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Michael Hanne

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How We Escape Capture by the "War" Metaphor for Covid-19

Michael Hanne

University of Auckland

ABSTRACT

We rely on metaphors and the stories they imply as heuristic devices for communication on all important social and political matters. We are easily trapped by dominant metaphors, though fresh metaphors may generate significant paradigm shifts. During the first months of the Covid-19 pandemic, the "war" metaphor, standing for our relationship to Covid-19, established itself, like the virus itself, almost universally. This paper details the reasons for the early dominance of the "war" metaphor and shows how the adoption of the title of "wartime leader" by Donald Trump and Boris Johnson rebounded on them as it highlighted their subsequent abject failure to perform the roles they attributed to themselves. It highlights the objections, many valid, raised early on to the military metaphors and lists some of the alternative overarching metaphors which have been offered. It shows how, as the virus took root in most countries and governments had markedly different success in their responses to it, use of the "war" metaphor declined and people around the world coined a host of mini-metaphors relating to specific, local features, of their experience. It concludes by drawing attention to the potential of metaphors from ecology to generate insights relevant to some of the other major challenges faced by humanity.

Introduction

In the early months of the pandemic, the "war" metaphor, standing for the human relationship to Covid-19, spread and established itself, like the virus itself, almost universally. People were "battling" the Coronavirus "invasion." Different countries used different "strategies" to "defeat" the invisible "enemy." Doctors and nurses in hospitals were "on the frontline." Researchers worked on drugs which might "defend us" against the virus and an effective vaccine would be the "ultimate weapon" against it. All over the world, spoken and written utterances about the pandemic by politicians, medical professionals, media, and the general public were couched almost solely in the form of military metaphors.

As I finalize this text in mid-May 2021, just over a year after the pandemic began, the global numbers of infections and deaths from Covid-19 continue to grow at an alarming rate. Reported figures show around 166 million cases and 3.43 million deaths worldwide (https://covid19.who.int/), though actual numbers are certainly much higher. The situation is still worsening even though the newly developed vaccines are slowing the upward trend in many of the richer countries. Different governments have had very different success in controlling the spread of the virus and mortality rates in their countries. This article focuses on the importance of the metaphors chosen by different leaders to organize national responses to the pandemic and to enlist their citizens in a concerted drive to control its spread. Metaphors have become highly political tools and it is imperative that scholars scrutinize them closely and take a stand where they see them being used to damaging effect (see, for instance, Catalano & Musolff, 2019). I begin by detailing the reasons for the early dominance of the

"war" metaphor and then show how the adoption by two populist heads of government of the title of "wartime leader" rebounded on them as it highlighted their subsequent failure to perform the roles they attributed to themselves. I draw attention to the objections, many valid, some less so, raised early on to the military metaphors and list some of the alternative overarching metaphors which have been offered. I show how, as the virus took root in most countries, and governments had markedly different success in their responses to it, use of the "war" metaphor declined and people around the world coined a host of mini-metaphors relating to specific, often quite local, features, of their experience. I conclude by drawing attention to the potential of metaphors from ecology to generate insights relevant to some of the other major challenges faced by humanity.

My argument intersects with several strands of current metaphor research. The central strand is the recognition that we rely very largely on metaphors and the stories they entail as simplifying, heuristic devices for communication on all important social and political matters (Bougher, 2012). If we did not wrap them in this way, the intricacy and detail would spill out of our hands. For instance, some progressive concepts of social welfare are based on the metaphor of society as a human body: if one part is sick or suffering or lacking nutrition, the health of the whole body will be threatened. Hence the need for collective action to remedy it. As Donald Schön showed 40 years ago, the metaphor we use to describe a situation is likely to generate the policy narrative adopted to deal with it (Schön, 1979). We use metaphors to frame a situation not only to describe what is happening, but to justify actions and even public policies (e.g. Ottati, Renstrom, & Price, 2014). Different metaphors may offer competing conceptions of public issues yet, sometimes, a particular metaphor will get to capture a key area of social concern to the exclusion of other ways of viewing it. I refer, moreover, to research which shows how fresh metaphors may generate significant paradigm shifts in a host of different disciplines and weave references to all these strands into the fabric of my argument.

"War" metaphors for Covid-19 seemed almost unavoidable In facing the frightening prospect of a global health threat of a seriousness unmatched since the 1918 influenza pandemic, most people needed a grand metaphor they could cling to, which would embody the gravity of the situation and their fears about it, the likelihood that many people could die, and the responsibility some members of our society would have for saving lives. One of the reasons why a conceptual metaphor such as "war" proved so serviceable is that its many sub-metaphors corresponded strongly with people's understanding, feelings, expectations about public policies, and beliefs about how they should act. The "war" metaphor helped constitute what was real for people. In using this grand metaphor, people were drawing, not on their knowledge of the messy and morally ambiguous realities of most wars, but on what has been called a "prototypical" model of war, where our side is defined as good and the enemy as evil (Flusberg, Matlock, & Thibodeau, 2018). Remarkably, the "war" metaphor was used equally by medical professionals, by politicians, by the media, and by the general public.

