## **ORIGINAL ARTICLE**



# On naming drones: a European perspective

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#### **Abstract**

This article discusses the naming of military drone technology by different actors. It thus explores the tension between producing, using, and experiencing drone technology. I will look at, among other things, the project of a drone called the *Euro Hawk* while reflecting on the experiences and perceptions of people from "outside" Europe. For my investigation, I used three types of journalistic texts in Arabic: (1) texts produced by professional platforms that are financed by European governments like *Deutsche Welle* and *Qantara.de*, (2) texts published on the news platform *Aljazeera.net* and (3) entries at the popular online encyclopedia *Wikipedia*.

 $\textbf{Keywords} \ \ Names \ of \ drones \cdot A rabic \ language \cdot Politics \ of \ non-translation \cdot Imaginations \ about \ Europe \cdot Postcolonial \ condition \cdot Qantara. de$ 

#### Introduction

The anthropologist Hugh Gusterson, in the beginning of his book about the remote control warfare, tells the story that "embassy staffers took to calling drones 'Voldemorts' after the villain in the Harry Potter series, Lord Voldemort: 'he who must not be named" (2016, 1). The staff of American embassies would not talk about drones, instead naming them after a literary figure of great power who stands on the wrong side and whose name must not be mentioned. Was it because the embassy staff did not want to have a discussion with anyone in the hierarchy about the legitimacy of the drone war, or because they were joking about the insanity of the digital war, or because it was a classified topic that was not allowed to be talked about? Whatever answer we imagine, this story suggests that names can tell us something about the power of things and the hidden meaning of phenomena.

It also suggests that, when new military technology is explored, built, and deployed, narratives are the key for understanding what is going on in technical, political, and ethical terms. Therefore, in this article, I will examine the stories associated with the names of military drones. <sup>1</sup> The

# About naming military technology by different actors

In 1962, the USA largely standardised its labeling for military technology in the army, navy, and air force in accordance with the designation of military aircraft (Tri-Service aircraft designation system). Since then, the denotation of all



names given to drones by actors on different sides of the aerial warfare are one way to remind us of the cross-regional complexity of the digital aerial war. They speak about the different experiences of people in various parts of the world with their specific histories, which include many languages other than European languages. My point is that the different names used to describe drones not only reveal some of the details and the effects of the current drone war but also about the image of and the imaginations about Europe. The article consists of an introduction into naming aerial military technology, followed by a chapter on the recent development of drone technology and the multidisciplinary literature about it. It goes on with a passage about the coverage of military drone technology at the Internet platform Qantara.de, funded by the German foreign office. Thereafter, I explore the various naming of military drones like Predator, Reaper, and Avenger and their translations into Arabic followed by a discussion of the Euro Hawk project and its media representation.

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new equipment and devices has followed a specific system of letters and numbers. A well-known example of this is the widely sold and globally deployed fighter aircraft F-16. The F stands for fighter. This refers to the aircraft's dual function as a fighter against other aircraft and as a support for ground attacks. Military aircraft with the designation F is distinguished from those that are used exclusively for transport and carry the designation C (cargo) and those with the designation A (attack) that explicitly attack and support the fight on the ground, with X being assigned to experimental aircraft and missiles used to test and evaluate new technologies. The numbers stand for the respective design numbers. The designation of some planes, bombs, and rockets, such as the V-2, is familiar to many people but often their meaning is not known or understood (V for Vergeltungswaffe, "weapon of retribution").

In addition to the technical designation, other names are always defined as the political scientist and drone specialist Ulrike Franke (2014) mentions: "The military, and in particularly the U.S. military, loves naming things [...]." The F-16 is thus also called the *Fighting Falcon* (Macdonald 2006, 140). Such epithets are invented by the manufacturer and/or the armed forces ordering from them and then approved, with a number of other proposals invariably examined beforehand. The naming is intended to facilitate communication within the industry and the military, as well as to the outside world, mostly with journalists, if communication is not done by the military's own public relations staff as part of the "military-media-nexus" (Stahl 2015, 162).

In the twentieth century, the development, production, and application of military technologies for airspace have had far-reaching consequences for many people around the globe. In his book about the aerial warfare in Germany and Britain during the Second World War, historian Dietmar Süß (2011, 16) speaks of a specific experience of violence in modern twentieth-century societies. These specific experiences are never part of the naming process, as the production and naming of airspace technology come first and the lived experiences among them come second. Certainly, names get adapted by the people who have to live under military airspace technologies.

In her article on the names of drones used for military purposes and their implicit gender attributions, Ulrike Franke (2014) points to another development within the military apparatus, namely the assignment of abbreviations that in turn result in reasonably meaningful names. She cites the example of the American MALE drone (Medium Altitude Long Endurance) and the planned European counterpart FEMALE drone (Future European MALE). Her article is ironically titled "U.S. Drones are from Mars, Euro Drones are from Venus" although the topic is anything but comical, especially since dichotomously juxtaposed gender categories

did not seem to bother anyone involved with the naming.<sup>2</sup> MALE class drones are the most powerful drones currently available on the market. They include those called *Predator* and *Reaper*, which I will talk about later in this article.

## Drones and the literature about them

In very general terms, one can differentiate between four types of unmanned aerial vehicles (UAV) or drones: those for surveillance and reconnaissance, those that carry rockets for attacks (both are directed remotely), those that act autonomously without any pilot no matter where, and drones for civil purposes (Suchman and Weber 2016; Sauer 2019). The first type was initially designed between World War I and II but was never effective enough and too expensive to be developed further given the technical facilities available at the time. This changed in the mid-1980s and drones for reconnaissance have been used by the American military and its allies ever since. The second type, the armed drone, was only developed as a drastic measure and used intensively by the USA in Afghanistan, Pakistan, Yemen, Somalia, and later in Libya in the so-called Global War on Terror since 2001. Meanwhile, over ninety states are in possession of military drones of different types—among them Iraq, Jordan, Morocco, Tunisia, and the United Arab Emirates—while many others are developing them themselves, such as the USA, Israel, Turkey, China, Saudi Arabia, and Iran (Franke 2018, 'Ādil 2020, Schörnig 2020).

Research on drones used for military purposes has expanded enormously since the first academic studies were carried out (Singer 2009; Krishnan 2012). The work of philosopher Grégoire Chamayou (2011, 2013, 2015), who calls the phenomenon "manhunting" (taking up this idea from an essay by Seymour Hersh in *The New Yorker* in 2002) and seeks to understand and categorise it theoretically, has contributed significantly to a broader debate outside of security studies. While political scientists and researchers in international relations are rethinking the future shape of war (Biermann and Wiegold 2015; Tawil-Souri 2016; Hippler 2019) or retracing political decision-making processes in this regard (Franke 2018), anthropological works have been reflecting on the complete transformation of the known world through the use of remotely controlled military drones for about five years (Gusterson 2016; Asad 2017; Parks and Kaplan 2017). Artists are reacting in a similarly rigorous way to the military use of robots, which theoretically affect us all globally in equal measure, but whose use has so far mainly been felt outside Europe and North America (Steyerl 2014, Amin 2016, Fast 2016, Osman 2017, El-Ariss 2019, Amin/Downey 2020, Downey 2020, Stubblefield 2020). In addition, books and projects by anti-drone activists such as



Medea Benjamin (2013, in Arabic 2014) or Emran Feroz (2017) have helped to popularise knowledge about the new arms race and the impact of drones on countries such as Afghanistan and Pakistan. Personal accounts of experiences such as Palestinian author Atef Abu Saif's (2015a) published diary testify to the psychological effects of this type of asymmetric warfare, which primarily impacts the civilian population. One of the first scientific studies to deal with the traumatising consequences for people in Pakistan living in the shadow of drones was that of the International Human Rights and Conflict Resolution Clinic at Stanford Law School (2012, also Weber 2012, Wilcox 2017). The psychological stress on drone pilots who carry out the potentially endless war using drones as part of a work shift has been addressed in a variety of forms in theater and radio plays, films, and novels (Brant 2013, Reintjes 2015, Kennebeck 2016, Milkman 2017, Hanif 2018).

