Introduction

Risk aversion, courage and sacrifice during the “war” against coronavirus
Courage, cowardice and cowering?
Honouring the risk takers?
Misrepresentation of the scope of the crisis?
Collateral damage and tolerable fatalities in warfare -- from the perspective of authorities

Introduction

The argument here follows from a previous criticism of the strategy of social distancing, so rapidly adopted worldwide (Social Distancing under Conditions of Overcrowding? Weaponising mass distraction from overpopulation denial? 2020). The speed with which consensus was achieved within countries could be considered remarkable when compared to the procrastination so evident with respect to other issues variously upheld as urgent. Many note the contrast with the response to the well-documented challenges of climate change, now sidelined, if not totally obscured (William Nordhaus, The Climate Club: How to Fix a Failing Global Effort, Foreign Affairs, May/June 2020). The same could be said of the dramatic challenges of developing countries and widespread injustice -- now clearly far from urgent, irrespective of the associated suffering and fatality.

The earlier criticism focused on the avoidance of systemic thinking which resulted in misrepresentation of social distancing in an overcrowded context. In particular it encouraged highly questionable modelling of the development of the pandemic crisis, most notably ignoring relative population density -- an exercise undertaken with a minimum of transparency and peer review. Consequently this has given rise to multiple ironies and contradictions in the implementation of social distancing. The argument raised questions about the requisite sacrifice in time of war -- as the strategic response has come to be enthusiastically framed by authorities in an effort to elicit rapid consensus and solidarity.

As the argument is further developed here, the implementation of widespread lockdowns as the primary strategy can be effectively recognized as a "call to cower" by authorities. With a focus on compliance, this has raised concerns with regard to emergent officiousness, authoritarianism and hidden agendas (Edward Santow, We must combat Covid-19 but creeping authoritarianism could do more harm than good, The Guardian, 8 April 2020; Coronavirus: why we must tackle hard questions about police power, The Conversation, 9 April 2020; Michael Sean Winters, History warns us: Crises like COVID-19 can give rise to great evil, National Catholic Reporter, 3 April 2020; Saladdin Ahmed, COVID-19: Communism or Fascism, TelosScope, 18 March 2020).

Curiously the country seen by many as the ideal retreat in time of crisis -- most notably by the extremely wealthy -- is now developing characteristics of a police state, as noted by Binoy Kampmark:

It’s all about the lever of balance. Laws made for public protection, within which public health features prominently, provide grounds for derogation authorities can exploit. Like plasticine, the scope of power during times of an emergency extends. But at what point does a state of public health become a police state? In time, we may find these to be not only indistinguishable but synonymous; the body will be the site where liberties are subordinate to regulation, movement, medical testing, and directives made in the name of health. Another by-product of these measures is a willingness to turn citizens into accessories of the state... the do-good brigade enlisted in public health’s calling. This saw the establishment of an online site which was swamped with reports within an hour of its activation, crashing it. (The Coronavirus State: New Zealand and Authoritarian Rumblings, Australian Independent Media, 11 April 2020).

It is to be expected that the superpowers will use the strategic and legislative opportunities of the pandemic to enhance their dominance and to further hidden agendas (Mark Minevich, Can China use coronavirus to pave the way to a new world order? The Hill, 2 April 2020; Coronavirus Drives the U.S. and China Deeper Into Global Power Struggle, The New York Times, 22 March 2020; Naomi Klein,
The argument here contrasts with a separate exploration of whether imaginative engagement with the form of the coronavirus is preferable to a fearful cognitive mindset inhibiting emergence of new thinking enabling a more fruitful response. This framed the question regarding the appropriate form of global organization and knowledge architecture required in a response to any pandemic -- and any crisis of other crises. The argument through visualization was then further developed (Coronavirus -- Global Plan, Doughnut, Torus, Helix and/or Pineapple? 2020; Engaging Playfully with Coronavirus through "Organizing" Global Governance? 2020).

The focus in what follows is however on the appreciation of risk of death in immediate response to a pandemic, in contrast to that in warfare as otherwise understood. -- and a continuing experience for many in countries which are "socially distant". This compares curiously with the lack of appreciation for risks now predicted to arise from climate change -- and currently evident in fatalities from natural disasters, readily recognized as heralding future deaths and loss of livelihood. There is however a strange irony to the appreciation of heroic courage of populations during other forms of warfare -- in contrast to the widespread condemnation of those who then cower at home as "conscientious objectors" and "pacifists". Lockdowns are now promoted by authorities as a means of avoiding risk of fatality, with cowering at home as the primary means of safeguarding human life -- especially that of others.

There is a further irony to the use of drones and other surveillance technology to ensure lockdown compliance in the face of a pandemic (Apple and Google are building a coronavirus tracking system into iOS and Android 53, The Verge, Apr 10, 2020). It is similar technology which is now the primary means of enabling fatalities in arenas of military conflict -- obliging people to cower for shelter in homes which may well be specifically targeted in consequence. The irony is all the greater in that the drones are piloted by agents safely ensconced in bunkers and facing zero personal risk. Under such circumstances, what form does courage take in the face of risk?

Perhaps the greatest irony lies in the sense in which people are being called upon to await the discovery, production and dissemination of a vaccine against COVID-19 -- a "silver bullet". This will be produced with the complicity industries under circumstances readily comparable with the operation of the so-called military-industrial complex, of which warnings have been given in the past: a "medical industrial complex"? There is every probability that authorities will render vaccination mandatory -- thereby requiring that people receive one or more "shots" (US Government Considering COVID-19 "Immunity Cards, Futurism, 10 April 2020). The necessity for such a "shot" will be framed in terms of the need to safeguard others from infection -- effectively to "take a bullet" for everyone else, if not for oneself. Does the world population require a "shot in the arm" to engage effectively with climate change and safeguard future generations?

The title and subtitle of this argument is necessarily provocative -- an invitation to condemnation. The basic point is however the need for contrasting perspectives in times of crisis, rather than the management of consent (Edward S. Herman and Noam Chomsky, Manufacturing Consent: the political economy of the mass media, 1988). The question is why such alternative views are deprecated in order to achieve knee-jerk consensus.

