What is certain, however, is that he, who knows how to breathe better than we do, is already choking on the gas that shall claim our breath (Canetti in Sloterdijk 2009: 100)

> Rights originate where existence originates. That which determines existence determines rights. (First principle or Thomas Berry's *Ten Principles of Jurisprudence, 2001*)

Abstract: Breathing is the activity which all forms of animated life share in common. The breath has been symbolised across cultures as the meaning of life itself. If breathing is imagined as life, gassing is the very opposite. Gassing is the intended (or unintended) means to prevent or obstruct breathing. Perhaps it is for this reason that the Nazi concentration camps are remembered as expressions of technological as much as metaphysical terror. The 2013 and 2017 Syrian chemical attacks show how gassing remains a 'red line'.

This paper deals with the historical significance and complexity of air and breathing in law. Human dependency on the air has in early treaties been protected at times of war between 'civilised' nations but was exploited as an instrument against the breather during colonialism. Today, non-lethal-weapons, a more-than-technical term, are used extensively to discipline the biological body into political order. Engaging with the work of Foucault, Sloterdijk and others, I seek to make sense of the legal status of this contradictory political technology, which does not directly attack the body but rather conditions the atmospheric requirements for its animation. I argue for a move towards understanding law atmospherically as an extension of the body.

#### Introduction

This article revolves around an activity so modest and mundane that few think twice of its significance. Breathing, the practice of which I write, provides for, or perhaps even *is*, the rhythmic movement that sustains life. "Births marks our first sound – the baby's cry – which of course is a gasp for air, for life" (Adey 2014: 45). Its prodigious importance for our bodies to emerge, develop and sustain stands in stark contrast with its near invisibility, its quietness and instinctiveness. A breath of air is the marker of difference between 'animated' (from *animare*, 'to infuse with breath') bodies and a universe of inanimate stones. Lighter than a feather but strong enough to carry the heaviest of bodies, "Being [*Seyn*] is the air [*Aether*], in which man breathes" (Heidegger 1988 [1936]: 169). Breathing is such a habitual matter that it is easy to forget that everything depends on something so seemingly insignificant.

"No other element is as light, as free, and as much in the 'fundamental' mode of a permanent, available, 'there is'" (Irigaray 1999: 8). The fact that it is simply there, anterior to the body and a condition for it, constitutes an important reason why the breath for long has been considered sacred. Spirit, *Pneuma*, *Prana* or *Ruach*, breathing is central to many theological, animistic (from Latin *anima*, 'breath') and other spiritual traditions, but it is experienced differently in each of these traditions.

"Between heaven and earth they [Sumerians] recognized a substance which they called *lil*, a word the approximate meaning of which is 'wind, air, breath, spirit'; its most significant characteristics seem to be movement and expansion, and it therefore corresponds roughly to our 'atmosphere" (Kramer in Škof 2015: 136)

The unreflective ease with which we, moderns, breathe the invisible air, perhaps the ultimate abstraction, means that it is easy to overlook the rich intellectual history of our intimate and, by all means, vital relationship with the atmosphere. In other words, if we do not take breathing as seriously as the ancients did, we run the risk of falling in the dangerous trap of underestimating our indebtedness and dependency on the air. Luce Irigaray (1999) famously critiques that the air is 'forgotten' in the weighty gravity of Western philosophy. Air, she explains, has long been secularised and imagined as void. Thinking of air as nothingness, as a space which lacks, results in a tendency to either forget or to implicitly presuppose it. Why think of air as something if it lacks 'thingness'? "When solidity is unconsciously conflated with substance, when only grounding counts for analysis, air can only be insubstantial" (Choy 2011: 145).

I do not agree with the presupposition that the air has been 'forgotten' in Western thought but, instead, wish to argue that thought about air and breathing has been shaped and formed by historical specificity. This entails a departure from the premise that the contemporary abstraction of the air is a natural phenomenon and a move towards the idea that breathing and air need to be rethought as being politically and historically contextual. I have elsewhere argued that context defines the particularities of social, political and scientific relationships to the air (see, for instance, Nieuwenhuis forthcoming), but I agree, with Valentine (2016), that that these relationships also help to contextualise air itself.<sup>1</sup> What this means is that air is not a singular nor a 'simple fact of life', but that it is rather

<sup>&</sup>lt;sup>1</sup> Writing about the lack of respiratory air in outer space, Valentine (2016: 514) notes that "all contexts are the product of *contextualisations*" It in the beyond the Earth's atmosphere, where context halts, that breathing needs to be recontextualized. "That is, Earth's atmosphere— as a metaphor and in its material functions—provides an upper limit to what we can call 'nature,' 'context,' or 'affect,' and therefore to what we can say is meaningful."

plural and ubiquitous, which is perhaps why "the air has not been conceptualised as the other elements have in many cultures and systems of thought" (Connor 2010, 15). Air was something worthy of speculation, wonder and thought.

In my own work (e.g. Nieuwenhuis 2015a, 2016a, 2016b), but here more explicitly, I concentrate on the historical and political specificity of atmospheric gassing, which was only made possible by the historical realisation that air, in the form of oxygen, could be modified or withdrawn from the breather. This recognition brought about a specific atmospheric form of governance. Important in this historical change is the bio-political interest that law took in the air (see also Whitehead 2009).

Western legal theory traditionally has had an inherent stake in life, as its distinctive purpose is to regulate but also define it. This means that law can be seen as a "tool of bio-power... a technique the task of which is to regulate and correct the development of *life in general*" (Ojakangas' 2005: 15, emphasis added). "Life in general", however, refers here not only to law's stake in embodied life but extends beyond into the very *elemental* conditions that constitute and sustain bodily beings. It is the hold that law has over the conditions to *animate* the body that makes the practice of gassing and the absolute quality of air so pivotal. My contribution rests on a provocation to think with and beyond life in its human form, as "bare life", and to argue that law historically has had a stake in the air (as the condition *for* and *of* embodied life). It is this specific, indeed historically Western, "socialisation of air", expressed in the form of the regulation of respiration, to which I want to direct my attention in this paper.

Breathing has been historically of longstanding interest in the Western legal tradition to protect and regulate life. This interest comes forth from the fact that respiration constitutes

and *is* the separation between corporal life and death. I demonstrate below how this attention for the *elemental* prerequisite for animation is visualised in law's attempt to securitise the respiratory body. Law can be used as a means to prevent the body from being gassed, as is the case in inter-state warfare, but can also be deployed to suspend the working of air to facilitate a temporary disabling of bodies, as in the case of so called *'nonlethal* weapons'. Law helps determine which and when bodies gain access to breathable air, to life, and which bodies do not. Law inhabits the air, but its presence is cloaked in invisibility.

The complex biological and metaphysical interaction between body and air has only recently started to receive attention in the political geography literature (see e.g. Adey 2014, Graham 2015, Whitehead 2009). Breathing conventionally is not considered of legal relevance and assumed to exist in a 'pre-social' vacuum outside of law. However, regulating the air through gassing entails an extending of the reach of law beyond its conventional focus on individual and collective bodies to the very conditions that provide for the emergence and development of those bodies. Gassing, which the German thinker Sloterdijk (2009) appropriately labels atmospheric terror or 'atmoterrorism', is an attempt to anthropogenically dominate the body's *environ*-ment, with the objective to gain total control over the body to the point of its demise.

