

The Developing Global Crisis and Survival of Human Civilizations

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Abstract

For over thirty years, we have used a phrase “the Developing Global Crisis” to identify a cluster of recurring causal factors of chaos that are especially difficult to deal with. These are: population pressure (not simply growth), corruptions of governance (hard to study in democracies much less in police-states), authoritarian political systems, and militant religions. The West has failed to control these recurring causes of chaos, often by imperial patterns of behavior instead of more enlightened governance. Civilizational scholars in Japan might be able to find better solutions to these problems for Asia and the world if they try hard. Please try quickly, because time is limited. So long as we treat mainly “symptoms” of global distress instead of the ultimate causes of wars, the doomsday clocks of WMD¹ will keep on ticking until someone uses them.

Introduction

Significant, recurring causes of wars through history include at least 40 variables, which makes that problem difficult for multivariate, “large ‘n’ analyses.”² To simplify that analytic dilemma, we focus here on four of the most difficult drivers of organized, armed violence on earth today. Each is intrinsically difficult to analyze, but some are further complicated by political taboos, especially population pressure and corruptions of governance. Therefore, before describing them in detail and examining some cases like Syria from 2010 to 2020, a few words will be devoted to those “taboos” and how they distort traditional analyses of this hypercomplex problem.

“Population pressure,” for example, is much more complicated than simple numbers of people in any country, or rates of growth, or even migration into or out of countries.

¹ WMD is the common recognized acronym in the English language for “Weapons of Mass Destruction.” Those include nuclear, biological, chemical, and a few more exotic weapons developed during the last century. The doctrine of “Mutual Assured Destruction” is unstable, however, so if dominant powers do not change their behavior, WMD will be used someday by someone. Simply put, we cannot wait forever.

² Small, Melvin and David Singer, “Patterns in International Warfare, 1816-1965,” in *The Annals of the American Academy of Political and Social Science*, Vol. 291, Issue 1, pp. 145-155, 1970.

But even the simplest discussions of human demographic issues are challenged by a deep reluctance among politicians to say anything at all about population issues, and elicit profoundly negative reactions among millions of ordinary people to any discussion of this topic. Why? Because many people defend what they see as inherent rights to have as many children as they desire, regardless of social consequences. They often have religious reasons for that position, rooted in sacred texts or in tribal customs common thousands of years ago when most scriptures were written, and death rates were very high. As deeply powerful factors, evolution and natural selection stipulate, that people will probably defend their rights to reproduction as fiercely as they defend their right to life itself.

Why? Because natural selection requires some people to both survive and to reproduce successfully, while others do not. All three factors are required, survival, reproduction, and “successful” reproduction, which means children born must survive until they too can reproduce successfully. Every one of your ancestors and mine reproduced successfully, while millions of others did not. Thus their (our) drive to both live, and to reproduce successfully, is profound.

Other complications of defining, measuring, and analyzing population pressure will be covered in the section that follows. Study of “corruptions of governance” labors under a different taboo. Very few governments are willing to fund serious study of their own corruptions. Since governments are the ultimate funders of a majority of social science research, this is a significant complication. For example, there are thousands of government sponsored studies of “terrorism” in the USA that ignore the role of corruptions of governance here in generating millions of near hopeless people desperate for political changes so they may have a fair chance at a decent life. Even fewer such studies consider population factors, for reasons mentioned earlier.

“Authoritarian Law” and “Militant Religion” present similar burdens to systemic analysis, not least defining what religions are (as opposed to ‘cults,’) without implying that any ‘religion’ is better than any other, lest fundamentalists of many types get angry. It bears noting that anger, enemies and taking offense easily are diagnostic traits of the “fundamental” vs. the “enlightened” forms of all major religions. A particular complication flows from the probability that these two factors, authoritarian law and militant religions, interact synergistically. That is, authoritarian legal systems resonate with militant religions such that the combination increases probabilities of resulting armed conflict more than simple linear additions would predict.³

³ Andregg, Michael, *On the Causes of War*, St. Paul, MN: Ground Zero Center for the Study of Intelligence and Wisdom, 1999, 2001, 2007, especially Chapter 13 on Authoritarian Law and Militant Religion, pp. 74-83.

Population Pressure

If too many people try to live on too little land, a pressure can result that causes migrations. People often move along opportunity gradients seeking tangible resources, or they may flee violence seeking safety for their families, or both.⁴ Either way, one practical result is migration into neighboring lands. Migrations can be gradual and benign, or fast and brutal as manifest in historic conquests and empire building, or “colonization” of weaker countries.⁵ The worst cases have resulted in genocides hundreds of times in recorded history, and probably thousands of times in the whole history of human civilizations.⁶ That long history of surviving and executing genocides has profound consequences for the evolution of both human behaviors and politics.⁷ One example is the “In Group vs. Out Groups” dynamic studied by sociology and psychology.⁸

One of the most dramatic examples of this in recent history is when Syria experienced an ecological crisis in 2010 that interacted with the other factors we consider here (authoritarian law, militant religion and corruptions of governance). Protests turned into complex civil wars, and approximately one-third of Syria’s pre-war population was forced to flee to neighbors Turkey, Jordan, and Lebanon, with over a million making it all the way to Europe. That had big derivative consequences for politics in many European nations.⁹ Ten years later millions of Syrians who remained within their territorial boundaries are considered internally displaced refugees. This case is so vivid and well documented that it will be considered in detail later.

