

The Drones of Others: An Insight into the Imagination of UAVs in Germany

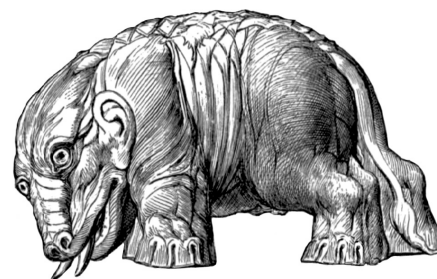
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Abstract:

Unmanned aerial vehicles (UAVs) have come to be a central military technology in the current era and have also recently entered the civil sector. Like any technology, UAVs are not just a technical object with distinct technical qualities but also the product of social negotiations and imaginations in public discourses. This article takes the word *drone* as a distinct component of these negotiations and imaginations of UAVs. With an interest in the German imagination of UAVs, the article presents an analysis of what is captured in the word *Drohne* (*drone*) in a corpus generated from an established German news platform. This analysis provides insight into the meanings attached to the word *Drohne*, such as ‘military power’, ‘hyper-progress’ and ‘threat to extant technology’. Importantly, it uncovers the distinction between two kinds of ‘Drohnen’: actors and tools, and unveils a geography of ‘Drohne’, in and through which ‘Drohnen’ are ‘managed’. With that, the analysis reveals an intriguing subtle theme in the social negotiation of UAVs in Germany. In this theme the technology ‘Drohne’ is imagined as potentially ‘game changing’ in nature. At the same time, it is symbolically ‘tamed’ and organised through a (modern) understanding of bordered social ‘containers’ in which ‘Drohnen’ are imagined to exist and are subject to ‘compartmentalised’ responsibilities.

Keywords: drone, UAV, Germany, social construction, collective imagination, public discourse

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Introduction

Aerial vehicles without a human operator on board that fly via remote control or guided by dynamic automation systems (UAVs) have come to be a central military technology in the current era. They are appreciated by their proponents as “[g]ood for ‘dull, dangerous and dirty’ tasks” (Brooke-Holland 2015, 6). Over the past years, UAVs have also come to be of interest beyond the military sector, for public non-military and civil uses and as consumer goods.

With the general spread of UAVs and especially their deployment for ‘targeted killings’/‘extrajudicial executions’ in Afghanistan, Pakistan, Yemen, Somalia and elsewhere, the technology has entered public debates. In addition to concrete concerns about the legality of the use of armed UAVs in combat zones, they are perceived as potential ‘game changers’ in regard to state-sponsored violence, e.g. as a(n advanced) first step in a trajectory towards the development and deployment of autonomous weapons. There are also increasing concerns about the potentially new kind of surveillance they enable. More generally, the production and deployment of UAVs produce ‘global risks’, i.e. potential consequences that can no longer be captured through established (modern nation-state) conceptions (Beck 2009).

Like any technology, UAVs are not just technical objects with distinct technical qualities and a pre-set pathway. They are the product of social, political and cultural processes, which feed into their invention and development and shape the context in which they are imagined, i.e. in which they are ascribed with meanings and functions. An important aspect of the shaping of this context are social negotiations of the technology in public discourses. These negotiations and imaginations “provide both conditions of possibility and limits on possibility; that is, they make it possible to act in the world while simultaneously defining the ‘horizon of the taken-for-granted’ (Hall 1988: 44).” (Weldes et al 1999, 17)

This article takes the word *drone* as a distinct component of these negotiations and imaginations of UAVs. What is special about the word *drone* is that it is used by many as a signifier for all kinds of civil and military UAVs. It brings together and contains meanings from different discourses. As such, it can be taken as a burning glass, in which meanings are thickened and crystallised; it can be seen as a magnet that attracts attention, binds all sorts of meanings from different (including military and civil) discourses and carries them from one (UAV-related) debate to another.

With an interest in the German imagination of UAVs, this article presents an analysis of what is captured in the word *Drohne* (*drone*) in a corpus generated from an established German news platform. This analysis provides insight into the meanings attached to the word *Drohne*, such as ‘military power’, ‘hyper-progress’ and ‘threat to extant technology’. Importantly, it uncovers the distinction between two kinds of ‘Drohnen’: actors and tools, and unveils a geography of ‘Drohne’, in and through which ‘Drohnen’ are ‘managed’. With that, the analysis reveals an intriguing subtle

theme in the social negotiation of UAVs in Germany. In this theme the technology 'Drohne' is imagined as potentially 'game changing' in nature. At the same time, it is symbolically 'tamed' and organised through a (modern) understanding of bordered social 'containers', in which 'Drohnen' are imagined to exist and are subject to 'compartmentalised' responsibilities.