In the following, I am interested in exploring the different dimensions of naming drones and the connected processes of borrowing, adapting, and translating words. In this way, I am trying to get a better sense of the politics of (non-)translation and of how experiences of injustice and the pain and suffering of others can be ignored when political analysts, journalists, and researchers are speaking and writing about it. Although one could argue with Susan Sontag (2004, 111) that "we," those who never "put in time under fire," do "not get it [...] can't understand, can't imagine," what we can do, and perhaps must do, is at least share the vocabulary used to express these experiences.<sup>3</sup>

I was inspired primarily by Hans-Arthur Marsiske (2012) who pleaded ten years ago for a broad debate on military robots that takes the cultural aspects and cultural imaginations seriously. I am especially interested in the drone project named Euro Hawk because it is linked to imaginations about Europe. Names of drones as an object of inquiry started to bother me when I read Salman Rushdie's essay about Kurt Vonnegut's novel Slaughterhouse-Five, first in English and then in German. What struck me in the German version is the fact that the code names Little Boy and Fat Man for the nuclear bombs dropped by the USA on Hiroshima and Nagasaki are not translated into German (Rushdie 2012a, 102, 2021b, 146). I realised that this is not a single case. The names are also kept in English in the German edition of the online encyclopedia Wikipedia entry about the first nuclear bombs ever dropped. However, in the Arabiclanguage entry in Wikipedia, the names are literally rendered into al-walad al-ṣaġīr and al-rajul al-badīn. 6 Not translating the names appeared to me as ignoring the historical experiences of the people involved, including those who built the bombs and gave them specific names. As if one were hiding something that is essential for the overall context. How this is evolving for drone technology I will start to investigate with the example of Arab news that are produced in Europe.

## Naming drones on Qantara.de

News in Arabic have been produced in Europe or with the financial support of European governments in the Arab regions for almost a century. It began with the idea of bringing European views directly to the Arab household as in the case of the medium-wave radio station Palestine Broadcasting Service (PBS), which was set up with the help of the BBC by the British Colonial Office in Jerusalem in 1936. It broadcasted in Arabic, English, and Hebrew. The British government also financed The Near East Broadcasting Station (Idhā'at al-Sharq al-Adnā) which aired in Arabic from Jaffa, Mandate of Palestine at the time, since 1941/1942 (Boyd 2003). In 1934, the Italians had installed a similar station in Bari. The public state-owned German foreign broadcasting service Deutsche Welle (German Wave) started airing after World War II in 1953. German and European news has been its central focus ever since, which makes it an important platform for my investigation into the naming of drones. Today Deutsche Welle publishes its content via radio, satellite television, and the Internet in thirty languages. It started its Internet presence in 1994, with Arabic as one of its eight core languages. The Arabic-language TV program started in 2002—one of the channel's four languages besides German, English, and Spanish.

Another kind of news and cultural production is close to the first type but involves more two-way traffic between European reportage and local sources in regions outside Europe. I will take as an example the Internet platform Qantara.de which has been published in three languages—Arabic, English and German—since 2003. Although its funding has been the subject of some debate in the meantime, Qantara.de is still produced with the financial support of the German foreign office. The platform mainly seeks Muslim voices to be heard in Europe. The attacks of 9/11 were the main reason for setting it up and they have played a major role in its content production ever since (Zöllner 2006). In their English mission statement on the website, it is explained that the Arabic word *qantara* means "bridge" and that the project seeks to promote "dialogue with the Islamic world." The mission statement in Arabic is more elaborate. Here "dialogue with the Islamic world" (al-hiwār ma'a l-'ālam al- $isl\bar{a}m\bar{i}$ ) is an important concept as well. In addition, the purpose of this dialog is explained. Accordingly, the aim is to "establish a universal human culture" (min ajli t-ta'sīs li-thaqāfa insānawiyya kawniyya). It further says that 500 authors contribute to the site content, 100 of whom are of Arab origin.



Consistently, the journalistic work of this platform involves translations in more than one direction. Many articles are available in the three languages. For this reason, and due to the fact that the platform was founded in the context of September 11, 2001 and the *Global War on Terror* sparked by the terror attacks, I began my investigation into the designation of drone technology with *Qantara.de*, incorporating other sources as appropriate.

Searching the Arabic version of the platform *Qantara. de* with the keywords "drūn" or "drunz" as of 24 June 2021 brings no result. Searching in English with the keyword "drone" brings seven results. Four texts are available in English and German only and three in Arabic, German, and English. To start with, I dealt with the latter three, which include, first, an interview by the communication researcher Marcus Michaelsen in (2012a, b, c) with Pakistani lawyer Mirza Shahzad Akbar, who has defended victims of American drone strikes in the region of Waziristan, second, an elaborate article by journalist Emran Feroz about daily life under drones in Afghanistan and Pakistan (2014), and third a book review of the Palestinian author Atef Abu Saif's book *The Drone Eats with Me* (2015a).

#### **American drones**

The interview in 2012 was first conducted in German. It was translated into Arabic by Ra'id al-Bash and into English by Jennifer Taylor. While the expressions used in the German

and English version were similar (amerikanische Drohnen, "American drones"), the Arabic terminology deployed was al-ṭā'irāt al-amrīkiyya bidūn ṭayyār (American airplanes without pilots). In the interview, no other details are given—for example, about the types of drones available and in use—since the focus is on the non-combatant victims of drone strikes and how they could possibly defend themselves and find justice in a deterritorialised global war. Answering the question about his main aim, the Pakistani lawyer mentioned:

"It's very simple: we want the attacks to stop. Or at least the entire drone programme to be put under legal and parliamentary control. The families of those killed in the attacks to date must receive appropriate compensation. It's a matter of justice and transparency." (Michaelsen and Akbar 2012b)

The texts are accompanied by various photographs, including one rarely published photograph in German media showing demonstrating woman in Pakistan (cf. Gräf 2021, 24) (Fig. 1).

## Angels of death

The second text available on *Qantara.de* in the three languages also deals with the perspectives of the drone victims in Afghanistan and Pakistan and is titled in German "Leben

Fig. 1 Demonstrating woman in Pakistan holding a sign with a military drone crossed out in red and the English letters "Stop drones", as well as in Urdu "Rawalpindi Division" (location of the headquarters of the Pakistani army), Source:

Qantara.de, May 5, 2012,
Screenshot: https://ar.qantara.de/content/-حرب-الطائ التحمية المناحية المناحية المناحية المناحية المناحية المناحية المناحية والكستان-جياة غانستان-جياة عانستان-جياة عانستان-جياة عانستان-حية والكستان-حية والكستان-كية والكستان-كية والكستان-كية والكستان والكست





unter 'Todesengeln'" (Feroz 2014a), translated into English by Jennifer Taylor (Feroz 2014b). The expression "angels of death" comes from the name the drones are given in Pashto by civilians living there as explained in the article:

"The Pashtun tribal areas between Afghanistan and Pakistan, as well as the region of Waziristan, are currently the main theatre of the drone war. The local Pashtuns there call the unmanned killing machines 'angels of death'." (Feroz 2014b)

The Arabic translation of this article by Ra'id al-Bash was entitled Ḥayāt taḥt raḥmat 'malā'ikat al-mawt' (Feroz 2014c). Many traditions of mankind know the figure of the angel of death, a supernatural being that announces death and accompanies the deceased into the afterlife. The Qur'an specifically mentions it in Sura 32:11, identified in the Islamic tradition as Azrael or 'Izrā'īl, one of the four archangels. Azrael, who is not mentioned in the Qur'an by name, separates people's souls from their bodies and thus brings death. He does not act independently, but on behalf of Allah. Pashtuns rather sarcastically refer to American drones as angels of death. This is suggested by jokes they tell each other about drone attacks. The sheer volume of the attacks and the indiscriminateness comes across in these gags. 12