Medical professionals explained for example how, like other infectious diseases, the virus "attacks" and "colonizes" the individual human organism, overwhelming the body's "defenses." A vivid and detailed description by an immunologist of the way the virus "invades" the individual and of what is required to "defeat" it is appropriately entitled "Bletchley Park 2020: Breaking the viral code" (McLellan, 2020). Medical experts described how it "assailed" whole communities and referred to the need for health authorities to develop the "armaments" (vaccines and viral treatments) and effective "strategies" for "defeating" it, while distributing the "defensive" equipment (personal protective equipment, PPE) required by doctors and nurses in the "frontline." While the metaphor "frontline" has long been used to refer to workers in private business or in public service, who deal directly with the public and who may frequently experience antagonism or abuse from the public, their lives are rarely threatened. In the context of the pandemic, however, the "frontline fighters" are literally, every day, at risk of dying as fatalities among healthcare workers have been appallingly high. This is the point where metaphorical and literal meaning collide, where the casualties of the "war" become real.

Many political leaders, of course, embraced the metaphor enthusiastically. In the words of François Heisbourg, "the mobilizing potential of war as a clarion call makes its metaphorical use irresistible to leaders" (Heisbourg, 2020). Xi Jinping vowed to wage "a people's war" against the epidemic in his country. Boris Johnson in the UK announced a "battle plan" (Johnson, 2020). Donald Trump declared that he was "a wartime president" (Wilkinson, 2020). President Macron used the term "war" eight times in a televised speech on March 16th outlining France's response to the virus (Heisbourg, 2020). Most leaders assumed special powers of national coordination and state intervention appropriate to a war and justified the requirement for citizens to surrender some of their rights and freedoms of movement, work, and assembly in a national effort to defeat the virus (Gillis, 2020). Some leaders, such as the Italian Prime Minister Giuseppe Conte, sought to build "alliances" with the leaders of other countries, initially without success.

The media reproduced the statements of medical experts and political leaders, embroidering further on the metaphors of "war." The virus was "an unseen enemy," spreading "stealthily" through the population, inflicting "casualties" and "a heavy death toll." They continually referred to medical professionals working in hospitals as "fighting in the trenches," to the "battle" we were all involved in, and so on.

As for the general public, we, for the most part, accepted without hesitation the notion that we were "at war" with the virus and adopted and elaborated on the wartime terminology ourselves. War metaphors embodied the threat we felt individually and, in many countries, our sense of solidarity and the need for a collective response led by an effective government. In certain countries, the use of military metaphors evoked a past war, in which the enemy was eventually overcome, and around which positive myths had arisen about citizens demonstrating solidarity, compassion, and selfsacrifice for the common good. In the UK (and many other Allied countries) pride still lingers about the values which assisted people to withstand terrible periods of WW II (specifically, in the UK, the Blitz, the German bombing campaign on the country in 1940-41). Friends in continental European countries, especially France and Italy, tell me that use of the "war" metaphor in the early stages of the pandemic had connotations for them deriving from the still powerful myths of their resistance movements, out of whose ideals their postwar societies (and social welfare and health systems) grew. The wide adoption by the general public in all these countries of metaphors of war, and of the narratives they imply, offered a curiously comforting sense of collective agency in relation to a situation in which it was very easy to feel helpless. Nevertheless, it can hardly have had positive connotations in countries such as Afghanistan, Iraq, Syria, Yemen, which are currently enduring terrible actual wars.

Early objections to the "war" metaphors Strong objections to the general use of the "war" metaphor were, however, raised early on by respected commentators in articles with headlines such as: "Pandemics are not wars: There are better metaphors to describe what's happening right now" (Wilkinson, 2020), "Why 'waging war' on Coronavirus is a dangerous metaphor" (Sered, 2020) and many others. Simon Jenkins, writing in the Guardian newspaper, summed up these objections emphatically: "Never, ever, should a government use war as a metaphor in time of peace" (Jenkins, 2020).

Protests against use of the "war" metaphor in the context of the pandemic echo the repeated objections to its use in a host of other contexts over the last 40 years (Sontag, 1979; Tannen, 1998, and many more, including; Nerlich, 2020; Hanne, Crano, & Mio, 2015). The most powerful objection to the widespread use of "war" metaphors is that it normalizes and naturalizes actual war, implying that war is a valid way of solving major issues. (Commentators in many disciplines have highlighted the restrictions and distortions in thinking which arise if a single metaphor comes to dominate the field to the exclusion of other ways of viewing it: see, for instance, Taylor & Dewsbury, 2018).

