Teresa Pepe

Environment and Climate Change in Contemporary Arabic Dystopian Fiction

MECAM Papers | Number 02 | September 29, 2022 | https://doi.org/10.25673/92260 | ISSN: 2751-6474

Contemporary (predominantly post-2011) Arabic fiction exhibits a dystopian strand that projects a pessimistic view of the future. This literature has become particularly prominent not least because environmental degradation is a major problem in the Arab region, but also as climate change looms on the horizon as an even bigger threat to global life conditions through desertification and sea-level rise.

- Arabic-language dystopian fiction written since 2011 explicitly deals with the issue of climate change. Prominent examples are the novels *Using Life (Istikhdam al-Haya)* by the Egyptian author Ahmad Naji (2014) and *The Solar Grid* by the Egyptian artist and writer Ganzeer (2020), along with the short stories "The Worker" and "The Gardens of Babylon" by the Iraqi writers Diaa Jubaili and Hassan Balasim (2016).
- Interestingly, a range of common issues spans most of the works: first, how air and water pollution, waste disposal, traffic congestion, and the built environment affect the daily lives of citizens; second, the imminent coming of the apocalypse as a result of resource exploitation and climatic changes; and third, the building of smart, futuristic cities and the use of technology and renewable energies as a means of navigating the ashes of the catastrophe.
- Most of these works depict the future environment in a way that resembles the
 present. Others, while projecting apocalyptic scenarios, imply that life does not end
 with the apocalypse and that Arab societies will find ways of surviving, often through
 technological solutions and foreign investments.

CONTEXT

Ecological theories should be applied more often to fictional works that do not necessarily fit neatly into the category of dystopia or science fiction. The presence of non-human creatures and descriptions of environmental degradation in realistic fiction show that climate change is a theme preoccupying most Arab authors and artists and thus pervades most forms of contemporary cultural production.



THE CLIMATE CRISIS IN CONTEMPORARY ARABIC DYSTOPIAN FICTION

"That future is now and it stinks," affirms Bassam, the main character and narrator of Ahmad Naji's novel *Istikhdam al-Haya* (*Using Life*), published in 2014, and illustrated by Ayman al-Zorqany (35). Bassam, a 46-year-old Egyptian, is one of the few survivors of the *nakba*, an environmental catastrophe that destroys Egypt and the rest of the world in the 2050s. This global disaster manifests itself first as a heatwave and then as a huge sandstorm covering the entire city, which is followed by a series of earthquakes that reduce the entire city of Cairo to a pile of rubble. The capital of Egypt, with its grand heritage, collapses – the Pyramids first, and then all further evidence of civilisation, architecture, poetry, and prose, causing an enormous loss of human lives and financial goods, along with an eternally unfulfilled sense of belonging among its new citizens.

This catastrophic scenario is only one of the possible outcomes of the climate crisis imagined in contemporary Arab literature and art over the last decade. As the example above demonstrates, most of this fiction is dystopian in the sense that it projects a pessimistic vision of the future. Since the 2011 Arab uprisings, several Arab and international critics have drawn attention to the boom in dystopian literature in Arabic and in translation on the broader international market. The aesthetic features of Arabic dystopian literature have been examined mainly in relation to the political events of the Arab Spring, which is interpreted as a failure of the revolutionary process that started in 2011 (Alter 2016). However, this focus on local politics has drawn attention away from the fact that these texts also engage with global challenges such as climate change and environmental degradation. In 2011 journalist Dan Bloom coined the term "climate fiction" to describe Anglophone fictional works where climate represents the main theme in the narration (Glass 2013). Scholars such as Adam Trexler (2015) and Adeline Johns-Putra (2019) have argued that climate fiction constitutes a big part of the dystopian, catastrophic fiction published in European languages in the last two decades. Although the Arabic counterparts of this term such as adab taghayyur al-manākh (lit.: "literature of the climate change," Subh 2018), al-adab al-bī'ī (lit.: "ecological literature," al-Rajib 2019), or the transliterated form $kl\bar{a}ymat\,fikshun$ (Ghali 2016), have appeared sporadically on the cultural press – mostly to denote works in translation - Arabic scholars and critics have not yet instigated their own critical discourse on Arabic climate fiction.

In the meantime, Arab authors have not been indifferent to the current global crisis. In their literary works, they paint a bleak picture of the current environmental degradation and the imminent threat of climate change. Urban decay, visions of the apocalypse, and future smart cities as misguided safe havens characterise the portrayal of the future in their works – in other words, the apocalypse will come, and humanity will survive, but only by surrendering dignity and freedom.