UAVs: potential 'game changers', 'global risks' and social constructions

UAVs have come to be a central military technology in the current era, an assemblage of systems within an assemblage of systems that is used within a 'networked' approach to warfare. The technology of UAV is proliferating (e.g. GAO 2012). Today, "there is not a single new manned combat aircraft under research and development at any major Western aerospace company" (Singer 2012), but a mushrooming number of programmes that focus on UAVs. Over the past years, UAVs have also come to be of interest beyond the military sector, for public non-military and civil uses and as consumer goods. They are employed in the context of border protection, to surveil protesters, for disaster response, land mapping, and as consumer goods. "[F]ive years ago consumer drones didn't exist. Even two years ago, low-cost and easy-to-use commercial drones were largely the subject of futurism. Today the [...] global market for nonmilitary drones has already ballooned into a \$2.5 billion industry, one that's growing 15% to 20% annually." (Dillow 2014). [2] The interest in developing (sub-systems that constitute) UAVs is not only fueled by the market for the relevant hard- and software but by an interest in (personal) data, "the new 'oil'", as the World Economic Forum (2011, 15) calls it. Following Dillow (2014), the "UAV boom in the heart of techland makes a lot of sense once you realize that America's drone industry is tied up inextricably with the ongoing explosions in data analytics and the so-called Internet of things."

UAVs can be seen as potential 'game changers' in regard to state-sponsored violence in that the technology could be the (advanced) first step in a trajectory towards the development and deployment of autonomous weapons and a kind of warfare in which humans and immediate human decisions disappear (e.g. Singer 2012). Furthermore, UAVs are potential 'game changers' in regard to the new kind of surveillance and (big) data generation they enable. [3]

More generally, the development and deployment of UAVs can be seen as producing 'global risks' (Beck 2009), i.e. as having potential consequences that cannot be treated as if they were 'tameable' through more knowledge, that are potentially 'non-knowable', as well as potentially 'socially delimited in space and time' (Beck/Grande 2010, 418). As such the development and deployment of UAVs brings into question the assumption that it is possible to control and compensate for their potential consequences in a way that used to be the 'natural' way of dealing with unintended consequences of industrial-economic decisions, namely through the modern concept of 'risk', and based on the idea of bordered national societies (Beck 2009). On the contrary, they

[2] As for the European Commission (2012) the development of UAVs for the use in civil contexts is seen by many as *the* new "opportunities to boost industrial competitiveness, promote entrepreneurship and create new businesses in order to generate growth and jobs."

[3] For the insight that some UAVs generate 'big data' through a device called 'Air Handler' see Andrejevic and Gates, 2014.

inevitably bring the ‘global other’ into the decisions and actions of other ‘global others’, no matter if this is understood and acknowledged, or not (Beck and Grande 2010, 417). As such, the development and deployment of UAVs produce a social reality that questions the supposed ‘naturalness’ of its established modern nation-state institutions and their underlying logic; it reveals them as ‘zombie institutions’ (e.g. Beck in: Boyne 2001).

Like all technologies, UAVs are more than technical artefacts with a distinct set of qualities that are applied and have an impact on the social world. They are not simply about a set of options and trajectories that social actors are confronted with and have to adjust to (e.g. Rothstein 2015; in general, MacKenzie/Wajcman 1999; Bijker et al. 2012). They are the product of social, political and cultural processes, which feed into their invention and development and shape the context in which they are used and ascribed with meanings and functions (in general, Zurawski 2015), and in which they are perceived as producing ‘global risks’ (or not).

One of the multiple aspects that play into the social production and reproduction of UAVs are symbolic references to this technology in public discourses. In these discourses the frame of meanings is established, within which the technology UAV and the way it is used makes sense (or not). As Carlson (1992, 177) highlights, the fashioning of the frame of meanings around a technical artefact is an essential aspect for its ‘success’ and acceptance. With every public engagement this frame of meanings is shaped and socially ratified, which opens and closes possibilities of the technology’s uses and functions. It matters how UAVs are imagined.

The label *Drone*

In the case of UAVs there is an intriguing aspect about the public engagements with the technology. This is the word *drone*. It is used as the label for all kinds of manifestations of UAVs – from the infamous *MQ-1 Predator*, which is used for ‘targeted killings’/‘extrajudicial executions’ in Afghanistan, Pakistan, Yemen, Somalia and elsewhere, to €25-hobby-UAVs, like the *JJRC H20 Nano Hexacopter*.

The word *drone*, as Zaloga explains, “is one of the oldest official designations for remotely controlled aircraft in the American lexicon.” (quoted in Mehta 2013) It dates back to 1935 when it was used to refer to aerial vehicles that were built to serve for gunnery practice. As Zaloga (ibid.) points out, the label *drone* was chosen in reference to the British Royal Navy’s system with the same function that was called DH 82B *Queen Bee*. The *Queen Bee* served as a template for the US ‘drone’. Hence, the word *drone* was chosen.