It would help to have a brief review of demographic fundamentals.¹⁰ Population size in any area at any particular time is an absolute number. Populations may grow or shrink, and growth rates (GR) are a measure of that, usually measured in percentage per year. Two other variables are often important and are commonly measured, birth rates per year (BR) and death rates per year (DR). Contemporary demographers often prefer another, more complex variable, total fertility rates, but we will ignore those here because they make understanding key results more difficult.

⁴ Arthur, John A., Joseph Takougang and Thomas Owusu, editors, *Africans in Global Migration: Searching for Promised Lands*, Lanham, MD: Lexington Press, 2012.

⁵ Markusen, Eric, and David Kopf, *The Holocaust and Strategic Bombing: Genocide and Total War in the 20th Century*, Boulder, CO: Westview Press, 1995.

⁶ Andryszewski, Tricia, *Walking the Earth: The History of Human Migration*, Minneapolis, MN: Twenty-First Century Books, 2007.

⁷ Vanhanen, Tatu, *On the Evolutionary Roots of Politics*, New Delhi, India: Sterling Publishers, 1992.

⁸ Tajfel, Henri, editor, *Social Identity and Intergroup Relations*, London, UK: Cambridge University Press, 1982.

⁹ Sakib, Nazmus, “How Syrian Refugee Influx has Shaped the Polarization of European Politics,” in TRTWorld, July 26, 2019, accessible at: <https://www.trtworld.com/opinion/how-syrian-refugee-influx-has-shaped-the-polarisation-of-european-politics-28548>

¹⁰ Shryock, Henry S., Jacob S. Siegel, and Elizabeth A. Lamon, *The Methods and Materials of Demography*, Volumes 1-2, New York, NY: Academic Press, 1980, 2004.

Life Expectancy (LE) is a function of death rates according to the formula $LE = 1000/DR$, which will become important soon. Another way that populations can change (other than births minus deaths) is by migration into them (immigration) or out of them (emigration). When populations are growing rapidly another measure is helpful called doubling times (dt). At a 1 percent growth rate per year, a population will double in about 70 years. At 2 percent, the dt is about 35 years, and at 3 percent the doubling time is about 23 years.¹¹ Fast growing populations develop ‘momentum’ because of pyramidal age distributions with many young and fewer elders. Few human populations have reached 4 percent growth rates, and those almost always export excess residents to neighbors whether willing to receive them or not.¹²

While derived from many of these variables, population *pressure* is different from all of them. The key distinctions are ecological, technical, and economic. Whether a population on any particular area of land is wealthy, healthy and calm (or impoverished, sickly and violent) is very much a function of the technology that population uses to extract resources from that particular land, and cultural practices that mediate what is considered acceptable use of common resources, and norms like how much wealth is necessary for happiness and social calm. Those things vary enormously. So, for one example, the relatively wealthy, healthy, and calm population of 2020 Japan, if transported magically to the Sahara Desert in Africa, would quickly become not wealthy, not healthy, and not calm. Rather, there would be huge pressures to migrate to more productive environments, each of which would already be full of other people, not eager to share scarce resources with unwanted immigrants. The most critical resource would also suddenly become clean, fresh water, which is relatively abundant in contemporary Japan.

Nazli Choucri and Robert C. North were the first scientists I know who tried to systematically and empirically study connections between population pressure and wars.¹³ Their work was sound, and few questioned their statistical methods. But they faced withering criticism from some social scientists who compared their conclusions (often unfairly) with statements by Thomas Malthus who wrote about population dynamics in 1798.¹⁴ As happens too often in social science, critics objected mainly to implications of their work, rather than to flaws in their data or methods of analysis. The bottom line remains the same.

¹¹ The exact formula for this is doubling time (dt) = natural log of 2 divided by the absolute growth rate. The rule of thumb for quick estimates is 70 divided by the growth rate in percentages.

¹² The current world leader in birth rates is Niger in North Africa, with 7 children per average woman, birth rate = 47.5/1000 population, for a national growth rate of 3.66%, source is [CIA World Factbook](https://www.cia.gov/library/publications/the-world-factbook/geos/ng.html), accessed June 15, 2020, at: <https://www.cia.gov/library/publications/the-world-factbook/geos/ng.html>

¹³ Choucri, Nazli and Robert C. North, *Nations in Conflict*, San Francisco, CA: Freeman, 1975.

