

DISCOURSE AND STRATEGIC USE OF THE MILITARY IN FRANCE AND EUROPE IN THE COVID-19 CRISIS

FLORIAN OPILLARD* , ANGÉLIQUE PALLE**  & LÉA MICHELIS***

**Institute for Strategic Research (IRSEM, Paris) / IHEAL-CREDA, Paris, France. Email: florian.opillard@gmail.com*

***Institute for Strategic Research (IRSEM, Paris) / UMR Prodig, Paris, France. Email: angeliques.palle@gmail.com*

****Rennes 1 University / IRSEM, Paris, France. E-mail: florian.opillard@gmail.com; angeliques.palle@gmail.com; michelislea@gmail.com (Corresponding author)*

Received: April 2020; accepted May 2020

ABSTRACT

In March 2020, the French President called to war against the COVID-19 which was followed by the launch of a military operation called Operation Resilience. This use of martial rhetoric initiated an effective mobilisation consisting in logistical assistance to the health sector. While armies are increasingly used to deal with environmental disasters, aside from their traditional role, this paper postulates that the geography of the French and international military engagement can be used to analyse both the institutional strategy of crisis management and the message governments send to their population. Military involvement differs in terms of missions given and of the amount of troops mobilised. It first questions the use of the military in the name of national resilience in the political discourse and the way it displays a symbolic message to the population, before analysing the role of armies in the crisis through the spatiality of their interventions.

Key words: COVID-19; military; France; Europe; resilience

INTRODUCTION

While announcing the implementation of strict lock-down measures on 16 March 2020, to fight the breakout of the COVID-19 epidemic, the President of the French Republic declared: 'We are at war, yes in a sanitary war. We are fighting neither against an army nor against another nation, but the enemy is here, invisible, elusive, and advancing. And that requires our general mobilization. We are at war' (Macron 2020a). After this political announcement, Emmanuel Macron decided to call in the army to help dealing with the crisis. Indeed, the French President announced the launch of 'Operation Resilience' on 25 March 2020 (Macron 2020b).

The name chosen for this operation refers to the larger notion of risk, a widely studied

topic in geography, which makes particular sense in this context. It gives first a certain sense in this context. It gives first a certain type of mission to the French army. Namely, to compensate for the current vulnerability of the French state. Its meaning is also a symbolic and political message to the population, associating resilience with military values and calling for a transfer of this value to the entire society.

Research questions – This choice of name and the types of missions the French army has been carrying out during the crisis paradoxically highlights the actual vulnerabilities of French society towards the epidemic and raises several questions this paper seeks to answer. The first aim of this paper is to question the involvement of armies in the COVID crisis and assess its

impact. What are the armies used for in this peculiar 'war' that some other European leaders disqualify as such? What are these missions saying about the crisis management? Going beyond the sole COVID-19 crisis, this paper also explores what this resort to armies changes to their traditional missions and their relation to societies. Against a background where armed forces are more and more appealed to in order to cope with environmental disasters, and have started to take into account climate change issues in their strategic plans, this specific sanitary disaster is also linked to environmental issues and the interaction between human societies and wildlife (Courtin *et al.* 2015; Keck 2010). As such it questions the evolution of the role of armies towards societies, their traditional missions and their level of preparedness to fulfil these expectations.

The paper draws on the conceptual frameworks of risk in geography and from land-use planning geopolitics to lay this analysis. It focuses first on the French case where the martial discourse is particularly strong compared to other European countries, but where the actual engagement of armed forces appears rather low. The discussion then opens to a comparison to other European countries.

This paper makes two main hypotheses. First the resort to armies, through the way they are used as a territorial equaliser and through the political discourse of governments, highlights the existing vulnerabilities towards the epidemic. Second the intervention of armies in this epidemic fits in a wider landscape of interventions to fight environmental disasters, which marks an evolution of their role and of what societies expect of them.

Methodology and conceptual framework

The analysis is based on empirical data on the involvement of armed forces (type and number of missions carried out, number of military personnel involved, location of missions, etc.) collected between March and April 2020. The sources encompass international press (accessed through the Europresse database) and press briefings from the Ministry of defence of EU countries. They have been analysed through both

quantitative and qualitative cartography. A qualitative analysis on the comparison of the COVID crisis to a war situation has been conducted in the political speeches of leaders and governments of the most touched EU countries in terms of death ratio including France, Italy, Spain, Belgium and the Netherlands, along with Germany.

The conceptual framework of this paper is twofold. The analysis of political discourse is based on the geography of risks and the links made in the scientific literature on the topic between the notions of vulnerability, resilience and disaster (the analysis and literature used are described below). The analysis of the missions carried out by the armies (see below) uses the conceptual framework of land-use planning, and more specifically its geopolitical aspects (Subra 2018 [2007]).

Paper structure – This paper first explores the capabilities involved in the French Operation Resilience and questions the role devoted to armies in the political discourse. It analyses the legal background and society's acceptability for the use of the army in this crisis. It then turns to the political discourse that legitimates this use and to the values that it conveys. This political discourse and the use of the word resilience to name the armies' missions is analysed against the geographic conceptual background of risk, investigating how it acts as a highlight of actual vulnerabilities and as a conveyer of values that are perceived as military to the social body as a whole.

The second section of this paper turns to the actual mission carried out by the armed forces in the crisis, how it marks an evolution of their societal role and the types of vulnerability they highlight. Acknowledging the link made by scientific literature between pandemic outbreaks and environmental issues, it explores the relation of armies to environmental catastrophes, their increasing involvement in their management, and how it affects their traditional missions. It then turns to the types of missions carried out by the French forces in the current COVID-19 crisis. Drawing from land-use planning framework, it analyses how they act as a territorial equaliser, thus revealing the vulnerabilities they aim at addressing.

The third section compares the operation Resilience to the mobilisation of the army in other European states, in terms of discourse, dimensioning and types of missions.

THE FRENCH 'RESILIENCE' OPERATION IN THE COVID-19 CRISIS, QUESTIONING THE ROLE OF THE MILITARY

This section assesses the capabilities involved in the French operation Resilience and questions the role devoted to armies in the political discourse.

When Operation Resilience was launched, the armed forces were already mobilised in France to fight against the coronavirus, in particular the Military Health Service (MHS) via the Mulhouse Military Reanimation Unit (MRU). The announcement by the President of the Republic of the beginning of the operation thus gave shape to a military action that had so far remained 'in scattered order' (Salaün 2020).

In the case of an intervention on national territory, the use of the army meets certain conditions which guarantee the respect of its specific missions. They also condition the acceptability of the military presence by the population. This first subsection thus delves into the legal and political grounds that made the operation possible.

Legal framework for the use of armed forces on national territory and civil-military cooperation – The French *Livre Blanc pour la Défense et la Sécurité Nationale*¹ published in 2013 sets out the various risks and threats addressed by the defence strategy, and includes 'major crises resulting from natural, health, industrial technological or accidental risks' (Livre Blanc 2013, p. 48). The use of the term 'war' to qualify the current context by the civilian authorities implies considering this crisis as a direct threat to the 'essential functions of the nation' (Livre Blanc 2013, p. 48). It therefore provides for the use of the army for health risks such as the COVID-19 crisis. In a study on the 'Protection of national territory by the Army', the French Institute of International Relations stated in 2009 that:

In the next fifteen years, the occurrence of a pandemic caused by such a virus or bacteria is plausible, without the authorities concerned being able to decide on its risk of contagion or lethality. While the response to this problem is not the direct responsibility of the armed forces in general, or the army in particular, it will nevertheless be up to them to manage the consequences of a possible pandemic disaster on national territory (Charlier 2018, p. 14).

The bacteriological risk is therefore considered as a possible threat to national territory and as a potential trigger for military intervention. The French army thus has special units dedicated to this type of threat (2nd regiment of Dragons, specialised in nuclear, radioactive, bacteriological and chemical threats).

However, the use of armed forces on national territory for COVID-19 takes place in a specific context, which is due both to the historical nature of relations between the army and the civilian authorities and to a recent context of military mobilisation for anti-terrorist missions (*Operation Sentinelle*).

On the one hand, the sensitive nature of armed interventions on national territory is due to the mistrust of the civil power towards the military, connected to recent history. Under the Fourth Republic (1946–1958), 'never before have politicians gone so far in abandoning their prerogatives as during the Algerian War. The "military power" that was established at the end of the Fourth Republic was largely the consequence of the resignation of political leaders' (Cohen 2008). It was this power left to the army that led to the trauma of the 'putsch of the generals', the name given to the attempted *coup d'état* by several generals in the French army in Algiers in 1961. It has been one of the drivers for a change of regime, the Fifth Republic clearly placing the military system under the sole political orders.

On the other hand, contemporary reluctance has emerged regarding the appropriateness of the use of the army on the national territory for anti-terrorist missions. Since 2015, the *Sentinelle* operation has permanently mobilised close to 7,000 soldiers on national territory for dissuasion and surveillance missions,

a number that may increase to 10,000 in the event of a major crisis. This operation has been the subject of much criticism, including that of the low level of resources allocated to these military personnel (Tenenbaum 2016). Moreover, at the beginning of 2019, fear arose of intervention by the soldiers of Operation *Sentinelle* to supervise the social movements of the ‘yellow vests’, such as the spectre of intervention by armies on the territory for counter-insurgency missions, evoking in particular the Algerian war (Jolly 2017).

However, in France, military intervention on national territory is strictly limited by law. Apart from a state of siege or a state of war, which are two exceptional legal regimes, the use of the army can only take place for law enforcement missions under very specific conditions, described as a ‘state of necessity’. The current sanitary state of emergency is no exception to this rule. A state of necessity occurs ‘when the means at the disposal of the civil authority are deemed to be non-existent, insufficient, unsuitable or unavailable’.² It is therefore systematically in support of civilian means that the army’s resources are made available for the civil authority, which must order its requisition. The decision comes from a dialogue between the civilian authorities and the military institution, which the law describes as ‘civil-military cooperation’. In practice, the French army is thus regularly called upon to provide the civil authorities with human or material resources, particularly in the event of natural disasters. However, this recourse to the armies in France is accompanied in the COVID-19 crisis by the use of a particular warlike discourse connected to the use of the concept of resilience.