THE IMMINENT THREAT OF CLIMATE CHANGE

Arab authors' ecological concern is a direct consequence of the double challenge that the inhabitants of the Middle East and North Africa face over the coming decades: the potentially destabilising effects of climate change, and a changing international energy market in favour of renewables, which threatens the oil-based economies that predominate in the region. There is broad agreement that the consequences of climate change will be severe and, in some cases, even pose an existential threat in the Middle East region, and that substantial efforts towards mitigation and adaptation are needed (e.g. Verner 2012). Harmful consequences — such as a long-term drought in Syria — are already visible. Several countries, such as Kuwait and the United Arab Emirates (UAE), have experienced unprecedented heatwaves, and increasing temperatures may render parts of the region "uninhabitable" by the end of the century (e.g. Lelieveld et al. 2016). In Egypt, the weather



fluctuations are negatively affecting agricultural production and contributing to the inflated prices of fruit and vegetables (Arafat 2022). In Iraq and Lebanon, state failure to deal with environmental challenges has sparked widespread protest and social unrest (Kraidy 2016). The socio-economic effects of climate change in the Middle East arguably even played a role in triggering the popular revolts commonly known as the Arab Spring (Johnstone and Mazo 2011).

However, despite such warnings, many national and urban agendas in Arab countries have not addressed these issues in any serious or meaningful way. It is true that all Arab governments have ratified the 2015 COP21 Paris Agreement (2021). They have also all endorsed the commitment of the UN-Habitat New Urban Agenda, with its twofold understanding of sustainability, comprised of environmental preservation and social inclusion (Verdeil 2019: 35). However, at the state level, it is hard to find strategies explicitly focusing on sustainability, let alone concrete policies and projects to implement these strategies. The Arab Spring revolutions represented the opportunity for many non-democratic or autocratic regimes to postpone these global, far-reaching ecological concerns and instead focus on restoring order on the ground.

Further, some national governments, such as those of Egypt, Saudi Arabia, and the UAE have initiated a series of giant urban projects consisting in building mega-cities that are advertised as sustainable, smart, and green. Examples of these projects include Masdar City in the suburbs of Abu Dhabi, launched in 2008 and initially planned as a carbon-neutral city, but not yet fully actualised; the New Capital in Egypt, the plan for which was announced in 2015 and which is currently under construction as a city built from scratch in the Egyptian desert meant to become the new administrative centre of the country; and, finally, NEOM in Saudi Arabia, announced in 2017 as more a country than a city, complete with its own independent laws and security forces, and currently being built in the Tabuk Province of northwestern Saudi Arabia. While presented as ways to attract foreign investment in the countries, generate new professional opportunities, and instil a new, worldly lifestyle, these projects reflect the authoritarian nature of the governments behind them, as both their planning and financing have completely excluded citizens from participating. Both in Egypt and Saudi Arabia, human rights campaigners say that thousands of people have been forcibly removed from their homes, without adequate compensation, in order to build the megacities. Additionally, these urban projects envision the wide use of technology, especially robots, to replace human labour. In NEOM, "there will be more artificial life than (...) biological," reads the project's official website (NeomPoint 2021). Each person will receive several robotic assistants, as well as a personal digital twin, to carry out all kinds of daily tasks, from cleaning to making doctor's appointments. In Egypt's New Capital, "through their mobile app a citizen will be able to manage all their life affairs from their mobile phone," according to Mohamed Khalil, head of technology for the Administrative Capital for Urban Development (ACUD), the military- and government-owned company building the city. In addition, in a country with over 60,000 political prisoners, a surveillance system will "monitor crowds and traffic congestion, detect incidents of theft, observe suspicious people or objects, and trigger automated alarms in emergency situations" (Reuters 2021). On the "green" side, advanced technology systems will help reduce waste by detecting leaks or faults, and by allowing residents to keep an eye on consumption.

On their websites, these cities appear glossy and glamorous, and probably appealing for those who can afford them. But for many ordinary Arab citizens, the move and cost would be unthinkable. Interestingly, Arabic climate fiction expresses these contradictions by shifting the narration between the present ruined cities and a delusional future life in the smart cities, where the apocalypse represents the breaking point between the two.