It is worth remembering that only gas was considered "suitable" for the 'Endlösung der Judenfrage' (Höss 1996: 28). Gas is in Agambian (2015) phraseology the 'practice of exception' because it so brilliantly incorporates what is a natural practise, ie. breathing, into a bio-political killing machine. Its necessity is used against the breather while the air itself transforms from a condition for animation into a threat to 'de-animate', therefore,

becoming also a technology of what Mbembé (2003) terms 'necropolitics'. This paper is not an attempt to conceptualise the experience and significance of the Holocaust through the lenses of atmospheric governance, although I do address this, but offers a more extensive contextualisation of law's position vis-à-vis the governance of respiratory life. One of the contributions of the paper focuses on the postcolonial history of atmoterrorism that compelled colonial subjects into discipline under threat of being robbed from their right to breath/ life. The Nazi gas chambers should be contextualised as part of a long, convoluted and historical unfolding of a (still ongoing) atmoterrorism.

The air was not forgotten. Rather, I argue, it became depoliticised, secularised and appropriated as a technique to protect, discipline and kill animated life. Law acts as a technique of governance to decide which bodies were allowed to be killed and which deserved protection. This paper wishes to make the air again political at a time in which there is little discussion about why chemical gas attacks are 'red lines' but other forms of pollution are allowed to kill millions with impunity.

This paper is organised into four sections. The first section looks at the evolution of the relationship between breathing and law. This history, which remains largely underexplored in the literature, ties together a vast array of subjects ranging from the discovery of oxygen to colonial policing and the Nazi death chambers. I offer a more modest and narrower analysis that revolves around the historical status of chemical warfare in law. I focus on the challenge that breathing, as *absolute* exposure to the environment, posed to international law and how law responded to this challenge by attempting to regulate the *atmo*sphere. The second section analysed the colonial geographies where atmospheric law receded, forcing bodies to experience their absolute exposure to the air. While bodily dependency on

the air was securitised in the West, where law was said to dwell, it was fully exploited in the colonial context where it enabled the killing of those bodies left unprotected. Agamben's logic of 'inclusive exclusion' allows me to move to the continuation of this practice in the Holocaust. I make the provocative case that the *Shoah* should not be seen as a historically unique event, but as a continuation of law's ongoing interest in the "politics of life itself" (Rose 2009). The third section, once more, emphasises law regulatory position in the ambiguous zone between embodied life and death in the form of so-called "non-lethal weapons". This section finishes by arguing that law's interest in life is not only centred on the issue of corporality but rather on the vital forces that facilitate the animation of the body's animation. The conclusion, therefore, turns to the need for a radical 'posthuman' alternative to rethink the status of air in law.

#### Air, Law and Life

The history of gassing is little conceptualised. Many of the histories start by dating the practice of gassing to a particular point in history without exploring the distinctive conceptual quality of atmospheric gassing. Among the more popular accounts is Coleman's (2005) work *A History of Chemical Warfare*. The book refers to the occurrence of smokescreens in "ancient India", "the use of gas during the Peloponnesian War", a "toxic smoke" in Roman Spain and "Greek Fire" at the sieging of Constantinople. A lot of the attention in such works is given to the gaseous experiences of WWI.

One of the argument to account for the spreading of chemical warfare was the relatively advanced state of German chemical companies, such as BASF and Bayer, which enabled the mass deployment of gassing as a weapon of warfare (see also Johnson 1990). Robert Joy (1997: 89) writes that "[b]y the turn of the [twentieth] century, Germany had become the

centre of world chemistry. The six largest German firms held 950 chemical patents, whereas the six largest British firms held only 86 patents." The onset of WWI meant that chemists started to take an active interest in the development of gas as a specific military strategy in war (see Freemantle 2015, MacLeod 1993). Cowell et al. (2007: 241), writing on the strategic function of gas, explain that "[d]uring this period, when the tank was in its infancy and the airplane had little direct impact on the ground, gas was the only weapon with the potential to break trench deadlock and solve 'the problem of the [deadlocked] Western Front'".

Besides its strategic purpose of forcing the enemy to move out of position, the attacking of breathing bodies also had strong psychological and physiological affect. The aim of gassing was not so much intended to kill the enemy but, as pulmonary agents are *designed* to do, to 'take away their breath'. The suffocation of the air was not necessarily intended to exterminate, but to terrorise the enemy physiologically as well as psychologically. A gas cloud's unique ability to strike fear was seen as a unique and valuable quality in war. The consequences of gas "cannot be measured purely in respect of their casualty tallies; they still have an effect if they deter, dissuade or demoralise an enemy" (Spiers 1994: 45). The moral dimension of atmospheric gassing is important to discuss in some detail because atmoterror, instilled in popular imaginations, as recently seen in the international outrage after the Syrian Khan Shaykhun gas attacks, has proved instrumental for the development of respiratory regulations.

The Hague Conventions of 1899 and 1907 were among the earliest modern attempts to legally prohibit the use of chemical warfare on an ethical basis.<sup>2</sup> A previous, perhaps less explicit, attempt to regulate the air can be found in the 1863 Lieber Code, which, while unrestrictive on some fronts, was among the first modern efforts to codify the rules of chemical warfare. Set in the American Civil War, it prohibited "the use of poison in any way" (Lieber 1898 [1863], art 16.: 8)<sup>3</sup>. Smart (1997) argues that the historical industrial context provided the real possibility for the development and deployment of chlorine, hydrochloric and sulphuric acid mixes as chemical warfare agents. The ground for their banning has by some been described as "premier humanitarian" (Gillespie 2011: 89). Gillespie (ibid.: 88) notes that similar moral antipathy against chemical warfare was not uncommon at the time but that such "chivalry" was rather "consistently reflected in Europe and the United States in 1813, 1862 and 1870, when high commands consistently refused petitions to allow poison to be placed on bayonets."

What immediately becomes evident in early, but, as I will come to show later, also in more recent atmospheric regulations is awareness that breathing is more than mere technical respiration. There seems to exist in law an unspoken agreement that the practice of breathing possesses an absolutist and pure quality that needs to be protected to preserve 'humanity'. Such recognition grew especially strong with the 'dehumanising' gaseous experiences of WWI. Traverso (2003: 83, original emphasis) recalls John Keegan's comparison of the gassing in the 1916 Battle of the Somme during the 'Great War' with the

<sup>&</sup>lt;sup>2</sup> It perhaps needs mentioning that the 1868 Declaration of St Petersburg, the predecessor to the Hague Peace Conferences, also argued for "technical limits at which the necessities of war ought to yield to the requirements of humanity" (Anaïs 2015: 10).

<sup>&</sup>lt;sup>3</sup> The same is repeated a number of pages later: "The use of poison in any manner, be it to poison wells, or food, or arms, is wholly excluded from modern warfare. He that uses it puts himself out of the pale of the law and usages of war" (Lieber 1898 [1863]: 23).

Nazi horror extermination camp in Treblinka. "[The gassing in WWI] introduced an *anthropological break*, revealing a new perception of human life that essentially paved the way for the genocides of the future." Sloterdijk (2009: 9) argues along similar lines when he observes that the earlier gas attack in the Battle of Ypres constituted the overture to a new century of "explication".