War rhetoric and resilience: the political instrumentalisation of a geographical concept

– This second subsection focuses on the political discourse used to justify the resort to the army. It discusses the joint use of the war rhetoric by the French president with the naming of the operation ‘Resilience’, which appeals to military values and practices.

In his speech of 16 March 2020, the French President repeated ‘we are at war’ six times, multiplying references to the ‘nation’, the fight, the ‘common enemy’ and calling for

‘general mobilisation’.³ Announcing the use of armies with the operation Resilience, Emmanuel Macron called on his ‘compatriots’ and their commitment. The President uses a warlike referential, and specifically refers to the First World War by declaring that ‘we will stand’, ‘our nation stands’ and ‘they have rights over us’ (Confavreux & Audoin-Rouzeau 2020). This part questions the purpose of these historical referrals and the use of a war rhetoric applied to a health crisis.

Following Clausewitz (1955), for war to occur, two sides must face and oppose each other with a feeling and intention of hostility. If the general population clearly opposes the virus, the intention and feeling of hostility are less perceptible. Described as ‘invisible’ and ‘elusive’, COVID-19 is designated as the enemy of the war at work. The amount of information relayed about the virus, true or false, tends to reinforce the confusion about its consequence on health. The fact that it manifests itself differently depending on individuals – some being severely affected, others being asymptomatic – can unsettle populations, creating ‘panic phenomena in all directions’ (Macron, 2020a). These representations have already been associated with the figure of the enemy that France has fought in several conflicts, notably to qualify Việt Minh in the Indochina war. Indeed, the enemy was described as ‘a mobile cloud, with vague and changing contours, dissolving like a mist or condensing into a violent thunderstorm, quickly passing by and leaving only a blue sky and a few ruins behind’ (Ely 2011, p. 66). Whereas soldiers constituted the frontline in the last two major world conflicts that remain very much salient in the French national narrative, it is now the civilian caretakers and hospital staff who occupy this position.

As David Bell (2020), puts it: ‘The metaphor [of war] is inevitable ... But it also sets a trap for us’. It has been more than seventy years since Europe has not experienced a war of global proportions on its own territory, and current operational commitments demand less of the population. They have, moreover, taken a different turn, since they are called ‘external operations’ and this term covers many realities. Very evocative, the term ‘war’ therefore appeals to the collective and individual imaginaries of French national

history. It refers more to the idea of war than to the war itself. Thus, the use of references to war serves the political purpose of raising awareness and creating national unity, building consent for the crisis management by the civil authority.

The war rhetoric and the representations it brings is indeed part of the political discourse. While the use of armed forces is based on the intention to use military expertise in the management of the health crisis (Migliani 2012) within the framework of Operation Resilience, the simultaneous use of war rhetoric and the term resilience in political discourse raises questions.

Concomitantly, resilience is a concept that has long been used by the French armies. According to (Livre Blanc 2008, p. 64), it 'is defined as the willingness and ability of a country, society and governments to resist the consequences of aggression or major disaster and then quickly restore their ability to function normally, or at least in a socially acceptable manner. It concerns not only public authorities, but also economic actors and civil society as a whole'. As practitioners of crisis and risk management, armies appear and present themselves as resilient organisations, their adaptation capabilities being constantly tested. Because they operate in crisis zones where they must remain operational as the last state resort, armed forces have developed tools, monitoring techniques, planning methods and health procedures to cope with epidemic situations (Merlin *et al.* 1996; Boutin *et al.* 2004; Migliani *et al.* 2004; Rogier *et al.* 2004; Pohl *et al.* 2014). Thus, the civil authority appeals to the strategic tool which the armies represent, using them as a last effective and symbolic resort to compensate for an overwhelmed public infrastructure. However, despite the symbol they bring, the armies seem to intervene downstream of the shock (the irruption of COVID-19 in France) and not upstream. Their contribution is above all logistical. In short, they act as a tool and not as a player in the management of the crisis, which could become a liability. Indeed, it could weaken operational efficiency outside the territory since they already operate on a tight flow. France has already had to recall its troops from Iraq (Chammal Operation)

in order to avoid their infection (Army Staff 2020a) – Iraq being close to Iran which is strongly hit by the virus – a troop recall which has also been announced by Finland. French soldiers have also been infected by the virus on the aircraft-carrier the *Charles de Gaulle*, which led the army staff to reconsider the safety measures implemented to protect the troops (Army Staff 2020c). This then raises the question of the societal role of the military, of the definition of its priority missions, but also of the meaning troops give to their commitment.

In this context, the juxtaposition of the concept of resilience and war rhetoric in the French president's speeches provides legitimacy for a mere logistic mission in a context of national crisis, while the name '*Opération Résilience*' suggests that it is a genuine war operation. This association between war and resilience conveys an idea of a resilient nation, adopting military values in the 'war' against COVID-19. This mix of concepts perhaps masks a reality that was mentioned by the head of the French Military Health Service, Maryline Gygax Généro, when she stressed that their 'means are not unlimited' (Clémenceau 2020). Indeed the French armed forces and in particular their Health Service have experienced numerous budget cuts over the last twenty years (HCECM 2019). The actors of the requested resilience may therefore not have the means to achieve it.

Finally, by using the term 'resilience' to name this military operation, the civil power places itself in a very specific genealogy. Resilience thus serves as a 'framing process' (Goffman 1974), which makes it possible for the civil authority to invoke a scientific and political paradigm 'so as to mobilize adherents and potential members, obtain the support of their audiences and to demobilize adversaries' (Benford & Snow 2000, p. 198) in the context of political and military action.

Vulnerability, resilience and adaptation: from a scientific paradigm to a public policy framework – This subsection analyses the transfer within the field of public policy of the scientific framework of risk to which resilience belongs. It explores how the State uses the term as an instrument for political purposes, in line with neoliberal international policies on

disaster management (Felli 2014).

Francophone geography generally distinguishes between hazard and risk. While hazard mostly refers to a bio-physical process that could happen (a flood, a cyclone, a virus), risk is a social object whose occurrence depends on the degree of exposure and preparedness of populations to the hazard, namely, their vulnerability. However, in the history of the discipline, the emergence of the concept of vulnerability of individuals and societies to hazards is recent, and that of the concept of resilience, which is the opposite, is just as new.

While the concept of vulnerability emerged in France in the 1990s to analyse the exposure of populations to hazards, the technical imagination of engineers prevailed over an analysis of the social and individual conditions of risk perception (Veyret & Reghezza 2005). It is therefore primarily an approach focused on engineering that is emerging, which involves the construction of infrastructure to contain the hazard (dykes, landslide nets). In this first integration of vulnerability into risk studies, individual and collective risk practices and representations are not questioned. This initial approach quickly reached its limits, due in particular to the appearance of new hazards, which are spatially difficult to circumscribe. As Veyret and Reghezza (2005, p. 64) note, ‘the treatment of risk and vulnerability consisted, according to Cl. Gilbert [...] in a “spatial projection of the hazard giving the appearance of potential enemies (...) in relation to whom lines of defence had to be organised”, but what to do when the enemy is poorly identified or spatially poorly circumscribed?’.

It was not until the mid-1990s that a broader definition of vulnerability emerged as ‘social vulnerability’ (Veyret & Reghezza 2005, p. 64). It makes it possible to integrate a society’s perception and culture of risk into the consequences of hazards. However, as Béatrice Quenault (2015, p. 142) points out, ‘the ability to appreciate the vulnerabilities of human societies is increasingly perceived as an essential step towards effective risk reduction and the promotion of a culture of resilience to disasters’. Developments in this triad of possible reactions to risk – prevention, protection, adaptation – express the positioning of societies in the face of risk. If protection and prevention

show a willingness to control risk, largely stemming from technicist cultures, the adaptation that must lead to a resilient society is a form of acceptance of the hazard and the associated vulnerability.

The use of the lexical field of resilience, on the part of a French state that is largely an heir to a culture of prevention and protection planning, is therefore particularly interesting to analyse insofar as it is a declaration of partial political inefficiency and an inability to fully control a risk (Pigeon 2006). It is all the more so in the context of a military operation, whereas the evolution of the international context and the rising awareness of so-called ‘systemic’ risks have, since the early 2000s, challenged the myth of a possible absolute protection of citizens against the risks by the public authorities.

The notion of disaster, an actualisation of a risk that neither prevention nor protection could control, is embedded in this context. For social sciences, disaster ‘reveals the dysfunction of a society’ (Veyret and Reghezza 2005, p. 5; see also Quarantelli 1998), which proves incapable of absorbing a shock (O’Keefe *et al.* 1976). This disaster then becomes an administrative state (that of a natural disaster) that is declared by public authorities and which most often leads to insurance-based reparation mechanisms. In the case of the COVID-19 crisis in France, all the measures taken by the State, from a state of health emergency to the use of armies, were based on the observation of a ‘state of health disaster’ which does not legally exist. This is evidenced by the bills or resolutions, aiming at creating it on the same basis than the existing ‘state of natural disaster’, tabled in parliament since the beginning of the crisis.⁴

In parallel with the structuring of the academic field, these notions are transferred to the political sphere thanks to the ability of geographers to play in both arenas. Thus in France, a rising number of regulations at local, regional and national levels have been using this vocabulary and adopted its meaning, for example through the development of ‘risk prevention plans’. While the notion of risk and vulnerability is being operationalised at the national level in France, a form of ‘disaster government’ (Revet 2018) is also emerging at the international level (Revet

2018). The anthropologist Sandrine Revet has analysed how the vocabulary resulting from risk analysis has been used to structure institutional action on an international scale. This action included 'a major lobbying effort at the United Nations by a group of international scientists whose efforts led to the designation of the 1990s as the International Decade for Natural Disaster Reduction (IDNDR)' (Revet 2018, p. 167), as well as the creation of several specific programmes within international bodies.⁵ It was not until the 2000s and the rise of climate change concerns that the concept of resilience was incorporated into these programmes, particularly that of the United Nations International Strategy for Disaster Reduction (UNISDR). It defines resilience as 'the capacity to withstand disaster-induced change in order to return to an acceptable level of functioning'. In this sense, resilience and disaster adaptation go hand in hand: adapting to a disaster means settling for its potential occurrence and anticipating a return to normality.

