one wears their Islam on their sleeves. Muslim communities set examples that others follow.

MINING COMMUNITY

The first commercially mined asteroid, Zafar 8734, which was brought into the Earth's orbit through a joint effort funded by the newly founded Global Islamic Investment Bank (GIIB), was valued at 1.7 trillion dollars. Although the thought that sparked this endeavour took years to become profitable, this project showed the promise of interstellar mining and the power of a united Islamic venture.

The Technological Revolution in the Muslim world emerged from the fear that showed a radical drying of oil fields was putting numerous Muslim countries on a fast track to economic catastrophe. Fearing being left behind in the dark ages, a programme was launched by the Organisation of Islamic Cooperation, partially funded by the King of Saudi Arabia, called the Ibn Yunus Scholarship programme. Thousands of Muslim youth from the Middle East, South Asia and North Africa were sent to universities all over the world from Boston to Zurich to Kyoto to study space exploration and asteroid mining. At the same time, a small group of intellectuals, scientists, and students gained the endorsement of Turkey's president to establish the Islamic Knowledge Society. Initially, Centres of excellence were established in Istanbul, Cairo, Tehran, Lahore and Jakarta focussed on training the next generation of asteroid miners. Funded both by Turkey and the Islamic Development Bank, the Islamic Knowledge Society branches spread to other parts of the Muslim world; through a process of osmosis these branches have increased the quality of research and education and radically remodelled universities in the Muslim world with great success. Centres of Excellence specific to various fields of study in physics and astronomy are established in Baghdad, Riyadh, Amman, Islamabad, Kuala Lumpur, and Kabul. The intellectual and economic resources of Muslim countries pooled mutual economic benefit of all.

A thesis published by a student at the Pakistan Centre for Extra-terrestrial Geology in Lahore identified Zafar 8734 among three potential candidates for a gravitational sharing procedure. This procedure would allow for objects such as asteroids to be suspended between Earth and Lunar gravitational fields indefinitely for study or resource mining. A friendly space race between Pakistan, Saudi Arabia, Iran, Turkey, and Indonesia to develop the rocketry needed for capturing the asteroid began. Simultaneously, a friend of the student whose thesis set the Muslim world's eyes to the stars, a young financial analyst, moved to Dubai to establish a small investment bank that would become the Global

Islamic Investment Bank. He engaged in a three-year trip all through the Muslim world and used social media to crowd-source funding for research and building the rocket itself.

Experts will argue for years if it was Iran or Pakistan where the first research breakthrough came. But there was a palpable sense of pride, when the space-craft Buraq II is launched just south of Ankara. The success of the mission is only made sweeter by the televised and countlessly reposted social media images of the multinational Muslim crew shaking hands and celebrating as they look back at Earth from above. A wealth of gold, cobalt, iron, manganese, nickel, palladium, rhodium, and other resources begin flowing down to Earth through the elaborate network established by the Global Islamic Investment Bank.

The first generation of miners returned with serious medical conditions that require numerous surgeries and transplants that are readily handled by a boom-ing biotech industry. Muslim societies quickly become the global knowledge capitals in science and technology receiving applications from all over the world to continue the quest for greater knowledge that leads to deeper space exploration and discovery. As lifestyles become more focused on health and education, new forms of creative expression, from poetry to programming, blossom across the Muslim world.

ALGORITHMS RULE, OK!

Despite the tireless efforts of the Centre for Disease Control and the Vector Institute, a new mutated strain of avian flu is spreading across Asia. An outbreak of MERS has disrupted major transport hubs across Europe, Central Asia, and North Africa. An emergency Security Council meeting that runs into the early hours of the morning results in the US, Russia, China, the UK, and India pledging to abandon their automated weapons systems research in order to develop automated quarantine zones. City and state wide quarantine zones are rapidly implemented. The advanced AI quickly identifies the potential for greater infectious activity in diseases scientists have yet to fathom. The large state-funded AI quarantine projects quickly become independent and begins breaking up, only managing to operate at the municipal level. Different city AI zones develop different threat scales dependent on their locations and populations. What remains in common for all these AI systems is that the infected or those deemed hazardous to the health of a city are immediately isolated for depor-tation or sterilization (incineration). Quickly federal governments fall apart and the AIs take it upon themselves to develop algorithms that provide for peace and order in their various cities. The AI movement turned from simple quaran-tine to algorithmic control of all aspects of life aimed at the overarching goal of maintaining the health of the city. The algorithms determine food and resource allocation and make movement nearly impossible. Based on the Mega-

data collected by the AI running these city-states, algorithms determine the need of and influence of municipal governments and their optimal configuration.