Even though these ‘drones’ were developed from ‘passive’ targets into ‘active’ (observation-)vehicles, until today the label *drone* has remained a central linguistic sign in the social negotiations and imaginations of the technology UAV. This is despite the fact that there is some discomfort with the word in official (US) military circles as well as among industry representatives. For instance, the President of the Association for Unmanned

Vehicle Systems International (AUVSI), Toscano (2013), rejects the word *drone* as he perceives it to have “a hostile connotation and does not reflect how UAS are actually used.” [4] The WiFi password in the media room at the 2013 AUVSI Convention was ‘DontSayDrones’ (Wolfgang 2013). In a similar vein, an internal US government website, that was published via Wikileaks, warns that “[a]dversaries have developed propaganda campaigns that target UAV use.” (NSA URL) In these campaigns, the US National Security Strategy claims, they use the term ‘drone strike’ as a “loaded term” that “evokes many things to English-speaking audiences, which may invoke in an emotional reaction. This is what propaganda intends to do. Drones connote mindless automations with no capability for independent thought or action.” (ibid.) Given the NSA’s understanding of the word *drone* as a loaded and propagandistic word applied by their ‘adversaries’, its use in the following abstract from a U.S. Department of Defense (DoD) News Article about developments in Iraq and Syria is intriguing:

“Also related to operations in Iraq and Syria, [Pentagon spokesman] Warren discussed an ISIL drone destroyed near Fallujah yesterday and a remotely piloted aircraft downed in Syria on March 17. On the ISIL drone, Warren said the department had assessed it to be a commercially available remotely piloted ‘model airplane’, and the sort of device that anyone could buy commercially. [...] On the remotely piloted aircraft downed in Syria, Warren confirmed that [...] U.S. military controllers lost contact with an unarmed U.S. MQ-1 Predator remotely piloted aircraft operating over northwestern Syria.” (Pellerin 2015)

It is apparent that the US DoD applies the word *drone* to address ISIL’s UAV and uses the expression *remotely piloted aircraft* for its own *Predator* UAV. It applies the same rhetoric strategy that it warns its ‘adversaries’ use to discredit US strikes with UAVs.

What makes the word *drone* an intriguing aspect of the public engagements with the technology UAV then is that there seems to be more to it than its referential function. It seems to prompt emotions and trigger strong connotations. It is filled with complex meanings and associations. In the word *drone* ideas of UAVs from different discourses come together. As such, it can be taken as a magnet that attracts attention and meanings, as a burning glass that thickens meanings, binds them and carries them from one discourse to another, helping to weave together public imaginations of UAVs. In this sense, to unveil what is in the word *drone* entails gaining insight into a distinct component of the imaginations that form UAVs.

Investigating *Drohne* in Germany

As in English language discourses, in Germany, too, the word *Drohne* is used as a signifier for all kinds of civil and military UAVs. So, what is behind the word *Drohne* in Germany? How is a ‘Drohne’ imagined and what does it bring into the social construction of UAVs, a technology which has only recently become subject to critical public discussions in Germany?

[4] In a similar vein, in a written statement provided to the UK Defence Committee (2014) General Atomics Aeronautical Systems, the producers of *Predators* and *Grey Eagles*, criticises that “[r]eference to RPA [Remotely Piloted Aircraft] as ‘drones’ has a pejorative connotation that belies their proven beneficial role in humanitarian crises.”

In order to take a step towards answering these questions a corpus is needed that captures the use of the word *Drohne* across (military and civil) debates. The corpus needs to be wide enough as to enable the detection of patterns and the development of general claims and, yet, still manageable for a systematic qualitative approach. For the establishment of the corpus it is particularly important to take into account a diversity of uses of the word from across debates because, after all, what is intriguing about the word *Drohne* is that it constitutes something like a magnet, in which meanings from different discourses come together and are thickened. It is not about finding out what is meant by 'Drohne' in a particular debate, e.g. in the debate about the use of UAVs for 'extrajudicial killings', but about ideas associated with the word *Drohne* more broadly.

For this present study I generated a database with uses of the word *Drohne* from the German edition of the online news platform *Spiegel Online* (Spon). Looking at the use of *Drohne* in a news medium is advantageous in a practical sense because, there, the word is deployed in diverse (including military and civil) contexts. At the same time, one can premise that the language use(d) in established news outlets mirrors, captures and also somewhat shapes the broader (socially ratified) language. An *online* news platform is a particularly valuable source in this respect because it generates a high number of outputs by different authors.

Spiegel Online is the online presence of the German news magazine *Der Spiegel*, a weekly, centre-left publication that was established in 1947. Spon is the oldest online presence of a news magazine in the world (Ehrenberg in Bönisch 2005, 52), and one of the three farthest-reaching news portals in Germany (Statista, 2015). At present, a team of 150 journalists produces *Spiegel Online*. Together, *Der Spiegel* and *Spiegel Online* are the second most cited German news sources (Presseportal, 2014). The nature of Spon's content is a mix of quality and background journalism, as well as tabloid content and a set of opinion columns. The range of themes covered is wide, with categories ranging from 'Politics' to 'Net-world', including sub-themes such as 'Games', 'Gadgets', 'Apps' and 'Copyright'.

In order to have a manageable database I chose to focus on the use of the word *Drohne*, and its modifications, during one full year in Spon, namely 2014, while being aware that a study of the use of the word in such a confined corpus should be extended and complemented in the future with studies of bigger corpora, including uses of the word in differently politically positioned sources, such as the centre-right news platform *Focus Online*.