¹⁴ Malthus, Thomas Robert, *An Essay on the Principle of Population*. A contemporary reprint can be found from New York, NY: Norton Critical Editions, 2017.

If human populations grow rapidly, they will tend to come into conflicts of many kinds with neighbors who do not want to be overrun by desperate migrants from poverty and/or endemic violence. More detail on how that works can be found in *On the Causes of War*, Chapter 12 on population pressure, 2007.¹⁵

One serious consequence deserves explication here. One of the most valued measures of a good society or a wise civilization is long life expectancies (LE) for its people. Good societies are also stable in many ways, including some equilibrium between themselves and the living system that supports them. At equilibrium, birth rates equal death rates, so the population neither grows nor shrinks. Equilibrium is a condition seldom achieved in human populations over the short term, but always achieved by living systems over the long term. This is so because nothing grows forever and if a population shrinks forever, it becomes extinct. Nothing grows forever, because ecological limits eventually increase death rates (which can also lead to extinction if the habitat that supports that living system is destroyed). This can occur with runaway population growth. When you combine the equation $LE = 1000/DR$ with the observation that $BR = DR$ at equilibrium you get a consequence: At equilibrium, birth rates determine life expectancy.

This is an iron law of biology, but it is also a bitter pill for “exceptional” cultures to swallow. Many cultures consider themselves remarkably exceptional, like the USA, and some theocracies literally believe that their God wants them to populate and rule the entire earth.

To put this in human terms, a birth rate of 12 per thousand per year would yield a life expectancy in an equilibrium population of $1000/12 = 83.3$ years, near the highest achieved so far by any human society. By contrast, a birth rate of 34 babies per thousand per year would yield a life expectancy of only 29.4 years in an equilibrium population. Few societies want to endure life expectancies of only 30 years or so. So, what many do is export excess population to wealthier and often healthier parts of the planet. For real world examples, the birth rate of Japan in 2020 was ~ 7.3 births/1000 population, and the birth rate of Niger was ~ 47.5 births/1000 population.¹⁶

Of course, everything is more complicated in real populations with many more variations of culture, land, and economy. But which example above seems healthier and wealthier to you?

We will illustrate the power of population pressure with a few historic examples before moving to corruptions of governance. The most dramatic one I know comes from land I walk on every day, the state of Minnesota in the USA.

¹⁵ Andregg, M. *On the Causes of War*, Chapter 12 on Population Pressure, pp. 62-73, 2007.

¹⁶ CIA, *World Factbook*, accessible at: <https://www.cia.gov/library/publications/the-world-factbook/>

Just over 200 years ago, in 1800 CE, this land was almost 100% Native Americans mainly of the Dakota and Ojibwe tribes. Less than 1% French Canadian fur trappers and traders were scattered about. By 1900 CE, just one century later, Native Americans were only .52 % of the official census (half of one percent).¹⁷ Another half percent were blacks, and 99% were whites of European ancestry. By 1980, even the memory of Native American origins and history was almost gone except for Indian place names.¹⁸

Vast numbers of immigrants from Europe and eastern US states had overwhelmed the Indians.¹⁹ The result: While in 1800, the territory now called Minnesota was 99%+ Indian, in just 100 years two indigenous peoples had been almost totally replaced by immigrants from far away.

This was not the first time an indigenous population was replaced by colonizers. Historic examples go back at least as far as Greek conquests of islands in the Aegean Sea,²⁰ and Chinese conquests of many neighbors as the Han replaced clans on their periphery.²¹

¹⁷ “Turn of the Century: Minnesota’s Population in 1900 and Today”, a publication of the Minnesota Planning State Demographic Center, editor Martha McMurray, especially page 7, November, 1999.

¹⁸ The term “Native American” is relatively recent, while the term “Indian” was predominant during that period, unless a specific tribe was identified. These terms have political connotations now that are irrelevant to this paper. Therefore, we use them interchangeably without any political inference intended.

¹⁹ The “Mankato Uprising” of 1862, sometimes called the “US-Dakota War,” was a key moment in this transition. Highly simplified, near starving Native Americans (Dakota and Lakota) who had been confined to reservations and denied promised food decided to fight, killing about 400 largely unarmed white settlers in the first days. That naturally aroused the US Army (and thousands of white citizens) who promptly slaughtered Indians who were fighting and drove thousands of them into Canada and the Dakota territories. About 1600 were confined to an ‘internment’ camp beneath Fort Snelling, where about 300 died during the brutal winter. Survivors were then shipped by steamboat to reservations further west, and Governor Alexander Ramsey put a bounty on the heads of others killed in the new state of Minnesota (\$25 for ordinary Indians, up to \$500 for the scalp of Chief Little Crow). The largest execution in American history occurred in Mankato, where 38 convicted of fighting were hung on December 26, 1862. This was a large reduction from the 303 originally condemned, ordered by then US President Abraham Lincoln.