URBAN DECAY

Many of the dystopic texts are set in urban environments where the city is either destroyed by a natural catastrophe, or decadent and claustrophobic. Interestingly, the Arabic term used to indicate "dystopia" is al-madīna al-fāsida (lit.: "the corrupted city"), as the antonym of al-madīna al-fādila, the term used by the philosopher al-Farabi (872-950) to indicate "the perfect state," hence "utopia" ('Aqil 2017). In Naji's novel Using Life, the narration oscillates between the New Capital in the 2050s and the present reality in Cairo. The inhabitants of post-2011 Cairo are forced to deal with unbearable weather conditions and urban deterioration, alongside social and political problems. The novel describes characters subjected to hot and humid temperatures to the point that they become drenched in sweat and struggle to breathe. The air is so hot that the main character, Bassam, almost burns his skin while sitting in a minivan stuck in traffic and as he touches the outside of his car. Aside from the hot temperature, citizens must deal with garbage. Part of the city lies in waste, with garbage piling up everywhere. Bassam describes "the nauseating stench of waste from dump trucks and pig farms" (Naji and al-Zorqany transl. by Koerber 2017: 38). Traffic is also a constant reality, or "the normal state of things" (ibid.: 179), as characterised by the narrator. At one point, after being stuck in traffic for hours, Bassam comments: "Welcome to the hell that is Cairo, where life is one long wait, and the smell of trash and assorted animal dung hangs about all the time and everywhere" (ibid.: 38-39). Aside from that, the air itself is rotten - it makes one incurably sick, and in some areas of Cairo it is impossible to build anything because of the bad air and risk of disease.

The urban deterioration of Cairo that we find in the novel (traffic, heat, waste) is hardly an exaggeration of Cairo's contemporary urban reality, and it recurs in other works of Egyptian fiction set in the future. In 'Utarid (2015), a novel written by Muhammad Rabi' and set in 2025, the urban environment contributes to the dystopic vision offered by the novel. 'Utarid is a sniper who looks at the city from his vantage point, the Cairo Tower, which gives him a better position to kill people. Therefore, he often comments on the ugly architecture. But one of the striking features of the urban environment is the presence of garbage and pollution. One of the novel's protagonists is the "garbage man" (rajul alzibāla) who lives on, and from, the garbage that piles up within the ruins of a shattered Cairo. Like any average citizen, he dreams of building a spacious home and having a family; however, the home that will house this citizen and his family will be carved out of an immense garbage pyramid. In this text, garbage represents misery and the absence of humanity: the "garbage man" initially grants two orphaned girls a kind of asylum and then ends up raping the eldest several times before killing himself with a rusty knife. Besides garbage, the air in the city is described as polluted and filthy. This is true for water as well: the Nile is described as running through hell, its colors being "black, red and blue from shit, blood and corpses" (Rabi' 2016: 297). While the novel could be categorised as a dystopia, one cannot help noticing how the depiction of future Cairo resembles the contemporary one, where air and water pollution and the smell and sight of waste is often unbearable. Indeed, several observers have noted how 'Utarid is "painfully plausible," as an article in the Egyptian newspaper Mada Masr labels it, because it depicts "a world we seem to already partially inhabit" (El Gibaly, quoted in Chiti 2016). The garbage crisis depicted in the novel is real. In fact, while NGOs, aid agencies, and innumerable academic works had particularly emphasised the efficiency of local, informal waste management systems led by the Christian community of the Zabbaleen in Cairo, in 2009 the Egyptian government strongly destabilised the system with its privatisation policy, taking the swine flu as an opportunity to slaughter the pigs that the local Zabbaleen community had raised to eat some of the organic trash, rendering the waste situation even worse than it was before (Guth 2021: 121).



Trash and pollution also figure prominently in Naʻil al-Tukhy's novel *Nisaʻ al-Karantina* (*Women of Karantina*, 2013). The novel deals with a criminal gang of women that controls the city of Alexandria over three generations. The story begins where it ends: a dog rummaging through trash is killed during a clash between the Egyptian authorities and the crime lords of Karantina in 2046. From there, the narrative backtracks to the early 2000s in Cairo, where married couple Inji and Ali become involved in the death of a man at Ramses Station and subsequently escape to the Alexandrian neighbourhood of Karantina. Again, the description of these urban environmental issues creates parallels between the contemporary reality and the future one imagined in the novel. It seems as if al-Tukhy is clearly telling the reader that the future will be a copy of today, the future-dystopic aspect of the novel coming from the feeling of being stuck over time in an eternally polluted, stinking present.