My Spon-corpus contained 1,046 appearances of the word, across 238 articles. The overall aim of the analysis was to gain insight into the meanings attached to the word *Drohne*. For that a qualitative approach was chosen. The analysis was open in the sense that it was not guided by pre-set hypotheses or a pre-set and standardised coding scheme. The only categories I applied from the outset were 'military theme' and 'civil theme'. Overall, codes and categories were 'flexible' (Schreier 2013, 171) and data-driven, i.e. generated from within the text corpus. A combination of established political language and content and text analytical research strategies was applied (e.g.

Charteris-Black 2014; Fairclough 2001; Schwarz-Friesel/Consten 2014; Mayring 2010; Schreier 2013). Although these strategies contained methods that are usually found in quantitative studies, such as the determination of collocations, [5] the distribution of the word in a distinct text and across the global corpus, explicit problematisations of the word, and evaluative contextualisations (e.g. Girnth, 2002, 67), findings about linguistic aspects of the text corpus served only as a means to a semantic end. In the manner of qualitative content analyses, the analysis was about the detection of patterns through the re-organisation of the content. Despite being open and flexible in nature, the analysis and interpretation were coloured by the earlier outlined pre-analytical understanding of UAVs as potential ‘game changers’, ‘global risks’ and social constructions.

[5] I used the computer programme *Ant-Conc* for this.

Overview: *Drohne* in the Dataset

The word *Drohne* and its modifications appear 1,046 times in the corpus, in a total of 238 articles. In 169 instances, it is used in constellations such as *Drohnenkrieg* (‘drone war’). In 79 instances it is used in constellations such as *Aufklärungsdrohne* (‘reconnaissance drone’). The word *Drohne* and its modifications are used in 141 articles that relate to the ‘military’ and in 97 articles that fall into the category ‘civil’. The articles that relate to the military can be divided into reports about the use of UAVs in combat zones and articles that are about issues such as debates about the necessity for Germany and Europe to develop an UAV that could be armed, Obama’s broader security policies, including the US use of UAVs, or Israel’s strong position in the UAV market. 32% of the articles are specifically about the referent of the word *Drohne*; in the others *Drohne* is used in a broader context.

‘Drohne’: Thing, actor and tool

The first insight to be gained from the corpus is that a ‘Drohne’ is, first and foremost, a generic ‘thing’. It is striking that throughout the corpus the word *Drohne* is used without clarification or specification as to the concrete nature of its *signified*. No matter whether the word is used in reports about ‘targeted killings’/‘extrajudicial executions’ in Somalia (Spon 2014a) or in relation to Walt Disney’s plans to use a ‘Drohne’ to carry giant puppets in a parade (Spon 2014b), the word *Drohne* is applied without specification of what kind of technical artefact it actually refers to in the respective context. Will Disney’s ‘Drohne’ be armed? Is the ‘Drohne’ that killed Tahlil Abdi Shakur in Somalia the same as the one that Facebook is developing for the purposes of extending internet access to remote parts of the world (Spon 2014c)? A ‘Drohne’ is a ‘Drohne’ is a ‘Drohne’ in the corpus, a generic ‘thing’ that is not perceived as requiring further explanation as to how it looks and what kind of artefact it is.

Closer investigation then reveals that there are two kinds of this generic thing ‘Drohne’. First, a ‘Drohne’ is an ‘actor’ that *does* something. A ‘Drohne’

kills, attacks, hits and targets – and it does this autonomously, as a self-guided actor, as a subject: ‘On Wednesday morning a US-drone [...] hit four Pakistani Taliban’ (Spon 2014d; here and in the following all translations are my own); ‘US-drones kill dozens of Qaeda-fighters’ (Spon 2014e); ‘Fighter jets and drones are said to have attacked [...] jihadists’ (Spon 2014f). Second, a ‘Drohne’ is a ‘tool’. As such, it does not act autonomously but is *developed* and *used by* social actors, such as Facebook and Amazon, or by a photographer, who takes aerial pictures of the city of Chernobyl (Spon 2014s).

The imagination of ‘Drohne’ as a generic thing that operates either as an autonomous ‘actor’ or as a ‘tool’ is interesting because it is linked to a distinct ‘geography of ‘Drohnen’ that is manifest in the corpus.

The Geography of ‘Drohnen’

There is a distinct geography of ‘Drohnen’. This geography is constituted by what can be imagined as ‘fields’ of meaning. Each of the two kinds of ‘Drohnen’ (actor and tool) operates in one of these two ‘fields’. Putting it the other way around, the two kinds of ‘Drohnen’ constitute two distinct ‘fields’, which form a geography of ‘Drohnen’. Notably, these two fields do not fall into line with the categories of ‘military’ and ‘civil’.