²⁰ Mark, Joshua J., “Aegean” in the *Ancient History Encyclopedia*, 28 April, 2011, accessible at: <https://www.ancient.eu/aegean/>

²¹ Ancient Military.com describes the broad span of ancient warfare in readable and reasonably accurate essays. Their entry on Ancient China can be accessed at <http://www.ancientmilitary.com/ancient-chinese-military.htm> but authorship and date of writing is not recorded there. What is certain is that Chinese warlords were fighting out of a base of the Yellow and Yangtze Rivers for about 5,000 years, during which they defended against, subjugated or even eliminated many neighbors in all directions.

In the West it took only 50 years for the Spanish to wipe out the original peoples of what is now the Dominican Republic and several other Caribbean Islands, as recorded in the classic work of Bartolomé de Las Casas, *Historia de las Indias*, written before his death in 1566, but first published in 1875.²²

Hitler blamed his invasions of Europe and especially Russia on a need for “*Lebensraum*” (living room) for his growing, and implicitly virtuous German people.²³ His moral turpitude annihilating millions of people in his way is a separate issue from why he felt a need to expand. Dictators often do, and the authoritarian political systems they create teach entire populations that it is OK for governments to kill to obtain their desires. Thus did millions of “Good Germans” become agents of genocide. It took only twelve years for Hitler’s evil philosophy to destroy his country.

In the West, it has been written that after World War II, the dominant explanation in Japan for its 1931 Manchukuo policy to extract resources from China was the need to feed one million new Japanese people every year.²⁴ Island nations can more easily see the limits to resources that are never really unlimited in life on earth (or the universe). That led to armed conflicts with China, Southeast Asia, the USA and to other, well-known consequences.

The ancient cases of collapse of the Mayan Empire and the near extinction of a thriving culture on Easter Island in the Pacific can also be examined through this lens. The Mayan population declined about 90% when they grew so quickly that they overran the carrying capacity of their land.²⁵ Crop failures followed, along with slaughter. Easter Island declined from a high of near 20,000 people to a low of 114 after they cut down the last trees on their formerly lush island and starved during a period of intense violence and interclan warfare.²⁶ Yes, both of these peoples were also decimated by disease after Europeans found them. But what Europeans found were civilizations in catastrophic decline because of their own, pre-existing population pressures.

²² De Las Casas, Bartolomé, *Historia de las Indias*, written during the mid-1500’s, first printed in 1875. *Encyclopaedia Britannica* provides a summary: <https://www.britannica.com/biography/Bartolome-de-Las-Casas> The entire text is available from Gutenberg Books at: <http://www.gutenberg.org/ebooks/49298>

²³ Noakes, Jeremy, “Hitler and ‘Lebensraum’ in the East, in BBC History, March 3, 2011, accessible at: http://www.bbc.co.uk/history/worldwars/wwtwo/hitler_lebensraum_01.shtml

²⁴ O’Dwyer, Emer, “Japanese Empire in Manchuria,” in the *Oxford Research Encyclopedias*, Asian History section, November, 2017, accessible at: <https://oxfordre.com/asianhistory/view/10.1093/acrefore/9780190277727.001.0001/acrefore-9780190277727-e-78>

²⁵ Cartwright, Mark, “The Classic Maya Collapse,” in *Ancient History Encyclopedia*, October 18, 2014, accessible at: <https://www.ancient.eu/article/759/the-classic-maya-collapse/>

²⁶ Diamond, Jared, *Collapse: How Societies Choose to Fail or Succeed*, New York, NY: Penguin Group USA, 2004.

Population pressure is one of the most powerful causes of wars, genocides, and civilizational collapses.²⁷ It is especially difficult to study because of psychological and cultural taboos.

Corruptions of Governance

This perpetual cause of conflicts presents other dilemmas, starting with defining — much less measuring — corruption. The most corrupt politicians on earth often think the only truly corrupt ones are their political adversaries, domestically or internationally. Hypocrisy on this item is monumental. Since governments fund most social science research and define what their laws consider corruption, they often crank out endless commentary on how corrupt *other* governments are, while proclaiming that theirs are blessed by God or at least are governed by a host of angels. Therefore, sadly, civil society non-profits like *Transparency International* have more reliable data on this topic than most governments provide.²⁸

That noted, one can still find libraries of commentary, both scientific and otherwise on how corruption cripples nations all over our earth. At the worst, it armors and cements the power of police-states. Corruption is prominent in virtually all civil wars, unlike some inter-state wars. Everywhere corruption diverts scarce public resources into private fortunes maintained by a global industry of tax havens,²⁹ and structures like the Swiss banking system.³⁰

The most important contribution of “corruptions of governance” to the Developing Global Crisis is preventing solutions to the great problems of our time.

It is tempting to illustrate this with examples from great power rivals or from impoverished, Third World kleptocracies. But that would be impolite. The US has many examples of our own. Therefore, we will focus here on climate change, and how constructive responses to that great global problem have been severely retarded in the US due to corruptions of governance here.