While a few commentators insisted unhelpfully that the "war" metaphor exaggerated the seriousness of the pandemic (e.g. Jutel, 2020), a clearly valid concern was that it gave political leaders the opportunity to "win obedience to authority" (Jenkins, 2020), "limit human rights such as freedom of movement and ... freedom of speech" (Tisdall, 2020), and "suspen[d] parliament and courts and

[postpone] elections" (Tisdall, 2020). Commentators pointed to Hungary, the Philippines, Egypt, India, Turkey, and other countries, where authoritarian leaders were taking measures at this time to strengthen their personal position (Musu, 2020) and to Israel, where Benyamin Netanyahu leveraged the Coronavirus to enable him to stay in power despite an indictment for corruption (Pillar, 2020). Overall, they were concerned that adoption of the "war" metaphor enabled "accretion of power" in the hands of unscrupulous leaders (Jenkins, 2020).

More specifically, objectors highlighted the way in which the metaphor provoked or legitimated xenophobia (Buruma, 2020). Several political leaders blamed other nations for causing or spreading the disease. Donald Trump repeatedly referred to Covid-19 as "the China virus" (Musu, 2020). The Iranian leader Ayatollah Khameini and some Chinese commentators suggested that the US had manufactured it (Anon, 2020, Zhao Lijian, 2020). At the local level, xenophobia was visible in the early days of the pandemic when people of E Asian appearance and E Asian restaurants were boycotted in the US and Europe. As the outbreak became worse in Europe and the US, people of European appearance were shunned in some E and SE Asian countries. In India, minority Muslims were blamed by groups from the Hindu majority for its spread in that country (Slater & Masih, 2020).

Objectors claimed that the use of the "war" metaphor had particularly fostered nationalist, rather than cooperative and internationalist, approaches in the manufacture and distribution of essential personal protection equipment (PPE) and respirators and the development of vaccines and drugs for treating Covid-19, with some countries seeking to monopolize scarce essential supplies (whether the "armaments" or the "defensive equipment") in this war (Martin, 2020; Musu, 2020). Other objections included that the metaphor was misleading and unhelpful in suggesting that a total "victory" would be possible, with the virus being fully "defeated" (Pillar, 2020). (Such objections continued to be uttered later in the year e.g. Wicke & Bolognesi, 2020.)

Boris Johnson and Donald Trump as "wartime leaders" Many national leaders, including Prime Minister Boris Johnson in the UK and then President Trump of the US willingly adopted the title of "wartime leader" in the early stages of the pandemic. This choice rebounded on these two populists as the "war" metaphor subsequently turned out to be a valuable lens through which to observe their woeful incapacity to perform the roles they had claimed.² Both failed in terms of all the criteria by which wartime leaders are judged: preparedness, effective strategies, ability to form alliances, provision of equipment, protection of civilians, and communication with their citizens.

Few countries, it has to be acknowledged, showed themselves adequately prepared for the arrival of a worldwide pandemic and yet the US and the UK, which had the resources to prepare themselves better than most, had with recent policies made themselves particularly vulnerable. Early in the virus outbreak, both the US and the UK ignored the warning signs that they were under threat of a massive outbreak of the virus in their countries. The UK had held an exercise Operation Cygnus in 2016, to simulate the effects of a possible influenza pandemic on the National Health Service (Pegg, 2020), which showed that it would cause the service to collapse from a lack of resources, but Johnson failed to implement the recommendations that emerged from that exercise. Similarly, Trump's administration had removed the many US health officials who had been placed around China to look out for such emergencies and discarded the 69-page plan for handling pandemics left by the Obama administration (Fallows, 2020). Both leaders received intelligence in January 2020 about the outbreak but failed to take serious action until it was too late. Johnson insisted that he had the situation under control, yet failed to take the early defensive steps, especially intensive testing, that were being advocated by the WHO. Trump famously declared in late February that "like a miracle" it would "disappear" (Burns, 2020). The early confidence of both leaders should remind us of the disastrously soothing words of Neville Chamberlain, UK Prime Minister, on his return from the Munich conference with Hitler in

²Several commentators have tried other "thought experiments" to analyze the handling of the pandemic. See especially Fallows (2020, June 29), who asks how the emergency would have been handled if it had related to air travel.

³Most notably Taiwan and S Korea, in part because of their experience of the SARS epidemic in 2003.

September 1938, just one year before the outbreak of WW II, that he could assure the British public of "peace for our time."