Such a definition of resilience emphasises, in addition to the impossibility of preventing or controlling risk, the need to return to a pre-disaster state, and therefore overlooks the possibility of change and social transformation it contains. This critique has been largely structured in social sciences by analyses of the United Nations system of governance, described as 'liberal environmentalism' (Bernstein 2001). These analyses highlight the transformation in the use of resilience in climate policy. While Francophone geography considers vulnerability and resilience as policy instruments, addressed to collectivities, UN climate policy uses resilience to give force to the individual's prescription for 'permanent adaptability to the extremes of turbulence' (Walker & Cooper 2011, p. 156). This enjoyment 'hypostasizes inequalities of resources and power, and thus explains the inadaptation of some individuals to the changing world' (Felli 2014, p. 8). The arguments of Felli (2014) appear particularly relevant when describing the ethical implications these policies prescribe. Those appear in line with works describing the incorporation of neoliberal ethics within the subject, described by Foucault (2004) as specific forms

of governmentalities. In a new environmental policy framework where adaptation is set as a new norm, 'resilience only makes sense as a response to an environment that is perceived to be constantly changing [...] The aspiration for stability, social and environmental security, contradicts the attitudes that are now necessary to the resilient subject' (Foucault 2004, p. 9).

In this context, conveying a national resilience throughout the name of a military operation is particularly interesting for several reasons. First, because it colours the civil authority's discourse with an ethical and political philosophy, borrowed from the neoliberal thinking stemming from international policy framings (Aykut & Dahan 2015). Second, because it transfers to the social body as a whole a strong incentive to adhere to a military value: the capacity to accept risk and adapt to it in the search for a goal. Third, because it opens the way to an admission of political and institutional impotence to fully prevent certain types of risk, particularly the so-called 'systemic' risks for which awareness of the effects of climate change (especially extreme weather events) is beginning to popularise a culture of risk. Yet the armies have been regularly involved in the management of these risks for the past ten years.

PUTTING POLITICAL DISCOURSE TO THE TEST OF MISSION REALITY: SPATIALITY AND ROLE OF THE RESORT TO ARMIES

This section compares the political discourse and the message it conveys analysed in the first section to the reality of missions carried out by the military in the management of the COVID-19 crisis. It sets the role taken by the military in this epidemic outbreak into a global context of environmental and health crisis, analyses how it highlights the vulnerability of the French society towards the crisis and questions how this evolution shapes a new role for the military.

The French army and its interventions in health and environmental crises – This subsection analyses the wider context of the intervention of the military in the COVID-19 crisis. It questions

how the military in French society is changing within a global landscape of environmental crisis. The military is regularly publicly mobilised by states to deal with extreme environmental events. In 2019–2020, Australia made extensive use of its army to deal with dry season wildfires, on an unseen scale since the Second World War, calling on 3,000 reservists to help evacuate the population; to provide humanitarian assistance and to control fires (Albeck-Ripka *et al.* 2020). Similarly in 2019, Russia called on the army to help control fires in Siberia (Nechepurenko 2019), while the Canadian army deployed 2,000 soldiers to help the population cope with flooding (CBC News 2019).

In France, the military is also regularly called upon by the public authorities (on a prefectural or ministerial level) to intervene in support of the population, fire or police forces in the context of extreme weather events, whether occasional or recurrent. This action is permanent on the national territory

in the *Hephaestos* operation (fight against forest fires), and regular in the assistance to populations affected by natural disasters (such as the storm *Xynthia* in 2010 and periodically for the *Cévenoles* episodes). Figure 1 shows the material and human commitments of the French armed forces on the national territory over the last ten years in the context of a climatic event. Although the size of the human and material resources tends to decrease, particularly from 2015 onwards (which corresponds to the start of Operation *Sentinelle*), the frequency of these commitments remains pluriannual in the vast majority of cases. One of them is particularly interesting to analyse, namely the management of the crisis linked to the passage of cyclone *Irma* in the West Indies and particularly in 2017 on the island of Saint Martin – which is partly a French territory. The military response to the crisis was then ‘dimensioned as an external operation’⁶ according to one of the officers in charge of its management.⁷ Material

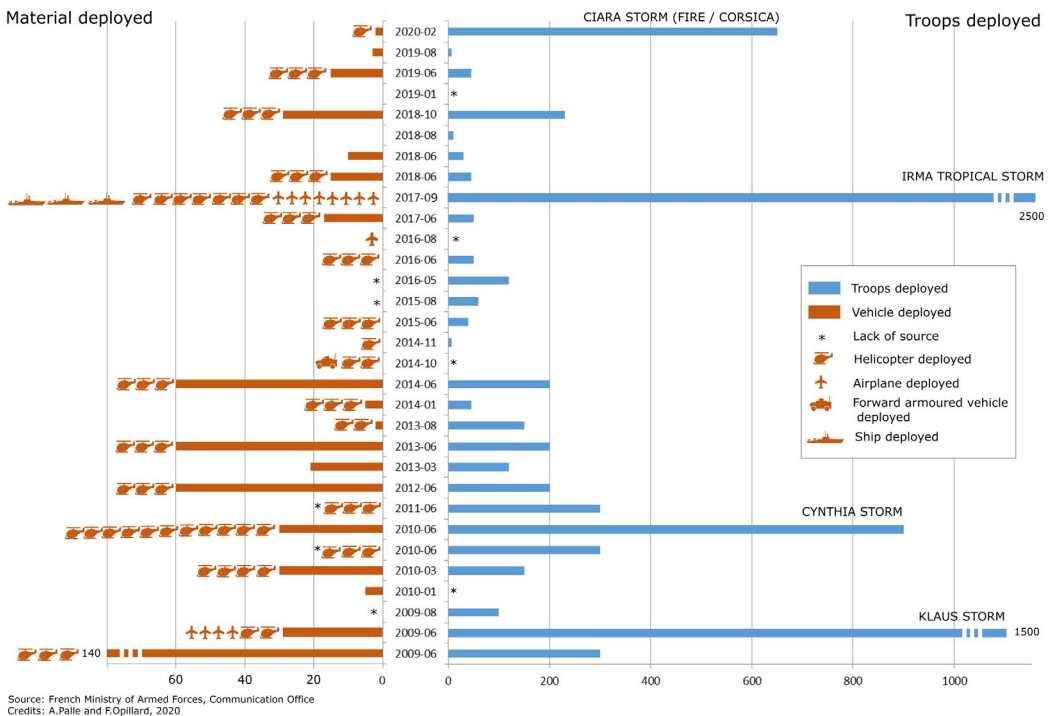


Figure 1. Military troops and material involved in internal operations on French territory in the context of environmental extreme events in France (2009–2019). [Colour figure can be viewed at wileyonlinelibrary.com]

and human military reinforcements were sent from metropolitan France, 7,000 soldiers were mobilised and the army was responsible for 'ensuring the continuity of the State'⁸ in unprecedented conditions on the national territory for a climatic event.

This contribution by the armed forces to the fight against extreme climatic events is helping to shift the military's view on the environmental issue, if for no other reason than that it is beginning to affect its operational capabilities. The US Army has thereby published an analysis of the exposure of its bases to environmental risks linked to climate change (US Department of Defense 2019). The document also contains elements concerning the possibilities for supporting populations in the context of disasters and the associated military training. The French Army conducts the same types of analyses within a 'Climate Defence' observatory entrusted to the Institute of International and Strategic Relations.⁹

This change in military approaches to the environmental issue encompasses health aspects. In line with part of the field of research on global environmental change (Keck 2010; Courtin *et al.* 2015), the army is beginning to link these two prisms. The presence of the French army in Africa is deepening this connection and the French Military Health Service¹⁰ is both increasingly vigilant about the risk of epidemics among troops on external operations,¹¹ for which it is developing specific tools (Meynard *et al.* 2008), and involved in the management of these epidemics on the ground, particularly in 2015 during the epidemic linked to the Ebola virus (Denux *et al.* 2016). These missions widen the societal role of the military in France. The 'external operations', the protection of the national territory against terrorism referring to war-like capacities are in this crisis joined by a protection of the population against other types of threats and a logistical assistance to civilian functions. This would call for further research on the perception of this new role by the populations and by the armed forces themselves.

The extent to which the military is used in environmental crises also raises questions about the systemic nature of the health and environmental crises facing contemporary societies. These are made vulnerable (Reghezza

& Rufat 2015) by the anthropic transformation and man-made artificialisation of ecosystems: the appropriation by cities (or by human activities in general) of areas where wildlife is abundant, or the destruction of these areas leading to animal migrations outside their traditional living areas, leads to closer contacts between these animal and human populations. These contacts are highlighted in the search for the origin of recent health crises (Courtin *et al.* 2015), some research then evokes the idea of crossing a biodiversity 'boundary' (Keck 2010). The hypothesis that increased artificialisation and degradation of natural environments will lead to a greater frequency of environmental disasters as well as health disasters, especially epidemics, is already documented by a large number of publications (Shope 1991; Comrie 2007; Curseu *et al.* 2010).

