

Book Reviews

Islam, Science Fiction and Extraterrestrial Life.

The Culture of Astrobiology in the Muslim World

JÖRG MATTHIAS DETERMANN. I.B. Tauris, 2021. 269 p. ISBN 978-0-7556-0127-1

The Muslim world, geographically as well as conceptually defined, is not commonsensically associated with science fiction. Jörg Matthias Determann's *Islam, Science Fiction and Extraterrestrial Life* demonstrates that Islam is far from being inhospitable to the idea that there may exist life forms on other planets. In fact, the concept has been widely elaborated on by Muslims, not only inspiring scientific research in astrobiology, but also cultural production broadly conceived, with rich ramifications throughout all of contemporary literature, cinema, and visual arts. Muslims have been advancing, as well, creative visions of the future, utopian and dystopian alike.

In the first chapter, Determann emphasizes that the Qur'an, the sacred book of Islam, defines God as "Lord of the worlds" (*rabb al-‘ālamīn*, an expression occurring forty-two times in the sacred text) and mentions that He scattered living creatures through "the heavens and earths" that He created. In fact, such references, in and of themselves, can hardly inspire sci-fi visions: prior to the emergence of a Copernican world view, Muslims wouldn't have associated those "worlds" with other planets. However, in the appropriate context, or if elaborated upon by sufficiently philosophical or imaginative minds, the expressions in question could well be interpreted as hinting at other physical worlds, and at extraterrestrial beings inhabiting them (10-11). To be sure, Muslim observers have deplored that science fiction in the Muslim world is underdeveloped and/or derivative (6), and conservative clerics have expressed hostility towards science fiction as potentially carrying evolutionist and materialist ideas (7-8). Even the Egyptian realist writer, Nobel laureate Naguib Mahfouz (1911-2006) dismissed science fiction as empty and useless (18). It is also true, however, that multiple Muslims have practiced, appreciated, and tangibly supported science fiction as a genre that allows one to covertly criticize contemporary society and politics, but that can also intellectually stimulate young readers, for instance inspiring them to study science. Notable examples touched upon in this chapter include the surrealist Syrian author Ayham Jabr (b. 1988), who created digital collages showing Damascus under siege by Martian spaceships as a way to criticize foreign interventions in the Syrian war (1-3), and the Pakistani author Tehseen Baweja (b. 1983), who co-founded the Salam Award for Imaginative Fiction (named after the Pakistani Nobel laureate in

physics, Abdus Salam) (8-9). Another interesting figure explored in the chapter is that of the Egyptian ophthalmologist and author Hosam Elzembely (b. 1968), who in 2018 founded the Egyptian Society for Science Fiction, with his clinic in Cairo serving as its headquarters (18-21). Literary science fiction is also used by Muslim authors to convey strongly anti-American and anti-Zionist messages significantly overlapping with Jihadism. Such is the case of the Malay Faisal Tehrani (pen name of Mohd Faizal Mosa, b. 1974), who transitioned from a hedonistic lifestyle and interest in literature for the material benefits it could bring, to creating politically engaged novels including *1511H (Kombat)* (2004). The novel elaborates on a high-tech war between the USA (and Israel) and the Muslims: the former plan to destroy the Kaaba (the most important Muslim pilgrimage site) and seize the Prophet's body, but the latter manage to take over the White House (22-26). Physics and biology, notes Determann, have been as important as the Qur'an and Muslim history to inspire science fiction in the Muslim world. For instance, space exploration and exobiology were pioneered at the Baikonur cosmodrome in Kazakhstan, that, although established in 1955 by the Soviet state, "nurtured dreams of life in space for many Muslims and fulfilled them for some" (27). And Pakistani researchers proved able to overcome their country's challenges and pursue scientific careers abroad, including astrobiologist Nozair Khawaja, based in Germany, who founded the Astrobiology Network of Pakistan in 2017 (27-28).