We have a further expectation of a "commander-in-chief" that s/he will develop a coherent strategy for the different phases of the campaign ahead. Neither Trump nor Johnson did that. Their early failure to grasp the seriousness of the threat and, especially, Trump's failure to listen to experts in the field, led to a series of incoherent moves, which facilitated the massive spread of the disease in both countries. Whereas countries such as Taiwan, South Korea and Germany kept infection rates, and so mortality, very low by following WHO guidelines, Johnson somehow thought he could make up his own protocols and Trump ignored the warnings of his own health experts about the predictable rise in cases of the virus and failed to authorize the measures needed to slow that rise. Having insisted that he was "a war-time president," Trump missed the opportunity that offered him to establish a federal strategy, instead leaving the fifty states to develop containment policies of their own and even pitching Republican-run states against Democrat-run states. On more than one occasion, he referred to himself as having been a "cheerleader" as he minimized the seriousness of the pandemic (Telnaes, 2020). The fragmentary, largely private, healthcare system in the US, from which a high percentage of the population were excluded - which he supported vociferously against the reforms advocated by Democrats - has proven woefully inadequate to cope with a menace to the whole population of the country. In addition, the extreme threat posed by Covid-19 obviously demanded, as a real war does, a "whole-of-government" response, whereas he had always insisted on shrinking the federal government. The consequence of this lack of leadership is that, as I write in May 2021, the US is showing a total of 588,000 deaths. (Statistics for the UK are equally appalling, with a total of almost 128,000 deaths.)

Another crucial feature of any war strategy is ensuring that supplies of weaponry and defensive and other equipment reach those fighting in the frontline. In both the US and the UK, there were inexplicable delays in obtaining enough testing kits to ensure that the health authorities could accurately estimate the spread of the virus. Their failure to manufacture, obtain, and distribute the defensive clothing (PPE) required by the "frontline" doctors and nurses in adequate quantities was astonishing. Particularly striking was Trump's unwillingness as then Commander-in-Chief to invoke the Defense Production Act, which would have required companies to manufacture the necessary equipment. He stated that, in a free market, large corporations would supply the need - which they very clearly failed to do. Boris Johnson, likewise, failed to ensure the manufacture and/or importing of PPE in reasonable time. The ineptness with which both leaders conducted their provisioning of equipment recalls the many notorious cases from history where there have been massive failures of supply - we could cite numerous such failures by the UK and the US in the two world wars and in the Vietnam War, but the most vivid, from an earlier war, is probably the decision by British authorities in the Crimean War to send left boots and right boots for the soldiers to the front on separate ships, one of which was, of course, sunk!

While the failure to seek alliances with other countries in countering the virus has not been limited to the UK and the US, those two countries were notable for missing the opportunity to learn not only from China, but from countries such as Taiwan, South Korea and Germany and the Indian state of Kerala, which had kept infection and mortality rates low by means of early testing and quarantining. Instead of seeing the opportunity to work in collaboration with China on understanding the virus and responding to the pandemic, Trump took an exclusively antagonistic posture toward the country in which the virus had originated and in which patients were first treated, insisting absurdly that the US was taken by surprise - though his conversation with Bob Woodward on February 7 makes clear that he was well aware then of the likelihood of high death rates (Smith, 2020).

One of the most onerous responsibilities of a wartime leader is to assure the maximum possible protection for the country's civilian population. In this "war," the civilians are the "enemy's" sole "target" - no cities, factories, ships, docks or transport networks have been destroyed, though economic activity in them has been severely restricted. For this reason, effective leadership in this crisis involves not only measures to reduce the infection rate and fatalities, but comprehensive and

transparent mechanisms to compensate those whose incomes have been severely reduced by the public health measures taken and to facilitate the return to activity of the nation's industries. An extraordinary feature of debate in the US, in the early months of the pandemic was a degree of equivocation over the definition of civilians. American media regularly compared fatalities in this "war" with the death toll in the many wars the US has fought over recent decades, noting, for instance, the point at which they surpassed US military deaths in Vietnam (the end of April). These acts of comparative measurement facilitated the emergence among Republican commentators of a discourse which suggested that all Americans are fighters in this "war". Chris Christie, a Republican former Governor of New Jersey and supporter of Donald Trump, expressed this most starkly on May 4, in an interview in which he pressed for a rapid reopening of the American economy. He declared: "We sent our young men during WW II over to Europe, out to the Pacific, knowing that many of them would not come home alive," concluding that his country should be willing to make the same sacrifice now "to stand up for the American way of life" (Silverstein, 2020). Seemingly unaware that he was talking about measures which would sacrifice thousands of civilians (especially old people), rather than military, he pressed for a rapid return to work and other activities. As I write, American deaths from the virus are almost five times the figure for US military deaths in Vietnam, Korea, Afghanistan and Iraq together and have overtaken the figure (405,000) for American deaths in WW II.