²⁷ Yoffee, Norman and George L. Cowgill, editors, *The Collapse of Ancient States and Civilizations*, University of Arizona Press, 1988. A similar comprehensive review of these topics by a single author is *The Collapse of Complex Societies* by Joseph A. Tainter, Cambridge University Press, 1988.

²⁸ Transparency International was founded in London in 1994, at: <https://www.transparency.org.uk/> It provides an annual measure and survey of corruption among governments worldwide.

²⁹ A comprehensive and international review of corruptions among governmental and global elites can be found in the “Paradise Papers” created by an International Consortium of Investigative Journalists in 2017, and available at <https://www.icij.org/investigations/paradise-papers/>

³⁰ The Swiss Federal government is generally regarded as one of the most honest and transparent in the world. But its banking system is also considered one of the best places on earth to store illicit funds, so Switzerland has been the financial destination of choice for endless warlords, dictators, and crime gangs. That itself is a good example of the endless permutations of corruption that enrich the already wealthy and further impoverish the already poor.

At Minnesota's leading public policy institute,³¹ we began talking about climate change in 1982. It took 26 years for our federal government to begin talking openly about responses to that topic, and very few have been adopted or implemented as late as 2020. The most fundamental reason why is because legacy fossil fuel interests spend about \$200 million per year lobbying against such open discussion, and funding calculated disinformation campaigns designed to frustrate public understanding.³² In modern America, national interests and public opinions often mean very little compared to hard cash provided to politicians by wealthy people and groups.³³

That dark power is so great today that it extends into our national intelligence agencies. While attending a conference at our National Intelligence University in 2005 (housed in a very secure Defense Intelligence Analysis Center) I was told by two sources that they had been "*forbidden* to discuss this (climate change) subject," even though the Pentagon had commissioned studies of it two years earlier.³⁴ Vice President Dick Cheney and Defense Secretary Donald Rumsfeld were making most of the important national security decisions at that time, and both had made tens of millions of dollars as chief executives of legacy commercial interests. Cheney in particular was an active denier of climate change, and defender of commercial interests of the fossil fuel industry.

This was more than unfortunate, because the engineers, physicists and biologists had figured out workable solutions to most of the practical problems presented by climate change by then. We are just not allowed to implement most of those solutions, because big scale solutions require big government involvement. There is also an efficient solution to the difficult financing problem. That solution is called a "Carbon Tax" to be levied on producers of fossil fuels, with funds derived going to promoting renewable, non-carbon-based energy sources. This is Econ 101.³⁵

³¹ The Hubert H. Humphrey Institute at the University of Minnesota.

³² Taylor, Matthew, "Revealed: big oil's profits since 1990 total nearly \$2 trillion," in The Guardian, February 12, 2020. Taylor cites another report that documents the top five firms spent approximately \$200 million per year on lobbying against climate change or actions to address it, accessible at: https://www.theguardian.com/business/2020/feb/12/revealed-big-oil-profits-since-1990-total-nearly-2tn-bp-shell-chevron-exxon?utm_term=RWRpdG9yaWFsX0d1YXJkaWFuVG9kYXIVUy0yMDAyMTI%3D&utm_source=esp&utm_medium=Email&utm_campaign=GuardianTodayUS&CMP=GTUS_email

³³ Primo, David M., "Public Opinion and Campaign Finance: Reformers Versus Reality," in The Independent Review, Vol. 7, No. 2 (Fall 2002) pp. 207-219, accessible at JSTOR, <https://www.jstor.org/stable/24562667>.

³⁴ Schwartz, Peter and Doug Randall, "An Abrupt Climate Change Scenario and its Implications for United States National Security," 2003, otherwise known as the "Marshall Report" because legendary Pentagon forecaster Andy Marshall commissioned it, is accessible at: <https://grist.org/wp-content/uploads/2004/02/abruptclimatechange2003.pdf>

³⁵ This is Economics 101: Tax what you want reduced and use funds to promote what you want instead. A Carbon Tax could do that very efficiently. Despite that, and despite profound national and global

But we still do not have that in the United States, because legacy oil and coal interests oppose it. Wall Street prefers partial solutions that establish new markets they can manipulate and profit from (in this case a scheme called “Cap and Trade”). Public opinion strongly supports direct conversion to a renewable energy economy, yet our national interest is sacrificed every day to defend oil fields far away rather than reducing dependence on those polluting energy sources.