## Machay and zannāna

Other names for drones in Pashto, which allude to the sound drones make are bhungana (the buzzing of a bee) and machay (wasp) (Bartsch et al. 2015, Franke 2018, 33). The dominance of the sound of drones for those living under it also features in the book The Drone Eats with Me by Palestinian author Atef Abu Saif. The book review for *Oantara*. de was written in English by Marcia Lynx Qualey (2015a) and translated into German by Harald Eckhoff. 13 Both versions utilise the vocabulary of "drone," "drone warfare," and "drone attack" throughout the text. This is, however, not the case in the Arabic version by Ibtisam Fawzi (Qualey 2016). She translated the word "drone" with zannāna and also gives an explanation of why she did so, namely that zannāna is the common word used for drones in Palestinian Arabic. Literally, this means "buzz" in English (and dröhnen in German). Accordingly, one version about the origin of the name "drone" for UAVs in English is that the noise they make is the reason for their naming. Another narrative refers to the aircraft used as targets for training by the British in the 1930s, they were painted yellow and black like bees and were therefore called drones (Franke 2018, 32). Composer Gonçalo F. Cardoso prefers the first explanation. He released a record entitled A Study into 21st Century Drone Acoustics, on which he imitates the sounds of different types of drones. The record cover has the following text:

"Much attention is focused on drones as 'eyes in the sky'. However for people on the ground, the sound of the drones is much more pervasive. Military drones fly at high altitudes and are more often heard than seen. The word drone itself is rooted in sound, referring to the noise of the male honeybee. The sound of drones in areas of conflict creates frightening soundscapes that go on for many hours on end. The sound gives them nicknames like Zanana (buzz) in Palestine." (Cardoso and Pater 2015)

The record looks like any other vinyl in the world of music, but the sounds it conveys give you a sense of what it might mean to live in an area under constant drone surveillance and attack.

#### The loanword drūn

Coming back to the three texts on *Qantara.de*, in none of them was the word  $dr\bar{u}n$  or  $dr\bar{u}nz$  mentioned. Either the translators used the established technical term "airplane without pilots" coming from the English terminology of "unmanned aerial vehicle" (UAV) or they used the names prevalent in the locality where these weapon carriers have the most impact—these names hint to the constant sound the drones make (*zannāna*, *machay*) or their function as unpredictable bearers of death (*malā*'ikat al-mawt).

The borrowed word  $dr\bar{u}nz$  was probably adapted to the Arabic language only around 2013, when the phenomenon of drone killings finally entered transregional public debates (Franke 2018, 194, Gräf 2021, 14). This can be shown by four examples. The first is an article on Aljazeera.net in 2008, which was the first text on military drones I ever stumbled upon in an Arabic news publication. <sup>14</sup> Aljazeera.net is one of the most read Arabic news platforms that was founded in Oatar in 1998 and has a close working relationship to the satellite TV station Al Jazeera which was founded in 1996 (Gräf 2010, 239). The text was published on December 7, 2008 and was basically a translation of an early article on the topic in *The Washington Times* published on the same date (Carter 2008). While the two types of drones *Predator* and Reaper were discussed (yet the names were not translated into Arabic), the word drone was not used yet. The second example is an article on the same platform three years later. 15 This one did use the English word "DRONE" in Latin script and in capitals in an otherwise Arabic text in Arabic script in order to explain that the word comes from the buzzing of the bee ("min dawīy al-naḥl") (Fig. 2).

In 2013, the American anti-drone activist Medea Benjamin was invited to a talk show about drones on *Al Jazeera Satellite TV*. Here, I saw the loanword *drūn* for the first time. <sup>16</sup> Also, the entry for the *Al Jazeera Encyclopaedia* 

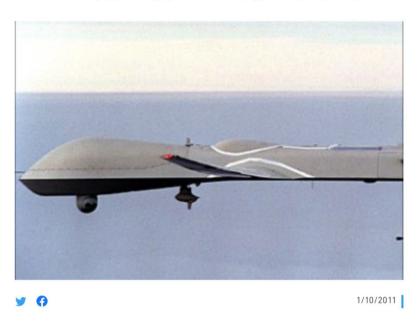


Fig. 2 Excerpt from the journalistic text "aṭ-Ṭāʾirāt bidūn ṭayyār wa-mustaqbal al-ḥurūb" (Airplanes without pilots and the future of wars), Source: Aljazeera.net, October 1, 2011, Screenshot: https://www.aljazeera.net/news/international/2011/10/1/-تالولول الحووب الطائر الحواد مستقبل الحووب



سياسي | دولي | الولايات المتحدة الأميركية

## الطائرات بدون طيار.. مستقبل الحروب



طائرة بريداتور الأميركية في رحلة استطلاع (الفرنسية)

حظيت الطائرات من دون طيار على شهرة إعلامية واسعة بعد أن أصبحت الوسيلة المفضلة للولايات المتحدة وربما دول أخرى من بينها إسرائيل في تنفيذ عمليات اغتيال أو قصف مبرمجة ضد من يوصفون بالإرهابيين الذين كان آخرهم رجل الدين الأميركي يمني الأصل أنور العولقى الذى قتل داخل الأراضى اليمنية.

واستوحي اسم هذه الطائرة بالإنجليزية (DRONE) من دويّ النحل، أي باستهداف من تريد أينما تريد وفي أي وقت تريد. وهي طائرة توجه عن بعد أو تبرمج مسبقا لطريق تسلكه، فى الغالب تحمل حمولة لاداء مهامها كأجهزة كاميرات أو حتى القذائف.

(*Mawsū*'at al-Jazīra), which was drafted in 2015, uses the adaptation of "drones" into "drūnz" in Arabic script.<sup>17</sup> One can conclude that in the seven years between 2008, when the world only gradually learned about military drones and its usage within the *Global War on Terror*, and 2015, the loanword *drūn* had entered the Arabic dictionary.

It is a relevant question what happens when a loanword finds its way into a language that does not convey the connection to lived experience. The meaning of "buzz" or "hum" for "drūn" is not directly understood in Arabic, or Pashto. So, does the use of the loanword trivialise the phenomenon of drone warfare? Is the invasion, as it were, being repeated with the media-conveyed loanword that accompanies it? And, to invert the question, could empathy be generated by using language associated with the experiences of the victims of drone technology instead of using the

English loanword? Walter Benjamin (1977, 61) reminded us of Rudolf Pannwitz's idea that words from other languages would be able to shake our own understanding of the world and expand our horizons, and that instead of bringing our languages into the world, we should invite other languages into our world.

Taking now a closer look at the *Al Jazeera Encyclopae-dia* article, mentioned at last, in the following section I will focus on specific names of American drones such as *Predator*, *Reaper*, *Avenger*, and *Global Hawk* and reflect on their meanings and implications in Arabic. I will after that discuss the European drone project *Euro Hawk* and then return to the media platforms *Qantara.de* and *Deutsche Welle*.