A further essential requirement of a good wartime leader is public communication that shares information and policy and builds trust and collective will in the population. Roosevelt's "Fireside Chats" and Churchill's addresses to UK citizens during WW II might have been outstanding models.

Trump has, of course, throughout his presidency fostered antagonism toward external groups, including refugees and migrants, China, Iran, NATO and other international organizations. Internally, he has fomented anger among his followers against "big government," Democrats and progressives, those who have argued for action on climate change, socialized medicine and limitation on gunownership. It has been clear throughout the pandemic that Trump's primary goal for 2020 was victory in the Presidential Election. Rather than seeking to unite Americans against "the common enemy," Covid, Trump conducted himself throughout as if the real war he had to fight was against the Democrats, progressive media, China, and the WHO. Far from uniting Americans he fomented antagonism at every turn. His earlier contempt for professional expertise was transferred from climate-change scientists to public health experts. His antagonism toward Democrats in government focused on state governors who introduced limitations recommended by health experts on citizens' free movement. He accepted the support of right-wing fanatics who assert that American Christiancapitalist values are under threat from left-wing, secular, multi-cultural, and environmental activists in such phrases as "the war on Christmas," "the war on Guns," "the war on Oil," and the "war on Coal" (Flusberg, 2018). He framed the need to limit deaths and prevent hospitals being overwhelmed by the cases they were required to treat as being in simple conflict with the desire to revive the economy by getting people back to work, when common sense makes clear that the two issues must be treated in tandem. By inviting those who objected to the science-based actions of Democratic governors of states such as Michigan and Virginia of limiting commercial and leisure activities of their citizens to reduce the risks of infection to "liberate" their states he opened the gate for armed militias to plan the kidnapping of their governors (CBS News, 2020). Rather than fostering national unity, his populist rhetoric and actions have made the outbreak of some kind of second civil war increasingly possible. Many of those who stormed the US capitol on January 6, 2021 saw Trump as advocating such a development. It is a sad irony that, rather than modeling himself on Roosevelt, he has absurdly likened himself to Lincoln, whom he resembles only in that he presided over an actual civil war. His defeat in the presidential election confirms that he failed to win either of the metaphorical "wars" he was involved in.

The Covid crisis struck the UK when it, too, was experiencing major internal conflicts, likewise stirred up by right-wing populist leaders, including Johnson, who had found it to their electoral advantage to foster resentment within large groups of their citizens. In the UK, some of the same resentments festered - especially around elites and immigration and ethnic minorities - but the

specific focus promoted by Johnson and his allies was the Brexit campaign, which, of course, promoted antagonism toward the supposedly overweening power of the EU, leading to the perception on the part of a large number of UK citizens that other countries in Europe were draining financial resources away from areas in the UK economy, such as education and healthcare, to which they should have been directed. In his presentations for the media around Covid, Johnson sought to project himself (as he had in the campaign to persuade the population that the UK should leave the European Union) as the "Churchill" needed for the occasion. 4 He employed a grandiose speaking style, recalling frequently the very positive myths about the solidarity, compassion, and self-sacrifice for the common good which had assisted people to withstand terrible periods of WW II (Nerlich, 2020). Johnson's lateness in responding to the pandemic and incoherent policies in relation not only to the health emergency but to its implications for employment, education, and other areas quickly resulted in public confusion and a continually declining level of trust in his handling of the crisis. Contributing factors in the mess he made of this challenge include: the austerity policies which Conservative governments have maintained over the last 10 years, which have severely reduced public spending, especially on social welfare (so that lower socio-economic groups are more vulnerable to getting sick); fragmentation of administration within the National Health Service, which has made national coordination of care and provision of PPE very difficult; and a gutting of the public service in general, including an ideologically driven reliance on private enterprise to supply effective testing and tracing systems (Lawrence et al., 2020). Reviews of his performance suggest that he has been no more than "a Churchill tribute act" (Friedland, 2020). The Brexit environment itself specifically resulted in a foolish unwillingness on the part of the UK government to collaborate with EU countries in producing and distributing PPEs (Stone, 2020).

Alternative metaphors for our response to the pandemic Several early objectors to the "war" metaphor proposed alternative grand metaphors, including, especially, firefighting, flood control, and responding to storms and other disasters (see Nerlich, 2020; Semino, 2020). In so doing, they were applying the long-established insight that different metaphors may offer valuable competing visions of the topic referred to. So, Paulo Freire opposed his concept of education as "liberation" to the established metaphor of education as "banking" (Freire, 2007). Some legal thinkers propose the metaphors of "restoration" and "rehabilitation" as alternatives to the traditional "retribution" metaphors for treatment of offenders (for instance, Daly, 2016). However, none of the alternatives for the "war" metaphor encompassed the vast range of sub-metaphors and connotations that this dominant metaphor offered and they did not catch on initially among leaders or the general public.