The second chapter reconstructs how scientific teaching and scientific popularization were taken up in the dynamics of colonialism and Christian evangelization, eliciting critical and creative responses on behalf of Muslims. For instance, 19th-century missionary institutions in India promoted Copernicanism in the hopes that it would demonstrate the superiority of European knowledge and dispel local traditions—Hindu cosmology in particular. However, both Hindu and Muslim scholars set out to prove in writing the harmony of Western science and their respective religious traditions (44-45). Christian missionaries were also instrumental in introducing Copernicanism (but also novels including those by Jules Verne) to the Near East. Protestant and Catholics competed over influence in Syria, an area that attracted them due to its Biblical significance; they opened educational institutions and spread scientific knowledge. Their efforts were soon responded to by Muslim scholars. The Qur'an was revealed in the seventh century CE; it is traditionally believed to be the faithful transcription of God's words as received by the Prophet Muhammad (570-632 CE) without human interference. The text does contain frequent mention of natural phenomena that are described as signs of God's existence, power, and benevolence. Some interpreters were inspired by such verses to popularize scientific notions as a form of Qur'anic commentary. Other ones, overstating the accuracy of Qur'anic references to nature, started elaborating on, and spreading, the idea that precise scientific notions were included in the Qur'an, that were thus revealed well ahead of their study on behalf of scientists. This discourse, that in fact has survived until today and is immensely popular, served as a way to both counter Western scientific superiority and to confirm the Qur'an's divine origin (48-58). Additionally, the periodicals that had emerged out of the missionary effort continued to publish in the 20th century, including articles that, receiving and discussing theories and views from the West, covered debates over the existence of life in the solar system (58-62). Later, Muslims proved receptive towards, and elaborated on, ideas coming from the Soviet Union, even when they had been advanced by

Soviet authors in the spirit of, and to promote, materialism. One interesting trajectory in the history of ideas reconstructed by Determann is that of the pioneer of astrobotany Gavriil Tikhov (1875-1960) who, like other scientists, was active in Kazakhstan; there, and in neighboring Soviet republics, Muslims could hold leading administrative positions. Tikhov regarded astrobotany as integrating and indeed completing the work of Copernican astronomy in dismantling the idea of earth's centrality. He was also convinced that plants existed on Mars. His astrobotany was associated with ideologically-aligned, pseudoscientific Michurinist biology—that caused immense damage, having been promoted by Stalin's protégé Trofim Lysenko (1898-1976), and which only came to be criticized after the dictator's death (1953); such an association also explains the decline of Tikhov's astrobotany after his death. However, his work didn't fail to influence writers such as Alexander Kazantsev (1906-2002), who famously advanced the narrative according to which the mysterious 1908 explosion in Tunguska (Siberia) was due to an alien spaceship running on atomic energy. In one of Kazantsev's stories, the protagonist is a student of Tikhov. Kazantsev's Tunguska narrative was picked up by other authors including the Polish Stanisław Lem (1921-2006). The Egyptian writer Abdul Razzak Naufal (1917-1984) received the Tunguska motif through the work of the Russian author Boris Liapunov (1862-1943). In his book *God and modern science* (1957), while mentioning extraterrestrials, Naufal claimed that the Qur'an had suggested their existence fourteen centuries earlier (63-70).

In the third chapter, Determann surveys cinematic science fiction in the Muslim world, beginning with the Pakistani film *Shanee* (1989), through which one learns that “a Pakistani woman can marry an alien, as long as he is Muslim” (71). While discussing the Saudi ban on cinema that lasted throughout the 20th century, Determann mentions the artist Shaweesh (b. 1990), famous for inserting characters from *Star Wars* into historical photographs. Shaweesh created a photomontage of Yoda next to Saudi king Faisal (1906-1975) when, as prince and foreign minister, he was signing the Charter of the United Nations in San Francisco in 1945. Ironically, for a society so impermeable to cinema (including science fiction), the artwork somehow made it to Saudi social studies textbooks showing it as a real, historical picture—and the books had to be withdrawn (75-76). Determann also discusses at length Egypt's science fiction, as well as Turkey's. In both countries, directors and screenwriters adapted Western plots and characters. “Turksploitation” was notable in that it comprised satire of Western franchises. One remarkable example Determann touches on is the 1973 film *Tourist Ömer in Star Trek*, whose protagonist is transported by God to a faraway planet after being forced at gunpoint to marry a pregnant woman, and is subsequently studied by Spock and the cruise of the *Enterprise*. Interestingly, Gene Roddenberry's series was broadcast by the Turkish Radio and Television Corporation (TRT), and the parody preceded the first US-American *Star Trek* movie by six years. *Tourist Ömer in Star Trek* drew, in particular, on a 1966 *Star Trek* episode, “The Man Trap” that was replicated in detail in the film, adding scenes shot at the archaeological site of Ephesus. *Tourist Ömer in Star Trek* presents irreverent references to religion, too (95-96). Determann also discusses an important case in which inspiration went from the Muslim/Arab world to the Western one, when Frank Herbert's (1920-1986) novel *Dune* (1965) was influenced by *Lawrence of Arabia's* (1962) depiction of the desert,

as well as by Arabic language, by Muslim societies (as depicted by orientalist authors), and by Arab history including recent one; moreover, some elements from the *Dune* universe influenced George Lucas's (b. 1944) *Star Wars*, which famously features desertic landscapes and a planet called Tatooine, the name itself inspired by the Tunisian town Tataouine (96-97).¹