## Predator, reaper, and avenger in Arabic

Besides the account of events that led to the technical development of drones, starting from World War I, around the same time when airplanes themselves were invented—the first engine-powered flight started in 1903 and a whole aerial war industry was developed between 1914 and 1918—the different types of drones, their costs, qualities, and utilisation are clarified in the *Al Jazeera Encyclopaedia* article published in 2015. Firstly, the *Predator* is mentioned:

"Hunāka naw' yatimm al-taḥakkum fīhi wa-tawjīhihi 'an bu'd mithl 'brīdātūr' ay al-muftaris." (There is the type that is controlled and directed remotely as exemplified by the 'brīdātūr' meaning the predator)<sup>18</sup>

This text is one of the rare examples where a direct translation of a drone name into standard Arabic has been given. Usually, the English names of the drones are adapted in Arabic or German without revealing their meaning. Looking, for example, at the Arabic-language Wikipedia, you will find only two references under the entry *Brīdātūr*, one to the 1987 US-film of the same name starring Arnold Schwarzenegger and one to the unmanned American reconnaissance aircraft. Brīdātūr is used here as a proper name and is not translated. 19 If you enter "predator" into the English version of Wikipedia, you get the following clarification: "A predator is an animal that kills other animals to eat." Under this explanation, various entries are listed in addition to the films from the *Predator* series (1987, 1990, 2010, and 2018), comics and video games, various novels-including the first in the Robots in Time series by the science-fiction author Isaac Asimov—music titles, band names, nicknames, names of sports teams, and also, names for military technology. Here, three UAVs have been called *Predator*: first, the *RQ-1 Predator*, in use as a surveillance drone for the USA between 1995 and 2018 (renamed MQ-1 Predator from 2001, which could now be armed with two missiles). Second, the MQ-9 Predator B, in use since 2001 and also known as MQ-9 Reaper, which can carry multiple missiles and stay in the air longer. And, third, Predator C, also known as General Atomics Avenger. Avenger can climb even higher, stay in the air longer, and carry more bombs and missiles.<sup>20</sup>

The development of the *Predator B drone* or *MQ-9 Reaper* is translated in the German edition of *Wikipedia* as "Sensenmann" (grim reaper). In the Arabic-language version, there is no translation given. The *Al Jazeera Encyclopaedia entry*, however, gives a translation:

"Brīdātūr' aw al-muftaris wa-r-rībr aw al-ḥaṣṣāda wahuma min ṣan' jinrāl awtūmīks fī madīnat sān dīyāġū." (Brīdātūr or the predator and ar-rībr or harvester are produced by General Atomics in San Diego)<sup>21</sup> Reaper is here translated as harvester, the meaning of grim reaper is thus not conveyed. The next generation of this drone type built by the same company carries the name General Atomics Avenger. No entry can be found so far for this model in the Arabic version of Wikipedia. Searching for the direct translation of avenger, muntaqim, one first finds a dozen entries on the four Avengers films (al-Muntaqimūn) of the Marvel universe (2012, 2015, 2018, 2019) before the entry on one of the ninety-nine most beautiful names of Allah (asmā' allāh al-ḥusnā) appears. It is the 81st name of Allah, according to the listing, the just retaliator (al-Muntaqim), that is referred to here, mentioned in the Qur'an in Sura 32:22, 43:41, and 44:16, while the two most important names being ar-Raḥmān (the compassionate) and ar-Raḥūm (the merciful).<sup>22</sup>

The genealogy of naming in relation to the first multifunctional drones deployed by the USA since the 1990s is therefore as follows: Predator, Harvester or Grim Reaper, and Avenger. In terms of the enemy image, and therefore also the victims of drone attacks, it runs from the animalistic, selectively killed prey to the harvest or the dead to the victim of revenge. All three names of American drones and related concepts are vexed, though revenge is possibly the most complicated and today most frowned-upon legal concept. The term is associated with a high degree of emotionality and unjustified vigilantism and is generally understood to diametrically oppose the modern state's legal understanding of and monopoly on the use of violence. Yet here it is, a supposedly legitimate name for a military drone in the Global War on Terror. Actually, if one thinks about it, that sums it up quite well, because the drone war does indeed undermine many people's legal understanding and sense of justice, especially in the areas where they are deployed. However, and as we have seen, the specific names given to drones by their producers are not necessarily known, let alone used in the languages of the people who are monitored and attacked by them.<sup>23</sup> They rather communicate something to us as spectators.

## **Global Hawk and Euro Hawk**

Let us now have a closer look at Europe's own involvement with drones. According to the NATO Treaty (Article 5), many European states, as members of NATO, declared a state of alliance one day after the 9/11 attacks and have since supported the *Global War on Terror* invoking the USA's right of self-defense according to UN Resolution 1368, which has been mainly performed via drone warfare.<sup>24</sup> Support for the fight against international terrorism is also legally legitimised by the proclamation of mutual assistance under article 42.7 of the EU Treaty, which was declared by the European Union following the attack by the organisation



named Islamic State (IS) in Paris on 13 November 2015. An important detail in relation to Germany and the American drone war is the existence of the US military base Ramstein on German territory close to the French border. The base has played a key role in the *Global War on Terror*, as American drones would not, for technical reasons, be able to operate at all in the Middle East and North Africa without the relay station at Ramstein (Gräf 2021).

Relatively detached from the discussion about the significance of Ramstein, and hence, the German and European responsibility within the *Global War on Terror* has been the debate about the procurement of Europe's own military drones. Since the end of the 1990s, the German Bundeswehr had been planning to acquire the large *Euro Hawk* reconnaissance drone, a modification of the drone type called *RQ-4 Global Hawk*, produced by the American company Northrop Grumman. The *Euro Hawk* project was started as a joint venture between the German company Airbus and Northrop Grumman. This gave rise to the company *EuroHawk* in 2005 with its seat in Friedrichshafen on Lake Constance, the same location in which the famous *Zeppelin* airship has been produced (Fig. 3).<sup>25</sup>

The name Euro Hawk follows the American name Global Hawk. Naming aircraft after birds of prey has a tradition in the US military. Another popular military aircraft, besides the Fighting Falcon that I mentioned in the beginning of this article, is the Black Hawk helicopter. It was named after Black Hawk, the native leader of the Sauk tribe in the American Midwest who lived from 1767 to 1838 and who was defeated in the war named after him in 1832 when he and his co-fighters tried to resist the US expansion into their territory at the time. Indigenous tribal leaders were named after animals either because they fought them and wore clothing made from their skin, fur, and feathers, or because they had characteristics resembling them, or because they possessed them in large numbers (Pinnow 1968). The US

military copied this practice, naming its equipment after the defeated leaders, taking their former signs of strength and turning it into a show of power strategy. For Raoul Peck, director of the TV series *Exterminate All the Brutes* (HBO, US 2021), naming American military equipment after indigenous Americans is evidence of the erasure, or at least complete ignorance, of the violent foundational past of the USA. But there is more to tell about the name *Global Hawk*. The name *hawk* is often used interchangeably with that of *falcon*. They are two different species of birds, but they have a lot in common and must rather be distinguished from eagles who

"[...] map to nation-states, not to modern war. Eagles are large, impressive, powerful. They connote old-fashioned styles of warfare: huge armies, large scale infantry movements and massive and deliberate strength. Falcons, however, are small. They possess immense speed, mobility, and range." (Macdonald 2006, 153)

Hawks are regarded the "wildest and proudest of living creatures" (Macdonald 2014, 66) and hawks and falcons are the "most successful predators on the planet—exceeded in its transcontinental range only perhaps by ourselves or the red fox" (Baker 2017, 1967, 10). <sup>26</sup> They are also identified as cruel to other birds, and they kill prey more than twice their size (Macdonald 2006, 40, 148).

Hawks, falcons, and eagles are the subject of taming known under the terminology of falconry which earlier also used to be called hawking (*al-ṣiqāra* is one of the names in the Arab tradition). Those powerful birds of prey have long military careers in many different traditions, especially falcons and hawks. Twentieth-century birds of prey have also been tasked with military roles far beyond airfield clearance or martial symbolism. In the Second World War, falcons for example were mobilised to capture pigeons and their post, and today, they carry sensors and cameras for monitoring on a global scale (Macdonald 2006, 158).<sup>27</sup> However,

Fig. 3 EuroHawk GmbH, Website under revision, Source: Eurohawk.de, Screenshot: http://www.eurohawk.de/





symbolism has kept strong as well. All the attributes of being agile, flexible, courageous, fearless, and aggressive come to mind when hearing the name *hawk*, although the drone assigned with the name *Global Hawk* is huge and meant for reconnaissance and not for killing. In any case, the attribute global in *Global Hawk* fits the idea of the "network-centric war, that is built on the concepts of global vision, surveillance, and rapid development" (Macdonald 2006, 153).