"Anybody wanting to grasp the originality of the era has to consider: the practice of terrorism, the concept of product design, and environmental thinking. With the first, enemy interaction was established on a postmilitaristic basis; with the second, functionalism was enabled to re-connect to the world of perception; and with the third, phenomena of life and knowledge became more profoundly linked than ever before. Taken together, all three mark an acceleration in 'explication.'"

Sentiments in law against attacks on the invisible conditions that enable (or *are*) life can be traced back (at least) to the writings of early enlightenment legal theorists, such as Grotius, Vattel and von Pufendorf, who, on various moral grounds, argued against the use of poison in the conduct of war (*jus in bello*). Later liberal thinkers saw war as a necessary evil in the "state of nature" but one that needed to be restricted and regulated as a prerequisite for attaining peace.<sup>4</sup> Kant (2003: 5, original emphasis), himself of pivotal inspiration for the poison clause in the Lieber code, famously argued for the importance of a 'rule of law' in war as a condition to "ensure perpetual peace among nations". The alternative, he writes, was a "war of extermination [*bellum intemecinum*] —where the destruction of both parties *along with all rights* is the result—would permit perpetual peace to occur only in the vast *graveyard of humanity as a whole*... [S]uch a war, including all means [including, but not

<sup>&</sup>lt;sup>4</sup> This was also codified in the Lieber code under article 15.

limited to, poisons, or *venefici*] to wage it, must be absolutely prohibited." Ideas of the delimited nature underpinning the workings of war can also be found in von Clausewitz's (1984: 580), the other source for the code, oft-cited statement that "war and its forms result from ideas, emotions, and conditions prevailing at the time". The delimited nature of 'real' war rails against the concept of an undesirable and, therefore, unattainable 'absolute war'.

In both Kant and von Clausewitz's thinking on the limits of war we trace the seeds for a regulatory mechanism that would come to inform nineteenth and twentieth century international laws on atmospheric governance. It enabled the possibility to regulate the external environment of the body so as to protect it from the threat of its pre-social dependency on and natural exposure to air. It is law's 'taking to the air', driven by an inherent need or desire to protect dependent *biological life* from ecological exposure, that facilitated and enabled the formal legal regulation of the atmosphere. The result was a denaturalisation of breathing and a subsequent socialisation of air.

Protecting the body's respiratory dependency on air helped prevent 'war' from escalating into a condition of 'dehumanisation' [*Entmenschlichung*]. Without air humans cannot remain *as humans*. The "progressive explication that binds [atmo]terrorism with humanism" (Sloterdijk 2009: 25), however, did not affect all of humanity. Law was only preoccupied with those bodies considered to be sufficiently 'human'. Gassing was used extensively throughout the nineteenth and twentieth century as a means to psychologically discipline and terrorise those considered to be less-than-human. While breathing bodies enjoyed

certain legal rights in the 'civilised' West, atmospheric governance worked very differently in other 'savage' and 'law-less' parts of the world.<sup>5</sup>

Europe's colonial violence in 'barbarous lands', where the legal principles of 'war' did not apply, propelled atmoterrorism to enter into discourses of race. Mbembé (2003) explains that these "colonial wars" cannot be really understood as 'wars' precisely because of the absolutist, law*less* quality of their violence. In other words, as he (ibid.: 25, emphasis added) explains, "the distinction between war and peace does not avail [here]. Colonial wars are conceived of as the expression of an *absolute* hostility that sets the conqueror against an *absolute* enemy." This meant that gassing could be used extensively to discipline the body of the 'non-human'. The taking away of the right to life, by making breathing literally impossible, was legitimised in the injunction of the distinction between the civilised life of the human Self and the bestial Other.

#### The Life of Others

Until now, there have been relatively few efforts to historicise these experiences systematically. Sloterdijk's observations of the supposed uniqueness of the gaseous experience of WWI are ripe for postcolonial critique. The gap in the literature is not an accidental oversight, but, as I will come to show through the work of Aimé Césaire and others, rather a lingering postcolonial spectre from Europe's own historic inability to account for the atmospheric terror of the Holocaust. The myth that Europe's imperial campaign occurred in "the comforting illusion that the 'civilized world' was insulated from the result" (Hull in Owens 2009: 53) remains the norm in accounts of state violence.

<sup>&</sup>lt;sup>5</sup> Preston (2015: 9) writes that "[b]y the mid-nineteenth century a fairly general consensus had emerged about the justification for wars between civilised nations. Much more latitude was at least tacitly given to the treatment of 'barbarian' states and individuals."

Colonialism, however, played a very substantial role in the historical unfolding of atmospheric violence in Europe. Tracing this evolution is of historical significance for understanding how oxygenic air was explicitated and transformed into an instrument to govern the very condition of life.

Colonial gassing occurred under the banner of a peculiar form of humanism that sometimes killed and other times protected embodied life. Britain's colonial administration, for instance, praised teargas and the "moral effect produced by it on crowds" (Radley [1928] in Legg 2007: 106). The chemical substance, first deployed by British forces in Palestine, was said to offer "a humanitarian alternative to policemen's bullets... Britain's colonial police needed to keep up with the time" (Thomas [1936] in Thomas 2011: 72). Churchill (in Spiers 2010 [1919]: 70), whilst being Minister of War and Air, is known to have been particularly "strongly in favour of using poisoned gas against uncivilised tribes [in the Middle East]... It is not necessary to use only the most deadly gasses: gasses can be used which cause great inconvenience and would spread a lively terror and yet would leave no serious permanent effects on most of those affected"<sup>6</sup>. Many imagined gassing as a morally justifiable means to psychologically instil the necessary terror to discipline colonial bodies. The British colonial deployment of gas, however, largely followed from earlier, more lethal French experiences.

Gassing already had been entertained as a means to 'cleanse' populations during the time of the French Revolution (Levene 2005). In the midst of the genocidal subjugation of the Vendée region, the chemist Antoine-François Fourcroy, a close acquaintance of the renowned (co-)discoverer of oxygen Antoine Lavoisier, was "charged with devising

<sup>&</sup>lt;sup>6</sup> Twenty-five years later Churchill (1944) asked for General Hastings Ismay's support for a gassing campaign against Nazi Germany: "I may certainly have to ask you to support me in using poison gas. We could drench the cities of the Ruhr and many other cities in Germany in such a way that most of the population would be requiring constant medical attention."

'fumigations [*enfumades*], mines to destroy, put to sleep, or asphyxiate the enemy" (Santerre in Levene 2005: 107, see also Taylor 1913: 164). Although the Vendée, by Bell (2007: 177) described as "the matrix against which future colonial wars were set", never had to endure this violent fate, gaseous attacks would soon come to constitute an indispensable component of French colonialism.

Colonial atmoterrorism was used as a means to instil terror and as a weapon of mass extermination. Its extra-judiciary nature signalled the indistinct divide between 'civilized warfare' and 'uncivilized chaos'. The legitimised killing of the colonial subject, "bare life" (Agamben 1998) defined by political exclusion, resulted in a legal zone of indistinction between the concept of a (limited) war, in which atmoterrorism was prohibited, and the act of unregulated extermination. It is not without coincidence that the term "'populicide', an important precursor to 'genocide'", was first coined during the massacre in the Vendée (Levene 2005: 110, Babeuf 1794). Recognition for this specific but legally contested and polemic term remains notoriously controversial.