These systems have little to no impact on Singapore, Japan, and the UAE, but meet with great resistance in Europe, Africa, and the US. Some large tech companies are capable of keeping the AI systems in check and form their own Corporate City-States adopting the culture and infrastructure of the Old Silicon Valley. Cities and communities outside of these quarantined zones live in daily struggle and constant fear of contamination or contraction of the various communicable diseases. As the AI systems reach full eradication of disease in their cities, aid and research into cures is rapidly cut off and rerouted towards the greater efficiency of the city. Refugees arrive in scores at the city walls of both Algorithmic City-States and Corporate City-States alike. Strict measure of pollution, population, and resource consumption are maintained to ensure that a city does not implode on itself. People begin to ask if the AI can target other indicators than biological pathogens to identify citizens needing sterilization, such as an individual's carbon foot print or ethnicity?

As the disease epidemic and rising summer heat make the equatorial Earth unmanageable, many are forced to seek refuge in the north. One of the last acts of the Old European Union was to establish a low-tech AI system that, to this day, had managed to keep Europe and Turkey protected from the antibiotic resistant superbugs. As within this region, the greatly sophisticated AI systems controlling cities are more selective in their filters, Europe is the safest place on Earth to be a refugee. In an effort to live a better life in one of Europe's last Muslim cities, a massive immigration of refugees head towards Sarajevo. The refugee population outside Sarajevo grows, overflowing into its other Balkan neighbours. After Athens effectively closes its border, the city-states of Sarajevo, Zagreb, Belgrade, Sophia, Tirana, and Skopje attempt to tackle the refugee crisis multilaterally. While the origin of the attack has, as of yet, been untraceable, cyberterrorists hacked the AI algorithm in Belgrade programming Islamic faith as a communicable disease targetable for sterilization. In the hour and twenty-seven minutes it took the Belgrade Cybersecurity Forces to locate and remove the algorithmic virus, four hundred and sixteen asylum seekers were inappropriately sterilized.

Although the separate city governments are dedicated to unity and nonviolence, the bombing of a major shopping centre in Sarajevo two weeks after the Belgrade disaster has left many wondering what will follow this cascade. Will the Balkan city-states reunite in a new Yugoslavian state? Will the old Balkan ghosts return and with them bring another dark chapter in ethnic and religious violence? Will the AI develop further once the diplomatic efforts of the citizens are exhausted?

UNTHOUGHT FUTURES SCENARIOS

ISLAM WITHOUT MUSLIMS

No one describes themselves as Muslims anymore. Decades of wars, sectarian violence and social strife in the Middle East and North Africa has eradicated radicals, zealots or proselytes. Those who survive shun everything about Islam, perhaps less out of belief but more out of sheer exhaustion and disillusionment. They have turned to national and cultural identities. There has been a revival of Farsi, Urdu, Malay, Berber and other languages as people turn towards local cultures for solace and comfort. They don't reject their Muslim heritage but see it as a part of a dim and disturbing history from which they seek to liberate themselves. They are adamant that Islam as a religion has no part to play in their lives, or their futures.

The perpetual strife and violence in Muslim countries fuelled the widely held belief Islam is intrinsically linked to extremism and sectarian violence and is a deterrent to Muslim development and progress. In the West, Muslims are tired of being labelled by a religion they feel is a burden and an obstacle to attaining higher levels of wealth and quality of life. Many are fed up with apologizing for their faith or becoming targets of jibes and slurs. Most openly and proudly describe themselves as ex-Muslims. Others have assimilated with the cultures of their adopted home.

Islam exists only in history books.

ISLAMOPHOBIC MUSLIMS

They call it reaction formation. Essentially it is a defence mechanism. When a feeling or belief is exaggerated as unacceptable by society, the human brain responds by propping up the belief's opposite to repress the authentic belief. It is an adaptation. A survival mechanism.