THE APOCALYPSE IS COMING

Reproducing tropes of international climate fiction, several works in contemporary Arabic fiction portray apocalyptic scenarios involving the global collapse of human civilisation and potentially human extinction as an either direct or indirect result of anthropogenic climate change. In the first part of Naji's Using Life, the cause of the apocalypse remains unclear. The narrator describes it as the effect of "Divine rage. A curse from the heavens. The Lord had decided to give the Egyptians a sequel to the Seven Plagues" (Naji and al-Zorqany transl. by Koerber 2017: 2). Later, it is revealed that climate change is the main reason behind the future catastrophe, and this was set in motion by foreign corporations that diverted the Nile to make space for a new futuristic capital city. Although presented as a fictional aspect, here the novel refers to 200 years of gigantic public works projects meant to manipulate the Nile's waters to satisfy what was presented each time as "exigent political and economic needs" (Mikhail 2013: 114). The reference to foreign corporations is intriguing, too: it seems Naji is pointing to European colonisation, whose impact has transcended politics to also involve a reshaping of Egypt's nature and restore the image of Egypt as a green, biblical land. Throughout the twentieth century, the Egyptian government and local elites, including the military, have internalised and actualised the same environmental imagination, implementing giant construction projects aimed at turning the desert into a green land and modifying the Nile's flow.

Flooding sets in motion another fictional work that explicitly deals with climate change: *The Solar Grid*, a graphic novel published in ten instalments written in English between 2016 and 2020 by the Egyptian US-based artist Ganzeer. For the artist, the environmental impact of the Aswan Dam on Egypt is emblematic of humanity's adverse impact on the whole planet (Batty 2016). In his novel, he extends the impact of the Dam to the whole planet, turning it into a massive solar grid that reproduces artificial sunlight. Then he imagines two kids from Cairo targeting this fictional solar array and blowing it up. The story follows their journey to achieve that and how it changes the country forever (ibid.).

While the two above mentioned works are centred around Egypt and deal with floods, in the short story "The Gardens of Babylon," included in the collection *Iraq* + *100*, the Iraqi author Hassan Balasim imagines the apocalypse as a result of desertification and a series of sandstorms that have rendered the entire Mesopotamian region uninhabitable. The environmental disaster comes after years of bloody violence due to religious fanaticism and "classic capitalism"; nevertheless, it also presents an opportunity to reshape the regional landscape. In the same collection, the short story "The Worker" by Diaa Jubaili (Balasim 2016: 61–81) features the apocalypse deriving from the exhaustion of oil in the region. Here the genre of climate fiction interlaces with so-called "petro-fiction," a type of literature that "explores the role played by oil in contemporary society" (Imre 2012). The story is told from the perspective of a statue set in a public square in the city of Basra.



After the country has run out of oil resources, the Iraqi population suffers from famine, illnesses, and cannibalism, and people sell their own children to survive. Meanwhile, the governor of the city, a wealthy religious man, watches the events from a screen and delivers a public sermon in which he minimises the gravity of the situation, justifying it as the natural course of history. The story's message is that the apocalypse will be cruel, but it will hardly affect the ruling class, and despotism and government corruption will remain unchallenged.

THE SMART CITIES OF THE FUTURE

The dystopian works mentioned above feature a climatic catastrophe, but they also indicate that life will go on, and that Arab societies can rise again thanks to technology and foreign investment, paraphrasing the political rhetoric of Arab national governments. However, the plots of these works show that resurrection from the apocalypse does not entail a new positive beginning, as governments want citizens to believe. Rather, these official utopian visions are infused by the authors with critical thought and dystopic scenarios.

In Ganzeer's *The Solar Grid*, a few centuries after the flood, the New World Order Alliance ruled by the billionaire scientist Sharif Algebri implements the solar grid project, consisting in a network of satellites that surrounds the planet, absorbing energy from the sun and applying heat to wet places to dry them out and to reduce the level of water that submerges the land. On future Earth, there is no nighttime: as the sun sets, the solar grid automatically turns on, and it turns off as soon as the sun rises again. Algebri's project ends up creating more problems than it fixes, demonstrating that the problem is not only the climate crisis but also capitalist forces trying to take advantage of it. Other chapters of the novel take place thousands of years later on Mars, where parts of the Earth's population resettle after the flood and establish a direct democracy with the help of artificial intelligence tools – an exaggeration, in the artist's view, of what we are already doing by ranking everything with our apps and mobile phones (Batty 2016).