In 2011, one Euro Hawk demonstrator crossed the Atlantic and completed several test flights. This type of drone is larger than usual commercial airplanes and can stay in the air for around 30 h. In one flight, Euro Hawk would have been able to monitor the complete German territory (Franke 2018, 181–182). However, after technical difficulties and a heated debate in 2012 and 2013, the then German Defense Minister Ursula von der Leyen decided to stop the Euro Hawk project. The main reason was probably that Northrop Grumman did not want to share technical details with the German authorities. The cancelation cost about half a billion Euro and "caused enormous media attention and political turmoil in Germany" (Franke 2018, 182). It may be that the one Euro Hawk that made it to Germany will soon become a relic of the past as it will be donated to the aircraft museum in Berlin-Gatow (Monroy 2018; Wiegold 2021). The name of the drone project has in any case never been the problem. I did not come across any reflection in German media coverage about its implications.

A search for the name "Yūrū hawk" (Euro Hawk) on *Qantara.de* yields no results, but a search on *Deutsche Welle Arabic* brings up one hit—an article on the public discussions in Germany about a new European drone version after the failure of the *Euro Hawk* (Pöhle and Abdelkarim 2014). The article debates the difficulties the German government has in convincing the population of the need for Europe to produce its own powerful drones, although the idea has been to gain independence from American drone production. The main difficulty is the aversion of the public to armed drones, rather than to reconnaissance drones, but the difference has not always been crystal clear in the media coverage (Fig. 4).

The article goes on to say that the German company *Airbus*, the French *Dassault Aviation* and the Italian *Leonardo* are already in discussion about production details of the new drone, although financing for the project continues to be an issue. <sup>28</sup> In December 2021, the discussions about a European drone project are still ongoing. Meanwhile, Spain is also on board financing the new drone which is called *Eurodrone* (no entry so far on *Deutsche Welle* or *Qantara.de*):

"The European Remotely Piloted Aircraft System (RPAS) contract was supposed to be signed in 2019. However, the program was stalled following disagreements about the price of the drone, with some concerned that a MALE drone could hardly enter today's

market if it was more expensive than its competitors, especially the U.S.-built General Atomics Reaper drone." (Charpentreau 2021)

For the moment, the individual European states use different kinds of drone models that they either rent, buy, or build themselves. The German Bundeswehr had seven UAV types in use as of 2017, and over 600 drone vehicles (Franke 2018, 183). Since the year 2000, these have included the so-called LUNA X-2000—an acronym for "airborne unmanned close reconnaissance equipment" (Luftgestützte Unbemannte Nahaufklärungs-Ausstattung)—and since 2005 the Aladin or "airborne reconnaissance drone for close area imaging" (Abbildende Luftgestützte AufklärungsDrohne Im Nächstbereich). Both drones, which are small in comparison with other drones, have been produced by the German company EMT Penzberg, Bavaria, until recently and were also sold for civil usage.<sup>29</sup> The name Luna, Latin for moon, seems rather neutral, suggesting the possibility of bringing light into darkness (although the crescent moon, for example, is also an important symbol in Islamic iconography). The etymology for Aladin is symbolically charged with a clear reference to the Arab region and Islam. "Aladdin and the Magical Lamp" (in German, the name 'Ala' al-Dīn, Arabic for sublimity of faith, is transcribed as Aladin) is one of the best-known stories associated with the *Tales of 1001 Nights*. 30

The only institutions that have so far been systematically critical of Europe's commitment to military drones and its ignorance of the impact of drone warfare are non-governmental organisations. One example is the "Drone roundup" that is regularly provided by the European Forum on Armed Drones (EFAD), a civil society network of organisations working to promote human rights, respect for the rule of law, disarmament, and conflict prevention. Their work is motivated by their concerns about the opacity of government policies related to drone warfare, both European governments and others. Another example is the British NGO Bureau for Investigative Journalism (TBIJ). Founded in 2010 by Elaine Potter, they intensively collected, analyzed, and published data on drone strikes, injuries and fatalities in Afghanistan, Pakistan, Yemen and Somalia. Since February 2020, the NGO Airwars / al-Hurūb al-jawwiyya has taken on this task, now in a bilingual version that includes Arabic.31 Similar to EFAD, Airwars is committed to highlighting harm to civilians and the perspectives of the victims of drone warfare.

## **Conclusion**

In 2020, the German ministry of defense announced a broad social debate on the question of whether armed drones make sense for the German Bundeswehr. Using the hashtag



Fig. 4 One of many privately created posters in Berlin against the acquisition of combat drones: "The use of combat drones lowers the threshold for armed operations and terrorises the population of the affected regions. Victims are always those who cannot defend themselves—children, the elderly, women," Berliner Allee, Berlin-Weißensee, Photograph: Tobias Doetsch 2020



#DrohnenDebatte2020 for a debate on Twitter and launching a series of events throughout the year, the ministry sought to openly discuss the political, legal, and ethical aspects of arming to be armed drones (Schörnig 2020). Most of the events, however, took place online because of the COVID pandemic and it was not possible to achieve widespread media coverage. Neither *Deutsche Welle* nor *Qantara.de* published articles about it. There is no doubt that the debate is needed given the fast technical developments, the economic promise for companies involved, and the multiple players in the different fields. Autonomous drone systems, micro- and nano-drones as well as swarm drones are technical innovations that are already under way (Sauer 2019). In the discussion, different perspectives of the digital war phenomenon need to be examined, mainly those of the

victims of drone warfare, as well as those of drone pilots whose professional experience consists of a daily nine-to-five of remote observing and killing, but also the perspective of the spectators—journalists and academics. It could be more relevant to make these three overlapping perspectives clear instead of focusing on the security aspects of certain states or larger political entities like the European Union in a debate launched by the German ministry of defense. While *Deutsche Welle* does not achieve this, *Qantara.de*, as I have shown, has the potential to make other perspectives visible. Why similar articles about drone operations to the ones described above no longer appeared on *Qantara.de* after 2015 is an open question. Meanwhile, in September 2022, it was announced that the German foreign office would no longer be funding *Qantara.de* (Rüssmann 2022).



Again, not addressing the experiences of the victims of drone warfare in appropriate words seems to indicate a lack of sensitivity to a reality that exists worldwide. Moreover, and speaking with Ann Stoler, this suggests a colonial attitude. She distinguishes between a "colonial present," as in Iraq and Palestine today, and "colonial presence," which refers to the "complex ways in which people can inhabit enduring colonial conditions that are intimately interlaced with a 'postcolonial condition' that speaks in the language of rights, recognition, and choices" (2016, 33). It seems cynical and indicates of a "colonial presence" to first claim to wish to "establish a universal human culture," as Qantara. de does on its Arabic website and then have to withdraw multi-perspective publications due to lack of funding from the German government. However, drone warfare funding will be implemented.