Risk aversion and sacrifice during the 'war' against coronavirus

The developing pandemic is variously presented and experienced as terrifying -- whether in terms of "enemy", fear and fearfulness are readily evoked. Few refer to Franklin D. Roosevelt in relation to the terrors of the recession in the century past:

The only thing we have to fear is fear itself -- nameless, unreasoning, unjustified terror which paralyses needed efforts to convert retreat into advance.

Evocation of "war" with its legislative implications: The response to the pandemic has already been framed as a "war" -- requiring war-like legislative provisions (Gaby Hinsliff, We are at war with coronavirus, The Guardian, 17 March 2020; David Eccles, We are at war: France locks down as pandemic surges, InDaily, 17 March 2020; Ryan P. Burke, The 'war' on COVID-19 doesn't mean military lockdown, The Hill, 20 March 2020; Israel Shamir, Fighting the Worldwide War on Death, Information Clearing House, 8 April, 2020). The possibility of martial law to enforce whatever provisions are deemed necessary, with or without critical review, is already evident (Stephen Lendman, Martial Law is Coming to the USA? Information Clearing House, 23 March 2020; Debbie White, Corona Coup: secret military plan to impose martial law and stop civil disturbances if government is crippled by coronavirus, The Sun, 22 Mar 2020; Matt Honeycombe-Foster, Government 'planning for martial law' under emergency no-deal Brexit preparations, PoliticsHome, 27 January 2019). What is the difference for the citizen between "martial law" and "lockdown"? (John W. Whitehead, Draconian Lockdown Powers: it's a slippery slope from handwashing to house arrest, Information Clearing House, 9 April 2020).

Confronting mortality: Warfare necessarily implies a confrontation with mortality. As argued by a palliative care physician: There is, therefore, a glaring imperative to confront the topic so many of us long to squirm away from: the inescapable fact of mortality (Rachel Clarke, We can't be squeamish about death: we need to confront our worst fears, The Guardian, 15 March 2020). Cynics might also argue that many of the vulnerable have long been indifferent to the fatalities exacerbated by the policies of their governments -- most obviously in distant countries.

The necessary "confrontation of mortality" noted above has long been a feature of warfare in which many -- if not everyone -- should be prepared to die for their country, despite controversy consideration of that requirement (Justin Ebert, Dying for one's country: poetic or propaganda? The Red and Black, 4 November 2015). Explicit evocation of the possibility dates back to the exhortation to the citizens of Rome by the poet Horace: Dulce et decorum est pro patria mori ("It is sweet and fitting to die for the homeland"). More curious is the suggestion that those most vulnerable from the pandemic are the elderly -- namely those with the highest probability of dying anyway, as with the "health compromised", possibly having indulged in various forms of "substance abuse".
Risk aversion: Faced with any potential threat, and especially in time of warfare, there is a need to manage risk through its appropriate assessment. This is obvious in the case of financial risk and is particularly cultivated in the case of gambling. The challenge is otherwise when there is potential for loss of life, however this too is reasonably well-understood with respect to:

- crossing a dangerous road
- going to dangerous places, no-go areas, etc (especially at night)
- travelling at speed (automobile, motorbike, skateboard, etc)
- rock climbing, skiing, paragliding
- trekking in wild places

A degree of risk may indeed be cultivated by choice, but management of response to a pandemic raises the question of risk aversion and who has aversion to what risk -- financial or life-threatening. Even more relevant is the question of the role of authority in averting risk.

(Coronavirus: the world economy at risk, OECD, 2 March 2020; Nassim Khademi, Coronavirus has heightened risk aversion and uncertainty! but economy will hold up, ABC News, 11 March 2020; Kellie Scott, Coronavirus COVID-19: Why some people panic-buy and self-isolate while others aren't worried, ABC News, 13 March 2020). However the pandemic now sees governments opting for strategies in which citizens are obliged to take zero risk -- removing from them any right to determining the level of risk they find acceptable and penalizing those who endeavour to do so. The curious exception are medical personnel who may be forced to be on the "front line", whether they wish to accept that risk or not.

Many fear risks of fatality of the type noted above -- however they may be cultivated by some. Are governments increasingly defining their role to ensure a "risk free" society in which many risky activities are deprecated or suppressed? Legislation regarding safety-helmets for bicycle riders, for example, is notably handled very differently in different countries.

Fatal remedies as cures to a collectively tolerable disease? What of the "unthinkable" strategy intimated by Donald Trump in tweeting that We cannot let the cure be worse than the problem itself (22 March 2020, at 10 minutes before midnight eastern time). and argued by others (David Katz, Is Our Fight Against Coronavirus Worse Than the Disease? The New York Times, 20 March 2020; Jonathan Sumption, Coronavirus lockdown: we are so afraid of death, no one even asks whether this 'cure' is actually worse, The Sunday Times, 5 April 2020). The latter cites Franklin D. Roosevelt in relation to recession:

The only thing we have to fear is fear itself -- nameless, unreasoning, unjustified terror which paralyses needed efforts to convert retreat into advance.

This view has naturally been challenged (Sten H. Vermund, et al, The Wrong Way to Fight Coronavirus, The New York Times. 23 March 2020). Most recognize the appropriateness of the old medical joke: The operation was a total success -- unfortunately the patient died.

Will social distancing, as currently conceived, prove eventually to have been a "total success" -- if only from the perspective of medical expertise? Why the knee-jerk rejection of Trump's argument in time of war, as the pandemic is now declared to be (Jeet Heer, Trump Toys With a Let-Them-Die Response to the Pandemic, The Nation, 23 March 2020)?

Sacrifice: Death as a consequence of pandemic implies that the "enemy" bringing about fatality is now everywhere. Rather than people seeking to avoid engagement with the enemy -- typically framed as cowards in conventional arenas -- what should "prepared to die for one's country" now be held to mean?