Similar to the New World Order Alliance project, Naji's *Using Life* (2014) imagines a totalitarian society constituted from foreign corporations building a new capital in post-apocalyptic Cairo. The society controls and manufactures everything, from machines to food, from clothes to pornography. Technology had made it possible to clean the air. Citizens have electronic chips implanted into their bodies that keep them traceable and connected to the rest of the world. All chickens are now raised in factories. As the catastrophe is global, Naji imagines this society taking over the entire planet, destroying national borders and reshaping new geographies. In this new world order, Arabic has been replaced by a mix of Chinese and English as the common language.

Similar anxieties about the environment and language can be found in Balasim's "The Gardens of Babylon" (2016: 11–34), whose title indicates a new city in Mesopotamia that has been completely rebuilt by Chinese investors in the form of domes with artificial gardens and machines that purify the air. The main protagonist writes from the newly rebuilt capital, the Gardens of Babylon, and introduces himself as a graphic designer hired by the government to produce a videogame about life before the apocalypse. Alluding to the scarcity of water that afflicts the region, Balasim envisions a train fabricated in Iran that transports water from Northern and Central Europe to the entire Mesopotamian region. While technology supplies the resources, disparities concerning access remain unresolved among the population: some have enough "e-quotas" to fill their fountains and swimming pools, while citizens in the poor area receive hardly a drop to drink (Balasim 2016: 13).

Another work set in the futuristic capital is Naji's third novel, *Wa al-Numur li-Hujratiyy* (*And Tigers to My Room*, 2019), which, like *Istikhdam al-Haya*, oscillates between post-



2011 and a future dimension. This time, the story is set in the high-tech city of NEOM, taking inspiration from the Saudi slogan exalting the city as "a vision of what a New Future might look like." In the novel, NEOM becomes the dream destination of many disillusioned youth who took part in the 2011 Egyptian revolution. Yet, once the main character Farah arrives there, she is faced with a terrible reality: she discovers she is pregnant, and she is told by the doctors that she must decide whether to abort or to donate her embryo to science, because pregnancy and child delivery are forbidden in the country, and children under three are not allowed in NEOM.

These three post-apocalyptic scenarios seem to mock the giant urban projects started by Arab governments and co-financed by local elites and foreign investors. They imagine the implementation of the Arab governments' "green" initiatives and alert readers to their potentially disastrous consequences. The authors also share a common vision: humanity will once again survive climatic changes, as it has historically done. However, featuring characters such as Algebri in *The Solar Grid*, Paprika in *Using Life*, or the Queen of Mesopotamia in "The Gardens of Babylon," the authors warn us that corporate capitalists will inevitably try to profit from the apocalypse, providing technical solutions while stripping us of our personal freedom and dignity.

Finally, the novel Otared ('Utarid, Rabi' 2015), the only work in which the apocalypse is not explicitly linked to climate change or set in a high-tech city, still offers insights about ecology and the relationship between human and non-human beings in the future. In 2025 the near-future reality has all the traits of a living hell: The main character, 'Utarid, witnesses public executions in the street and people killing each other or themselves under the uncaring eye of the population. People apparently survive by taking a drug called "karbon," made from insects, which has the effect of making people forget; listening to electronic music that reproduces the sound of pigs and humans being killed; visiting brothels; and wearing masks. 'Utarid is accompanied by his silent yet smart companion: a multipurpose drone that can kill, deliver messages, and spy. In the meantime, the dwindling number of humans benefits the natural environment: while rivers of blood flow in the city, the nearby island of Zamalek has plants everywhere that spread and flourish unwatered and untended as "a green wild garden" - birds even nest there. "Our existence as peaceful urban citizens, our life on this earth, had ultimately been an impediment to that of the plants and birds, while the artillery was their friend: they lived in harmony with the falling shells, the bullets of the warring sides," affirms the main character (Rabi' 2015: 29).