As the months passed and the pandemic established itself across more and more countries, so the misplaced optimism of national leaders that "victory" could be achieved with a short, sharp "campaign" faded and the "war" metaphor came to be used less and less. Sub-metaphors from the alternatives that had been proposed have been increasingly employed. Epidemiologists talked of "hotspots" of infection and the virus was seen to leap from one location to another just as sparks in a wildfire do. Because its spread has occurred most rapidly in cities, some commentators referred to the pandemic as "an urban forest fire." Quarantining to limit the spread of the disease was much like establishing "firebreaks" around the conflagration, and so on. These metaphors had particular immediacy for people in the US and Australia where extraordinarily destructive wildfires occurring alongside the pandemic have devastated vast landscapes, property, wildlife and killed many people. Sub-metaphors from the alternative "flood" metaphor came into common use too, notably in reference to second and third "waves" of infection and intense local outbreaks were described as "storms" of infection. Use of these two metaphors coincided with disastrous storms and actual floods in the southern US, especially. Increasing knowledge of the disease, both scientific and personal, made people less trusting of, or reliant on, the overarching metaphors. The ongoing collective experience came increasingly to be referred to as "a journey" (Kiger, 2020).

It has become clear that countries which have been most successful in limiting the effects of the pandemic have relied on putting into effect strict policies recommended by the WHO on testing, contact tracing, physical distancing, and mask-wearing. NGOs in different countries have offered strategies for communicating in ways that convey both urgency and hope (e.g. Berentson-Shaw, 2020). It is noteworthy that two of the national leaders who have managed the outbreaks in their countries most successfully, Angela Merkel in Germany and Jacinda Ardern in New Zealand, have as far as possible avoided use of the "war" metaphors. Merkel has used just a few metaphors, such as "thin ice" and "a long-distance run" (Paulus, 2020). Ardern has used more, including the "bubbles" within which families should isolate themselves (a metaphor which has been taken up in several other countries), "embers" which might flare up, and the need for care in the "descent from Everest" (Adams, 2020). Ardern has consistently referred to the NZ population as "a team of 5 million," a metaphor which, in that very sporty nation, probably contributed a good deal to maintaining the collective focus and compliance which have resulted in the almost complete eradication of the virus. The contrast between Ardern's image of herself as the "coach to the national team" and Trump's image of himself as "cheerleader," could hardly be stronger.

Once it became clear to people in most countries that they were not fighting an external enemy, but rather struggling to manage a disease that was widely, if unevenly, spread within communities, there occurred a proliferation of metaphors, generated much more from the ground up than the "war" metaphors. Certainly, there was talk of "stamping out" the infection (as we might a fire), but it also proved helpful to view it as resembling an "infestation of rats" or other pests. For gardeners like me, the struggle to eliminate it resembled the endless effort to "suppress weeds" in the garden! Evidence of grass-roots creativity is to be found in the host of metaphors referring to different aspects of local and community experience of the pandemic, many of which have been collected by Brigitte Nerlich in her blog (https://blogs.nottingham.ac.uk/makingsciencepublic/) and through the wonderful Twitter site #ReframeCovid. I shall just refer to some of the categories into which I see these metaphors as falling: metaphors for disease transmission, for official handling (effective and ineffective) of the pandemic, for strategies to reduce its spread, for research on treatments and vaccines, for practicing physical distancing, for the experiences of grief and isolation suffered, and for the compassion, caring and solidarity demonstrated by so many people. There have been several metaphors for the effect of the pandemic on the economy and the goal of economic recovery. While some metaphors highlight human vulnerability to the pandemic, others emphasize human agency. Many commentators have turned established metaphors back on themselves for ironic or critical effect. So, a senior public health official in one American state, when asked how his colleagues were coping with the "second wave" of the infection, replied that "when you are completely submerged in cases, it's hard to count the waves on the surface" (heard by chance on radio). And Robert Reich and others made a crucial point about the inequity with which communities were being struck: "We are in the same storm, but we are not in the same boat" (Reich, 2020). In the UK, senior medical adviser Jonathan Van-Tam has excelled in coining vivid nonmilitary metaphors to explain the processes by which vaccines have been developed and tested (Van-Tam, 2020). Some of the metaphors used to describe the approaches of different national leaders have been illuminating, particularly those which link to the culture of the country they lead. The Prime Minister of Norway coined a wonderful simile for her own experience: "Ruling Norway during the Coronavirus is like driving a rally cross with the devil on your hood and one thousand map readers in the back seat" (#ReframeCovid 233). Anthropologist Anne Salmond borrowed imagery from ancestral Polynesian exploration to describe the New Zealand Prime Minister as guiding the national waka (canoe) across the ocean and "navigating by the stars" (Salmond, 2020). Both images take up the "journey" metaphor referred to above.