#### **Notes**

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- 2. Susan Sontag (2004, 1–4) discusses the question of the extent to which war has a gender.
- 3. See for example Sabry (2017), who argues that we seek shelter in philosophising rather than looking into the face of the sufferer.
- 4. I thank Elke Posselt who provided me with the two
- "Atombombenabwürfe auf Hiroshima und Nagasaki," https://de.wikipedia.org/wiki/Atombombenabw%C3% BCrfe\_auf\_Hiroshima\_und\_Nagasaki.
- Verbatim the little boy and the fat man, https://
  ar.wikipedia.org/wiki/\_وشيم
  القصف الذري على مي وشيم النام والمارة المارة المار
- 7. Another type of Arabic-language media production in Europe began with transnational Arab newspapers with their headquarters in London—for example, Asharq al-Awsat (The Middle East, founded in 1978 by two Saudi businessmen), Al Hayat (The Life, 1988–2020), and AlQuds Alarabi (The Arab Jerusalem, 1989) (Rogler 2004). However, these privately founded newspapers, which have targeted audiences in Arab countries with up to 250,000 print copies produced every day, are not considered further in this article. For the larger and

- more complex transnational Arab media history, cf. Kraidy and Khalil 2009. Richter and Kozman 2021.
- 8. "About us," https://en.qantara.de/page/about-us.
- 9. "Man naḥnu" (Who we are), https://ar.qantara.de/page/about-us.
- 10. Different search terms are possibly to be used in Arabic to find articles about drones: \(\taa^i irat bid\tilde{u}n \tayyar/\ta^i irat bid\tilde{u}n \tayyar/\tayvar/\tai^i irat bid\tilde{u} \tayyar/\tayvar/\tayvar/\tayvar/\tayvar/\tayvar/\tayvar/\tavyar/\tayvar/\tay
- 11. Along with Isrāfīl, who blows the trumpet on the day of judgment, Jibrīl, the angel of revelation, and Mikā'il, who ensures nourishment (von Hees 2002, 254ff).
- 12. For example, one of those jokes goes like this: since the drone strikes in Afghanistan often happened at times when people were eating, they would shout loudly, "Where's the ketchup, you infidel?". I thank Thomas Gugler for insides concerning the names of drones in Pashto and Urdu as well as Motaz al-Khatib and Rahina Muazu concerning the metaphor of drones as angels of death (cf. Gräf 2021, 25).
- 13. He used the German title of the book *Frühstück mit der Drohne* (Breakfast with the Drone) (Qualey 2015b).
- 14. It was entitled "Amīrikā tastakhdim ṭāʾirāt bidūn ṭayyār li-l-qatl bi-l-sharq al-awsaṭʾ (America uses airplanes without pilots to kill in the Middle East), Aljazeera.net, December 7, 2008, https://www.aljazeera.net/news/presstour/2008/12/7/-المائيركا-تستخدم-طائراكا-المقتل بدون-طيار -للقتل بدون-طيار -للقتل
- 15. "aṭ-Ṭā'irāt bidūn ṭayyār wa-mustaqbal al-ḥurūb" (Airplanes without pilots and the future of wars), Aljazeera.net, October 1, 2011, https://www.aljazeera.net/news/international/2011/10/1/- المائ المائرات بدون طي المائرات.
- 16. The show was entitled "al-Drūnz... al-ḥarb al-ṣāmita" (Drones... the silent war), see Talkshow Fī l-'umq (In the deep), December 30, 2013, http://www.aljazeera.net/programs/in-depth/2013/12/ الدرونز-الحرب-الصامت المحافية على 30.
- 17. "Ṭāʾirāt bidūn ṭayyār" (Airplanes without pilots). Mawsūʿat al-Jazīra (Al Jazeera Encyclopedia), *Aljazeera.net*, August 3, 2015, https://www.aljazeera.net/encyclopedia/military/2015/3/8/.
- 18. "Ṭā'ira bidūn ṭayyār" (Airplane without pilots). Mawsūʿat al-Jazīra (Al Jazeera Encyclopedia), *Aljazeera.net*, August 3, 2015, https://www.aljazeera.net/encyclopedia/military/2015/3/8/ طائرة-بدون-طيار.
- 19. "Im Kiyū-1 Brīdātūr" (MQ-1 Predator), https://ar.wikipedia.org/wiki/يريدانور 1-ام كيو.
- 20. "Predator (disambiguation)", https://en.wikipedia.org/wiki/Predator\_(disambiguation).



- 21. "Ṭā'ira bidūn ṭayyār" (Airplane without pilots). Mawsū'at al-Jazīra (Al Jazeera Encyclopedia), *Aljazeera.net*, August 3, 2015, https://www.aljazeera.net/encyclopedia/military/2015/3/8/.
- 22. With the formula "In the name of the compassionate and merciful God", the so-called *basmala*, 113 of 114 suras are introduced in the Qur'an. For the importance of names in the Islamic tradition, see Pielow (2019).
- Three other types of drones are referred to in the respective entry in the Al Jazeera Encyclopedia entry in 2015, the "Abābīl," the "Būyīnġ Iks 45" and the "Glawbal hūk". Boeing X-45 was at the time the most advanced, so-called autonomous or smart drone built by Boeing Phantom Works, Global Hawk has been the largest reconnaissance drone available until today.  $Ab\bar{a}b\bar{\imath}l$  is the name of a reconnaissance drone built in Iran but also used by other groups like the Palestinian Hamas and the Lebanese Hizbollah. It means a flock of birds and refers to the birds mentioned in Qur'an, Sura 105:3, which once protected the Kaaba in Mekka from enemies by throwing small clay stones at them when they approached. Iran has developed reconnaissance drones since the 1980s, for example the series Muhājir (Arabic and Persian for immigrant).
- 24. However, that practice has been minimised under current US-president Joe Biden. In 2021, his first year in office, 54% less American drone attacks were executed worldwide (Shear and Tankersley 2021, Piper and Dykes 2021).
- 25. The German Zeppelin Sachsen itself was used to drop seven or eight bombs on the city of Antwerp of neutral Belgium in August 1914 at the beginning of World War I. See, among others, the propaganda postcard made of a painting by T. von Eckenbrecher, http://www.luftfahrtarchiv-koeln.de/Angriff Antwerpen.htm.
- 26. I thank Torben Hanhart for the references to literature on the cultural and military history of birds of prey.
- 27. In 1907, the photographer Julius Neubronner (b. 1851) patented a camera that could be attached to pigeons and would automatically take pictures as they flew (Fontcuberta 2017; Amin and Downey 2020, 67–68).
- 28. Deutsche Welle Arabic has, besides the one article about Euro Hawk, reported extensively on drones. A search for the names rībr (Reaper) and afīnjr (Avenger) shows no and for brīdātūr (Predator) seven entries, the search for the more neutral notion tā irāt bidūn tayyār (airplanes without pilots) shows over 1,000 entries, including one very short lexicon article: Ṭā irāt bidūn tayyār (Airplanes without pilot). Deutsche Welle, 8 August. https://p.dw.com/p/1GLCz.
- With the assassination of the government-critical journalist Jamal Khashoggi in the Saudi Consulate General in Istanbul in 2018, exports of drones to Saudi Arabia

- were banned by the German government. In addition, there were delays in the development of the EMT Luna NG, which caused the company to run into financial difficulties. In November 2021, it was announced that EMT was to be taken over by Rheinmetall AG as part of the strategic portfolio expansion (Monroy 2021).
- 30. Although the story was not part of the original collection and has no authentic Arabic text source, it was only included in the story collection by its French translator Antoine Galland in the year 1710. German Luftwaffe, furthermore, uses the Israeli MALE drones *Heron 1* and *Heron TP*. The English name is hinting to a freshwater bird. However, *Heron 1* is called in Hebrew, which most probably came first, *Machatz 1*, which translates into *crash*. *Heron TP* is called in Hebrew *Eitan* which translates into *steadfast*. None of these drones can be armed yet (Franke 2018, 17–18, 188).
- 31. Founder and director Chris Wood also had founded the drone project within TBIJ: https://airwars.org/ar/.

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## References

Abu Saif, Atef. 2015b. Frühstück mit Drohne. Tagebuch aus Gaza. Transl. by Marianne Bohn. Zürich: Unionsverlag.

'Ādil, Samar. 2020. al-Dawla al-'arabiyya allatī tamtaliku ṭā'irāt bidūn ṭayyār (The Arab countries that own airplanes without pilots). Almrsl.com, 19 Nov. https://www.almrsal.com/post/966584.

Amin, Heba, and Anthony Downey. 2020. Contesting post-digital futures: Drone warfare and the geo-politics of aerial surveillance in the middle east. *Digital War* 1: 65–73.

Amin, Heba. 2016. The General's Stork. Lecture Performance. https://www.hebaamin.com/works/the-generals-stork/.