A decade or so ago, the French historian Claude Ribbe (2005) stirred public outrage in France's academic and political circles by suggesting that the roots of the *Endlösung* should not be sought in Nazi Germany but, instead, in colonial, Napoleonic France. Part of his evidence was that sulfur dioxide, extracted from Haitian volcanoes, was deployed in ships with gas chambers called *etouffiers*. These 'chokers' were together with the drowning of bodies among the principal instruments to terrorise and suppress slave rebellions in Haiti. The massacring of black slaves was not the only harbinger to the colonial Nazi gas

chambers.<sup>7</sup> In Algeria in 1845, thousands of women, men and children are believed to have been exterminated as result of asphyxiation (Chitour 2011). The French Governor-General of Algeria argued that this "cruel extremity" was necessary to set a "horrifying example" that could "strike terror among these turbulent and fanatical montagnards" (Bugeaud in Brower 2009: 23).<sup>8</sup>

As control over air space became pivotal in post-WWI colonial governance (see e.g. Omissi 1990), heralding a new phase of colonial governance, the idea to inflict (atmo)terror 'from the air' soon followed. Examples include, but are not limited to: the Spanish use of mustard gas against Riffian guerrillas in the Rif War (1921–1926); the Italian (mustard and phosgene) gassing campaigns in Libya and Ethiopia (see e.g. Del Boca 2007 [1996]), a massacre to which the Italian government only admitted in the 1990s; the Japanese deployment of lewisite [*ruisaito*], mustard and other gases, which accounted for 10 percent of the total deaths in the Chinese army (see also Tanaka 1988).<sup>9</sup> These experiences signal the arrival and evolution of an extermination programme that proved economical and highly effective in the killing of a large group of dehumanised bodies.

Central to understanding the evil genius of atmoterror is the using of the body's respiratory dependency against itself. A historisation of gassing reveals a great deal about whose right to life is legally protected and whose rights are suspended; who is allowed to access to air and who is not; who is inside and who is outside law. These divisions are racially and bio-

<sup>&</sup>lt;sup>7</sup> Recent writings (e.g. Madley 2005) read the extermination programmes in 'German Southwest Africa' (*Deutsch-Südwestafrika*) as an important precursor to the Nazi genocide.

<sup>&</sup>lt;sup>8</sup> The events of these so-called *Enfumades* are narrated in Assia Djebar's (1985) novel *L' amour, la fantasia*. The story is based on thorough historical archival research of military accounts.

<sup>&</sup>lt;sup>9</sup> Preston (2015: 271) writes "that one of the reasons for Japan using gas against the Chinese but not against the other Allies was that... the Japanese considered the Chinese an 'inferior race'. Such racism may also have influenced the Italian attacks in Abyssinia."

politically determined. In Foucault's (2003b [1976]: 103) *College de France* lectures, one of the few instances that he discusses colonialism, he coins the term "boomerang effect" [*effet de retour*] to describe the return effect that "colonial practice can have on the juridico-political structures of the West."

"It should never be forgotten that while colonisation, with its techniques and its political and juridical weapons, obviously transported European models to other continents, it also had a considerable boomerang effect on the mechanisms of power in the West, and on the apparatuses, institutions, and techniques of power. A whole series of colonial models was brought back to the West, and the result was that the West could practice something resembling colonisation, or an internal colonialism, on itself."

The term 'boomerang' effect is not of Foucault's own design, but is arguably more visibly present in Hannah Arendt's work. Her (in Owens 2009: 30, 64) interpretation of the term refers to an "unexpected ruinous backfiring of evil deeds on the doer, of which imperialist politicians of former generations were so afraid... Continental imperialism... truly begins at home." This insight provided Arendt with the means to historicise the particularity of violence. She (Arendt 1970: 54) hints to the postcolonial history of gassing in a critique of atmospheric police violence targeted against Berkeley students:

"The recent gas attack on the campus at Berkeley, where not just tear gas but also another gas, 'outlawed by the Geneva Convention and used by the [US] Army to flush out guerrillas in Vietnam,' was laid down while gas-masked Guardsmen stopped anybody and everybody 'from fleeing the gassed area,' is an excellent example of this 'back-lash' phenomenon."

Even more powerful is Aimé Césaire's use of the phrase. The most important work here is his *Discourse on Colonialism* (2000 [1950]) which is based on and influenced by French

colonial atrocities in the Antilles. Césaire (He (ibid.: 41, emphasis in original), who in the original uses the term *Choc en Retour*, argued that experiences of Nazism in Europe and those of European colonialism cannot be separated from one another.

"[They] prove that colonisation... dehumanises even the most civilised man; that colonial activity, colonial enterprise, colonial conquest, which is based on contempt for the native and justified by that contempt, inevitably tends to change him who undertakes it; that the coloniser, who in order to ease his conscience gets into the habit of seeing the other man as *an animal* accustoms himself to treating him like an animal, and tends objectively to transform *himself* into an animal. It is this result, this boomerang effect [*choc en retour*] of colonisation that I wanted to point out."

Césaire (ibid. : 36) points out that the same "colonialist procedures which until then had been reserved exclusively for the Arabs of Algeria, the "coolies" of India, and the 'niggers' of Africa," had found their way into Europe where they were introduced in the German gas chambers. What Césaire's account does, in quite an extraordinary and provoking manner, is account for Nazi atmospheric terror by placing it in a historical colonial context.

The deliberate choice to describe this as a 'shock' is potent because it accounts for Europe's moment of paralysis and its (ongoing) inability to deal with the atmospheric terrorisation of bodies on its own soil. Césaire holds up a mirror to Europe that challenges the conventional dichotomisation of barbarity and civilisation and overturns the ambiguous line that international law draws between these two realities. In the process, but equally crucial, he also makes visible the instability of the line between pre- and post-Holocaust. Rothberg (2009: 80) writes that "[c]onnecting Hitler to colonialism allows Césaire to unveil Hitler's function as a fetish in European discourse, as the psychic figure that 'interrupts'

understanding and enables 'the abrupt halt made by memory in traumatic amnesias.'" The process of Europe's 'de-civilisation' culminates in the gas chamber where the continent's Humanism disappear into the thin, toxic air of Treblinka and Sobibór.

## **Dead Air**

An atmospheric attack on the practice of breathing constitutes a distinction between the possibility of an absolute and a delimited war, between savagery and civilisation, biology and law, and, most vital of all, between death and life. The 'killing of breath', which has a metaphysical history that goes back to the very foundations of European and other cultural traditions (e.g. Škof 2015), is what lies at the heart of the politics of the Holocaust. Gassing does more than kill individual life because it eliminates the medium that facilitates the very possibility for its emergence. Air is 'elemental' in the sense that its materiality enables, if not *is*, the condition of life. Without surprise, it was the killing of air, as life-enabling God or life itself, which is central to writings about the significance of the Holocaust. The function and experience of the gas chamber [*Spezialeinrichtungen*] shows how breathing, often assumed and left un-thought as a pre-social condition of/ for life, could no longer be excluded from political life.