Disasters intervene as a rupture in the individual's capacity to make sense of the common narratives that structure daily life (Klein 2008; Moreau 2017), and as an inability to project oneself into the future, to glimpse the possibilities of resilience (Veyret & Reghezza 2005; O'Keefe *et al.* 1976). In this sense, the army's interventions on the national territory reveal some of their functions: they intervene with the aim to mark the presence of the State, to assess the seriousness of the event, to reassure the population and to plan ways out of the crisis. While the disaster is a suspension of common sense, the military intervention comes symbolically and practically to rebuild the conditions of normal life.

Operation Resilience thus aims at drawing on the dual capital of the army's regular interventions on the national territory in situations of environmental disaster on the one hand, and on the other hand on its already proven technical and medical expertise, mainly outside the national territory, in a context of epidemic crisis.

Spatiality of military interventions: the French army as an actor of territorial equalisation highlighting vulnerabilities? – This second subsection analyses the spatiality of the French Operation Resilience and puts the political discourse on this operation in regard to the actual missions carried out by the military. The way the military is being used for logistical

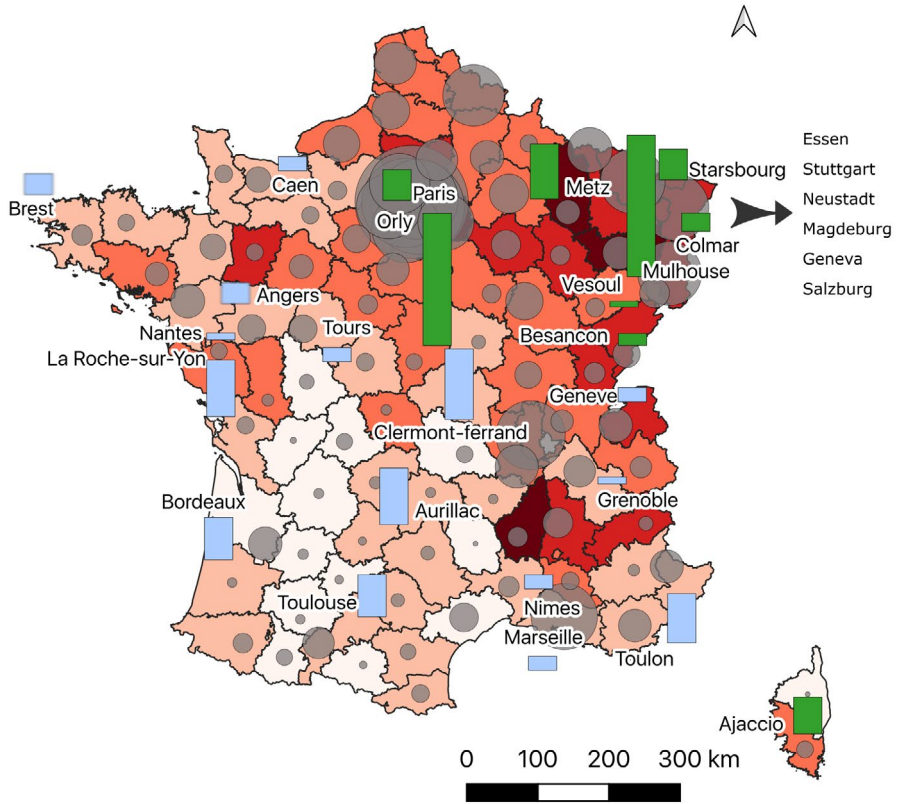
purposes is here discussed in light of the crisis in France. The fact that the military intervene to compensate for national imbalances in hospital infrastructures is analysed as an insight on States capacities.

The spatial dimension of the military intervention during *Opération Résilience* reveals an interesting first element: its dispersed nature makes it impossible to consider that there is a single, clearly identifiable battlefield. Nevertheless, the spatiality of the viral infection is very marked on the French territory, with a North-East/South-West asymmetry. As such, the mobilisation of equipment and personnel follows the geography of the viral infection, since the installation of the Military Health Service's MRU in Mulhouse takes place in the heart of the territories most affected by the epidemic. However, this thirty-bed intensive care hospital is the only specific infrastructure that the military has been setting up. Almost all of its interventions in the crisis take the form of logistical assistance to the health sector. The vast majority of military interventions involve the transfer of patients in intensive care units by aircraft, helicopters and ships within metropolitan France and across the German border, in order to relieve the hospitals' intensive care units, which have reached saturation levels.

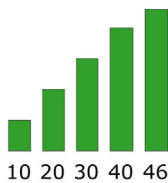
As Figure 2 shows, it is the regions of Eastern France and *Ile-de-France* that are most affected by the epidemic. In these regions, hospital capacities are saturated (surface symbol), contrary to several southern regions, which are not. The number of hospitalisations, represented by proportional circles, shows a geography similar to that of the saturation of intensive care capacities. However, there is a discrepancy between the two symbols: some areas with saturated intensive care units are not those with the highest number of hospitalisations. This discrepancy reveals territorial disparities in terms of hospital intensive care capacities. The combination of the two indicators in some specific areas is the most striking: eastern France and the Paris region have both the highest number of patients in intensive care units and the highest percentage of saturation. Two elements need to be highlighted here. First, many of the hospitals in the most saturated regions have already more than doubled their capacity in terms of number of beds compared to the

situation before the crisis, such as the hospitals in the Vosges for which intensive bed capacity is 425 per cent occupied. Second, some regions such as the *Ile-de-France* represents cumulative hospitalisation capacities that are far higher than the rest of France, since its population density is far higher than in any other area in the country. In terms of ratio, the *Ile-de-France* then concentrates a great part of hospitalised cases in the whole country.

Finally, two symbols represent the places of departure and arrival of the patients transported by the army. A geography of the military action then emerges, which essentially consists in transporting patients from the most affected departments (Metz, Strasbourg, Mulhouse, Paris) to less saturated areas (Caen, Brest, Nantes, Bordeaux, Toulouse, Marseille). In regional planning, this rebalancing is called territorial equalisation. It consists in the transfers, particularly financial transfers, to remedy territorial inequalities. The introduction of this term in the French Constitution in 2003 reveals a transformation of public action in spatial planning and allows an interesting parallel with military action. Previously oriented towards equality in the allocation of resources to territories, particularly in terms of infrastructure from 1963 to the end of the 1990s, the French public action in spatial planning has become guided by the principle of territorial competitiveness (Subra 2018 [2007]). Before it became the Agency for territorial competitiveness (DIACT) in 2005, the French Agency responsible for the coordination of spatial planning was responsible for the '*Aménagement du territoire*' (literally territorial planning). Its mission was the implementation of territorial balancing plans, such as the extension of highways, touristic development in the margins or the equal deployment of public services. The shift towards territorial competitiveness came with a withdrawal of overall State allocations favouring public-private partnerships (Le Galès 1995). It mechanically implied a competition between local authorities to secure declining state allocations. This public policy trend has largely been analysed in social and political geography as a specific moment in the neoliberalisation of the State (Brenner & Theodore 2002; Peck & Tickell 2002). Generally applied to anglophone contexts, the 'rolling-out' (Peck



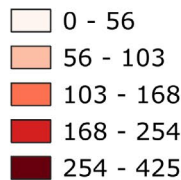
Number of patients transferred (out)



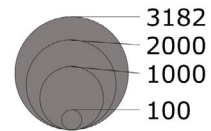
Number of patients transferred (in)



Rate of intensive care beds occupation



Number of hospital admissions



Sources: Santé Publique France / French Ministry of Armed Forces as of 06/04/20.
Credits: A. Palle and F. Opillard

Figure 2. Patient transfer by French military in COVID-19 crisis, an element of territorial equalisation. [Colour figure can be viewed at wileyonlinelibrary.com]

& Tickell 2002, p. 396) of neoliberalism applies to the French state (Denord 2007; Dardot & Laval 2009). Its spatial consequences have

been identified as the aggravation of inequalities between the centralities of the globalised economy – the metropolises (Ghorra-Gobin

2016) or Global Cities (Sassen 2001 [1991]) – and the others, on the fringes of the financial fallout (Davezies 2012). The same logic described for regional planning can be applied here to hospitals: having been asked to reduce their spending for several decades¹² and put in competition with private structures, hospitals are not able to manage the influx of patients in intensive care during the health crisis.

The spatial dimension of military action is therefore also interesting from this point of view: it takes place above all in the nerve centres of the economy, the metropolitan areas, those that are known to be ‘connected’ to the financial flows of the globalised economy, taking advantage of the economic wealth of Rhine Europe. In this respect, military action reveals the magnitude of the crisis: health capacities are saturated in the economic hubs, precisely where state services are most concentrated.

Incidentally, the neoliberalisation of the State also applies to the armed forces. Since the professionalisation of the army in France in 1997, managerial models have been the origins of important tensions (Irongelle 2011). Along with a drastic reduction in financial means, technological capacities have been at the centre of public investment, all the while the spatial implantation of military infrastructure in the French territory has faded. The intense commitment of French armed forces in foreign conflicts increased the need for constant recruitment of new personnel, which heightens the financial strains. As a consequence, several voices have been claiming the need for a reinvestment in military capacities, its best example being Army General Pierre de Villiers who in 2017 was discharged after publicly criticising the President’s political decisions concerning the overall budget of the military (Guibert 2018). In this sense, the call on the 2nd Regiment of Dragoons, the only French regiment specialising in CBRN (nuclear, radiological, bacteriological and chemical) risk management, also illustrates the weakness of the army to deal with sanitary emergencies. Mobilised to disinfect the French parliament so that the text of the emergency health law could be voted by the parliamentary members, its action was restricted to ‘advising and monitoring the private company that carried out the

work’ (Merchet 2020). Additionally, the French military capacity has been described as weak by a growing number of political observers who compared the only Campaign Hospital with a capacity of 30 beds deployed in Mulhouse to the 17 Campaign Hospitals in Spain, for example (Cancio 2020).

France is far from being the only European country to have called on its army in the management of the health crisis. In Europe, recourse to the army is widespread but varies from one State to another, both in terms of the number of personnel and the functions assigned.