Asad, Talal. 2017. Remarks on Allen Feldman's Archives of the Insensible. https://socialtextjournal.org/periscope\_article/remar ks-on-allen-feldmans-archives-of-the-insensible/ (Accessed Aug 12, 2022)

Baker, J.A. 2017 (1967). The Peregrine. London: William Collins.
 Bartsch, Matthias, Baumgärtner, Maik, Blome, Nikolaus, Darnstädt,
 Thomas, Gebauer, Matthias, Gude, Hubert and Rosenbach, Marcel. 2015. Bündnisse. Der Krieg via Ramstein. Spiegel Online,



- 18.04.2015, https://www.spiegel.de/spiegel/print/d-134104206.
- Benjamin, Medea. 2013. Drone Warfare. Killing by remote control. London: Verso.
- Benjamin, Walter. 1977. Die Aufgabe des Übersetzers. Illuminationen. Ausgewählte Schriften 1, ausgewählt von Siegfried Unseld. Frankfurt a.M.: Suhrkamp, pp. 50–62.
- Benjamin, Medea. 2014. Ḥarb al-ṭā'irāt bidūn ṭayyār. al-qaṭl bi-l-taḥakkum ʿan buʿd. Transl. by Ayham al-Sabagh. Doha: Muntadā l-ʿalāqāt al-ʿarabiyya wa-l-duwaliyya.
- Biermann, Kai and Thomas Wiegold. 2015. Drohnen. Chancen und Gefahren einer neuen Technik. Berlin: Ch. Links Verlag.
- Boyd, Douglas. 2003. Sharq Al-Adna/the voice of Britain: The UK's 'Secret'Arabic radio station and Suez War Propaganda Disaster. *Gazette (Leiden, Netherlands)* 65 (6): 443–55.
- Brant, George. 2013. Grounded. https://www.fischer-theater.de/theater/autor/george-brant/t4215743.
- Cardoso, Gonçalo. 2015. A Study into 21st Century Drone Acoustics. Record. London: Discrepant.
- Carter, Sara A. 2008. Delivering devastation. The Washington Times, 7 Dec.
- Chamayou, Grégoire. 2013. Théorie du drone. Paris: La Fabrique.
- Chamayou, Grégoire. 2015. A theory of the drone. Transl. by Janet Lloyd. New York: The New Press.
- Chamayou, Gregoire. 2011. The manhunt doctrine. Radical Philosophy 169(5). https://www.radicalphilosophy.com/commentary/the-manhunt-doctrine.
- Charpentreau, Clement. 2021. Eurodrone program stalls as Spain delays approval. Aerotime Hub, 2 Dec. https://www.aerotime.aero/articles/29611-eurodrone-program-stalls-as-spain-delays-approval
- Downey, Anthony, ed. 2020. *Heba Y. Amin. The General's Stork*. London: Sternberg Press.
- El-Ariss, Tarek. 2019. *Leaks, hacks, and scandals. Arab culture in the digital age*. New York: Princeton University Press.
- Fast, Omar. 2016. 5,000 Feet Is the Best. In Watched! Surveillance, Art and Photography, ed. Louise Wolthers, Dragana Vujanovic, and Niclas Östlind, 134–39. Köln: Verlag der Buchhandlung Walther König.
- Feroz, Emran. 2014a. Leben unter 'Todesengeln'. Qantara.de, 10 Nov. https://de.qantara.de/inhalt/drohnen-krieg-in-afghanistan-und-pakistan-leben-unter-todesengeln.
- Feroz, Emran, 2014b. Living in the shadow of the 'angels of death'. Transl. by Jennifer Taylor. Qantara.de, 14 Nov. https://en.qantara.de/content/drone-war-in-afghanistan-and-pakis tan-living-in-the-shadow-of-the-angels-of-death.
- Feroz, Emran. 2014c. Ḥayāt taḥt raḥmat 'malā'ikat al-mawt' (Living in the grace of the 'angels of death'). Transl. by Ra'id al-Bash. Qantara.de, 31 Dec. https://ar.qantara.de/node/18637.
- Feroz, Emran. 2017. Tod per Knopfdruck. Das wahre Ausmaß des US-Drohnen-Terrors oder Wie Mord zum Alltag werden konnte. Frankfurt am Main: Westend.
- Fontcuberta, Joan. 2017. Dronifying Birds, Birdifying Drones. In Degiorgis, Nicolò and Solomon, Audrey. eds. The Pigeon Photographer. Longo: Rorhof, pp. iii-xxx.
- Franke, Ulrike, 2014. U.S. drones are from mars, Euro drones are from venus. War on the rocks, 19 May. https://warontherocks.com/2014/05/u-s-drones-are-from-mars-euro-drones-are-from-venus/.
- Franke, Ulrike. 2018. The Unmanned Revolution. PhD thesis. https://ora.ox.ac.uk/objects/uuid:ab40b722-2613-478a-912c-5b06307a34 35/download\_file?file\_format=pdf&safe\_filename=FRANKE% 2BUnmanned%2BRevolution%2BDissemination%2Bversion. pdf&type\_of\_work=Thesis.
- Gräf, Bettina. 2021. Rezo, Ramstein und Drohnentötungen im Jemen. Berlin: De Gruyter.

- Gräf, Bettina. 2010. Medien-Fatwas@Yusuf al-Qaradawi. Die Popularisierung des islamischen Rechts. Berlin: De Gruyter.
- Gusterson, Hugh. 2016. *Drone. Remote control warfare*. Cambridge: The MIT Press.
- Hanif, Mohammed, 2018, Red Birds, London: Bloomsbury,
- Hees, Syrinx von. 2002. Enzyklopädie als Spiegel des Weltbildes. Qazwīnīs Wunder der Schöpfung. Eine Naturkunde des 13. Jahrhunderts. Wiesbaden: Harrassowitz.
- Hersh, Seymour M. 2002. Manhunt. The New Yorker, 16 Dec. https://www.newyorker.com/magazine/2002/12/23/manhunt.
- Hippler, Jochen. 2019. Krieg im 21. Jahrhundert. Militärische Gewalt, Aufstandsbekämpfung und humanitäre Intervention. Wien: Promedia.
- International Human Rights and Conflict Resolution Clinic at Stanford Law School. 2012. Living under drones. Death, injury and trauma to civilians from US Drone Practices in Pakistan. Stanford Law School. https://law.stanford.edu/publications/living-underdrones-death-injury-and-trauma-to-civilians-from-us-drone-practices-in-pakistan/.
- Kennebeck, Sonia. 2016. National Bird. Ten Forward Films, DL/US. Kraidy, Marwan M., and Joe F. Khalil. 2009. *Arab television industries*. New York: Palgrave Macmillan.
- Krishnan, Armin. 2012. Gezielte Tötung. Die Individualisierung des Krieges. Berlin: Matthes & Seitz (engl. 2009).
- Macdonald, Helen. 2006. Falcon. London: Reaktion Books.
- Macdonald, Helen. 2014. H is for Hawk. London: Jonathan Cape.
- Marsiske, Hans-Arthur. ed. 2012. Kriegsmaschinen, Roboter im Militäreinsatz. Hannover: Heise.
- Michaelsen, Marcus and Akbar, Mirza Shahzad. 2012a. Für Gerechtigkeit und Transparenz. Qantara.de, 2 May. https://de.qantara.de/node/4591.
- Michaelsen, Marcus and Akbar, Mirza Shahzad. 2012b. Fighting the injustice of the US drone programme. Transl. by Jennifer Taylor. Qantara.de, 2 May. https://en.qantara.de/node/4591.
- Michaelsen, Marcus and Akbar, Mirza Shahzad. 2012c. al-Ḥujaj al-amīrikiyya al-khāṣṣa bi-l-difāʿʿan al-nafs laysat illā nukta (The specific American arguments regarding self-defense are nothing but a joke). Transl. by Raʾid al-Bash. Qantara.de, 2 May. https://ar.qantara.de/node/4591.
- Milkman, Arielle Janet. 2017. Drone. Anthropology, Poetry, Military Cultural Anthropology, Podcast. https://culanth.org/fieldsights/1197-drone-anthropology-poetry-military.
- Monroy, Matthias. 2018. Zum Wegwerfen zu schade. Riesendrohne 'Euro Hawk' soll verkauft werden. Netzpolitik.org, 23 May. https://netzpolitik.org/2018/zum-wegwerfen-zu-schade-riese ndrohne-euro-hawk-soll-verkauft-werden/.
- Monroy, Matthias. 2021. Takeover of German manufacturer: Rheinmetall re-enters the drone business. Security architectures in the EU, 25 Nov. https://digit.site36.net/2021/11/25/takeover-of-german-manufacturer-rheinmetall-re-enters-the-drone-business/.
- Osman, Wazhmah. 2017. Jamming the Simulacrum. On Drones, Virtual Reality, and Real Wars. In Delaure, Marilyn and Fink, Moritz. eds. Culture Jamming. Activism and the Art of Cultural Resistance. New York, NY: New York University Press, pp. 348–364.
- Parks, Lisa, and Caren Kaplan, eds. 2017. *Life in the Age of Drone Warfare*. Durham: Duke University Press.
- Peck, Raoul. 2021. Exterminate All the Brutes. HBO, US.
- Pielow, Dorothee. 2019. Ach wie gut, dass niemand weiß... Die Bedeutung des geheimen Namens in der islamischen Magie. In Günther, Sebastian and Pielow, Dorothee. eds. Die Geheimnisse der oberen und der unteren Welt. Leiden, Boston: Brill, pp. 347–70.
- Pinnow, Heinz-Jürgen. 1968. Zu den Eigennamen der Apachen-Häuptlinge. Anthropos 63/64(3/4): 441–56.
- Piper, und Dyke. 2021, How do the 'forever wars' look under president Biden? Airwars.org, 22 Dec. https://airwars.org/news-and-investigations/how-do-the-forever-wars-look-under-president-biden/.