It is the poisonous contamination of the atmosphere which, in the final analysis, leads Agamben (1998), perhaps unbeknownst by himself, to demonstrate how *zoe* relates to *bios* in the production of bare life. Agamben (2015: 2074) describes *zoe* as the "the simple fact of living common to all living things" but this does not mean, as some seem to suggest, that *zoe* can simply be "confined to the private sphere." *Zoe*, instead, is the opposite of private. Braidotti (2012: 64), in her attempt to account for the category of *zoe*, make this abundantly clear when she describes *zoe* as "vitalistic, pre-human and generative life". *Bios*, in contrast,

she (ibid.) conceptualises as "a discursive and political discourse about social and political life". *Zoe*'s generative potentiality [*potentia*], she explains elsewhere, "cannot be bound or confined to the single, human individual. It rather transversally trespasses all boundaries in the pursuit of its aim, which is the expression of its potency" (Braidotti 2011: 350). Agamben (1998: 11) writes that the "natural sweetness" of *zoe*, "reproductive life", has no plural. It is "life in general" while *bios*, its opposite, is "the qualified way of life proper to men" (ibid.: 66).

Differences between two forms of life, biological / political, nature / culture, collapse in the attacking of the breath. The gas camp is the *secularising* structure, the killing machine of metaphysical breath, that enables the politicisation of *zoe* and its inclusion into *bios* in the production of bare life. Of course, zoe is already secularised and transformed by birth into citizenship through, for instance, the social contract ("Every man is born with inalienable and indefeasible rights") but the death camp is, at least for European thought, believed to have been the first experience in which divisions between *bios* and *zoe* completely and absolutely breakdown. This so-called 'indistinction' is reduced to its fragile and bare biological minimum. Bare life is excluded from law, resulting in its demise, and at the same time included by it, because it is the instrument of law that enables the very possibility of death. Law transforms natural life (zoe) into bare life by exposing it to death but, because of the logic of this "inclusive exclusion" (inclusion by exclusion), it is only able to kill without hailing it as sacrifice. The camp offers the sudden realisation of the extent to which politics has managed to capture biological life. What is law? Agamben (1998: 27) answers that it is "made of nothing but what it manages to capture inside itself through the inclusive exclusion of the [exception]."

What was killed in the camps, however, was not *immediate* bare life but rather the atmospheric medium that constitutes and animates its existence. Law turns atmospheric to permeate and destroy the breathing body from within. "When life has entered the realm of politics, not only the body is inscribed in its mechanisms, but the arms of power are extended to the entire 'field' that makes man's natural existence possible" (Tavares 2008). In other words, it is the air, the condition of animation, which is the (first) target of gassing. It is important to remember that air is not *of* the body, but, rather it *is* (the source of) *zoe* itself. The air I breathe, the source of biological life, is not mine to give or take because it is always, and can only be produced, in collaboration with others (human and non-human).

Life in the general sense is less corporally situated and more of a cooperative and communal potential. Air, the oxygenised material abstraction that facilitates animation, is a shared, borrowed and travelling medium in which humans function as generative links and temporary "air-filters" (see also Adey 2014, introduction). Therefore, the emphasis should not be on how law includes *zoe* into *bios*, making biological life a part of political life, but rather on law's efforts to appropriate, regulate or, in other words, to include the ecological conditions of life for politics in the production of so-called bare life.

What is needed to prevent *zoe* from transforming into bare life is a counter-politics for it. This was perhaps what Kant had in mind when he attempted to regulate war. However, it was the unintended consequence of seeing the air only as a dependent condition for the body that enabled the very possibility of its withdrawal in the gas-chamber. If the air is thought of to exist exclusively in service of the body, it is only a small step to becoming another instrument of governance. Tavares (2008) explains:

"if biopolitics is a modality of government of man by which power is made effective at the precise point where individuals are just pure living beings, it is so, as Foucault argues, that [it] 'at once becomes possible to protect life and to authorize the holocaust'. Air is a material that becomes a question for politics insofar as it has a [direct] connection to life as such, and therefore should be made a matter of government in order to protect the life of individuals, as it was the material by which, in the paradigmatic space of the camp-as-gas-chamber, was chemically poisoned to be used as a weapon for mass murder."

It is the body's respiratory dependency on air that makes it vulnerable to become mere bare life. The orifices of the body to the outside enable the atmospheric transmittance of contagious gaseous particles that can corrupt but also fatally wound the body's microclimate. The fragility of this ecological 'lifeline' can upon its discovery no longer be thought of as existing simply outside of the realm of bio-political life. Life itself is of primary interest — and the purpose—of politics. Breathing can be socialised into law as, for example, through its exclusion in inter-state conflict or be incorporated by regulating it in situations of domestic policing. Whichever of the two is chosen, breathing as the first and last act of corporal life can no longer thought to exist outside of law, instead the breath is either bio-politically protected or an opening awaiting thanatopolitical exploitation. The air is in both cases already suffused with the legal principles that govern life.

This also means that gassing is the legal boundary that on the most fundamental level differentiates between the "[bare] life that is unworthy of being lived" [*Lebensunwertes Leben*] (Agamben 1998: 123) and political life that has the right to be lived. Gassing constitutes the midpoint or legal "zone of indistinction" in-between biopolitics and thanatopolitics. The politics of life and death come together in the air which can be used both to protect and end lives.

In Germany, atmospheric violence was a practice for the protection of the body politic for which, as Esposito (2008: 115) shows, doctors and physicians accepted a "therapeutic mission" in their role of executioners of those "they either considered nonessential or harmful to improving public health." Esposito's analysis of the original immunising function of law shows how Jews were perceived as parasites that threatened to contaminate the air on which healthy German bodies depended. The decision 'to gas' was meant to purify the German 'geo-body' as much as the human itself. Jews had already since the time of the Black Plague been blamed for the spreading of noxious 'miasma', their respiratory bodies infusing clean air with diseases (most notably tuberculosis), but it was especially in Nazi discourse on racial hygiene that this imagined relationship came to be fully exploited. Traverso (2003: 105) writes that almost all of the references to Jews in Mein Kampf "are borrowed from the vocabulary of parasitology". The language of medicine dominated public debate and was "permeated through and through by political ideology" (Proctor in ibid.: 106). Robert Ley wrote in a book with the telling title 'Pestilential Miasma of the World' [Pesthauch der Welt]:

"Is it enough to free ourselves of the pest, yet deal with others who are still infested with the pest? The brood that we leave alive is the Jewish world, the Jewish mentality, the *Jewish spirit, that still surrounds us, that follows us everywhere*" (Ley 1944, emphasis added)

"Indeed, SS gas chamber operators were called *Desinfektoren*, or disinfectors, in Nazi parlance" (Madley 2005: 445, original emphasis). The 'cleansing' of the atmosphere created an order based on an atmospheric relationship between law, hygiene and biology. An invisible gaseous line was drawn in the air. The atmosphere stopped functioning as the shared, communal condition of life and became a political boundary that carved up an

outside from within the inside. 'Atmospheric law', by deciding who was allowed to breathe and who was not, established "a third zone between subjecthood and objecthood" (Mbembé 2003: 26), between life and death, human and sub-human. Atmospheric violence rests on an uneven regulation of *zoe* that distinguishes human from beast.<sup>10</sup>

Law's primary function is neither designed nor intended to serve the purpose of protecting life from harm but rather is a political technique to redeem its animating quality. There are perhaps few other examples that make this as clear as law's governing of the air. There is strangely enough little acknowledgement of the political implications of law's atmospheric turn. It is this historical 'forgetting' of the primary medium, which in non-modern times had always been equated to life (as *Prana*, *Qi* or otherwise), that might explain why we seem to think and care so little about the air, even though millions of bodies, disproportionally coloured and poor, prematurely pass on each year from air pollution. Atmospheric governance has made it difficult to disentangle where life/nature ends and law/culture begins.