COMPARING *OPÉRATION RÉSILIENCE* TO OTHER STATE INITIATIVES: CALLING TO WAR, CONCEALING VULNERABILITIES?

This section compares the political discourses describing the crisis and the types of missions assigned to armed forces by European states. This comparison’s goal is to offer a deepened analysis of the French operation and discourse, in light of European practices during the COVID-19 crisis. Its main hypothesis is that despite a diversity of civil recourse to the military, calling to war and resilience might actually be a sign of vulnerability from the State’s crisis management.

International warlike rhetoric and the epidemic management – While the French President has made an extensive use of the metaphor of war to mobilise around the civil authority and prepare for military intervention, other countries affected by the virus have also used it. The United States’ leader and the British Prime Minister have been very keen on using this rhetoric. Indeed, Donald Trump (2020) declared: ‘It’s a war – it’s a medical war. And we have to win this war. It’s very important’ and Boris Johnson (2020) stated on 17 March that ‘We must act like any wartime government’ In the same way, Spanish Prime Minister Pedro Sanchez (2020) used war references to call for a national union by saying that ‘[the Spanish] society [...] now finds itself waging a war to defend what [it] already took for granted’. Just as Emmanuel Macron did, Pedro Sanchez called the virus the enemy: ‘Sometimes [...]

we can get confused when we choose our enemy. But our enemy, the enemy of all of us, is clear: it is the virus'. Calling upon various memories of wars (mostly of the Second World War), those four countries have in common an extensive sanitary crisis with an important death toll, a saturation of hospital capacities, along with an important military mobilisation. Hence, the multiple use of the war rhetoric by countries whose systems are mostly hit by the crisis tends to reveal the intricacy of weakened military means and public vulnerabilities of the State.

If martial rhetoric is in the French case, as in the UK, US and Spanish ones, a way to legitimise the recourse to the armies and create national unity, some other European leaders have been taking a very different stance. Germany, for instance, had a very sharp viewpoint insofar as German President Frank-Walter Steinmeier (2020) asserted on 11 April 2020 that: 'This pandemic is not a war. It does not pit nations against nations, or soldiers against soldiers. Rather, it is a test of our humanity'. Other countries' leaders such as Belgium, the Netherlands and Italy, have been very careful not to mention the word 'war' in their speeches to their nations. Indeed, in her speech on 17 March 2020, Belgian Prime Minister Sophie Wilmès (2020) used the terms 'unprecedented times' and 'grave health peril'. Likewise, Dutch Prime Minister Mark Rutte (2020) talked about a 'difficult period' and Giuseppe Conte (2020) used the word 'crisis' to describe the situation. This second group of countries have, except Italy, been through the sanitary crisis in a different way than the first group. Germany, Belgium and the Netherlands seem to have endured the crisis in a more tempered manner. In this sense, we follow the argument that 'the war rhetoric externalises responsibilities in the crisis that the health system is facing today. We are speaking of medical workers as soldiers and of hospitals as battlefields. This conceals that the present crisis is mostly the product of our trust in neoliberal economic logics and in technological progress'. (Caso 2020). In the French case, war rhetoric and the call for 'Resilience' could very well be a sign of vulnerability from the State because of its own disinvestment of protection planning.

Military mobilisation in Europe: the prevalence of the state level? – How does this translate into the mobilisation of the military? European armies are widely used by states to respond to the crisis. However, the extent of that use is unrelated to the seriousness of the crisis in the states concerned. It is often linked to a variety of intrinsic factors, ranging from military capabilities to the availability of forces and their status (militia army, conscription or professional army). The missions assigned to the armed forces therefore differ from one state to another. While the vast majority of them uses the armies to reinforce the health system, a minority uses them to control mobilities and flows, whether within the country or across borders.

Figure 3 compares the ratio of COVID-19 deaths in a country's population – which can be taken as an indication of the severity of the crisis, with the number of troops deployed in the country to manage the crisis. Although a great precautions shall be taken in the comparison of the death toll¹³ it shows that a great majority of European countries have resorted to the use of their armed forces, with no necessary correlation between the 'seriousness' of the crisis (the ratio of deaths to population) and the number of troops deployed. Countries such as Germany and Austria, for example, which were less affected by the crisis than their French or Italian neighbours, have mobilised their military reserves to a greater extent. In Germany, 38,000 reservists have been mobilised in addition to a contingent of 15,000 soldiers (Gebauer & von Hammerstein 2020). In Austria 10 per cent of the reservists have been called up (3,000, Reuters 2020) those who have been back from military or civilian service for less than five years have been recalled (2,400) and the service of those currently in the armed forces has been extended.

In France, the armed forces have been professionalised since 1997, shifting from a conscription system to a corporate-like recruitment system following the precepts of the new public management (Larrieu 2018; Cardona & Jabukowski 2020). They are largely mobilised by external operations (5,100) or missions outside French territory (approximately 10,000 people) and although the fight

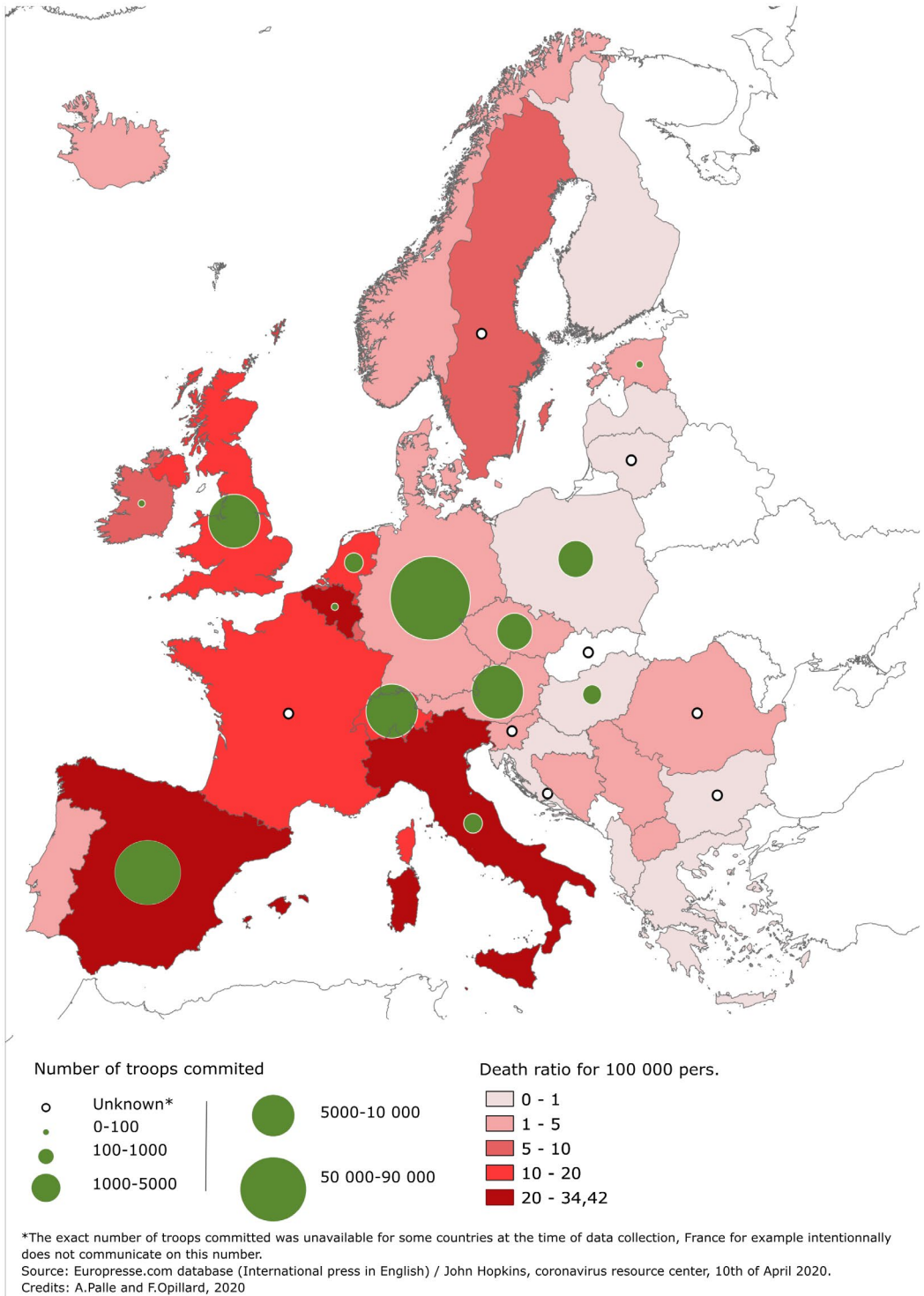


Figure 3. Mobilisation of the military in Europe during COVID-19 crisis (as of 10 April 2020). [Colour figure can be viewed at wileyonlinelibrary.com]
© 2020 Royal Dutch Geographical Society / Koninklijk Nederlands Aardrijkskundig

against terrorism has led the country to resume a visible military presence on its territory on a daily basis (7,000 to 10,000 people) since 2015, military budget cuts have been a norm since the 1990, resulting in a pauperisation of its personnel. Conversely, the Swiss or Austrian armies are not only professional armies and military or civilian service exists in both countries (it was only abolished in Germany in 2011). Their missions are more focused on the defence of the national territory, their projection is smaller and largely confined to the framework of UN peacekeeping operations.