The "postwar" period and recovery It is now clear that this "war" will not end soon, as, though vaccines are widely available in the rich countries, early promises by those countries that they would ensure fair distribution to poor and middle-income countries have not been kept. (The "war" metaphor has undergone something of a revival as these "ultimate weapons" have been realized. I would much prefer metaphors of "armor" and "protection" to be used for the vaccines, just as I wish we were talking about "shared immunity" rather than using the animal-based "herd immunity.") Even countries which acted early to impose effective hygiene, lockdowns, testing, and tracing and have seen far fewer deaths than those which did not, are struggling to eliminate infections completely. There is much discussion of what a "postwar" recovery" might look like. Martha Lincoln observes acutely that there is a danger that we may consign the pandemic to the over-full dustbin of "forgotten wars" (Lincoln, 2020). It will be crucial that, in the coming years, as the impact of the virus fades, we model our actions on the major positive achievements of the post-WW II period on a global scale, which included the founding of the United Nations, rather than the negative outcomes, notably the Cold War. The abandonment or weakening of the WHO or the freezing of the current US-China antagonism into a new Cold War would be catastrophic.

Some immediate positive lessons from the "lockdown" that has been in effect to varying degrees in different countries have become visible to ordinary citizens, such as the desirability of maintaining the reduction of CO₂ emissions resulting from less fossil-fueled road and air traffic and industrial activity; the possibility of more employees working from home; the allocation of temporary housing in some countries to homeless people to ensure that they could adhere to the requirement to "stay home"; recognition of the devoted service to the community performed by, not only medical professionals, but hospital cleaners, and supermarket clerks. In the US, farm workers (many of whom are undocumented and most of whom are poorly paid) were deemed "essential workers" in the early stages of the pandemic (Jordan, 2020) and they should clearly be rewarded with adequate pay and, where needed, green cards. More generally, we are aware of innumerable manifestations of neighborly compassion and generosity as people, spending more time at home, have come to know and care for the people who live around them much better and we must hope that these innovations will continue.

Some of the deficiencies of existing social and economic arrangements have become glaringly obvious, including the inadequacy of fragmented healthcare systems to cope with a national, let alone international, emergency, and the extreme vulnerability of low wage, especially migrant, workers and the homeless. In the words of one commentator: "In the house of Corona, the mirrors have been replaced by windows facing reality" (#ReframeCovid 400).

Conclusion

Several writers have highlighted the extent to which larger pressing issues – notably climate change and other environmental degradation, extreme inequality within and among nations, and the refugee and migrant crisis – have been sidelined in the minds of the public and of governments by the pandemic (Pillar, 2020). A number of commentators have suggested, however, that our experience of the pandemic should make us more aware of the need and the opportunity for a Fresh Start, a Big Reset (Egan, 2020; Gaskell, 2020; Yunus, 2020), and that we are facing "a portal between one world and the next" (Roy, 2020) in relation to these issues. In particular, the lessons we will hopefully be learning about just how governments might have managed the pandemic better may be extrapolated to the other world crises. Moreover, the extraordinary flowering of verbal creativity, in the wealth of non-war metaphors that have been coined for our responses to Coronavirus, should offer valuable hints about how we may look for solutions.

Many philosophers and researchers in the social and physical sciences attest to the potential of a fresh metaphor to open the door to a new way of conceptualizing a long-studied topic, to achieve a "paradigm shift" (Haack, 1994). (Friedrich Froebel's imagining education as "horticulture" and establishing kindergartens, that is "child gardens," and Niels Bohr's visualizing atoms as "planetary systems" would be prime examples.). As we emerge blinking from the dark night of the pandemic, we should certainly be taking the opportunity to cast off the dominant noxious metaphor, and of course the reality, of war to which we have been shackled for so long.

Two wide-ranging observations about the potential of metaphor may serve as starting points for this journey. The first is Lynne Cameron's assertion that metaphor is closely linked to empathy (Cameron, 2016). Empathy involves our "seeing the world through someone else's eyes" or "walking

in someone else's shoes." The second is Ted Cohen's claim that metaphors are "an invitation [...] to intimacy" (Cohen, 1979, p. 6). When we utter a striking metaphor, we offer our audience the opportunity to view the topic through the frame we have proposed. Metaphors are too often used to draw people into opposing, antagonistic camps: think, for instance, of the metaphors used by President Trump to refer to migrants and refugees as the Other (Catalano & Musolff, 2019).