# Never Again?

The gassing of air and life did neither start nor end with the Holocaust. In fact, as Sloterdijk (2009) suggests, the story of atmospheric violence has only just begun. The experience of the 'boomeranged' Holocaust transformed atmoterror from a technology to kill bare life into a bio-political technology. Gassing, as a means to disrupt the biological working of the body, is now among the most popular of policing instruments to discipline populations.

<sup>&</sup>lt;sup>10</sup> Madley (2005: 441), writing on the 'beastialisation of the Herero people in German colonial Africa, explains that "central to Nazi ideology and genocidal thought" was the oft-repeated Nazi ethos that "[n]ot every being with a human face is human." It is no coincidence that the site of the Herero and Namaqua genocides was visited by the prominent eugenicist Eugen Fischer.

Atmospheric governance has in a relatively short time become the preferred technology of state power to discipline, punish and immobilise breathing bodies. Market research shows that the "gases and sprays segment is the most attractive segment in the global non-lethal weapons market" (TMR 2015: 33). While global demand for gas is surging, legal justification for its deployment is enshrined in the notorious exclusionary laws of the 1993 Chemical Weapons Convention (CWC).

The international treaty stipulates that a state may deploy 'toxic chemicals' for the purpose of 'law enforcement<sup>11</sup> — indeed, a very broad term — on the basis of their 'non-lethality'.<sup>12</sup> The term 'non-lethal' weapon (NLW) has been given a variety of legal definitions which either tend to deny or ignore that they could result in death.<sup>13</sup> Proponents of NLWs, a name that only made its way into dictionaries in the 1960s (Davidson 2009), "have been vigorous in their advocacy..., laying stress on the humanitarian attractions of 'war without death'", or at least of war with fewer deaths" (Robinson 2007: 4).

Seantel Anaïs (2015: 6, original emphasis) reveals the fundamental flaw in such reasoning by exposing the risk of normalisation that the term inherently conveys. She explains that "the concept of non-lethality continues to *make things happen*." To appreciate this process of normalisation we have to start with the invested faith in the technological capacity of these 'humane' NLWs. This liberal 'trust' in law is premised on the idea that they are designed and

<sup>&</sup>lt;sup>11</sup> Other permitted uses include: "(a) Industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes; (b) Protective purposes...; (c) Military purposes not connected with the use of chemical weapons and not dependent on the use of the toxic properties of chemicals as a method of warfare (OPCW 1993).

<sup>&</sup>lt;sup>12</sup> The term toxic chemicals' refer in Article II to "[a]ny chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals." (OPCW 1993). <sup>13</sup> NATO's (1999) 'Policy on Non-Lethal Weapons' states that "Non-Lethal Weapons are weapons which are explicitly designed and developed to incapacitate or repel personnel, with a low probability of fatality or permanent injury, or to disable equipment, with minimal undesired damage or impact on the environment." Davidson (2009) and Anaïs (2015) discuss other definitions.

said *not* to kill. Its very name entails a fundamentalist faith in a weapon that demands the surrendering of one body for the sake of protecting others. It is the promise to protect life whilst simultaneously attacking it that "makes new forms of intervention possible; it makes new programs of political action acceptable; it makes certain ethical assessments seem natural and therefore indisputable; and it makes new technical and strategic realities possible" (ibid.).

The force of Anaïs' argument stems not so much from her focus on the blatantly dangerous consequences of the deployment of non-lethal weapons but, rather, from exposing the problem inherent in the term 'non-lethal' itself. She (ibid.: 2015: 29, emphasis added) explains that the "salient question is not 'are non-lethal questions ethical, legal, and humanitarian in their nature?' but, rather, 'how are they invested with shifting notions of what is ethical, what is legal, what is humane?" Arguing from the principle of non-lethality helps towards expanding the legal realm of punishing bare life right up until the point of its killing. The concept of non-lethality, in other words, forces law into a direct engagement with the conditions that facilitate the division between animation (life) and de-animation (death). This is to say that non-lethality always carries within itself the difference of death. The legal meaning of life is here dissolved to the point of its (supposed) opposite while it is fear of this opposite, asphyxia, that propels the governed into obedience and halt before reaching and crossing this line. Non-lethality, therefore, is marked by a presence of absence. This is to say that non-lethality is not devoid of death but haunted by it. Mbembé (2003) famously coined the term 'necropolitics', as the "subjugation of life to the power of death", to argue that law does not revolve around the protection of life, via Foucault, but that it is centred on the excess of death.

The place of death in law is important when we consider that the very essence of (nonlethal) gassing — ie. the practice of atmospheric regulation — is an attack on the air's ability to animate the body. The point is not so much that the air is used to exercise sovereignty, understood as the 'right of the sword' (*droit de glaive*), but that the atmosphere itself becomes an extension of the logic of sovereignty. Gassing makes the significance of the relationship between body and air *explicit*, whilst, by attacking it, transforms the nurturing nature of this relationship into an ecstatic politics of death. Sovereign power is exercised by enforcing bodily cognition of the proximity of death. This move mirrors sovereignty in the form of bio-power, as a means "to make live and to let die" (Foucault 2003a: 241), but articulates it as an expression necropower, in which life "exists only in bursts and in exchange with death" (Mbembé 2003: 15).

It is important to remember that gassing throws into question the status and condition of life in law. What is at stake here is not merely the already discussed idea that atmospheric law historically produces bare life but, and perhaps anterior, the recognition that life in law is 'individualised' and anthropogenic. This means that law starts from the ontologically anthropogenic premise that life is conceptualised as humanly *embodied* in the form of the legal person. She is said to have *a right to life* or finds herself deprived from that right. The status or condition of life itself, however, is not accounted for but rather assumed. This is not a reiteration of Foucault's (2003a) biopolitics in which, as we have seen, law takes an active and productive interest in embodied life, or even of Agamben's (paraphrasing Savigny in 1998: 27) concept of a thanatopolitics in which "law truly 'has no existence in itself, but, rather has its being in the very life of men'". Neither position encapsulate the position of law in its regulating of the air, which, as I argue, either *is* life (as *zoe*) or, at least, an

elemental condition for the possibility of its emergence. Life is a shared medium that exists independently from the "airborn(e)" (Adey 2014: 45) human body that emerges and passes in a collaborative in-between with plants, animals, rain and sun. Air continues to be after the body has ended its period of (briefly) infused animation. A good part of our 'forgetting' seems to stem from the myth that the air exist *for* us, but *zoe* existed and will continue to be long after *bios*.

The objective of non-lethal gassing, therefore, should not only be seen as a legal attempt to regulate the body, although its political objective is to discipline or punish its behaviour, but, rather, and more importantly, as a means to make the air an integral part of sovereign power. Breathing is a *political* relation between the body and the sovereign power that can switch on and off the atmospheric conditions for its animation. Biopolitics, then, is not something that acts *on* the body but rather works *through* it. This understanding approximates Rose's (2009: 3) of a 'vital politics', or a 'politics of life itself', which is "concerned with our growing capacities to control, manage, engineer, reshape, and modulate the very vital capacities of human beings as living creatures."