Authorities are now variously calling explicitly for sacrifice (as in conventional warfare), with the expectation that some may indeed be obliged to make it:

- Jake Nevins: The Imperative of Personal Sacrifice, Today and During World War II (The New York Times, 3 April 2020)
- Carmel Spark: Doctors urged not to 'sacrifice' themselves during coronavirus pandemic (AusDoc, 3 April 2020)
- Julia Ries: These Are The Sacrifices Medical Workers Make To Fight Coronavirus (HuffPost, 7 April 2020)
- Aman Cheema: An Appeal To Youth To Face Coronavirus With Self-Sacrifice, Not Selfishness (NPR, 29 March 2020)
- Ken Burns: E Pluribus Unum: shared sacrifice will be needed to beat coronavirus (Forbes, 29 March 2020)
- Aaron Patrick: The battle to shift sacrifice elsewhere (Financial Review, 6 April 2020)
- David Corn: Donald Trump Signals He Might Sacrifice Thousands of Americans to Restart the Economy (MotherJones, March 2020)
- Coronavirus outbreak is 'a sacrifice for all of us' (PBS NewsHour, 15 March 2020)

Which of these understandings of "sacrifice" corresponds to the "ultimate sacrifice" which many are called to make in time of war? Given the degrees of sacrifice, which should be considered insulting from the perspective of those who make such an ultimate sacrifice?

Should the elderly be especially prepared to do so? -- as claimed by a Texas official (Lois Beckett, Older people would rather die than let Covid-19 harm US economy, The Guardian, 24 March 2020). Does this contrast strangely with conventional expectation (by the elderly) that this is an obligation for the young? Is this a "new norm"? As with the security services, are the elderly and the "health compromised" now expected to "take a bullet" to protect society? This lends itself to speculative exploration (Terminal Empowerment: socio-political implications of radical mutual assistance amongst the terminally ill, 2003)?

Should sacrifice be more carefully framed as "protect society" and "dying for one's country" -- understood as taking risks of exposure in order to allow the livelihoods of many to be sustained rather than destroyed by ill-considered policies?

Trolley problem of risk management: There is the very delicate issue of who should take what risk and who should decide who is to be sacrificed -- and what form that sacrifice should take. There is also increasing concern, as noted above, that the risk to the economy and too livelihoods may be greater than the risk of fatality. This raises the eternal question of the value of life in such contexts and the
dilemmas of the so-called trolley problem:

- Morgan Sung: The trolley problem is the perfect meme for our government's pandemic response ( Mashable, 25 March 2020)
- John Ridlehoover: The Good Place Creator Uses the Trolley Problem to Explain COVID-19 Crisis (CBR, 24 March 2020)

The trolley problem can be framed in terms of the choice between saving relatively few in the present (condemning many to death in the future) or acting to save the many in the future (by constraining the response to the relatively few in the present). This emphasizes the temporal dimension in contrast with other articulations of the problem -- those of the future being effectively neglected as "over the temporal horizon", as with other forms of strategic short-termism (Roger L. Martin, Yes, Short-Termism Really Is a Problem, Harvard Business Review, 9 October 2015).

A temporal dimension is relevant to consideration of the economic and social disaster enabled by lockdown. It is equally relevant to the currently neglected consideration of the climate change crisis. The trolley problem helps to focus any effort at root cause analysis of a crisis when its most disruptive effects may be experienced in the future rather in the present. Focusing on present adaptation by tinkering with policy "fixes" (as is currently the case) carefully avoids the need to attend to the dimensions of the crisis in the future, an approach which is similarly evident in the response to predicted food/water/resource shortages, and the like (Vigorous Application of Derivative Thinking to Derivative Problems: transcending bewailing, hand-wringing and emotional blackmail, 2013).

Irrespective of the time preferences of authorities, far more problematic is the radical opposition to any debate on time preferences and risk analysis, as they may affect the fate of billions in the future.

**Courage, cowardice and cowering?**

**Courage**: Under conditions in which authorities have effectively issued a "call to cower" through lockdown -- in what is claimed to be wartime -- it is curious to note that there are few official articulations of the need for courage. Such articulations have been characteristic of wartime leaders of the past.

What form might courage take in a period of permanent curfew, possibly stringently enforced by compliance agents? Especially bizarre, it is medical personnel (framed as being on the "front line") whose actions are deemed heroic -- in responding to the health conditions of those cowering in their homes, seemingly as far as possible from any combat zone, or any possibility of being considered courageous.

Some examples of how courage is understood in that context, distinct from those of individuals struggling with personal challenges, include:

- Carol K. Moore: Courage, Cancer and COVID-19 (Cure, 9 April 2020)
- Renee A. Shellhaas: Neurologists and Covid-19: a note on courage in a time of uncertainty (Neurology, 1 April 2020)
- Margie Warrell: A Pandemic Sized Lesson In Letting Go And Finding Courage Amid Fear (Forbes, 28 March 2020)
- Azim Azman: Fear, humour and courage amid the Covid-19 outbreak ( The Strait Times, 19 March 2020)
- Stan Kutcher: Three ways to tackle fear with courage amid COVID-19 pandemic (The Hill Times, 1 April 2020)

How do such indications of courage compare with that called for in wartime -- and a characteristic of personal experience? These are repeatedly commemorated, and celebrated in literature and movies but would appear to differ fundamentally from that of the war against the coronavirus. Most obvious is the iconic role of unarmed Scottish pipers leading troops into battle a century ago -- even "over the top" during trench warfare (Ben Johnson, Scottish Piper War Heroes, Historic UK). *Lest We Forget*: Might an adaptation of traditional use of such a piper in Australian memorial services be expected after the war is over (The Lone Piper and Flowers of the Forest, Australian War Memorial)?

Strangely, if a dangerous zone of combat is where courage is to be found, it is those obliged to cower in their homes -- losing their jobs and livelihood in the process -- who could appropriately be deemed heroic. Such heroism, when evident in time of conventional warfare, is forced upon many by the misconceived strategies of their leaders -- often to relatively little purpose. Will the loss of jobs and increased exposure to domestic violence come to be recognized as a mark of heroism engendered with little consideration by such strategies?