IN PRAISE OF AN ARABIC ECOLOGICAL CRITICAL LITERATURE

Arabic dystopian fiction has proven a fertile ground to study how Arab authors and artists engage with issues of climate change and ecology. As the impact of climate change is increasingly visible in everyday realities across the Middle East, I envision that other types of fiction might also be studied in relation to this theme. As expressed by the literary critic Mark Bould in his book *The Anthropocene Unconscious*, "works of art or popular entertainment may not appear to be about climate change, but it has nevertheless seeped into them, rising to the surface like a melting ice cap" (2021: 13). An indication of that could be the increasing presence of animals in contemporary fiction, such as in the novel *Ikhda' al-Kalb* (*The Taming of the Dog*, 2021) by the Egyptian author Ahmad al-Fakharani, the story focusing on the relationship between a man and a dog. This fact shows that authors are paying increasing attention to relations between humans and non-humans. Another means of proceeding would be to remain alert not only to landscape descriptions, both urban and non-urban, but also to fictional characters' statements about climate change and the environment even in works that do not exclusively deal with this topic. Therefore,

I encourage future studies to enlarge the scope to different forms of cultural production in Arabic, from realistic novels to TV series, music, and movies. The "art and literature of our time is pregnant with catastrophe, with weather and water, wildness and weirdness" (Bould 2021: 13). It is the task of the critic to engage with these works and highlight the presence of these topics within them.

BIBLIOGRAPHY

Alter, Alexandra (2016), Middle Eastern Writers Find Refuge in the Dystopian Novel, in: *The New York Times*, May 29, https://www.nytimes.com/2016/05/30/books/middle-eastern-writers-find-refuge-in-the-dystopian-novel.html (10 February 2022).

'Aqil, Hanan (2017), Adab al-Mudun al-Fasida Yajtah al-Riwaya al-'Arabiyya, al-'Araby (The Literature of The Corrupted City Occupies Arabic Literature), in: al-Arabiyya, 2 February, https://alarab.co.uk/%D8%A3%D8%AF%D8%A8-%D8%A7%D9%84%D9%85%D8%AF%D9%86-%D8%A7%D9%84%D9%81%D8%A7%D8%B3%D8%AF%D8%A9-%D8%A0-%D8%A7%D8%A0-%D8%A7%D9%84%D8%B1%D8%B1%D9%88%D8%A7%D9%8A%D8%A9-%D8%A7%D9%84%D8%B9%D8%B1%D8%A8%D9%8A%D8%A9 (10 February 2022).

Arafat, Nada (2022), Vegetable Prices Soar as Crop Yields Suffer from Cold Wave, in: *Mada Masr*, 1 February, https://www.madamasr.com/en/2022/02/01/feature/economy/vegetable-prices-soar-as-crop-yields-suffer-from-cold-wave/ (10 February 2022).

Ayed, Kawthar (2021), La Science-fiction et l'Anticipation, MECAM Public Lecture, 13 July.

Balasim, Hassan (2016), The Gardens of Babylon (Hadaʻiq Babil, transl. by Jonathan Wright), in: Hassan Balasim (ed.), *Iraq* + 100: Short Stories from a Century after the *Invasion*, Manchester: Comma Press, 11–34.

Batty, David (2016), From Revolutionary Art to Dystopian Comics: Ganzeer on Snowden, Censorship and Global Warming, in: *The Guardian*, 20 July, https://www.theguardian.com/books/2016/jul/20/ganzeers-graphic-novel-future-dystopia-recent-history-egypt-the-solar-girl (10 February 2022).

Bould, Mark (2021), The Anthropocene Unconscious, London: Verso Books.

Chiti, Elena (2016), A Dark Comedy': Perceptions of the Egyptian Present between Reality and Fiction, in: *JAIS*, 16, 273–289, https://journals.uio.no/JAIS/article/view/4752/4188 (10 February 2022).

Evans, Jason P. (2009), 21st century Climate Change in the Middle East, in: *Climatic Change*, 92, 3–4, 417–432.

Ezz, Mohamed, and Nada Arafat (2015), We Woke up in a Desert' – the Water Crisis Taking Hold Across Egypt, in: *The Guardian*, 4 August, https://www.theguardian.com/world/2015/aug/04/egypt-water-crisis-intensifies-scarcity (10 February 2022).

Al-Fakharani, Ahmad (2021), *Ikhdaʻ al-Kalb* (Taming the Dog), Cairo: Dar al-Shuruq. Ganzeer (2016-2020), *The Solar Grid*, https://ganzeer.com/The-Solar-Grid-Ch-1 (10 February 2022).

Ghali, Dana (2016), Klaymat Fikshun: Nuʻ Adabi Jadid (Climate Fiction: A New Literary Genre), in: *al-Faisal*, 26 December, https://www.alfaisalmag.com/?p=4022 (10 February 2022).