The Coronavirus pandemic should, I suggest, be seen, not so much as a distraction from the other major challenges the world is facing - the environmental crisis, inequality, racism, refugees and migration, and so on - but as a metaphor for them. This was vividly illustrated by a speaker at the first memorial service for African American George Floyd, killed by police in late May in Minneapolis, who referred to the killing as a symptom of "the pandemic of racism and discrimination" (PBS Newshour, 2020) and this phrase was taken up by protestors internationally. Such unified international action, crystallized in that metaphor, suggests that a huge number of people worldwide may, indeed, see this as the moment for dealing with some of our most intractable problems. Here, of course, Covid-19 is no longer the "target" domain for which metaphors are to be sought, but rather the "source" domain. The implications of this choice of metaphor should be clear: to counter this "pandemic" we should be seeking sub-metaphors, such as "infection," "vectors," "transmission," "treatment," "prevention," even "vaccination," and other clues from public health and epidemiology for dealing with racism.

To treat not only the actual pandemic and this metaphorical pandemic, but also the other major challenges, we require a vision that incorporates many elements. That vision will be both international and local. It will view human beings as integral to the natural world, rather than distinct from it. It will be inclusive, in terms of regions of the world, ethnicity, beliefs, economic status, and gender and sexual orientation. It will be active, rather than reactive. It will emphasize collective, as well as individual, identity. It will highlight obligations alongside rights. It will focus on achieving changes which will last to be beneficial for future generations.

It is the discipline of ecology which encourages us to think of the world in such a holistic way. Ecology is concerned with interconnection and interdependence, with communities of living creatures. Ecology has a strong temporal component, reconstructing how things were, exploring how things are now, envisaging scenarios for how things might be. Ecology focuses especially on creatures and environments which are vulnerable and those which are resilient. These perspectives are clearly relevant to all the major challenges we currently face. Thinkers in many fields have explicitly employed an ecological lens to view their particular discipline, including human health (Epstein, 2001), social inequality (Hackfort, 2012), racism (Kovel, 2003), international relations (Dyer, 2018), migration (Sanderson, 2019), as well as environmental change. (The discipline of ecolinguistics explores the role of language as it offers an ecological perspective on these and other disciplines. See: Fill & Mühlhaüsler, 2006; Mühlhaüsler, 2003; Stibbe, 2021) In the words of Joel Kovel: "Ecology ... has come to stand for whatever discourse would emphasize connectedness, or the logical consequence of being fully-connected: wholeness. In the context of a world hell-bent upon breaking down organicity and wholeness, the ecological perspective readily becomes endowed with ethical and political perspectives" (Kovel, 2003, p. 100).

Metaphor, too, makes connections and is most valuable when it links domains that are not conventionally associated with each other. Metaphor has the advantage, as we have seen, of condensing complex ideas into manageable form. All the major challenges I have referred to are complex and are susceptible to resolution only by complex responses. The populist framing of solutions is always oversimple, single, and adversarial: America first, leave the EU, stop immigration, defend our freedom, we must keep our guns, and so on. Clearly, we should not be seeking a single alternative grand metaphor, which would in its turn capture the discourse. (Note how even the illuminating "pandemic of racism" metaphor has its limitations. Pandemics refer to infection by novel viruses, whereas racism has a long history in colonization and slavery). We should be aiming to generate clusters and series of metaphors, each of which will illuminate a different facet of the many challenges that face us.

Metaphors from ecology illuminate processes, multifactorial causation, cycles of mutual influence, and so on. They acknowledge complexity, without spelling out the details of interaction. Some of those metaphors, including "interdependence," "co-existence," "homeostasis," "stress," "adaptation," "tipping point," are heuristically applicable across disciplines. Most importantly, the host of metaphors used in ecology are not a prescriptive strait jacket: they are constantly being critiqued by theorists and practitioners, who see that every metaphor they use is just one way of framing reality that can only be partially valid and should always be subject to modification and change (Larson, 2014).

I hope I have illustrated the crucial role played by metaphor in the conceptual framing of major public issues. I have sought to show why the "war" metaphor was dominant in the early stages of the pandemic but rebounded on national leaders who used it and failed to live up to the title of wartime leader. I have aimed to demonstrate that our remarkable metaphorical creativity may in the post-Covid period contribute to a collective revisioning of the world in ways that exclude both the metaphor and the reality of war and highlight empathy, interdependence, equity, and resilience.

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ORCID

Michael Hanne (D) http://orcid.org/0000-0001-9866-665X

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