Relatively little is said about risk aversion in relation to the pandemic and social distancing measures (Melissa Couto, Coronavirus: Finding social distancing loopholes not worth the risk, experts say, Global News, 7 April 2020). However "experts" in Sweden (presumably "made of different fibre") have assessed the situation otherwise, advocating a strategy which does not involve "cowering" at home-- arousing much disapproval from elsewhere, inviting the suspicion of a desperate need to prove that There Is No Alternative (in accordance with the principle of Margaret Thatcher):

- Katri Uibu: Sweden is adopting a 'flexible' coronavirus response and betting on 'social obedience' (ABC News, 7 April 2020)
- Matthew Holroyd: Coronavirus: Sweden stands firm over its controversial COVID-19 approach (Euronews, 6 April 2020)
- Paul W. Franks: Sweden under fire for 'relaxed' coronavirus approach -- here's the science behind it (The Conversation, 28 March 2020)
- Amanda Hodge: Coronavirus: Sweden goes it alone but will it work? (The Australian, 1 April 2020)
- Orlando Crowcroft: Is Sweden's COVID-19 strategy working? (Euronews, 12 April 2020)
Consideration in the form of wide media coverage has already been given to honouring the victims of the pandemic (Al Jazeera, 7 April 2020)

**Cowardice:** Risk avoidance is readily framed as cowardice, most notably in time of warfare. Soldiers are required to take risk -- to risk their lives. During a pandemic, people of various categories are framed as being "on the front line" and obliged to take risk. These most notably include medical personnel -- as well as the security services required to ensure lockdown compliance.

Missing is any sense that people may have different appreciations of the risk involved -- as is evident in the example of Sweden, potentially now to be considered the most courageous country (however foolhardy some may deem them to be, as is typically the perception of the more timid). Are the Swedes to be understood as especially courageous -- compared to many who are respectful of lockdown directives in other countries?

In contrast with conventional warfare, leaders and their generals are seldom accused of cowardice. This is proving to be less the case with respect to the pandemic:

- Alessandra Scotto di Santolo: *Boris Johnson lambasted for 'cowardly' response to coronavirus outbreak in UK* (Express, 13 March 2020)
- Lincoln Mitchell: *The Cowardice and Avarice of Trump’s Media Enablers* (European Interest, 16 March 2020)
- Kenneth Braun Pahrump: *Coronavirus highlights how we have become a selfish and cowardly people* (Review Journal, 16 March 2020)
- *Trump has adopted the coward's conception of heroism* (The Washington Post, 16 December 2019)

**Cowering:** More intriguing, given the wartime framing, is the level of risk assumed by the general population. In wartime, people typically assess the risk of exposure to bombing or enemy snipers. This is the case of those populations currently exposed to bombing in places like Iraq, Syrian and Afghanistan. They may indeed "cower" in shelters in fear of such bombing. Is that to be considered cowardice?

As in conventional war, given the equivalent threat posed by exposure to COVID-19, are those self-isolating in their homes to be considered as demonstrating cowardice -- "cowering" in their shelters? Some already refer to the "cowering" response to lockdown:

- *As world cowers, China glimpses coronavirus aftermath* (Bangkom Post, 19 March 2020)
- Mark Kenny: *The end of hu-vanity: the coronavirus will change the way we interact with each other* (The Canberra Times, 29 March 2020):
  - Cowering in our houses, neighbours become the enemy as we withdraw from society, eschewing all but the absolutely necessary.
  - But as in 2011, clear information is rarely provided, and people cower indoors in fear of an invisible threat, unsure how long they will be required to remain sheltered and whether or not they will have enough food.
- Stephen Ko: *Coronavirus Fears Mean We Need More Communion, Not Less* (Christianity Today, 18 February 2020):
  - We are called to provide compassion instead of cowering in fear.
- Emanuel Pastreich: *The Global Media and COVID-19* (CounterPunch, 23 March 2020)
  - For example, the average citizen should not be cowering in fear at home, afraid to go out, but rather building up a strong immune system.
- Pat Robertson: *God's People Don't Cover Before An Inert Virus*
- *Corona Virus, Confident or Cowering* (First Baptist Church, 22 March 2020)
  - But cowering in the dark places of our minds doesn't help.
- *Texans don't cover over coronavirus* (The Star Telegram, 15 March 2020)
- *Coronavirus has failed to drive city-dwellers to cover behind masks* (The Telegraph, 5 March 2020)
- *Industry:*
  - Automotive industry covered by COVID-19? (Autovista Group, 10 March 2020)
  - Grain Markets Cower as Coronavirus Spreads (Brownfield AgNews, 9 March 2020)
  - The impact of COVID-19 on emerging markets (Financial Standard, 24 March 2020)
  - Emerging markets, which in recent times had made somewhat of a comeback, are now cowering in the shadow of the rapidly spreading coronavirus.

What if people venture outside their shelters? Is that a courageous acceptance of risk -- comparable to the courage required to "go over the top", risking fatalty, as in trench warfare? What of any resistance, defying curfews and risking the severest condemnation by authorities?

Alternatively should waiting in shelters under lockdown for the benefit of one's country be reframed in the light of the traditional consolation for soldiers on sentry duty: *They also serve who only stand and wait* (John Milton, *When I Consider How My Light is Spent*, 1673). As indicated in the subtitle, perhaps appropriate to the lockdown requirement, this could be reworded as: *They also serve who only cower and wait*.

**Honouring the risk takers?**

Consideration in the form of wide media coverage has already been given to honouring the victims of the pandemic (*China pauses to...*)
However, strictly speaking, such victims are not to be considered risk takers. From the perspective of the statistics of warfare, should the fatalities among those choosing to take risk from coronavirus now be framed as "honourable" in the face of an implacable enemy -- one worthy of appropriate demonisation by official propaganda and the arguments of religion? Are such victims better understood as "collateral damage" and dismissed as incidental to the proper execution of wartime strategy?