Glass, Rodge (2013), Global Warming: The Rise of Cli-fi, in: *The Guardian*, 31 May, https://www.theguardian.com/books/2013/may/31/global-warning-rise-cli-fi (10 February 2022).

Guth, Stephan (2021), Garbage (an array of "In 2016"), in: *Journal of Arabic and Islamic studies*, 21, 120–125, https://journals.uio.no/JAIS/article/view/9464/8033 (10 February 2022).

Johns-Putra, Adeline (2019), Climate Change and the Contemporary Novel, Cambridge:



Cambridge University Press.

Johnstone, Sarah, and Jeffrey Mazo (2011), Global Warming and the Arab Spring, in: *Survival*, 53, 11–17.

Jubaili, Diaa (2016), The Worker (al-Mutakallim, transl. by Andrew Leber), in: Hassan Balasim (ed.), Iraq + 100: Short Stories from a Century after the Invasion, Manchester: Comma Press, 61–80.

Kraidy, Marwan (2016), Trashing the Sectarian System? Lebanon's 'You Stink' Movement and the Making of Affective Publics, in: *Communication and the Public*, 1, 1, 19–26.

Lelieveld, J., Y. Proestos, P. Hadjinicolaou et al. (2016), Strongly Increasing Heat Extremes in the Middle East and North Africa (MENA) in the 21st Century, in: *Climatic Change*, 137, 245–260, https://doi.org/10.1007/s10584-016-1665-6 (10 February 2022).

Mikhail, Alan (2011), From the Bottom Up: The Nile, Silt, Humans in Ottoman Egypt, in: Diana Davis and Edmund Burke (eds.), *Environmental Imaginaries of the Middle East and North Africa*, Athens: Ohio University Press, 113–135.

Naji, Ahmad, and Ayman Al-Zurqany (2014), *Istikhdam al-Haya*, Cairo: Dar al-Tanwir (Using Life, transl. by Ben Koerber, Austin: University of Texas Press, 2017.

Naji, Ahmad (2019), *Wa al-Numur li-Hujratiyy* (And the Tigers to My Room), Cairo: Dar al-Mahrusa.

NeomPoint (2021), Neom and Robots: World of Technology, in: *NeomPoint*, 2 February, https://neompoint.com/neom-and-robots-world-of-technology/ (24 May 2022).

Al-Rajib, Walid (2019), Al-Adab al-Biʻi (Ecological Literature), in: *Alrai-media*, 29 November, https://www.alraimedia.com/article/869859/%D9%85%D9%82%D8%A7%D9%84%D8%A7%D8%AA/%D8%A7%D9%84%D8%A3%D8%AF%D8%A8-%D8%A7%D9%84%D8%A8%D9%8A%D8%A6%D9%8A (10 February 2022).

Rabiʻ, Muhammad (2015), *'Utarid*, Cairo: Dar al-Tanwir (Otared, transl. by Robin Moger, Hoopoe, 2016).

Reuters (2021), Egypt Plans High-Tech Leap with New Capital, in: *GulfNews*, 2 September, https://gulfnews.com/world/mena/egypt-plans-high-tech-leap-with-new-capital-1.82008591 (24 May 2022).

Subh, Fatin (2018,), Adab Taghayyur al-Manakh ... Isdarat Tali'iyya li-Thima Mustaqbaliyya (Climate Change Fiction ... Avant-garde Publications on a Futuristic Theme), in: *al-Bayan*, 21 September, https://www.albayan.ae/five-senses/mirrors/2018-07-21-1.3319503 (10 February 2022).

Szeman, Imre (2012), Introduction to Focus: Petrofictions, in: *American Book Review*, 33, 3, 3, https://www.muse.jhu.edu/article/480500 (10 February 2022).

Al-Tukhi, Na'il (2013), *Nisa' al-Karantina*, Cairo: Dar al-Mirit (Women of Karantina, Transl. by Robin Moger, Cairo: AUC Press, 2015).

Trexler, Adam (2015), *Anthropocene Fictions: The Novel in a Time of Climate Change* (Under the Sign of Nature, University of Virginia Press: Kindle).

Verdeil, Eric (2019), Arab Sustainable Urbanism: Worlding Strategies, Local Struggles, in: *Middle East - Topics & Arguments*, 12, 1, 35–42, https://doi.org/10.17192/meta.2019. 12.7935 (10 February 2022).