In the fourth chapter, Determann reconstructs UFO-sightings in Muslim countries and the subsequent political debates on the topic, as well as the rise of a ufological scene in the Muslim world. UFOs and aliens were associated with the Qur'anic entities known as *jinn*s (or genies), creatures particularly touched upon in the 72nd chapter of the sacred book (105-111). UFOs, aliens, and Islamic concepts were even combined in a UFO-religion such as the US-based Nation of Islam (NOI), founded by Wallace Fard Muhammad (1877- disappeared 1934) in 1930, that drew upon the Qur'an and the Bible, and whose belief system included reference to Mother Plane, a wonderful flying vehicle controlled by black Muslim scientists (111-113). Another syncretic UFO-religion discussed by Determann is the Nuwaubian Nation, founded by Dwight D. York (b. 1945): he claimed to be an extraterrestrial who had arrived on a craft from NOI's Mother Plane; in 2002, York was arrested and sentenced to 135 years in a federal prison over multiple charges including child molestation, but some elements of his religion survive in urban subcultures (113-116). Determann emphasizes that the beliefs of such new religions were influenced by the pseudoscientific/sci-fi subgenre of the "ancient aliens," produced and propagated by authors such as Robert Charroux (1909-1978), Peter Kolosimo (1922-1984), Erich von Däniken (1935), and Zecharia Sitchin (1920-2010). According to these writers, extraterrestrials created human beings by manipulating hominids, and remained in contact with ancient civilizations while also erecting, through advanced technology, astounding monuments that mostly have survived in the form of mysterious ruins, inexplicable by reference to human skills and tools only. Ancient-alien literature circulated in the Muslim world (especially von Däniken's books) and was even imitated, for instance by the prolific and protean Egyptian author Anis Mansour (1924-2011), whose book *Those Who Descended from Heaven* was published in Cairo and Beirut in 1971, followed by *Those Who Returned to Heaven* in 1977; both became best-sellers, turning Mansour into "an Arab von Däniken" (117-119). One remarkable blending of ufology, conspiracy theory, and "scientific miraculousness" of the Qur'an was advanced in 2008 by Virginia-based journalist Abdul Aziz Khan in his book *UFOs in the Quran*. He was inspired, among others, by von Däniken as well as by the Jordanian scholar Umar al-Ashqar, who in a 1978 book had criticized scientific interest in astrobiology as futile, suggesting instead to study the jinn (129). According to Khan's *UFOs in the Quran*, the Qur'anic term "jinn" in fact refers to UFOs and aliens, who interfered with humans in antiquity and were worshiped by Arabs before Qur'anic revelation. Even the Prophet of Islam, suggests Khan, was once abducted by aliens. In fact, according to Khan, the Prophet's mission was to reveal the truth about extraterrestrials so that people stop idolizing them (132-134).

¹ The first cinematic adaptation of Herbert's novel was only released in 1984.

In the fifth chapter, Determann explores authors who used science fiction to build fictional nations and worlds that they used to convey criticism towards the actual world and politics. In so doing, Muslim authors (or authors from Muslim countries) used icons and conventions from the global (Western) system of science fiction, but, at the same time, aiming at regional and local readerships, they also localized their stories, addressing specific geopolitical concerns. An example is the Egyptian Ahmed Khaled Tawfiq (1962-2018), a physician by training and profession, who authored many works of fiction including sci-fi books. In the 1995 novel *Empire of the Stars*, while borrowing elements from *Star Wars* (including lightsabers and a princess called Leia), Tawfik criticized US-American imperialism and military operations against Iraq. His 2008 novel *Utopia* depicted in fact a dystopia set in a 2020 Egypt characterized by social inequality, corruption, and violence; the novel conveyed an analysis of the conditions that led to the 2011 revolution (162-165). Interesting literary figures emerged in Southeast Asia as well. The Indonesian singer and writer Dee Lestari (b. 1976) was born into a Christian family. Her first science fiction novel *Supernova* (self-published) was released in 2001. It features a gay couple that writes a novel popularizing a quantum-physics based theory. The novel met with huge success and was followed by several sequels as well as by a cinematic adaptation (2014) (170-171). Eliza Vitri Handayani (b. 1982) is another remarkable Indonesian author, but with a Muslim background. In her 2003 novel *Area X*, she imagines Indonesia in the year 2015, and its government intent on secretly trying to hybridize aliens and humans. The novel was criticized by Muslim readers for the inclusion of scenes in which the protagonists, a heterosexual couple, engage in (mild) expressions of affection and intimacy (171-173).