Pöhle, Sven and Imara, Abdelkarim. 2014. Jadal fī almāniyā ḥawl nuṣkha ūrūbiyya jadīda min 'drūn' (Debate in Germany about a new European 'drone' version). Deutsche Welle, 21 May. https://p.dw.com/p/1C2xr.

- Qualey, Marcia Lynx. 2015a. A war without distinct edges. Qantara.de, 18 August. https://en.qantara.de/content/book-review-the-drone-eats-with-me-by-atef-abu-saif-a-war-without-distinct-edges.
- Qualey, Marcia Lynx. 2015b. Krieg ohne klare Grenzen. Qantara.de, 10 September. https://de.qantara.de/inhalt/atef-abu-saif-fruehstueck-mit-der-drohne-tagebuch-aus-gaza-krieg-ohne-klare-grenzen.
- Qualey, Marcia Lynx, 2016. Adab al-hiṣār... 'al-Zannāna ta'akkul maī' mathalan (Literature of siege... 'The drone eats with me' for example). Transl. by Ibtisam Fawzi. Qantara.de, 5 March. https:// ar.gantara.de/node/20937.
- Reintjes, Thomas. 2015. 1 oder 0, Leben oder Tod. Kampfroboter Blog. Deutschlandfunk Kultur. http://blogs.deutschlandfunk.de/Kampfroboter/2013/12/18/1-oder-0-leben-oder-tod/.
- Richter, Carola, and Claudia Kozman, eds. 2021. *Arab media systems. Global communications*. Cambridge: Open Book Publishers.
- Rogler, Lutz. 2004. Die überregionale arabische Presse und ihr Beitrag zum Wertewandel in arabischen Gesellschaften. In Politische und gesellschaftliche Debatten in Nordafrika, Nah- und Mittelost: Inhalte, Träger, Perspektiven, ed. Sigrid Faath, 423–447. Deutsches Orient-Institut: Hamburg.
- Rushdie, Salman. 2021a. Languages of Truth. Essays 2003–2020. New York: Random House.
- Rushdie, Salman. 2021b. Sprachen der Wahrheit. Texte 2003–2020. Transl. by Sabine Herting and Bernhard Robben. München: C. Bertelsmann.
- Rüssmann, Ursula. 2022. Islam-Portal Qantara.de droht das Aus. Frankfurter Rundschau, 1 September. https://www.fr.de/politik/islam-portal-droht-das-aus-91761274.html.
- Sabry, Tarik. 2017. Mediatization, suffering and the death of philosophy. Westminster Papers in Communication and Culture 12 (1): 28–29
- Saif Atef, Abu. 2015. *The drone eats with me. A Gaza diary*. Boston: Beacon Press.
- Sauer, Heiko. 2019. Angst vor der eigenen Courage? Licht und Schatten im Drohnenurteil des OVG Münster. Verfassungsblog, 22 Mar. https://verfassungsblog.de/angst-vor-der-eigenen-courage-licht-und-schatten-im-drohnenurteil-des-ovg-muenster/.

- Schörnig, Niklas. 2020. Die Drohne kommt. Was die aktuelle #Drohnendebatte2020 noch bringen kann und was nicht. PRIF BLOG, 19 May. https://blog.prif.org/2020/05/19/die-drohne-kommt-was-die-aktuelle-drohnendebatte2020-noch-bring en-kann-und-was-nicht/.
- Shear, Michael D. and Tankersley, Jim. 2021. Biden defends Afghan pullout and declares an end to nation-building. The New York Times, 1 September 2021. https://www.nytimes.com/2021/09/01/us/politics/biden-defends-afghanistan-withdrawal.html.
- Singer, P.W. 2009. Wired for War. The robotics revolution and conflict in the twenty-first century. New York: Penguin Press.
- Sontag, Susan. 2004. Regarding the Pain of Others. London: Penguin Random House.
- Stahl, Roger. 2015. Media and the Military. The Full Spectrum? In Parcell, Erin Sahlstein and Webb, Lynne M. eds A Communication Perspective on the Military. Interactions, Messages, and Discourses, New York: Peter Lang Publishing Inc., pp. 161–77.
- Steyerl, Hito. 2014. Liquidity Inc. Icaboston.org. https://www.icaboston.org/art/hito-steyerl/liquidity-inc.
- Stubblefield, Thomas. 2020. *Drone art: The everywhere war as medium*. California: University of California Press.
- Süß, Dietmar. 2011. Tod aus der Luft. Kriegsgesellschaft und Luftkrieg in Deutschland und England. München: Siedler.
- Tawil-Souri, Helga. 2016. Technology's Borders. The U.S., Palestine, and Egypt's Digital Connections. In *American studies encounters the Middle East*, ed. Alex Lubin and Marwan M. Kraidy, 263–85. Chapel Hill: University of North Carolina Press.
- Weber, Jutta, and Lucy Suchman. 2016. Human-Machine Autonomies. In *Autonomous Weapons Systems*, ed. Nehal Bhuta, Susanne Beck, Robin Geiß, Hin-Yan. Liu, and Claus Kreß, 75–102. Cambridge: Cambridge University Press.
- Weber, Jutta. 2012. Vorratsbomben im Himmel. In Marsiske, Hans-Arthur. ed. Kriegsmaschinen. Roboter im Einsatz. Hannover: Verlag Heinz Heise, pp. 31–54.
- Wiegold, Thomas. 2021. Der EuroHawk kommt ins Museum. Augen geradeaus!, 16 March. https://augengeradeaus.net/2021/03/dereurohawk-kommt-ins-museum/.
- Wilcox, Lauren. 2017. Embodying algorithmic war. Gender, race, and the posthuman in drone warfare. Security Dialogue 48 (1): 11–28.
- Zöllner, Oliver. 2006. A quest for dialogue in international broadcasting. Germany's public diplomacy targeting Arab audiences. *Global Media and Communication*. 2 (2): 160–82.