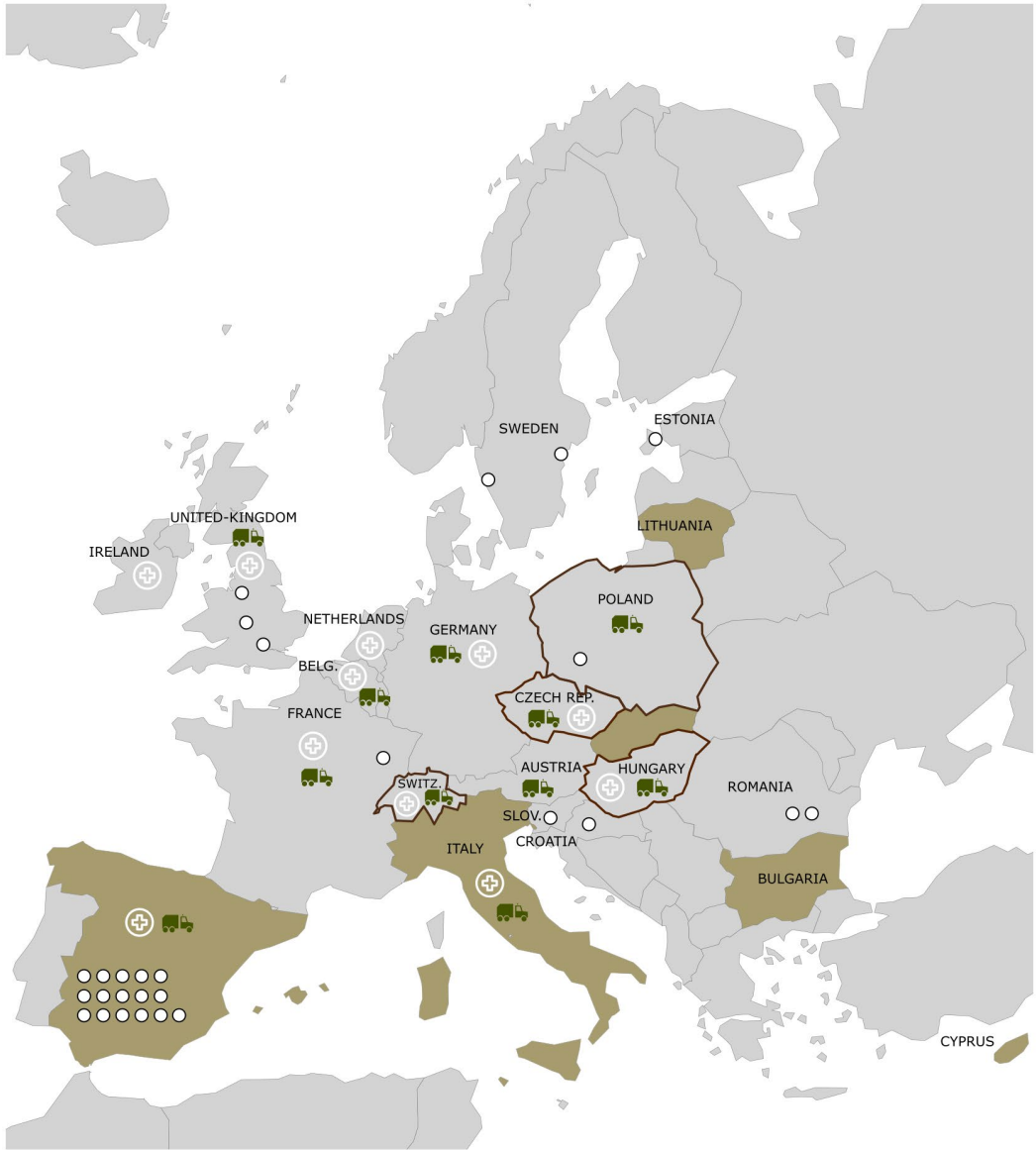
This raises the question of the role to be played by the armed forces mobilised by the European states during the crisis. Figure 4 maps these functions, divided into three categories. The first is a health support function, which aims to assist health systems close to saturation. The armed forces are then called upon to set up field hospitals in support of existing hospitals (this is particularly the case in Spain and the United Kingdom) or in regions isolated from the national health system, as in Estonia on the island of Saaremaa. This military contribution also involves logistical support (transport of equipment, patients, etc.) which is provided in the majority of countries that have recourse to armies. The third component of this medical contribution concerns the provision of military medical personnel for public hospitals and is also widely used by European states. Two other functions are performed by the armed forces on a less extensive basis. They concern the control of population mobility and the reinforcement of territorial sovereign functions. The control of the mobility of populations within the country (respect of confinement measures) is present in Spain, Italy, Slovakia, Bulgaria and Lithuania, where the armed forces are then entrusted with functions usually devolved to the police. They may be restricted to certain areas particularly affected by the crisis, such as Liguria in Italy, or to certain types of population, such as in Slovakia, where the army is in charge of controlling the mobility of Roma communities. Last, in a minority of countries (Poland, Czech Republic, Hungary, Switzerland) the army is used to reinforce the sovereign presence and

control of borders, indicating a desire to control mobility across borders rather than within the state.

Overall, this information on the mobilisation or armies in Europe shed light on a key element about the French case: contrary to the official communication of the French Minister of Armed Forces (DlCoD 2020), the comparison shows that the mobilisation of the armies remained limited in both the number of personnel involved, in the medical capacities it deployed, in its legal abilities to enforce the confinement of the population and in its capacity to protect its own military personnel from the infection, notably on the *Charles de Gaulle* ship. These elements therefore reinforce the core assumption which lead the end of this reflexion: war rhetoric and the conveying of 'resilience' framework are in fact indicative of the vulnerabilities of the state and of a political will to show an image of strength far from reality.

Finally, at the European Union level, the few instances of cooperation observed between Member States are the result of specific operations, as it was the case of the transfer of certain patients from France to Germany (Army Staff (2020b), or the coordination of three Northern European Countries (Denmark, Sweden, Finland) who opted for 'joint evacuations, air assistance and information sharing' (Latici 2020, p. 3).

Since the beginning of the crisis, the European Union has been seeking to produce a coordinated response in the economic field and has few competences in the area of armed forces deployment. Its coordinated response resulted in mandating 'the creation of a dedicated task force at the level of the EU Military Staff [...] meant to temporarily support and facilitate information exchange among Member States' armed forces' (Latici 2020, p. 4). Likewise, NATO's (2020) response consisted in sharing best practices within the Allies, in providing logistical support to the countries most affected such as Spain and in coordinating the delivering of medical material from one ally to another. In total, international institutionalised cooperation has been rather weak and this crisis reveals the importance of state level responses.



SOVEREIGNTY

Reinforced control of borders

HEALTH

- Military field hospital
- Medical support
- Logistical support

POPULATION CONTROL

Control of population mobility

Source: Europresse.com (research on international journals in English), Eurostat / Credits: A.Palle and F.Opillard, 2020
The data collection has been done on the 10th of April 2020, past the peak point of new cases in Europe (around the 4th of April)
The Military field hospitals in Spain could not be precisely located at the time of data collection.

Figure 4. Military support in Europe during COVID-19 crisis (as of 10 April 2020). [Colour figure can be viewed at wileyonlinelibrary.com]

CONCLUSION

In the analysis of crisis management by public authorities, the spatial analysis is relevant for several reasons. On the one hand, analysis through risk management makes it possible to deconstruct the official discourse. Using a conceptual framework that is particularly used in contemporary climate policies, the French state thus places its political action at the heart of international environmental crisis management politics. On the other hand, the spatialisation of issues is indeed essential to understand the political stakes, and in particular the means and modalities of action of the state through the military. This study of the geography of viral infection and the geography of military action thus highlights how the resort to the military calls attention to societal vulnerabilities located, seemingly paradoxically, in health service centralities.

This paper also concludes to a potential change in military functions *vis-à-vis* society. In a more global context of wider resort to armed forces by Western states to face extreme climatic events, the nature of military role and of the enemy it protects societies from seem to gain a dimension that diverges from the traditional notions of war. This not only opens perspectives for further research on the definition of this new role and on the structural changes the military will have to endure, but also on the changes it brings in the perceptions of the military by populations.

Notes

1. This document sets out the main strategic guidelines for French defence and national security.
2. Inter Ministerial Instruction on the engagement of armies on the national territory when they intervene on the requisition of the civil authority, N°10100/SGDSN/PSE/PSN/NP of 14/11/2017.
3. Emmanuel Macron uses the war metaphor in three of his speeches: (2020a, 2020b, 2020c).
4. See legislative proposals: *Proposition de loi relative à la création d'un « état de catastrophe sanitaire » et à l'indemnisation des victimes de catastrophes sanitaires*, n° 2776, proposed on 24 March 2020,

Proposition de résolution visant à la création d'un état de catastrophe sanitaire, n° 2783, proposed 30 March 2020.

5. Sandrine Revet quotes in particular the European Commission's 'Disaster Preparedness Programme (DIPECHO) which was set up within the Humanitarian Aid Department (ECHO) in 1996, the Bureau for Crisis Prevention and Recovery (BCPR) within the United Nations Development Programme (UNDP) in 2001, and the institutionalization of the Decade through the United Nations International Strategy for Disaster Reduction (UNISDR)' (Revet, 2018, p. 167).
6. 'external operations' refer to current operational commitments of the French military in war-like context.
7. Interview, lieutenant colonel A., Army. February 2020.
8. Interview, lieutenant colonel A., Army. February 2020.
9. Website of the Defence and Climate Observatory, carried out by the Institute of International and Strategic Relations for the General Directorate of International Relations and Strategy (DGRIS) of the Ministry of Defence, <https://www.iris-france.org/observatoires/observatoire-defense-et-climat/>
10. The Military Health Service is a joint-forces service placed under the Chief of Staff's command. It accompanies the military units engaged in operations around the world and secures a sanitary chain from the battlefield to military hospitals in France.
11. Interview, navy captain B., February 2020.
12. In its *Panorama de la santé*, the Direction de la recherche, des études de l'évaluation et des statistiques estimated in 2019 that 69,000 hospital beds had been closed between 2003 and 2017 (DREES, 2019). This decline is deepened in 2018 with the closure of nearly 4,172 beds, again according to DREES.
13. Comparisons of the death ratio remain unprecise at this time. Policies concerning the amount of tests within the population, the differentiation between deaths of coronavirus and because of coronavirus and the unaccounted deaths within the general population are contextual elements which urge caution. Yet, this is the best indicator available at this time.