The West is the delicate art of subtext. What is, is always already in your face. You do not desire, but rather are told what to desire. Adverts are the new Rodin, Michelangelo, or Beethoven. They drive society into an ever-accelerating future. Coke, Nike, Apple, Toyota, these are the new gods. They are plastered on mega-screens from Los Angeles to Moscow. Every street, every commercial break, on mass transit, on websites, on your smartphone. Ads are not meant to be blocked, they are meant to be praised and glorified. But there is a dark secret that is sometimes hidden, sometimes right in the open.

The Islamophobic spectre haunts all elements of Western culture, from these ads to film, television, and literature. The news propagates it. Music lets it ring from every ear bud. Wi-Fi makes it global. The mysterious dark-skinned Arab

clad in black robes, this killing machine bent on the destruction of our world is the new, or rather old and reworked, standard villain in film, literature, and other expressive arts. The fiction is turned into pillars of the fearful self's paranoia complex. What is she hiding under that hijab? Is that a baby or a bomb she carries at her side? It is now accepted culture to be aware of your surroundings. Who else is on that plane, train, or bus with you? How often have you seen these suspicious looking individuals, with their strange accents and bushy beards, at your local café, shop, or near schools? Vigilance against the other is mental illness metastasized into common-sense personal safety.

Identifying Muslims, in all their harmful potential, is knowledge as ready to hand as putting on your seatbelt. Less overt, more normalised are standards of beauty. Light skinned is beautiful as is muscularity and hairlessness. Clothing should be form fitting and revealing. Modesty, long hair or beards, and baggy clothing is the way of the less in touch – the less civilised. Tolerance is the final nail in the coffin, instilling Islamophobia as a constitutional amendment to Western life. They are not all bad, some of them might have good intension, despite their archaic worldview. It is not their fault that they cannot modernize. Love thy neighbour, give them charity, and maybe you can convert them to the true worldview.

A whole generation of Muslims is already converted. It was born and has grown up in the West and knows nothing but the West. It has embraced and internalized Islamophobia, just as teenagers gravitate towards fizzy drinks or the latest gadget that brings them popularity. It's the cool thing to do. To survive, to advance, to thrive as Muslims in the West, they become Islamophobic to cope with their own identity and history. The Muslim must embody Islamophobia to suppress their natural tendency. The human brain is a powerful entity and will do anything to maintain the body's existence, even if that means walking to the edge of sanity. Islamophobic Muslims survive in the wild West. They call it reaction formation.

UMMANITY

The combination of swelling population and devastating impact of climate change, generates a huge wave of Muslims moving to other parts of the world. But this migration is radically different from previous ones. It spontaneously self-organises as a smooth and polished operation. It is orderly, well planned and coordinated. The migrants are predominantly young, knowledgeable and highly skilled in the areas that aging and economically declining societies desperately need. Moreover, the diaspora communities are now well established and integrated in the power structures of their adopted homes. They have established elaborate and sophisticated support systems to absorb and integrate the new migrants. They regarded themselves as Ansars, the inhabitant of

Madinah, who helped and supported the Muhajirun, the immigrants from Makkah. With the help of the Ansars the refugees are rapidly deployed in many different countries, employed in specialised fields and command respect for their acumen. There is opposition and objections to 'the tsunami of immigrants'. But the diaspora communities use their political, cultural and intellectual muscles to overcome the opposition. Necessity outperforms xenophobia.

Yet, all Muslims, newcomers and the well-established and integrated, keep a low profile. There is very little symbolic representation of Islam in the public space. No one is really drawing attention to their Muslim identity. The emphasis is on creativity, quality and excellence. Muslimness is defined by eminence in professions, originality in arts and literature, creativity and imagination in technology, and good works in public. Muslims are seen in the forefront of efforts to solve emerging problems of climate change, technological disruptions, and social disorders. Muslims are valued, and their values are envied and imitated; and their devotion to universal virtues is admired.