Rather than being "honourable", as in more conventional warfare, it is now intriguing the degree to which risk takers are potentially to be criminalised in the case of pandemics -- with the exception of medical and security services.

The distinction follows from the sense in which everyone is potentially complicit with the enemy -- unknowingly or otherwise -- as a carrier of the disease. Everyone is then a potential "fellow traveller" or traitor. The pattern has been especially evident in the case of HIV/AIDS and other sexually transmissible diseases. However in such cases there are few legislative measures against failure to practice the equivalent of "social distancing".

Given the wartime framing of the pandemic, is it to be expected that medals will be awarded -- as is typically the case in war? To whom? Who will be deemed as having with exceptional courage in saving others? Correspondingly, who will be deemed to have been traitors and subject to courts martial?

As queried above, how will the war against coronavirus be appropriately commemorated? How are the Spanish flu and other epidemics commemorated?

Misrepresentation of the scope of the crisis?

Every year an estimated 290,000 to 650,000 people die in the world due to complications from seasonal influenza (flu) viruses. This figure corresponds to 795 to 1,781 deaths per day due to the seasonal flu. It might be asked how such fatalities are confused and conflated with those of COVID-19. A valuable summary is offered by Martin Cohen (Thinking Errors and the Coronavirus, Off-Guardian, 18 April 2020).

Questions meriting clarification: Figures are presented daily by the media -- for many countries and worldwide -- on the number of cases of COVID-19 detected and on the number of fatalities. These may include both recent updates and cumulative totals. Less evident are figures on the number infected who have recovered, although periodically this has been estimated at over 85% of those who have been infected. Far more elusive is any sense of:

- how any per capita figures relate to population density, since the infection rate might be assumed to be much lower in sparsely populated countries, and especially in those countries where the population is concentrated in a few urban centres.
- how the symptoms and testing distinguish or obscure other medical conditions with which "COVID-19" might be readily confused in its early stages.
- how death certificates distinguish deaths "from COVID-19" from other causes of death -- especially in the case of the vulnerable for which the simplest flu might trigger fatality.
- how predisposition to vulnerability (in terms of age, hypertension, cardiovascular disease, chronic respiratory disease, diabetes, cancer) obscures lifestyle choices which have engendered such predisposition, most notably substance abuse (drugs, smoking, alcohol, etc) and diet.
- how the number of deaths (so systematically presented) is to be compared with the number of deaths from any cause in the population in question, namely what proportion of all fatalities are directly due to COVID-19.

Such questions are notably of relevance given:

- various allegations of misreporting and under-reporting.
- potential confusion of fatality from other diseases with so-called "COVID-19-related fatalities".
- documented tendencies by authorities to massage data in support of particular agendas.
- the manner in which data is incorporated into models, especially any failure to ensure adequate data granularity.

The earlier exercise discussed the possibility that modelling of the crisis was distorting possible interpretation by aggregating data by country rather than endeavouring data granularity of a higher order. This has meant that no account is taken of population density over the country as a whole and, more specifically, within the country as a consequence of urbanization. It is evident that such an epidemic would spread more rapidly within urban areas rather than across rural areas. This is even more evidently the case when movement is far greater in the former than in the latter. Any lockdown strategy could have been appropriately adjusted to such circumstances -- rather than requiring those on a remote farm to conform to the lockdown strictures of a highly urbanized environment.

Ironically, by contrast, considerable focus is now placed on "granularity" by compliance authorities in using mobile phone locations to track individuals infringing lockdown provisions. (Coronavirus: Apple and Google team up to contact trace Covid-19, BBC News, 10 April 2020; Privacy versus Pandemic: tracking mobile phones could allow the government to control the spread of COVID-19, SmartCompany, 3 April 2020; Coronavirus lockdowns could end in months if Australians are willing to have their movements monitored, ABC News, 14 April 2020).

Confrontation of data sources assumed to be mutually irrelevant: There is therefore a case for confronting data tables that are currently treated as mutually irrelevant in any presentation of pandemic statistics in the media or in political discourse. A valuable summary of the scientific expertise marginalized by what has been described as a "pandemic panic" (or a "plandemic panic") is offered by an edition of The Corbett Report (Lies, Damned Lies and Coronavirus Statistics, #376, 17 April 2020). This notes the arguments of a sample of:
An early exercise towards clarification is presented below with a sample of those countries considered to be the most affected.

The following table juxtaposes data for a selection of countries from the excellent Worldometer presentation of COVID-19 cases (updated daily and sortable by column), with corresponding figures for those countries from:

- the Wikipedia List of countries by population density, whether per square kilometer or per square mile
- the Wikipedia List of countries by urbanization. Distinct indications are given: The first describes the percentage of the total population living in urban areas, as defined by the country. The second describes the rate of urbanization, namely the projected average rate of change of the size of the urban population over the given period of time.
- the Wikipedia List of sovereign states by mortality rate, namely the normal mortality rate in the absence of COVID-19. This crude mortality rate refers to the number of deaths over a given period divided by the person-years lived by the population over that period. It is usually expressed in units of deaths per 1,000 individuals per year. Separate estimates are given from OECD and from the CIA World Fact Book.

The main countries included are the first 22 from the Worldometer ranking by total deaths, together with three other countries of particular interest, as examples.