REFERENCES

- ALBECK-RIPKA, L., I. KWAI, T. FULLER & J. TARABAY (2020), 'It's an Atomic Bomb': Australia Deploys Military as Fires Spread. *New York Times*. Available at <<https://www.nytimes.com/2020/01/07/learning/lesson-of-the-day-its-an-atomic-bomb-australia-deploys-military-as-fires-spread.html>>. Accessed 2 June 2020.
- ARMY STAFF (2020a), Press Release, Délégation à l'Information et à la Communication de la Défense, 'Communiqué_Adaptation du Dispositif de l'Opération Chammal'. 25 March 2020. Available at <https://www.defense.gouv.fr/salle-de-presse/communiques/communiqu%C3%A9_adaptation-du-dispositif-de-l-operation-chammal>. Accessed on 5 May 2020.
- ARMY STAFF (2020b), Communiqué Opération Résilience – Transfert de Patients en Réanimation à Bord d'un NH90 Caïman. Press release of the Ministry of the Armed Forces, 29 March 2020. Available at <https://www.defense.gouv.fr/salle-de-presse/communiques/communiqu%C3%A9_operation-resilience-transfert-de-patients-en-reanimation-a-bord-d-un-nh90-caïman-mise-a-jour>. Accessed on 17 April 2020.
- ARMY STAFF (2020c), Press Release, Délégation à l'Information et à la Communication de la Défense, 'Communiqué_Suspicion de Cas de Covid-19 à Bord du Porte-avions Charles-de-Gaulle', 8 April 2020. Available at <https://www.defense.gouv.fr/salle-de-presse/communiques/communiqu%C3%A9_suspicion-de-cas-de-COVID-19-a-bord-du-porte-avion-s-charles-de-gaulle>. Accessed on 5 May 2020.
- AYKUT, S. & A. DAHAN (2015), *Gouverner le Climat? Vingt Ans de Politiques Internationales*. Paris: Presses de Sciences Po.
- BELL, D.A. (2020), La Guerre au Virus, le Passé d'une Métaphore. *Le Grand Continent*. 7 April 2020. Available at <<https://legrandcontinent.eu/fr/2020/04/07/david-bell-guerre-coronavirus/>>. Accessed 13 April 2020.
- BERNSTEIN, S. (2001), *The Compromise of Liberal Environmentalism*. New York: Columbia University Press.
- BENFORD, R.D. & D.A. SNOW (2000), Framing Processes and Social Movements: An Overview and Assessment. *Annual Review of Sociology* 26, pp. 611–639.
- BOUTIN, J.-P., O. RIBIERE, H. VAN CUYCK; ET AL. (2004), Towards Health Vigilance for Defense. *Médecine et Armées* 32, pp. 366–372.
- BRENNER, N. & N. THEODORE (2002), Cities and the Geographies of 'Actually Existing Neoliberalism'. *Antipode* 34, pp. 349–379.
- CANCIO, F. (2020), Los Militares han Ayudado a Levantar 17 Hospitales de Campaña. *La Razón*, 31 March 2020. Available at <<https://www.larazon.es/espana/20200331/fajnlm6iangqhlosqkfpurfpii.html>>. Accessed 7 May 2020.
- CARDONA, G. & S. JABUKOWSKI (2020), *Les Logiques de Transformation des Armées*. Lille: Presses Universitaires du Septentrion.
- CASO, F. (2020), Are We at War? The Rhetoric of War in the Coronavirus Pandemic. *The Disorder of Things*, 10 April 2020. Available at <<https://thedisorderofthings.com/2020/04/10/are-we-at-war-the-rhetoric-of-war-in-the-coronavirus-pandemic/>>. Accessed 6 May 2020.
- CBC NEWS (2019), 2,000 Military Personnel Supporting Volunteers in Ontario, Quebec, N.B. flood zones. *The Canadian Press*. Available at <<https://www.cbc.ca/news/canada/flooding-ontario-quebec-new-brunswick-1.5114910>>. Accessed 2 June 2020.
- CHARLIER, M.D. (2018), La Protection du Territoire National par l'Armée de Terre. Fondements, Limites et Perspectives. *IFRI, Focus stratégique* 18, pp. 30–31.
- CLAUSEWITZ, C.V. (1955), *De la Guerre*. Paris: Les Éditions de Minuit.
- CLÉMENCEAU, F. (2020), La Cheffe du Service de Santé des Armées Face au Coronavirus: Mes Moyens ne Sont pas Illimités. *Le Journal du Dimanche*, 21 March 2020. Available at <<https://www.lejdd.fr/Societe/exclusif-la-cheffe-du-service-de-sante-des-armees-face-au-coronavirus-mes-moyens-ne-sont-pas-illimites-3956920>>. Accessed on 14 April 2020.
- COHEN, S. (2008), Le Pouvoir Politique et l'Armée. *Pouvoirs* 2, pp. 19–28.
- COMRIE, A. (2007), Climate Change and Human Health. *Geography Compass* 3, pp. 325–339.
- CONTE, G. (2020), Dichiarazioni del Presidente Conte. Available at <<http://www.governo.it/it/articolo/dichiarazioni-del-presidente-conte/14361>>. Accessed 21 March 2020.
- CONFVREUX, J. & S. AUDOIN-ROUZEAU (2020), Nous ne Reverrons Jamais le Monde Que Nous Avons Quitté il y a un Mois. *Mediapart*, 12 April 2020. Available at <https://www.mediapart.fr/journal/culture-idees/120420/stephane-audoïn-rouzeau-au-nous-ne-reverrons-jamais-le-monde-que-nous-avons-quitte-il-y-un-mois?page_article=2>. Accessed 14 April 2020.

- COURTIN, F., P. MSELLATI, & P. HANDSCHUMACHER (2015) La dynamique spatio-temporelle du virus Ebola dans l'espace CEDEAO. *Dynamiques environnementales*, pp. 28–57. <http://dx.doi.org/10.4000/dynenviron.946>
- CURSEU, D., M. POPA, D. SIRBU & I. STOIAN (2010), Potential Impact of Climate Change on Pandemic Influenza Risk. In: I. DINCER, A. HEPBASLI, A. MIDILLI & T. KARAKOC, eds., *Global Warming. Green Energy and Technology*, pp. 643–657. Boston, MA: Springer.
- DARDOT, P. & C. LAVAL (2009), *La Nouvelle Raison du Monde. Essai sur la Société Néolibérale*. Paris: La Découverte.
- DAVEZIES, L. (2012), *La Crise Qui Vient, La Nouvelle Fracture Territoriale*. Paris: Le Seuil, Collection la République des Idées.
- DENORD, F. (2007), *Le Néo-libéralisme à la Française. Histoire d'une Idéologie Politique*. Marseille: Agone.
- DENUX, V., ET AL. (2016), Le Service de Santé des Armées: Des Savoir-faire Militaires au Service de la Gestion des Crises Sanitaires. *Médecine* 12, pp. 44–45.
- DIRECTION DE LA COMMUNICATION DE LA DÉFENSE (DICOd) (2020), *Dossier de Ppresse_Opération Résilience*, 21 April 2020. Available at <https://www.defense.gouv.fr/english/salle-de-press e/dossiers-de-presse/dossier-de-presse_opera tion-resilience>. Accessed 7 May 2020.
- DREES (2019), Les Établissements de Santé. *Panorama de la Santé*. Available at <<https://drees.solidarites-sante.gouv.fr/IMG/pdf/es2019.pdf>>. Accessed 14 April 2020.
- ELY, P. (2011), Les Enseignement de la Guerre d'Indochine (1945–1954) - Rapport du Général Ely, Commandant en Chef en Extrême-Orient. Volume 1/ Service Historique de la Défense/. Paris: Ministère des armées.
- FELLI, R. (2014), Adaptation et Résilience: Critique de la Nouvelle Éthique de la Politique Environnementale Internationale. *Éthique Publique* 16, 16 August 2014. Available at <<https://doi.org/10.4000/ethiquepublique.1371>>. Accessed 3 April 2020.
- FOUCAULT, M. (2004), *La Naissance de la biopolitique. Cours au Collège de France (1978–1979)*. Paris: Hautes Études.
- GEBAUER, M. & K. VON HAMMERSTEIN (2020), Bundeswehr Mobilisiert 15,000 Soldaten. *Spiegel*, 27 March 2020. Available at <<https://www.spiegel.de/politik/deutschland/corona-krise-bundeswehr-mobilisiert-15-000-soldaten-a-fb7668c0-a47f-4ca5-b83b-3a2ddd3b68a1>>. Accessed 5 May 2020.
- GHORRA-GOBIN, C. (2016), *La Métropolisation en Question*. Paris: PUF.
- GOFFMAN, E. (1974), *Frame Analysis: An Essay on the Organization of the Experience*. New York: Harper Colophon.
- GUIBERT, N. (2018) Le Jour où Macron a 'Pulvérisé l'Honneur du Général de Villiers'. *Le Monde*, 27 November 2018. Available at <https://www.lemonde.fr/idees/article/2018/11/27/ce-jour-ou-macron-a-pulverise-l-honneur-du-general-de-villiers_5389084_3232.html>. Accessed 5 May 2020.
- HCECM. (2019) La mort, la Blessure, la Maladie. *Rapport thématique*. Available at <<https://www.defense.gouv.fr/portail/vous-et-la-defense/evaluation-de-la-condition-militaire/hcecm/publications/les-rapports-thematiques>>. Accessed on 2 June 2020.
- IRONDELLE, B. (2011), Qui Contrôle le Nerf de la Guerre: Financement et Politique de Défense. In: P. Bezes, ed., *Gouverner (par) les Finances Publiques*, pp. 491–523. Paris: Presses de Sciences Po.
- JOHNSON, B. (2020), PM Statement on Coronavirus, 17 March 2020. Available at <<https://www.gov.uk/government/speeches/pm-statement-on-coronavirus-17-march-2020>> Accessed on 17 March 2020.
- JOLLY, É. (2017), Du Terrorisme à la Guerre Civile ? Notes sur David Galula et sa Pensée de la Contre-insurrection. *Le Philosophoire* 2, pp. 187–199.
- KECK, F. (2010), Une Sentinelle Sanitaire aux Frontières du Vivant*. *Terrain* 54, 1 January 2014. Available at <<https://doi.org/10.4000/terrain.13928>>. Accessed 7 April 2020.
- KLEIN, N. (2008), *La Stratégie du Choc*. New-York: Penguin.
- LARRIEU, V. (2018), La Mise en Œuvre des Préceptes du New Public Management dans les Soutiens des Armées Françaises: Échec ou Réussite ? *Les Champs de Mars* 30, pp. 67–75.
- LATICI, T. (2020), The Role of Armed Forces in the Fight against Coronavirus. European Parliament Research Service, PE 649.401. Available at <[https://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI\(2020\)649401](https://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI(2020)649401)>. Accessed 2 June 2020.
- LE GALÈS, P. (1995) Aspects idéologiques et politiques du partenariat public-privé. *Revue d'économie financière*, 5(1), 51–63. <http://dx.doi.org/10.3406/ecofi.1995.2556>