An extension of *bios* into the atmospheric domain of *zoe*, which before its modern chemical discovery was situated in a metaphysical realm, confirms Agamben's (1998) Schmittian observation that there can be nothing outside of law except for law itself.<sup>14</sup> The idea that 'we are all bare life' should not blind us from the fact that not all bodies are governed equally, as race, age and class affect the quality of air a body respires<sup>15</sup>, or to deny that biological lives are constantly subject "to judgements of worth. [S]uch a judgement about

<sup>&</sup>lt;sup>14</sup> "I, the sovereign, who am outside the law, declare that there is nothing outside the law [*che non c' e un fuori legge*]" (Agamben 1998: 15).

<sup>&</sup>lt;sup>15</sup> The artist Dryden Goodwin (2012) has recently made a similar point in his art installation *Breathe*, which projects drawings of his young son's breathing torso. Children are especially vulnerable to air pollution.

the relative and comparative 'quality of life' of differently composed human beings and of different ways of being human" (Rose 2001: 21). Indeed, as we have seen in our (too) short postcolonial history of the gas chamber<sup>16</sup>, some bodies find themselves suspended in an indistinct legal zone between *zoe* and *bios*. These bodies are not separated from political life but, instead, legally excluded from the right to life. They are mere bodies which, as recent police violence demonstrates (Nieuwenhuis 2015b), are disciplined under threat of losing their right to breath. What is needed, as I will conclude, is a way to conceptualise and imagine life differently in law.

# Conclusion

I finish with the argument that any attempt to problematise the conflation between *zoe* and *bios* would need to start with a rethinking and reclaiming of *zoe*. This affirmative appropriation of a 'vital politics' accepts Braidotti's (2013: 115, 136) invitation to a post-human understanding of *zoe*. The "generative force of *zoe*, the great animal-machine of the universe", she posits, "undoes any clear-cut distinctions between living and dying. It composes the notion of *zoe* as a posthuman yet affirmative life-force." This neo-Spinozist rendering of life not as embodied, individualised or owned, but always in the active process of becoming, cooperative and animating, comes close to how the air historically was conceptualised. The air before its legal integration into *bios* was beyond "personal individual death... the ontological motor" (ibid.: 136) that was celebrated as 'inspiring', 'inspiriting', 'animating' and 'enthusing'. A new ethics for anthropogenic relationships to the air would require a change in the metaphysical status of life in law.

<sup>&</sup>lt;sup>16</sup> Future research on the gas chamber should take in consideration scientific developments in the history of chemistry and biology.

This is admittedly ambitious thinking but not less urgent at a time in which anthropogenic gases end the right to life of millions. A move towards what Philippopoulos-Mihalopoulos (2012) and others have described as 'posthuman law', which cuts across culture/ nature binaries, would accredit a legal and, therefore, moral status to the air in a manner that rivers and trees recently have received. The objective of the emerging body of philosophies of 'Ecological Jurisprudence' is to transform the anthropocentric and Eurocentric ontology of law into a decolonial, 'biocentric' and 'ecocentric' ethics that stirs away from classical ideas of a law that works *for* (some) 'humans' only. A different law requires a new perception of and commitment to life's ecological and environmental interdependence. This means seeing the 'right to life' not as a hierarchical relationship that originates from a metaphysical authority of human law over 'nature' but as recognition for our always already atmospheric being-together-with humans and more- than- humans.

## References

Adey, Peter. 2014. Air: Nature and Culture. London: Reaktion Books.

Agamben, Giorgio. 1998. Homo Sacer: Sovereign Power and Bare Life. Stanford (CA): Stanford University Press.

Agamben, Giorgio. 2015. The Use of Bodies. Stanford (CA): Stanford University Pres.

Anaïs, Seantel. 2015. *Disarming Intervention: A Critical History of Non-Lethality*. Vancouver and Toronto: UBC Press.

Arendt, Hannah. 1970. On Violence. London: A Harvest/HBJ Book.

Bell, David Avrom. 2007. *The First Total War: Napoleon's Europe and the Birth of Warfare as We Know it*. Boston and New York: Houghton Mifflin Company.

- Braidotti, Rose. 2012. "Transposing Life." In *'Clones, Fakes and Posthumans': Cultures of Replication*, edited by Philomena Essed and Gabriele Schwab, 61-78. Amsterdam: Rodopi.
- Braidotti, Rosi. 2011. *Nomadic Theory: The Portable Rosi Braidotti*. New York: Columbia University Press.

Braidotti, Rosi. 2013. The Posthuman. Cambridge: Polity.

- Brower, Benjamin Claude. 2009. A Desert Named Peace: The Violence of France's Empire in the Algerian Sahara, 1844-1902. New York (NY): Columbia University Press.
- Babeuf, F. N. 1794. *Du système de dépopulation ou La vie et les crimes de Carrier*. Paris: Franklin.

Cesaire, Aime. 2000 [1950]. Discourse on Colonialism New York (NY): Monthly Review Press.

- Chitour, Chems Eddine. 2011. "Algérie, 1845, un jour de mai : Il était une fois les enfumades." Accessed 3 February, 2017: <u>https://www.legrandsoir.info/Algerie-1845-</u> <u>un-jour-de-mai-Il-etait-une-fois-les-enfumades.html</u>.
- Choy, Tim. 2011. *Ecologies of Comparison: An Ethnography of Endangerment in Hong Kong*. Durham: Duke University Press.
- Churchill, Winston. 1944. "Winston Churchill's Secret Poison Gas Memo." Accessed 1 February, 2017: http://www.globalresearch.ca/articles/CHU407A.html.

Clausewitz, Carl von. 1984. On War. Princeton (NJ): Princeton University Press.

- Coleman, Kim. 2005. A History of Chemical Warfare. Basingstoke and New York (NY): Palgrave.
- Cowell, Frederick, Xuan Goh, James Cambrook, and David Bulley. 2007. "Chlorine as the First Major Chemical Weapon." In *An Element of Controversy: The Life of Chlorine in*

Science, Medicine, Technology and War edited by Hasok Chang and Catherine

Jackson, 220-245. London: British Society for the History of Science.

Davidson, N. 2009. 'Non-Lethal' Weapons. Basingstoke: Palgrave.

Del Boca, Angelo. 2007 [1996]. *I gas di Mussolini: il fascismo e la guerra d'Etiopia*. Rome: Editori riuniti.

Djebar, Assia. 1985. L'amour, la fantasia. Paris: Lattes.

- Esposito, Roberto. 2008. *Bíos: Biopolitics and Philosophy*. London: University of Minnesota Press.
- Foucault, Michel. 2003a. "Society Must Be Defended" Lectures at the College De France 1975-76. New York: Picador.
- Foucault, Michel. 2003b. "Society Must Be Defended" Lectures at the Collège de France, 1975–76. New York: Picador.
- Freemantle, Michael. 2015. *The Chemists' War: 1914-1918*. Cambridge: Royal Society of Chemistry.
- Gillespie, Alexander. 2011. A History of the Laws of War: Volume 2: The Customs and Laws of War with Regards to Arms Control. Oxford: Hart Publishing.