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<th>Country</th>
<th>Total Cases (Worldometer: 11 April 2020)</th>
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<th>Mortality 0/00</th>
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<td>Total Recovered</td>
<td>Serious, Critical</td>
<td>Tot Cases</td>
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<td>4,232</td>
<td>35,485</td>
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<td>Belgium</td>
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<td>1,002</td>
<td>11,100</td>
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<tr>
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<td>23,097</td>
<td>2,511</td>
<td>250</td>
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<td>Canada</td>
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<td>557</td>
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<tr>
<td>Brazil</td>
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<td>15,472</td>
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<tr>
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<td>6,604</td>
<td>246</td>
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<tr>
<td>Russia</td>
<td>13,584</td>
<td>106</td>
<td>1,045</td>
<td>8</td>
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<tr>
<td>Israel</td>
<td>10,505</td>
<td>95</td>
<td>1,236</td>
<td>191</td>
</tr>
<tr>
<td>South Korea</td>
<td>10,480</td>
<td>211</td>
<td>7,243</td>
<td>55</td>
</tr>
<tr>
<td>Sweden</td>
<td>9,685</td>
<td>870</td>
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<td>749</td>
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<tr>
<td>Ireland</td>
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<tr>
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</tr>
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<td>Mexico</td>
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<td>233</td>
<td>639</td>
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<tr>
<td>New Zealand</td>
<td>1,312</td>
<td>4</td>
<td>422</td>
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</tr>
</tbody>
</table>

The data as presented merits further consideration. Provisionally the following chart can be produced -- reordered to some degree by clusters.
The point that is subject to criticism is that interpretation of the pandemic by modellers, health authorities, decision-makers and the media is based on aggregated data, as summarized by the Worldometer portion of the table. Little if any account appears to be taken of the qualified interpretation that could be derived from the portions of the table relating to population density or to the degree of urbanization. Furthermore no effort is made to place such data in the context of the mortality rates in the absence of COVID-19, or with respect to mortality unrelated to COVID-19.

**Media coverage**: Criticism of representation of the crisis also merits consideration in terms of the coverage of natural disasters by the media columns inches per death. An early example is given by the study of Thomas Eisensee and David Strömberg:

This paper studies the influence of mass media on U.S. government response to approximately 5,000 natural disasters occurring between 1968 and 2002. These disasters took nearly 63,000 lives and affected 125 million people per year. We show that U.S. relief depends on whether the disaster occurs at the same time as other newsworthy events, such as the Olympic Games, which are obviously unrelated to need. We argue that the only plausible explanation of this is that relief decisions are driven by news coverage of disasters and that the other newsworthy material crowds out this news coverage (*News Droughts, News Floods, and U.S. Disaster Relief*, *The Quarterly Journal of Economics*, 122, 2007, 2).

This is complemented by a separate study by David Strömberg:

Natural disasters are one of the major problems facing humankind. Between 1980 and 2004, two million people were reported killed and five billion people cumulatively affected by around 7,000 natural disasters, according to the dataset maintained by the Centre for Research on the Epidemiology of Disasters (CRED) at University of Louvain (Belgium). The economic costs are considerable and rising. The direct economic damage from natural disasters between 1980-2004 is estimated at around $1 trillion. This paper starts by describing the incidence of natural disasters, where they strike, and their development over time. It then discusses how societal factors act to protect people from or expose them to natural hazards. The final section discusses the determinants and targets of international aid to disaster victims. (*Natural Disasters, Economic Development, and Humanitarian Aid Journal of Economic Perspectives* 21, 2007, 3).

Further insight of relevance is available from a comprehensive study by Owen Shen, Hasan Al-Jamaly, Maximillian Siemers, and Nicole Stone (Charting Death: Reality vs Reported, 2018). The latter notes a much earlier study Paul Slovic and Barbara Combs (Newspaper Coverage of Causes of Death, *Journalism and Mass Communication Quarterly*, 56, 1979, 4). The latter noted:

Although all diseases claim almost 1,000 times as many lives as do homicides, there were about three times as many articles about homicides than about all diseases. Furthermore, homicide articles tended to be more than twice as long as articles reporting deaths from diseases and accidents.

Other studies have explored the issue of media coverage -- presumably of the highest relevance to the interpretation by government in responding to the pandemic crisis, whatever the guidance from health authorities:


The Shen study notes in particular:

The most striking disparities here are that of kidney disease, heart disease, terrorism, and homicide. Kidney disease and heart disease are both about 10 times underrepresented in the news, while homicide is about 31 times over represented, and terrorism is a whopping 3900 times over represented. Kidney disease is a little surprising; we had guessed at the other three, but it was only by calculating the factor here that this disparity became visible.

A summary of the Shen study by Hannah Ritchie (*Does the news reflect what we die from? Our World in Data*, 29 May 2019), notes that the coverage in *The New York Times* and *The Guardian* is strikingly similar. It is the discrepancy between what people actually die from and what is reported in the media which stands out:

- around one-third of the considered causes of deaths resulted from heart disease, yet this cause of death receives only 2-3 percent of Google searches and media coverage;
• just under one-third of the deaths came from cancer; we actually google cancer a lot (37 percent of searches) and it is a popular entry here on our site; but it receives only 13-14 percent of media coverage;
• we searched for road incidents more frequently than their share of deaths, however, they receive much less attention in the news;
• when it comes to deaths from strokes, Google searches and media coverage are surprisingly balanced;
• the largest discrepancies concern violent forms of death: suicide, homicide and terrorism. All three receive much more relative attention in Google searches and media coverage than their relative share of deaths. When it comes to the media coverage on causes of death, violent deaths account for more than two-thirds of coverage in the New York Times and The Guardian but account for less than 3 percent of the total deaths in the US.

Arguably the presentation of the pandemic crisis by the media has fallen victim to the same pattern as is evident with respect to data on Olympic Gold Medals. A corrective methodology is presented in an analysis of the Most Successful Countries of All-Time: Per Capita (Topend Sports, 2016). The top-ranked countries are listed below for several tables.

<table>
<thead>
<tr>
<th>Determination of top-ranked medal winning countries in Olympic Games</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Finland</td>
</tr>
<tr>
<td>Finland</td>
</tr>
<tr>
<td>Grenada</td>
</tr>
<tr>
<td>Bahamas</td>
</tr>
</tbody>
</table>

The website also offers a complete medal list and population data from which the analysis is derived, and also a discussion of different ranking systems. Also available are lists based on medals per GDP.