- LIVRE BLANC (2013) *Livre Blanc sur la Défense et la Sécurité Nationale*. Paris: Odile Jacob-La Documentation Française.
- MACRON, E. (2020a), Address to the French People by the President of the Republic, 16 March 2020. Available at <<https://www.elysee.fr/emmanuel-macron/2020/03/16/adresse-aux-francais-covid19>>. Accessed 2 June 2020.
- MACRON, E. (2020b), Address to the French people by the President of the Republic, 25 March 2020. Available at <<https://www.elysee.fr/emmanuel-macron/2020/03/25/a-mulhouse-aux-cotes-des-femmes-et-des-hommes-mobilises-en-premiere-ligne-pour-protoger-les-francais-du-COVID-19>>. Accessed 2 June 2020.
- MACRON, E. (2020c), Address to the French People by the President of the Republic, 13 April 2020. Available at <<https://www.elysee.fr/emmanuel-macron/2020/04/13/adresse-aux-francais-13-avril-2020>>. Accessed 2 June 2020.
- MERCHET, J.-D. (2020), Covid-19: Le Régiment NRBC a Participé à la Désinfection du Parlement. *L'Opinion*, 23 March 2020. Available at <<https://www.lopinion.fr/blog/secret-defense/COVID-19-regiment-nrbc-a-participe-a-desinfection-parlement-214946>>. Accessed on 12 April 2020.
- MERLIN, M., G. MARTET, J.-M. DEBONNE, P. NICOLAS, C. BAILLY, D. YAZIPO, J. BOUGÈRE, A. TODESCO & R. LAROCHE (1996), Contrôle d'une Épidémie de Méningite à Méningocoque en Afrique Centrale. *Cahiers d'Études et de Recherches Francophones/Santé* 6, pp. 87–95.
- MEYNARD, J.-B. (2008), Surveillance Épidémiologique en Temps Réel dans les Armées: Concepts, Réalités et Perspectives en France. *Revue d'Épidémiologie et de Santé Publique* 56, pp. 11–20.
- MIGLIANI, R. (2012), Introduction to the Special Issue: The 2009 Influenza Pandemic within the French Armed Forces. *Médecine et Armées* 40, p. 5.
- MIGLIANI, R., F. PAGES, R. JOSSE, ET AL. (2004), Malaria Outbreaks on Duty Areas. *Médecine et Armées* 32, pp. 293–299.
- MOREAU, Y. (2017), *Vivre avec les catastrophes*. Paris: PUF.
- NECHEPURENKO, I. (2019), Russia Sends Military Planes to Fight Wildfires in Siberia. *New York Times*. Available at <<https://www.nytimes.com/2019/08/01/world/europe/russia-fire-siberia.html>>. Accessed 2 June 2020.
- O'KEEFE, P., K. WESTGATE & B. WISNER (1976), Taking the naturalness out of natural disasters. *Nature* 260(5552), pp. 566–567. <http://dx.doi.org/10.1038/260566a0>
- PECK, J. & A. TICKELL (2002), Neoliberalizing Space. *Antipode* 34, pp. 380–404.
- PIGEON, P. (2006), 'L'Efficacité des Politiques gérant les Risques dits Naturels en France: Lecture Géographique. In: F. LEONE & F. VINET, eds., *La Vulnérabilité des Sociétés et des Territoires Face aux Menaces Naturelles, Analyses Géographiques*. Montpellier: Publications de l'Université Paul-Valéry.
- POHL, J. A. MAYET, G. BÉDUBOURG, S. DURON, R. MICHEL, X. DEPARIS, C. RAPP, P. GODART, R. MIGLIANI & J.-B. MEYNARD (2014), The 2009 A(H1N1) Influenza Pandemic in the French Armed Forces: Epidemiological Surveillance and Operational Management. *Military Medicine* 179(2), pp. 183–189. <http://dx.doi.org/10.7205/milmed-d-13-00261>
- RUTTE, M. (2020), Television Address by Prime Minister Mark Rutte of the Netherlands, 16 March 2020. Available at <<https://www.government.nl/government/members-of-cabinet/mark-rutte/documents/speeches/2020/03/16/television-address-by-prime-minister-mark-rutte-of-the-netherlands>>, Accessed 2 June 2020.
- QUARANTELLI, E. (1998), *What is a Disaster? Perspective on the Question*. London: Routledge.
- QUENAULT, B. (2015), La Vulnérabilité, un Concept Central de l'Analyse des Risques Urbains en Lien avec le Changement Climatique. *Les Annales de la Recherche Urbaine* 110, pp. 138–151.
- REGHEZZA, M. & S. RUFAT, EDS. (2015), *Résilience: Sociétés et Territoires Face à l'Incertitude, aux Risques et aux Catastrophes*. London: ISTE Éditions.
- REUTERS (2020), Austria Mobilizes Military Reserves to Fight Coronavirus, 23 March 2020. Available at <<https://www.reuters.com/article/us-health-coronavirus-austria/austria-mobilizes-military-reserves-to-fight-coronavirus-idUSKBN21A2J8>>. Accessed 5 May 2020.
- REVET, S. (2018), *Les Coulisseries du Monde des Catastrophes Naturelles*. Paris: Editions de la Maison des sciences de l'homme.
- ROGIER, C., F. PAGÈS, R. GIROD, ET AL. (2004), To Evaluate Military Forces Exposure to Malaria Transmission. *Médecine et Armées* 32, pp. 387–394.
- SALAÜN, T. (2020), Coronavirus: Avec l'Opération Résilience, les Armées se Mettent en Ordre de Bataille. *Reuters*, 26 March 2020. Available at <<https://fr.reuters.com/article/topNews/idFRKBN21D2HJ>>. Accessed on 16 April 2020.

- SANCHEZ, P. (2020), Comparecencia del Presidente del Gobierno en el Congreso de los Diputados por el Estado de Alarma en la Crisis del Coronavirus, 18 March 2020. Available at <<https://www.lamoncloa.gob.es/presidente/intervenciones/Paginas/2020/prsp18032020.aspx>>. Accessed 2 June 2020.
- SASSEN, S. (2001 [1991]), *The Global City – New York – London – Tokyo*. Princeton, NJ: Princeton University Press.
- SHOPE, R. (1991), Global Climate Change and Infectious Diseases. *Environmental Health Perspectives* 96, pp. 171–174.
- STEINMEIER, F.-W. (2020), Televised Address by Federal President Frank-Walter Steinmeier on the Coronavirus Pandemic at Schloss Bellevue, 11 April 2020. Available at <http://www.bundespraesident.de/SharedDocs/Downloads/DE/Reden/2020/04/200411-TV-Ansprache-Corona-Englisch.pdf?__blob=publicationFile>. Accessed 2 June 2020.
- SUBRA, P. (2018, [2007]), *Géopolitique de l'Aménagement du Territoire*, 3rd edn. Paris: Armand Colin.
- TENENBAUM, E. (2016), La Sentinelle Égarée ? *Études de l'IFRI*. Available at <<https://www.ifri.org/fr/publications/etudes-de-lifri/focus-strategique/sentinelle-egaree-larmee-de-terre-face-terro-risme>>. Accessed on 23 May 2020.
- TRUMP, D. (2020), Remarks by President Trump, Vice President Pence, and Members of the Coronavirus Task Force in Press Briefing, 19 March 2020. Available at <<https://www.whitehouse.gov/briefings-statements/remarks-president-trump-vice-president-pence-members-coronavirus-task-force-press-briefing-6/>>. Accessed on 19 March 2020.
- VEYRET, Y. & M. REGHEZZA (2005), Aléas et Risques dans l'Analyse Géographique. *Annales des Mines* 40, pp. 61–69.
- WALKER, J. & M. COOPER (2011), Genealogies of Resilience: From Systems Ecology to the Political Economy of Crisis Adaptation. *Security Dialogue* 42, pp. 143–160.
- WILMÈS, S. (2020), Discours de politique générale du Gouvernement – Première ministre Sophie Wilmès, 17 March 2020. Available at <<https://www.premier.be/fr/Discours-de-politique-generale-du-Gouvernement-Premiere-ministre-Sophie-Wilmes>> Accessed 2 June 2020.
- US DEPARTMENT OF DEFENSE (2019), Report on Effects of a Changing Climate to the Department of Defense, Department of Defense, Office of Republication and Security Review. Available at <<https://media.defense.gov/2019/Jan/29/2002084200/-1/-1/1/CLIMATE-CHANGE-REPORT-2019.PDF>>. Accessed 2 June 2020.