The sixth chapter surveys the creative work of socially engaged authors who imagined future visions of the Muslim world, including pessimistic ones. An interesting example is the book *Iraq + 100: Stories from a Century after the Invasion* (2016), edited by filmmaker and writer Hassan Blasim (b. 1973). The tales in the collection feature satirizations of Americans, depicted as violent aliens, but also challenge Islamic conservatism, in describing Arabs whose lives are not constrained by religious taboos. Blasim's book met with considerable success, and it inspired the creation of another collection: *Palestine + 100: Stories from a Century after the Nakba* (2019, edited by Basma Ghalayini) (192-193). Yet another creative reaction to, and elaboration on, the American-led invasion of Iraq, is Ahmed Saadawi's (b. 1973) novel *Frankenstein in Baghdad* (2013), featuring the creation of a monster made up of human remains collected after bombings; at first, the creature sets out to only take revenge on those responsible for the deaths, but then it starts merely killing for body parts (194). Determann also covers the visual arts, including the work of Turkish artist Cevdet Mehmet Kösemen (b. 1984), who in 2004 published *All Tomorrows: A Billion Year Chronicle of the Myriad Species and Mixed Fortunes of Man*. The book's text and illustrations explore biological evolution throughout the Milky Way over billions of years. It was followed by the project *Snaiad* (2007) for which the artist created hundreds of illustrations of creatures inhabiting the fictional exoplanet with the same name. Kösemen studied visual arts, but he took additional courses in biology, and he imagined precise ecological roles and classifications for the creatures of his fictional planet.

The artist embraces biological evolution and refuses to read it teleologically: given the vigorous opposition that evolution meets in Turkey, he was also accused of blasphemy, but he felt no need to exert self-censorship (196-200). Pakistan-born, but US-based artist Saks Afridi (b. 1975) created in 2018 the series of sculptures *SpaceMosques*, that creatively merge spacecrafts and Islamic architecture; he calls this approach “Sci-fi Sufism” (the latter being Islamic mysticism) (205-207). Somali-Canadian artist Riya Jama (b. 1985) created portraits of dark-skinned women against a background of space, including ones wearing a headscarf: “It is essential to me that Hijabs [headscarves] exist in space too,” she stated (although she prefers not wearing one), and added that she wanted black-skinned Muslim girls to feel celebrated in their “universes” (207-208). For the project *Desi Star Trek* (2018), Pakistani data scientist Muhammad Aurangzeb Ahmad creatively encapsulated the iconic spaceship Enterprise in Pakistani truck art motifs. Blending Islam and science fiction, however, remains controversial. Scott Neidich, a Duke University biologist, argued in a 2017 article that showing a hijab in *Star Trek* would improperly suggest that Islam will make it into the 23rd century, unlike other religions not represented in the saga. However, not everyone shared these concerns. The same year, African American activist Blair Imani (b. 1993) dressed up as *Star Trek* character Geordi La Forge at the San Diego Comic-Con, creatively and provocatively including a headscarf in her costume: actor LeVar Burton vigorously commended the cosplay as the best one ever (208-210).

Determann ends the book with some general reflections. While he refrains from any attempt at predicting in detail what future Muslim futurisms will look like, he observes that, in the Muslim world “solid bases have been established for the production of speculative texts and images of all kinds” (210). Science fiction, he remarks, can be used to antagonize conservative and repressive establishments, but it also can be creatively combined with conservative imagery and views; lack of censorship can be helpful as much as censorship can be stimulating. Additionally, various Muslim-majority countries have set up promising space programs. All this strongly suggests that Muslims will keep engaging in a vibrant production of science fiction in all of its subgenres, in various creative fields, and with different purposes.

Determann is not a critic of strong views and words, but more of a gentle, neutral and meticulous cartographer. His monograph is a detailed atlas more than an opinionated introduction to the myriads of works and authors he discusses (for obvious reasons, in the present review I only have touched upon a selection of them). Determann’s “light touch,” however, can definitely be regarded as a positive feature of *Islam, Science Fiction and Extraterrestrial Life*. The author masters a fabulous wealth of sources belonging to different periods, genres, languages, and local Islamic cultures, and he proves supremely skillful in covering each one by hinting at its essential elements so as to simultaneously show its relevance in the general landscape and sharpen the reader’s curiosity to explore it in detail on their own. Additionally, Determann has an excellent, unique insight for the frequently overlooked fact that *imagination* brings about the interconnection, indeed the cross-fertilization, of ideas and narratives in areas that academia would rather box into different and separate compartments. To convey this concept, he wisely resorts to the expression

“scientific imagination” which includes, and underscores, the interrelations between varied fields and topics, including science fiction, astrobiology, and ufology and connects figures ranging from established scientists to authors of fiction and writers in fringe fields (29-30).

Dettermann’s monograph is highly recommended to all those readers who want to know more about Islam and science fiction, as well as to anyone who wishes to explore the contemporary Muslim world from an unusual angle, beyond traditional academic boundaries.

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