Verner, Dorte (2012), Adaptation to a Changing Climate in the Arab Countries: a Case for Adaptation Governance and Leadership in Building Climate Resilience, MENA development report Washington: World Bank.

READING SUGGESTIONS

'Abd al-'Aziz, Basma (2013), *Al-Tabur*, Beirut: Dar al-Tanwir (The Queue, transl. by Elisabeth Jaquette, London: Melville House, 2016).

al-Kilani, Mustafa (2004), *Miraya al-Saʻat al-Mayyita* (Mirrors of Dead Hours), Sousse: Dar al Mizan li-l-Nashr.



'Azim, Ibtisam (2014), *Sifr al-Ikhtifa*', Beirut: Manshurat al-Jamal (The Book of Disapperance, transl. by Sinan Antoon, Syracuse: Syracuse University Press, 2019).

Balasim, Hassan (ed.), Iraq + 100: Short Stories from a Century after the Invasion, Manchester: Comma Press.

Ghalayini, Basma (2019), Palestine +100: Stories from a Century after the Nakba, Manchester: Comma Press.

Ghariani, Rhiad et al. (2010-13), *Tunis 2050*, GCS Production, https://www.youtube.com/user/2050theseries/featured (10 February 2022).

Naji, Zafir (2006), Hikaya Khyaliyya Jiddan Tuhaddath al-An wa-Huna (A Very Imaginative Tale that is Told Now and Here), in: *al-Ashya*, Tunis: Dar Tunis li-l-Nashr, 40-50.

Nasrallah, Ibrahim (2016), *Al-Harb al-Kalb al-Thany* (The Second War of the Dog), Bayrut: al-Dar al-'Arabiyah lil-'Ulum Nashirun.



ABOUT THE AUTHOR

Teresa Pepe is Associate Professor in Arabic Studies at the University of Oslo. Her research interests include Arabic literature, media, popular culture, sociolinguistics, and environmental humanities. She is the author of the book *Blogging From Egypt: Digital Literature* (2005–2016) (Edinburgh University Press, 2019) and the co-editor of the volume *Arabic Literature in a Posthuman World* (with S. Guth, Harassowitz Verlag, 2019). Her work also appears in refereed journals such as *Oriente Moderno, The Middle East Journal of Culture and Communication*, and the *Journal of Arabic and Islamic Studies*. In 2021 she received a MECAM Fellowship to join the overarching research project "Imagining Futures – Dealing with Disparity" as part of Interdisciplinary Fellow Group I: "Aesthetics and Cultural Practices" with a subproject entitled "Environmental Imaginaries in Egyptian and Tunisian Dystopian Fiction."

E-mail: teresa.pepe@ikos.uio.no

IMPRINT

The MECAM Papers are an Open Access publication and can be read on the Internet and downloaded free of charge at: https://mecam.tn/mecam-papers/. MECAM Papers are long-term archived by MENA-LIB at: https://www.menalib.de/en/vifa/menadoc. According to the conditions of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Public License (https://creativecommons.org/licenses/by-nc-sa/4.0/legalcode), this publication may be freely reproduced and shared for non-commercial purposes only. The conditions include the accurate indication of the initial publication as a MECAM Paper and no changes in or abbreviation of texts.

MECAM Papers are published by MECAM, which is the Merian Centre for Advanced Studies in the Maghreb – a research centre for interdisciplinary research and academic exchange based in Tunis, Tunisia. Under its guiding theme "Imagining Futures – Dealing with Disparity," MECAM promotes the internationalisation of research in the Humanities and Social Sciences across the Mediterranean. MECAM is a joint initiative of seven German and Tunisian universities as well as research institutions, and is funded by the German Federal Ministry of Education and Research (BMBF).

MECAM Papers are edited and published by MECAM. The views and opinions expressed are solely those of the authors and do not necessarily reflect those of the Centre itself. Authors alone are responsible for the content of their articles. MECAM and the authors cannot be held liable for any errors and omissions, or for any consequences arising from the use of the information provided.

Editor: Dr. Thomas Richter

mecam-office@uni-marburg.de

Editorial Department: Meenakshi Preisser, Christine Berg

Merian Centre for Advanced Study in the Maghreb (MECAM)
GIGA | Neuer Jungfernstieg 21
20354 Hamburg | Germany
https://mecam.tn