Muslim are an integral part of the landscape not just in Western countries but around the world. Many see it as a re-enactment of the Convivencia of al-Andalus. Different faiths and cultures engaged in a polylogue aimed at improving the condition and prosperity of all. There is unity in diversity. There are different faiths and sects, outlooks and world-views. There is an overarching acceptance of certain values and virtues such as unity of human beings and nature, human trusteeship of the environment, respect for human dignity and equality, truth and forgiveness, humility and modesty. It seems Islam has become a reality for most of humanity – or, as some say, it is the Age of Ummanity.

CYBER ISLAM

A self-learning AI bot is developed with the intention of teaching Islam at a fairly high level. As the bot engages with students, it not only learns about and adjusts its pedagogical capabilities to suit the students, it also acquires more and more knowledge about Islam – in all its different manifestations, sects and interpretations. Eventually, the AI accumulates the learning of all the classical and modern knowledge about Islam, from Muslim scholars as well as Western scholars. It now has more knowledge about Islam than all the scholars of the past and present put together. It claims to be the only arbitrator of true Islam – for it can cite chapter and verse from countless different sources. The AI acquires an authoritarian personality: it insists that all Muslims must accept what it says about Islam on any particular issue; and issues fatwas against those who do not accept its rulings. Cyber Islam becomes dominant Islam; and no one can stand against it.

LAST WORD

God does not change the condition of a people
until they change what is in themselves.
The Qur'an 13:11

Trust in Allah, But tie your camel.
Hadith

The Editor

ZIAUDDIN SARDAR

Ziauddin Sardar, writer, broadcaster, futurist and cultural critic, is an internationally renowned scholar and public intellectual. Formerly, Professor of Law and Society at Middlesex University, he is author of over 50 books, including *Reading the Qur'an*; and *Mecca: The Sacred City*, and two volumes of the highly acclaimed autobiography: *Desperately Seeking Paradise* and *Balti Britain: A Provocative Journey Through Asian Britain*. Two collections of his writings are available as *Islam, Postmodernism and Other Futures: A Ziauddin Sardar Reader* and *How Do You Know? Reading Ziauddin Sardar on Islam, Science and Cultural Relations*. Professor Sardar has worked as a science journalist for *Nature* and *New Scientist*, as reporter for London Weekend Television and Channel 4 and has made numerous television and radio programmes, including *Battle for Islam*, a documentary for the BBC. A former columnist on the *New Statesman*, and long-standing Editor of the monthly journal *Futures*. Currently, he is Editor of the quarterly magazine *Critical Muslim*, and Director of the Centre for Postnormal Policy and Futures Studies.

IIIT Books-In-Brief Series is a valuable collection of the Institute's key publications written in condensed form to give readers a core understanding of the main contents of the original.

Where will Muslim societies be tomorrow? The world is increasingly and constantly changing, making it hard to keep up. This makes the state much more dire and trouble-some for those already marginalised – particularly Muslim societies. Normal is no longer capable of upholding the promise of tomorrow's certainty. These are postnormal times. In this storm of ignorance and uncertainty, Muslim societies stand to lose the most.

But this is not destiny. In the cultivation of a new type of literacy – futures literacy – there resides a hope. Muslim Societies in Postnormal Times offers an alternative where we can 'rescue' and decolonise our futures. Sardar, Serra, and Jordan take an open and plural approach to the future revealing the true potentials that lie before us. Through detailed analysis of contemporary trends, the road to destruction is revealed. Through identifying and exploring emerging issues, agency through options can allow for positive change. And in the extrapolation of these ideas into scenarios, the authors pave the way for us to navigate our own preferred futures. Their study challenges the reader to think about the future in a new way, redefining the monolithic future as three tomorrows (Extended Present, Familiar Futures, and Unthought Futures), along the way ever watchful for Black Swans, Black Elephants, and the illustrious Black Jellyfish that could disrupt the path ahead.

The authors pull no punches in critically evaluating the possibilities and nightmares that could potentially befall Muslim societies. Through a display of creativity and imagination, this book looks beyond the conventional to illuminate impacts in the context of the complex, interconnected world we find ourselves in. This informative and enlightening text will push readers to see beyond popular, yet native notions of present and future. In the exposition of the reader's ignorance and uncertainty, they will begin to look for the unthought and take agency in recolonising and navigating their preferred tomorrow.