Scientific and modelling uncertainties: Especially problematic in the development of the pandemic has been a combination of scientific uncertainties, questionable modelling and unquestionable assertions -- all variously cloaked in secrecy and lack of transparency. From this nexus has emerged a lockdown strategy only questioned by those deemed irresponsible -- and possibly criminally so. There can be no debate allowing for the expression of a variety of voices. Indications are offered by:

• Matt Field: Three coronavirus pandemic questions that science hasn’t answered with certainty (Bulletin of Atomic Scientists, 9 April 2020)
• Jessica Hullman: Leading with the Unknowns in COVID-19 Models (Scientific American, 11 April 2020)
• Stuart Weston and Matthew B. Frieman: COVID-19: Knowns, Unknowns, and Questions (mSphere, 18 March 2020)
• Dave Mosher: 11 critical unanswered questions about the coronavirus and COVID-19, the illness it causes (Business Insider, 30 March 2020)
• Dyani Lewis: Is the coronavirus airborne? Experts can’t agree The World Health Organization says the evidence is not compelling, but scientists warn that gathering sufficient data could take years and cost lives. (Nature, 2 April 2020)

"Red Team" versus "Blue Team" -- and "Purple Team"? It is characteristic of more mature strategic assessments to benefit from two simulations of two opposing strategies, especially in evaluating military options-- typically a so-called "Red Team" and a "Blue Team":

• Cybersecurity Red Team versus Blue Team: main differences explained (Security Trails, 7 December 2018)
• Red Team versus Blue Team (European Council blog, 15 June 2019)
• Red team versus blue team: how to run an effective simulation (CSO Online, 26 July 2017)

It would appear that the lockdown strategy is the outcome of one-team thinking in elaborating the "One Plan" -- on the assumption that there can be no viable alternative from which insight might be derived. The two-team framework may be further enhanced by a "Purple Team" perspective designed to integrate the learnings from Red and Blue team operations, as clarified by Daniel Miessler (The Definition of a Purple Team, 28 June 2019; The Difference Between Red, Blue, and Purple Teams, 4 April 2020). Could the authorities responsible for lockdown be recognized as strategically colour-blind?

Such considerations merit reflection in the light of any assumption that in a democratic two-party system the two teams are a reflection of appropriately counteracting "Red" and "Blue" perspectives. However there is now an expressed concern to any situation in which they are in uncritical agreement -- as with the lockdown situation (When The Left And Right Join Forces It's Not Always Good! Australian Independent Media, 15 April 2020).

Collateral damage and tolerable fatalities in warfare -- from the perspective of authorities
**Lockdowns as trench warfare?** Given the wartime framing, with only medical and compliance personnel "on the frontline", are the main victims of the attack by COVID-19 to be recognized as those cowering in shelters awaiting such possible attack -- as with many civilians in the combat zones of Syria, Iraq and Afghanistan? In the absence of other combatants however ("militants"), this suggests that this is a war in which all fatalities should be recognized as effectively "collateral damage". Is this the first war in history in which this is the case?

A strange comparison can be made with the worldwide imposition of mandatory lockdown and the trench warfare of World War I. The curious difference is that a century later people are now effectively confined to the trenches -- under orders. There is no question of courageously "going over the top", since the level of fatality is now deemed to be unacceptable, even unthinkable -- in contrast with the thinking by authorities which prevailed during World War I.

Strangely however, there is now emerging recognition of a need for some to "go over the top" and take greater risk -- because of the evident danger to the economy, livelihoods and the social fabric. Now seen as a "diabolical dilemma", one wonders whether the original lockdown strategy could have been seen in this light -- as highlighted by ordering combatants "over the top", and the "trolley problem" discussed above. Is new insight now overriding the simplistic "trench warfare" approach, or is weight increasingly being given to the "unthinkable" strategies of the reality of trench warfare (and the cost in human lives), as indicated by the following:

- Chris Kenny: *Balance between care and disease a diabolical dilemma* (The Australian, 11 April 2020)
- Liam Mannix: *Diabolical dilemma looms even after coronavirus curve is flattened* (Sydney Morning Herald, 4 2020)
- Jon Henley: *EU countries take first cautious steps out of coronavirus lockdown* (The Guardian, 14 April 2020)
- Rachel Maddow: *US eager to leave lockdown finds Trump failed on month-old promises* (MSNBC, 14 April 2020)
- Ciara Nugent: *Governments Are Weighing How to Ease Coronavirus Lockdowns. Letting Young Adults Out First Could Be One Option* (Time, 9 April 2020)
- *President Trump told governors that states could begin allowing public activities before his target of May 1: "You’re going to call your own shots"* (The New York Times, 16 April 2020)

**Tolerable fatalities in time of war:** Governments are notoriously tolerable of fatalities in time of war -- possibly regretting the fatalities inflicted on the "enemy" and civilian populations (but typically only after the fact) and deploring the fatalities of their own forces and civilian populations. Those fatalities are presented as a necessity, long framed by so-called just war theory. With the response to pandemic now framed in terms of a wartime mindset -- and unquestionably so -- consideration could be given to the level of fatalities considered tolerable in the light of past adoption of that mindset.

The peculiarity in the case of a pandemic is that the war is an ‘internal’ one in which everyone is potentially a combatant and a victim -- it being unclear who is acting on behalf of the enemy (knowingly or unknowingly).


> **Killing in war as a matter of course may be inferred from the fact that, as stated by Thomas Hobbes, "all laws are silent in the time of war" [Inter arma enim silent leges]. Although this traditional law-suspending power of war has been restricted to a certain degree by modern humanitarian international law, it is still commonly assumed that killing in war, unless and as long as not explicitly forbidden, is per se permitted and thus does not require any further legitimisation. This is in fundamental contrast to a "normal" homicide, which requires special justification to be considered lawful. This commonly unquestioned license to kill, by the mere reason of being at war, is all the more astonishing given that no legal norm can be found that positively and explicitly declares killing in war to be lawful.**

Frequent reference is currently made to the fatalities resulting from the Spanish Flu pandemic of 1918. Lasting from January 1918 to December 1920, it infected 500 million people -- about a quarter of the world's population at the time. The death toll is estimated to have been anywhere from 17 million to 50 million, and possibly as high as 100 million, making it one of the deadliest epidemics in human history.