Many books have been written about that topic,³⁶ and there are many other types of high-level corruption in America today. For example, we call ourselves the land of free and brave people, but we incarcerate a higher percentage of our citizens than any other country on earth. We claim to be a land of opportunity, where “All men are created equal,” but express endemic and systemic racism.³⁷ We call ourselves a peaceful nation but spend more on “defense” than the next ten countries combined.³⁸ While being so peaceful, we have killed at least six million people in other countries during my lifetime, few of whom attacked us.³⁹

security consequences of ignoring climate change, the US continues to do so, and dozens of mainly Republican Senators have become “true believers” in climate change denial. 97% consensus among climate scientists worldwide cannot apparently overcome the power of money from donors with vested interests in not solving that problem. Such is one measure of corruption in the USA today.

³⁶ Hoggan, James, with Richard Littlemore, *Climate Cover-Up: The Crusade to Deny Global Warming*, Greystone Books, 2009, 2017. This is just one of the more recent and thoroughly researched books and articles on this topic. Others include: Oreskes, Naomi and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*, Bloomsbury Press, 2010; McCarthy, Niall, “Oil and Gas Giants Spend Millions Lobbying to Block Climate Change Policies [Infographic],” in *Forbes*, March 25, 2019, accessible at: <https://www.forbes.com/sites/niallmccarthy/2019/03/25/oil-and-gas-giants-spend-millions-lobbying-to-block-climate-change-policies-infographic/#9e0917b7c4fb> ; Hope, Matt and Karen Savage, “Global Climate Coalition: Documents reveal how secretive fossil fuel lobby group manipulated UN climate programs,” in *DeSmogBlog*, April 26, 2019, accessible at: <https://www.nationofchange.org/2019/04/26/global-climate-coalition-documents-reveal-how-secretive-fossil-fuel-lobby-group-manipulated-un-climate-programs/> and Kehoe, Paula, *A Burning Question: Propaganda and the Denial of Climate Change*, a 53 minute educational video produced by Earth Horizons Productions, 2012.

³⁷ Minneapolis, Minnesota, USA acquired an unwanted international reputation when a black man named George Floyd was murdered in broad daylight on a city street by a ‘rogue’ policeman, sparking massive demonstrations in over 700 American communities and many others world-wide. A summary of that period can be found at:

https://en.wikipedia.org/wiki/George_Floyd_protests#:~:text=The%20George%20Floyd%20protests%20are,Minneapolis%20on%20May%2026%2C%202020.

³⁸ Peter G. Peterson Foundation, “US Defense Spending Compared to Other Countries,” May 13, 2020, accessible at: https://www.pgpf.org/chart-archive/0053_defense-comparison

³⁹ Approximately 3 million people were killed in both the Koreas and around Vietnam, if we count the Chinese killed near the Yalu River, and Cambodians and Laotians in Southeast Asia. More conservative estimators sometimes omit those and many other “collateral” casualties of our wars. About one million Iraqi’s died by US arms during our brief invasion of 1991, twelve years of weekly bombing, and our much larger occupation that started on March 20, 2003, in an alleged search for weapons of mass

We honor ideals like equality with words every day, while maintaining one of the most unequal income distributions and health care systems on earth.⁴⁰ And justice for the rich is not remotely similar to “justice” for poor people in the country I still love today.⁴¹

That love requires me to mention a few of the better things that America has done too, despite our many flaws. We helped to preserve freedom in Europe during World War I, even though nothing required us to. A few decades later, we prevailed with many allies in World War II. But rather than exacting vengeance or demanding crippling economic costs, we financed rebuilding efforts that helped make Japan and Germany two of the world’s leading economies today. And since these peaceful nations do not spend fortunes on pseudo-defense, they take better care of their citizens than the US does today. We sent men to the moon and may someday send women to Mars on behalf of all humankind. For generations Americans were a beacon of support for human rights, civil liberties, and ‘rule of law.’ Sadly, others must lead on those ideals now. We built a global positioning system that everyone uses for navigation and rescues at sea today. And we built the Internet, which has transformed everything, mostly for the better. Despite our many flaws, Americans have done some great things also. So, it makes me cry how corruption in my beloved country stops us from leading with solutions to the great problems of humankind today.

Corruptions of governance are among the most important causes of wars and other distress on the earth today because, a) they prevent solutions to many great and threatening problems, b) they drain scarce public resources to private piles of loot that are then used to further corruption, and c) because they confuse fundamental concepts like “freedom,” “democracy,” “equality,” “rule of law” and other ideals. There are ‘little’ types of corruption, like the petty graft and thieving kind well known to law enforcement and every bureaucracy. But I think the big corruptions of ideals, language and especially of laws are much more destructive.⁴²

destruction that did not exist. The story of how intelligence on that topic was manipulated to support this horrendous policy failure is a vivid story of corruption at every level of our national security elites. See more below.