Field 1: US-led fight against insurgency and terrorism

The first ‘field’ of the geography of ‘Drohnen’ that is apparent in the corpus relates to the US-led fight against insurgency and terrorism in places such as Afghanistan, and Pakistan. It is grounded in an homogenous idea of ‘Drohne’ as an autonomous actor, i.e. in the idea of the first of the two kinds of ‘Drohnen’. In this field, a ‘Drohne’ is a subject that *does* something. Although ‘Drohnen’ are usually explicitly accredited to the US in this field, as in ‘a US-drone killed’, they are presented as acting on their own. There is no mentioning of a human or social agent in reports about ‘Drohnen’ here. Hence, there is no mentioning of anybody who could be held responsible and called to account, guiding or controlling ‘Drohnen’.

A ‘Drohne’ *does* something in this field. What this is, is limited to what a weapon does. The actor ‘Drohne’ in this first field takes the form of a *weapon*. This is not spelt out, i.e. there is no use of modifications of the word *Drohne*, such as *bewaffnete Drohne* (‘armed drone’) or *Kampfdrohne* (‘combat drone’) that would clearly point to the nature of the ‘Drohne’ as a weapon. The idea of ‘Drohne’ as an autonomous weapon is apparent simply in that the majority of texts in the corpus use the word *Drohne* in reports about the death of insurgents, terrorists or civilians. Almost without exception, these are reports about how a ‘Drohne’ ‘killed’ or ‘attacked’ or ‘hit’ a target. There are almost no ‘Drohnen’ in this first ‘field’, that is, in the US-led fight against insurgency and terrorism, other than ‘Drohnen’ understood as ‘autonomous’ weapons. There is no mentioning of ‘Drohnen’ conducting intelligence, surveillance or reconnaissance tasks. ‘Drohnen’

kill.

Yet, *how* a ‘Drohne’ actually ‘kills’ is rarely explained. Only in two instances is it mentioned that the respective ‘Drohne’ killed by shooting a missile at its target. The weapon ‘Drohne’ simply kills, the result of which is evident, but the act as such is not explained. It is treated as if it was a ‘technicality’; the details of the act of killing are treated as if they were common knowledge and not worth mentioning.

At the same time, ‘Drohnen’ are presented as a supposedly ‘natural’ or standard feature of the US-led fight against insurgency and terrorism in places such as Afghanistan and Pakistan. This is apparent in the fact that the word *Drohne* is often positioned in line with conventional weapons, military equipment and strategies. It is catalogued as one of them, for example: ‘Obama approves additional combat missions in Afghanistan [...] Fighter jets, bombers and drones are said to also be deployed’ (Spon 25), or ‘In Iraq, too, drones and fighter jets are said to have attacked 28 targets’ (Spon 2014g). This normalisation of ‘Drohne’ as a weapon within the US-led fight against insurgency and terrorism in places such as Afghanistan and Pakistan is further realised in that the fact *that* ‘Drohnen’ are part of this fight is rarely expressly presented as a distinct choice and practice. ‘Drohnen’ are mentioned in the context of concrete incidents in the fight against insurgents, in which they happen to play a role as a means to an end. However, the fact *that* there are ‘Drohnen’ acting as ‘autonomous agents’ is not the subject of reflection. They just ‘are’.

An important meaning that is attributed to (the actor) ‘Drohnen’ in this first field of the geography of ‘Drohnen’ is the idea of military power. An illustrative example for this point is an article that talks about a propaganda video by ISIL (Spon 38). The article explains that the video shows aerial pictures of Kobane, which, as the film is said to explain, have been shot by a “‘Drohne’ of the Army Islamic State’. “‘Drohne’ of the Army Islamic State’ is put in quotation marks. This means the information is treated not as a fact but as a quote from the video itself. This indicates how seriously the possibility is taken that ISIL could be in possession of a ‘Drohne’ – even if it was only a device with a camera (see also Spon 2014i; Spon 2014j). To possess a ‘Drohne’ means to be powerful and to be taken seriously.

Field 2: The world beyond the US-led fight against insurgency and terrorism

The second ‘field’ that forms the geography of ‘Drohnen’ is constituted by the second kind of ‘Drohne’, namely ‘Drohne’ imagined as a ‘tool’. It relates to everything beyond the US-led fight against insurgency and terrorism in places such as Afghanistan and Pakistan. In this field, ‘Drohnen’ are not autonomous agents that do something themselves but are grounded in social action. Somebody does something *with* a ‘Drohne’. Interestingly, in contrast to the first ‘field’, ‘Drohnen’ are not just mentioned as a part of a wider story here, i.e. it is not that they just ‘are’. Rather, they are relatively often the main focus of the respective articles. This means that, although

they are less ‘active’ as a ‘tool’ than they are as an ‘actor’, they are the subject of a more express focus. ‘Drohnen’ understood as ‘tools’ are more visible than the actors ‘Drohnen’, which kill in Afghanistan and elsewhere. In the second field, ‘Drohnen’ actually and notably ‘exist’, are mentioned and talked about explicitly.