Goodwin, Dryden. 2012). Breathe. Accessed 1 July, 2017:

http://www.drydengoodwin.com/breathe.htm

- Graham, Stephen. 2015. "Life-support: The political ecology of urban air". *City* 19 (2-3): 192-215.
- Heidegger, Martin. 1988 [1936]. Schelling: Vom Wesen der menschlichen Freiheit. Frankfurt am Main: Vittorio Klostermann.
- Höss, Rudolf. 1996. *Death Dealer: The Memoirs of the SS Kommandant at Auschwitz*. New York: Da Capo Press.

- Irigaray, Luce. 1999. *The Forgetting of Air in Martin Heidegger*. Austin (TX): Univeristy of Texas Press.
- Johnson, Jeffrey Allan. 1990. *The Kaiser's Chemists: Science and Modernization in Imperial Germany*. London: University of North Carolina Press.
- Joy, Robert, J.T. 1997. "Historical aspects of medical defense against chemical warfare." In *Medical Aspects of Chemical and Biological Warfare*, edited by F.R. Sidell, E.T. Takafuji and D.R. Franz, 87-110. Washington, D.C.: Borden Institute.
- Kant, Immanuel. 2003. *To Perpetual Peace: A Philosophical Sketch*. Cambridge: Hacket Publishing Company.
- Legg, Stephen. 2007. Spaces of Colonialism: Delhi's Urban Governmentalities. Oxford: Blackwell.
- Levene, Mark. 2005. Genocide in the Age of the Nation-State: Volume II The Rise of the West and the Coming of Genocide. New York: Tauris & Co. Ltd.
- Ley, Robert. 1944. "Pesthauch der Welt." Franz Müller Verlag Accessed 2 February, 2017: http://research.calvin.edu/german-propaganda-archive/pesthauch.htm.
- Lieber, F. 1898 [1863]. Instructions for the Government of Armies of the United States in the Field. Washington, D.C.: United States Government.
- MacLeod, Roy. 1993. "The chemists go to war: The mobilization of civilian chemists and the british war effort, 1914–1918." *Annals of Science* 50 (5):455-481.
- Madley, Benjamin. 2005 "From Africa to Auschwitz: How German South West Africa incubated ideas and methods adopted and developed by the Nazis in Eastern Europe." *European History Quarterly* 35(3): 429-464.
- Marder, Michael. 2013. *Plant-Thinking: A Philosophy of Vegetal Life*. Chichester: Columbia University Press.

Mbembé, Achille. 2003. "Necropolitics." Public Culture 15 (1):11-40.

- Nieuwenhuis, Marijn. 2015a. "On one breath all depend." *Journal of Narrative Politics* 1(2): 167-179.
- Nieuwenhuis, Marijn. 2015b. "A right to Breathe". Accessed 1 July, 2017.

http://criticallegalthinking.com/2015/01/19/right-breathe/.

- Nieuwenhuis, Marijn. 2016a. "Breathing materiality: aerial violence at a time of atmospheric politics." *Critical Studies on Terrorism 9* (3): 499-521.
- Nieuwenhuis, Marijn. 2016b. "The Governing of the Air: A Case Study of the Chinese Experience." *Borderlands* 15(1): 1-23.
- Nieuwenhuis, Marijn. Forthcoming. "The Politics of Breathing: Knowledge on Air and Respiration." In *Atmospheres of breathing: the respiratory questions of philosophy*, edited by Škof, L. & P. Berndtson. New York: SUNY Press.
- NATO. 1999. "NATO policy on non-lethal weapons." Accessed 2 February, 2017: http://www.nato.int/docu/pr/1999/p991013e.htm.
- Ojakangas, Mika. 2005. "Impossible Dialogue on Bio-power. Agamben and Foucault." *foucault studies* (2):5-28.
- Omissi D. 1990. *Air Power and Colonial Control: The Royal Air Force 1919–1939*. Manchester University Press, Manchester.
- Organisation for the Prohibition of Chemical Weapons. 1993. "Chemical Weapons Convention: Article II. Definitions and Criteria." Accessed 15 January, 2017.
- Owens, Patricia. 2009. Between War and Politics: International Relations and the Thought of Hannah Arendt. Oxford: Oxford University Press.

- Philippopoulos-Mihalopoulos, Andreas. 2012. "Law, Space, Bodies: The Emergence of Spatial Justice." In *Deleuze and Law*, edited by Laurent de Sutter and Kyle McGee, 90-110. Edinburgh: Edinburgh University Press.
- Preston, Diana. 2015. A Higher Form of Killing: Six Weeks in World War I That Forever Changed the Nature of Warfare. New York (NY) and London: Bloomsbury Press. Ribbe, Claude. 2005. Le Crime de Napoléon. Paris: Éditions Privé.
- Robinson, J. P. Perry. 2007. Non Lethal Warfare and the Chemical Weapons Convention. In *Further HSP submission to the OPCW Open-Ended Working*: Group on Preparations for the Second CWC Review Conference.

Rose, Nikolas. 2001. "The Politics of Life Itself." Theory, Culture & Society 18 (6):1–30.

- Rose, Nikolas. 2009. Politics of life itself: biomedicine, power, and subjectivity in the twentyfirst century / Nikolas Rose. Princeton (NJ): Princeton University Press.
- Rothberg, Michael. 2009. *Multidirectional Memory: Remembering the Holocaust in the Age* of Decolonization. Stanford (CA): Stanford University Press.
- Škof, Lenart. 2015. Breath of Proximity: Intersubjectivity, Ethics and Peace. Dordrecht: Springer.

Sloterdijk, Peter. 2009. Terror from the Air. Los Angeles (CA): Semiotext.

- Smart, Jeffery K. 1997. "History of chemical and biological warfare: an American perspective." In *Medical Aspects of Chemical and Biological Warfare*, edited by F.R.
  Sidell, E.T. Takafuji and D.R. Franz, 9-86. Borden Institute.
- Spiers, Edward M. 1994. *Chemical and Biological Weapons A Study of Proliferation*. London: Palgrave-Macmillan.
- Spiers, Edward M. 2010. A History of Chemical and Biological Weapons. London: Reaktion Books.

- Tanaka, Yuki. 1988. "POISON GAS the story Japan would like to forget," *Bulletin of the Atomic Scientists* 44(8): 10-19.
- Tavares, P. 2008. "General Essay on Air, Defined and Begun. Probes into the Atmospheric Conditions of Liberal Democracy." Department of Visual Cultures, Goldsmiths -University of London Accessed 1 March, 2017:

http://www.paulotavares.net/air/part-01-the-air-inside-the-political-chamber/8conditioning-air/.

Taylor, I.A. 1913. The Tragedy of an Army: La Vendee in 1793: Hutchinson and Co.

- Thomas, Martin. 2011. "Paying the Butcher's Bill': Policing British Colonial Protest after 1918." *Crime, Histoire & Sociétés / Crime, History & Societies* 15 (2):55-76.
- TMR. 2015. Global Non-Lethal Weapons Market: 2015–2021, Albany (NY): Transparency Market Research.
- Traverso, Enzo. 2003. *The origins of Nazi violence*. London and New York (NY): The New Press.
- Valentine, D, (2016) "Atmosphere: Context, detachment, and the view from above Earth." American Ethnologist 43(3), pp. 511-524.

Whitehead, Mark. 2009. State, science and the skies: governmentalities of the British atmosphere. Oxford: Wiley-Blackwell.