⁴⁰ Schaeffer, Katherine, “6 facts about economic inequality in the U.S.,” Pew Research Center, February 7, 2020, accessible at: <https://www.pewresearch.org/fact-tank/2020/02/07/6-facts-about-economic-inequality-in-the-u-s/>

⁴¹ The Sentencing Project, “Report to the United Nations on Racial Disparities in the U.S. Criminal Justice System,” April 19, 2018, accessible at: <https://www.sentencingproject.org/publications/un-report-on-racial-disparities/>

⁴² In fact, our intelligence prior to invading Iraq the second time included creation of fraudulent documents (like a letter alleging Iraq had bought large quantities of “yellowcake” from Niger) and so many examples of willful distortion of critical details that the head of Great Britain’s MI6, Sir. Richard Dearlove, told his Prime Minister Tony Blair on July 23, 2002 that “The facts are being fixed around the policy.” This is high-level intelligence speak for calculated fraud to support an illegal and immoral war that killed a million Iraqi’s and helped to generate horrific death cults like ISIS that went on to help destroy Syrian civil society as well as Iraq’s. As with most secret intelligence scandals, this one is very

Authoritarian Law and Militant Religions

In my opinion, authoritarian law and militant religions should be considered together, because while different, they are intimately related. They also resonate synergistically as causes of wars and lesser conflicts. Authoritarian political systems concentrate practical power among small political elites who often exercise that power with impunity. Militant religions claim absolute authority over moral and spiritual “truths,” and are far more likely to attack each other or nearby democracies than democracies are likely to attack each other. There are many reasons “secular” societies fear “theocracies,” foremost because theocracies create notoriously authoritarian and aggressive political systems that generate conflicts with neighbors over whose truth is truer.

In English language social science, these tendencies are described by something called “democratic peace theory,”⁴³ originally proposed by philosophers Immanuel Kant⁴⁴ and political theorists Thomas Paine⁴⁵ and Alexis de Tocqueville.⁴⁶ Empirical support for this theory was found by the correlates of war project in 1976.⁴⁷ Vigorous academic debate followed noting many difficulties of definition of key terms (like war, peace, and democracy).

The Chinese philosopher Lao Tzu anticipated this debate about 2500 years ago in his classic work, the *Tao te Ching*.⁴⁸ Challenges for accurate translation of such ancient works are profound.⁴⁹

complicated and hard to document, but I did my best for an annual gathering of intelligence professionals in Europe called the “Need to Know” conferences (#5, November 2015). One reference is Andregg, M., “The US Decision to Invade Iraq in March 2003, Chasing Phantom WMD: How Human Intelligence was Used, Abused and Politicized to “fix the facts around the policy.” This was published in their Proceedings but can also be accessed at the University of Minnesota’s Digital Conservancy at: <http://hdl.handle.net/11299/208817>

⁴³ Wikipedia, on “Democratic Peace Theory,” accessed June 6, 2020 at:

https://en.wikipedia.org/wiki/Democratic_peace_theory#:~:text=The%20democratic%20peace%20theory%20posits,conflict%20with%20other%20identified%20democracies

⁴⁴ Kant, Immanuel, “Perpetual Peace: A Philosophic Sketch,” 1795, accessible at:

<https://www.mtholyoke.edu/acad/intrel/kant/kant1.htm>

⁴⁵ Paine, Thomas, “Common Sense,” 1776, accessible in Foner, Phillip S. (ed.) *The Complete Writings of Thomas Paine*, New York, NY: The Citadel Press, 1945.

⁴⁶ Tocqueville, Alexis de, *Democracy in America*, (1835, Vol. 1, 1840, Vol. 2, original in French, *De La Démocratie en Amérique*). Reprinted in English by the University of Chicago Press, 2002.

⁴⁷ Small, Melvin, and David J. Singer, “The War Proneness of Democratic Regimes, 1816-1965,” in the *Jerusalem Journal of International Relations*, Vol. 1, pp. 50-69, 1976.

⁴⁸ Lao Tzu, *Tao te Ching*, translated by DC Lau in 1963, London, UK: Penguin Classics, 1978, in section 193, near the end of his classic work.

⁴⁹ Therefore, I commend Appendix 1 in that translation, where DC Lau describes “The Problems of Authorship” over pages 147-162. He explains in great detail problems of accurate translation of such ancient works that are familiar to anthropological linguists everywhere, but seldom to fundamentalists.

That noted, Lao Tzu wrote in his *Tao te Ching* that to achieve peace leaders should “Reduce the size and population of the state” and “Ensure that even though the people have tools of war for a troop or battalion, they will not use them.” To Lao Tzu, martial arts were for “defense only” in some contrast to his possibly contemporary Chinese philosopher Confucius.⁵⁰

The problem of “militant religions” is vividly illustrated by Islamic terrorist groups like ISIS or “Islamic State.”⁵¹ But it is a grave mistake to conclude that violent methods are confined to any religious group, large or small. Rather, I observe that Christians, Jews, Muslims, Hindus and even Buddhists have militant versions that vie with much more peaceful “ecumenical” wings that cite peaceful or even pacifist advice from the same scriptures.^{52 53}

Two psychologists found clues for resolving this paradox of nominally peaceful religions spawning violent, terrorist behaviors by “true believers” in them. Canadian Bob Altemeyer won the American Association for the Advancement of Science (AAAS) prize for best behavioral science research in 1988 when he published *Enemies of Freedom: Understanding Right-Wing Authoritarianism*.⁵⁴ William Eckhardt, an American who worked out of the Canadian Peace Research Institute in Ontario, published *Compassion: Toward a Science of Values* in 1972.⁵⁵ Eckhardt’s apex work was *Civilizations, Empires and Wars: A Quantitative History of War* (1992).⁵⁶ Their common conclusion was that authoritarian political ideologies that oppose enlightened democracies, and militant religions that cite mostly peaceful scriptures, reflect psychological predispositions among ordinary people more than higher level, abstract theories.