This second field is more nuanced than the first one. Here, three meanings are attributed to (the tool) ‘Drohne’:

First, ‘Drohne’ stands for hyper-progress. This is apparent in instances in which their use by commercial actors is discussed. Here, ‘Drohnen’ represent the cutting edge of progress and technology. They are treated as providing a tantalising glimpse of the future. This is not expressly articulated but is apparent, for instance, in those texts which are about various technological advancements and end with reference to ‘Drohnen’ as the ultimate sign of progress. ‘Drohnen’ are mentioned as a kind of cliffhanger into the future, the next, ultimate step towards technological advancement (e.g. Spon 2014k; Spon 2014l).

Second, ‘Drohne’ is understood as a political decision. It is understood as a political decision, for instance, for the German defense minister or for the US President. Notably, when it is about ‘Drohne’ as a political decision, the term *Kampfdrohne* (combat drone) is used. This is interesting because ‘combat drones’ do not exist in the first ‘field’, in the field of the US-led fight against insurgency and terrorism in places such as Afghanistan and Pakistan, that is, in the field in which they are actually applied. There, it is simply ‘Drohnen’ that kill, not ‘combat drones’. ‘Combat drones’ only exist in the political debates about them but not on the ground in those areas in which they actually ‘kill autonomously’.

Third, ‘Drohne’ stands for a potential threat to extant technology especially critical infrastructure. This is apparent in articles that deal with ‘Drohnen’ flying over nuclear plants in France and Belgium and near Heathrow airport in the UK, in particular, as well as in close proximity to civil airplanes, in general. On the one side, ‘Drohnen’ are presented here as autonomous ‘things’ – similar to the ‘Drohnen’ in the first ‘field’. They disrupt the everyday. In fact, they are constructed as *creatures* that suddenly ‘appear’ (Spon 2014m) out of the blue; they are ‘spotted’ (Spon 2014m) and ‘located’ (Spon 2014n) from the ground while they are circling at a distance in the sky. It is a science fiction like scenario that is conjured up in these instances. Their appearance is ‘mysterious’ and causes surprise (e.g. Spon 2014m). They even leave ‘experts’ puzzled and in disagreement with each other about the threat they might pose (e.g. 2014n). On the other side, however, these creatures are imagined as being under control in different ways, for instance, through the banalisation of ‘Drohne’ as ‘x-mas presents that are accidentally misused’ (Spon 2014o), through suggestions including that ‘pilots sometimes simply forget the regulations for the use of ‘Drohnen’’, and, in general, through reference to some concrete, even if unidentified, agent who remotely controls the ‘Drohnen’. Unlike the ‘things’ that act autonomously in the ‘field’ of the US-led fight against insurgency and terrorism, ‘Drohnen’ in this second ‘field’ are ultimately grounded in

some form of responsible social agency. They might appear mysterious and hold the potential to be scary and threatening, but, ultimately, they are 'explicable', hence, predictable: whatever threat they might pose it is 'from this world', it is manageable; somebody is behind them.

In summary, the analysis reveals that there are two kinds of 'Drohnen' in the world that is constructed in the corpus: actors and tools. It is remarkable that although the word *Drohne* refers to very different kinds of UAVs, such as medium altitude, long endurance UAVs (MALE) and medium and small commercial and hobby quadcopters, this is not made clear. Throughout the corpus the word *Drohne* is used without clarification or specification as to the concrete nature of its *signified*. Furthermore, each of the two kinds of 'Drohnen', actors and tools, constitute a distinct 'field': the US-led fight against insurgency and terrorism in places such as Afghanistan and Pakistan, and everything beyond this fight, respectively.

Confined contexts: Belgium, France, 'business'

The second 'field', i.e. the world beyond the US-led fight against insurgency and terrorism, is further sub-divided. It contains different 'contexts', in which 'Drohnen' exist and are symbolically 'caught'. These 'contexts' are less stable than the two above identified 'fields'. They are not the product of (two) robust meanings of 'Drohnen' (actor and tool) but come into being through a *textual practice*. The symbolic 'capturing' of 'Drohnen' in distinct 'contexts' is realised in that articles that discuss 'Drohnen' and the respective issue around them do so in a narrow and 'closed' way. For instance, in reports about the appearance of 'Drohnen' over nuclear plants in France and Belgium, 'Drohnen' are narrowly framed as an issue for France and Belgium. In this sense, 'Drohnen' are locked into a distinct geo-political context, i.e. into the context 'France' or 'Belgium'. The texts do not open to a more generalised discussion of 'Drohnen' over nuclear plants in general, or in neighbouring Germany in particular. Reports of the development of 'Drohnen' by companies such as Facebook, Google and Amazon for commercial purposes provides another illustration of this point. The texts engage in relative detail with the respective issue but do not open the examination beyond the distinct case. Here, 'Drohnen' are symbolically locked into the social context: 'business'. In contrast with the main two 'fields', discussed above, these various 'contexts' within which 'Drohnen' are symbolically captured are not the product of a distinct meaning that is associated with the word *Drohne*, in other words, it is not that a distinct meaning of 'Drohne' is associated with each of these 'contexts'. Rather, they are the product of textual strategies, i.e. of the way in which 'Drohnen' are talked about.