That period -- namely the aftermath of World War I -- was witness to the implementation by generals of military strategies which resulted in a total of some nine million combatant and seven million civilian deaths as a direct result of the war, while resulting genocides and the resulting 1918 influenza pandemic caused another 50 to 100 million deaths worldwide. This can be compared with the 70 to 85 million fatalities of World War II -- more specifically with those implemented as acceptable and necessary by the UK and the USA. In the case of the UK the example cited is that of Marshal of the Royal Air Force Sir Arthur Travers Harris ("Bomber Harris") in implementing the policies of Winston Churchill, namely the "area bombing" of German cities, most notably the Bombing of Dresden. In the case of the USA, the most cited examples are those of the atomic bombings of Hiroshima and Nagasaki. Commentators now consider that neither was "necessary".

**World War III?** The fight against the pandemic is already being framed as World War III, raising questions as to what has been learned from the strategies implemented previously, especially in the light of subsequent military strategies over decades by a Western coalition *(Transforming the Unsustainable Cost of General Education: strategic insights from Afghanistan, 2009; Mark R. Wilson, The 5 WWI Lessons That Could Help the Government Fight Coronavirus, Politico, 19 March 2020)*. As of 5 August 2018, there have been 3,459 coalition deaths in Afghanistan as a result of that conflict, and an estimated 360,000 civilian deaths in Afghanistan. Given the cost of such operations, estimated in trillions of dollars, it is strange to note that the level of fatalities among the populations of that coalition now vastly exceeds that of those operations -- with an obligation to provide trillions of dollars in bailouts.

Whilst fatalities are indeed to be deployed in theory, what fatalities are in process of being considered tolerable in practice by authorities
-- notably by those leaders inspired by Winston Churchill? How many are expected to die "in combat" due to the virus or as a consequence of "collateral damage"? The young? The elderly? The marginal? Should notions of "death" be extended to include loss of "livelihood"?

Curiously it is difficult to disentangle the percentage of losses considered "acceptable" by generals and leaders in time of war -- whether military or civilian (despite details of the civilian casualty ratio). The misreporting by various sources is addressed with respect to World War I by Greg Allwood (What Were The Actual Odds Of Dying In WW1? Forces Network, 4 March 2020). As for World War II, Chris Keating notes: Approximately 16 million Americans wore the uniform in WWII, and 290,000 died in combat. So, just under 2%. Another 115,000 died non-combat deaths, so now you're up to 4% (What were the average soldier's odds of surviving WWII?, Quora, 15 January 2014). Also offered by the History of Western Civilization is:

> World War II was the deadliest military conflict in history in terms of total dead, with some 75 million people casualties including military and civilians, or around 3% of the world's population at the time. (Casualties of World War II)

Another framing is offered by Jeremy Bender (This Chart Shows The Astounding Devastation Of World War II, Business Insider, 30 May 2014). What is the fatality expectancy of the pandemic virus by comparison?

The probability of death after coronavirus infection is variously estimated at from 2%-10% (Aylin Woodward, The probability of dying after developing coronavirus symptoms is 1.4% in Wuhan, China, new research suggests -- far lower than initial estimates, Business Insider, 20 March 2020). Rates are reported to be 9% in Italy (Virginia Pietromarchi, Why is Italy's coronavirus fatality rate so high? AlJazeera, 24 March 2020), now called into question as considerably overestimated (Peter Andrews, How lethal is Covid-19 really? Why massive fatality rates from Italy are misleading, RT, 25 March 2020).

Why is no effort made to offer any such comparison, if a war-time scenario is promoted with its call for necessary sacrifice and expectation of "tolerable" fatalities? Most curious is the exhortation of courage by leaders in time of war -- exemplified by those ordered to climb out of trenches in World War I, namely a process of "going over the top" from which relatively few survived. The irony of the lockdown response to the pandemic crisis, by contrast, is the order that people should stay at home -- "cowering courageously" until the pandemic abates? Who are the courageous during a pandemic?

Whilst awaiting the promised "silver bullet" vaccination shot, who will be expected to "take a bullet" to safeguard the lives of others, if not their own? Does the world population require a "shot in the arm" to engage effectively with climate change and safeguard future generations?

### Addendum

- Joe Murphy and Corky Siemaszko: COVID-19 has killed more Americans than the rebels did during the Civil War (NBC News, 28 July 2020)
- Giulia Carbonaro: Can we compare the COVID-19 pandemic to a world war? (CGTN, 8 May 2020)
- Dan Evon: Will US COVID-19 Deaths Be Double the Number of US Vietnam War Deaths By Fall 2020? (Snopes, 24 July 2020)
- Elliot Ackerman and Allan S. Detsky: Why Comparing the Fight Against COVID-19 to War Is Ethically Dangerous (Time, 7 May 2020)
- Brian Bennett and Tessa Berenson: 'Our Big War.' As Coronavirus Spreads, Trump Refashions Himself as a Wartime President (Time, 19 March 2020)
- Michael T. McPhearson: COVID-19 and War Deaths Ignored (AntiWar, 5 June 2020)
- Anne Geenan, Christopher Rowland and Laurie McKinley: US coronavirus deaths reach 60,000, surpassing the number of Americans killed during the Vietnam War (The Washington Post, 29 April 2020)
- Charles S. Maier and Ian Kumekawa: Responding to COVID-19: Think through the Analogy of War (Center for Ethics of Harvard University, 21 April 2020)
- Robert Rapier: COVID-19: "Our Generation’s Great War" (Forbes, 5 April 2020)
- David Welna: Coronavirus Has Now Killed More Americans Than Vietnam War (NPR, 28 April 2020)
- War metaphors used for COVID-19 are compelling but also dangerous (The Conversation, 8 April 2020)
- COVID-19 war requires nationwide strategies and sacrifices: QandA with former CDC chief (USA Today, 16 July 2020)

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