The unit 'at home'

Finally, the symbolically produced geography of 'Drohnen', with its two 'fields' and the distinct 'contexts' that constitute the second of these 'fields',

is obviously written and constructed from a particular perspective. This is the perspective 'Germany', or – to put it more generically – the perspective of the 'at home'. It is from the perspective of the 'at home' that the geography of 'Drohnen', with its clearly demarcated 'fields' and its various 'contexts', is 'visible', i.e. comes into being.

This brings us to a final insight. Besides being the perspective from which the geography of 'Drohnen' arises, 'Germany'/'at home' is also a 'unit' within the second 'field', similar to the above mentioned 'contexts'. Yet, it is more 'stable' than these 'contexts' are. This is because it is (like the two 'fields') grounded in a distinct idea of 'Drohne'. In general, 'at home' 'Drohne' is a tool, as it is characteristic for the second field. In particular, however, 'at home' 'Drohne' has a discrete characteristic: it is an anthropomorphised and domesticated creature – more precisely, 'at home' (the tool) 'Drohne' is perceived as a kind of pet that unfolds its 'potential as soon as one let's it off the leash' (Spon 2014p), that lands in one's hand like a butterfly, and, although it might lose its way, that can be caught, 'tamed' and taken back to where it belongs (Spon 2014q). [6] It is a safe and manageable creature that is used, sometimes gets out of hand, but is ultimately under control.

The Drones of Others

The analysis of the word *Drohne* in the chosen text corpus brings to light a set of different senses of 'Drohne' and their complex management. 'Drohne' is perceived as hyper-progress, as a potential threat to extant technology and infrastructure, as a political decision and as a sign of military power. Bringing everything together, we see a two-fold symbolic practice through which 'Drohnen' are managed, ordered and, ultimately, symbolically 'controlled'. A geography of 'Drohnen' is apparent in which 'Drohnen' are compartmentalised and quarantined into different symbolic spaces. At the centre of this geography is the 'at home'. 'At home' is both the perspective from which the geography is produced and a 'unit' in which a distinct kind of 'Drohne' exists, namely an anthropomorphised and domesticated creature that is used by different social actors for different kinds of tasks. Particularly interesting is the sharp and clear demarcation between the perception of 'Drohne' as an autonomous actor in the 'field' of the US-led fight against insurgency and terrorism in places like Afghanistan and Pakistan and everything beyond it, including the 'at home', where 'Drohnen' are perceived as tools that are under control and embedded in social action.

The symbolic border that is drawn between these two fields and their distinct ideas of 'Drohnen' holds certain ideas of 'Drohnen' 'outside' of the 'at home' and makes others a reality 'inside'. Not only is the existence of 'Drohnen' in this US-led engagement presented as an issue beyond and outside of the realm of the ('German') everyday and, in effect, beyond the realm of social actors and responsibility in general, the clear positioning of it into one 'field' makes it actually an *'unimaginable'* possibility in the 'at home'. 'Drohnen' of the kind that kill in the first 'field' are even beyond *fiction* in the 'at home' (see Spon 2014r). In this sense, the analysis of the

[6] The way the incident is treated, in which a US Hunter-'Drohne' flew uncontrolled over a residential area in Southern Germany close to a US military base, gives additional insight into the imagined nature of 'Drohne' 'at home' (Spon 2014q). The Hunter-'Drohne', the predecessor of which, as we have seen above, autonomously kills people in the context of the US-led fight against insurgency in places like Afghanistan and Pakistan is presented here as if it was the neighbour's dog that ran away and got lost, straying through the neighbourhood. Once the annoyed neighbours contacted the US military base to find it and take it back home, the 'owners' apologised and assured everybody publicly that they would invest in additional training so that the Hunter-'Drohne' would not 'lose its way' again.

corpus unveils that these 'killing' 'Drohnen' are the drones of others. They exist in the distance and far away from the 'at home'.

Finally, the clear compartmentalisation of 'Drohnen' as, on the one side, 'killing' actors 'outside', in the field of the US-led fight against insurgency and terrorism in places like Afghanistan and Pakistan and, on the other side, tools 'inside', in the field beyond Afghanistan etc, accounts for an important connotation that the 'Drohne' is associated with in the constructed unit 'at home'. This is the idea of 'Drohne' as something spectacular, fascinating and noteworthy. 'Drohnen' are worth mentioning; there is something exciting about them that attracts attention. This is apparent in instances in which the use of a 'Drohne' is specifically stressed although it is not at the centre of the respective story. For instance, an article about a filmmaker travelling to and providing pictures from the city of Chernobyl is headlined with 'Drone flight over a ghosttown' (Spon 2014s). His use of a 'Drohne' to shoot aerial pictures is highlighted, i.e. perceived as particularly worth mentioning. Yet, as it turns out, the aerial pictures are only one aspect of his documentary. The fact that he also went to the city in person, equipped with a *Geiger* counter, is only a side-note in the article – what matters is the use of the 'Drohne' (see Spon 2014s; similarly Spon 2014t). This connotation of the spectacle arises exactly in the face of the first of the two established 'fields', in which autonomous 'Drohnen' kill. The apparent fascination with 'Drohne' is the result of the idea that a different 'Drohne', the drones of others, which are not just anthropomorphised and domesticated creatures that are under control and used for various tasks but actors that 'kill autonomously', are lurking 'out there'.

Conclusion

UAVs are more than the sum of their technical qualities. They are embedded in and a product of broader social, political and cultural ideas and imaginations. This article started on the premise that the word *drone* constitutes a distinct component of these negotiations and imaginations of UAVs. The word brings together and contains meanings from different discourses; like a magnet it binds all sorts of meanings from different (including military and civil) debates and carries them from one (UAV-related) debate to another. To study which meanings are attached to the word *drone* is then not to study imaginations of or debates about the technology UAV as such but to focus on one aspect of these imaginations.

Motivated by an interest in the German imagination of UAVs, the article presented an analysis of the current use of the word *Drohne* in a corpus generated from an established German news platform. This analysis provided insight into the meanings attached to the word *Drohne*, such as 'military power', 'hyper-progress' and 'threat to extant technology'. Importantly, it uncovered the distinction between two kinds of 'Drohnen': actors and tools, and unveiled a geography of 'Drohne', in and through which 'Drohnen' are 'managed'. While 'Drohnen' 'at home' are imagined as manageable tools, 'Drohnen' in the US-led fight against insurgency and

terrorism in places such as Afghanistan and Pakistan are seen as actors that kill autonomously and independently of human agency and responsibility. While these 'Drohnen' are a natural reality in the distinct field of this fight, their existence is unimaginable 'at home'.

Taking a broader view now, we are able to reveal an intriguing subtle theme apparent in the corpus that plays out in the social negotiation of UAVs in Germany. In this theme two imaginations of the technology 'Drohne' interplay:

First, the corpus reveals an understanding of the technology 'Drohne' as potentially 'game changing' in nature. 'Drohne' is imagined as a global technology, which brings out a set of different technical artefacts, which together constitute a homogenous group. This is apparent in that their specificities are obscured behind the label *Drohne*. As we have seen, the word *Drohne* is used without explicit reflection on what kind of artefact it refers to. Clearly, there is something that all the referents of the word have in common and what makes them a 'Drohne'. What this is, however, remains unarticulated, i.e. taken as assumed knowledge. A 'Drohne' is a 'Drohne'. This is intriguing because it implies a distinct potential of the artefact 'Drohne'. It implies that there is the idea that any 'Drohne' has the potential to turn into something else on the spectrum that is the nebulous technology 'Drohne'. In other words, it indicates the idea that the 'Drohne' used in a Disney parade holds the potential to turn into an autonomous weapon, and the autonomous weapon has the potential to turn into a dog-like companion. There only seems to be a thin line between the 'Killerdrohne' (killer drone) and a 'Drohne' deployed to deliver an Amazon book. It indicates an understanding of the technology 'Drohne' as 'game changing' in nature, in the sense of a technology that challenges the way in which to deal with it. This is because it holds the potential of a spectrum of appearances – from a photographer's tool to an autonomous killing actor. This perception is evident in the fascination and sense of spectacle that surrounds the idea of 'Drohne' in the corpus, i.e. in the 'at home'.

Second, the corpus reveals an understanding of the spectacular (potentially 'game changing') technology 'Drohne' as a product of modern progress and part of and subject to the (international) world as we know it. This is evident in that it is naturally imagined through the revealed geography. The existence of 'Drohnen' is symbolically 'tamed' and organised through a (modern) understanding of bordered social 'containers', in which 'Drohnen' are imagined to exist in different fields and contexts, e.g. in France or in the context of 'business'. The 'at home' is far away from the drones of others, indicating an understanding that the (potentially 'game changing') technology 'Drohne' and its artefacts are subject to clear compartmentalised spheres, in which they are dealt with, and, in fact, in which they are an issue of 'compartmentalised' concern. For instance, the ascription with responsibility for the development and the deployment of 'Drohnen' through reference to distinct social actors, such as Facebook, the German defense minister etc., indicates that the technology of 'Drohnen' is not a global political issue but, for instance, the 'business' of a business,

such as Facebook (e.g. Spon 2014c). In this sense, the analysis reveals that the development and deployment of 'Drohnen' is not perceived as producing 'global risk', i.e. potential unintended consequences that cannot be captured through established conceptions of borders, responsibility, (progressive) knowledge production, in fact, 'the political' as we know it. They are not perceived as a potential challenge to the modern 'nation state' way of thinking but are naturally 'tamed' in its narrative and symbolic compartments.

And yet, what is interesting is that the idea of the potentiality of the technology 'Drohne' – its (potential) 'game changing' nature – is lurking in this theme and might come to the fore to trigger an imagination of UAVs that might take into account the technology's distinct complexity as a 'game changer' and the nature of its potential unintended consequences, i.e. the 'global risks', which the development and deployment of the technology produce.

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