⁵⁰ Confucius, *The Analects*, as translated by DC Lau, London, UK: Penguin Classics, 1963, 1978.

⁵¹ “ISIS,” “Islamic State,” “ISIL” and the Arabic word “Daish” are different labels for a terrorist organization notorious for exceptionally brutal public executions and other punishments of anyone who opposed them including fellow Muslims. They were born as an affiliate of Al-Qaeda, grew out of the chaos of post-war Iraq in 2003, went on to control much of Syria and to create or engage or inspire other terrorist groups worldwide. It declared a worldwide Caliphate in 2014 and was substantially destroyed by 2019 although fanatic supporters and spinoff groups will linger on much longer.

⁵² Andregg, M., “Why Population Pressure and Militant Religion are the Most Important Causes of the Developing Global Crisis,” in *Comparative Civilizations Review*, No. 61, Fall 2009, pp 65–86, accessible at: <http://handle.net/11299/208781>

⁵³ Andregg, M., “ISIS and the Apocalypse: Some Comparisons with End Times Thinking Elsewhere, and a Theory,” International Society for the Comparative Study of Civilizations, Fall 2016. Retrieved from the University of Minnesota Digital Conservancy, <http://hdl.handle.net/11299/210178>

⁵⁴ Altemeyer, Bob, *Enemies of Freedom: Understanding Right-Wing Authoritarianism*, San Francisco, CA: Jossey-Bass Publishers, 1988.

⁵⁵ Eckhardt, William, *Compassion: Toward a Science of Value*, Oakville, Canada, 1972, 1973.

⁵⁶ Eckhardt, William, *Civilizations, Empires and Wars: A Quantitative History of War*, Jefferson NC: McFarland & Company, 1992.

Fundamentalists of many religions are also typically pronatalistic (encourage large families).⁵⁷ They often truly believe that their ‘God’ wants them to rule the entire earth.⁵⁸ They also tend to repress women’s rights, enforcing tribal concepts of gender roles justified by ancient scriptures. Their relative militancy and associated authoritarian politics reduce civil liberties, increase population pressure at home, and create conflicts with neighbors near and far. Encyclopedia Britannica describes fundamentalist forms of most contemporary religions quite well.⁵⁹ They also describe common objections to study of these issues, noting that “... some scholars have argued that the negative connotations of the term (fundamentalism) aptly characterize the nature of fundamentalist movements, many of which seek violent overthrow of national governments and the imposition of particular forms of worship and religious codes of conduct in violation of widely recognized human rights to political self-determination and freedom of worship.”

This quickly becomes hideously complicated, politicized, and fraught with peril for people who dare to point out the huge contradictions between original scriptures and theocratic governments or violent death cults like Islamic State (often described by critics as neither Islamic nor a State). So, I wish to cut through this angry debate with a simpler summary conclusion.

In my opinion, violent, theocratic political ideologies are just using “religious” words to justify the ancient logic of selfish genes.⁶⁰ That logic is brutally simple. Genes “want” to out-reproduce competitors, by any means practical. People so motivated may use any rationalization to justify their predatory behaviors toward other people, whether those others are gentle, ‘live and let live’ members of other religions or tribes, or are other authoritarian competitors for the prize of best breeders in the contested area. When that area includes the entire earth, violent conflicts are inevitable, and the living system that supports all civilizations is in serious jeopardy.⁶¹

⁵⁷ Safi, Michael, “Iran Ends Provision by State of Contraceptives and Vasectomies,” *The Guardian*, June 5, 2020, accessible at: <https://www.theguardian.com/world/2020/jun/15/iran-bans-vasectomies-and-contraceptives-to-improve-birth-rate#:~:text=Iran's%20state%20hospitals%20and%20clinics,official%20has%20told%20state%20media>

⁵⁸ Marty, Martin E., and R. Scott Appleby (editors), *Fundamentalisms and the State: Remaking Politics, Economies, and Militance*, (The Fundamentalism Project) in five Volumes, Chicago, IL: University of Chicago Press, first edition 1993.

⁵⁹ Munson, Henry, “Fundamentalism, religious movement,” in *Encyclopaedia Britannica*, accessed June 8, 2020, at <https://www.britannica.com/topic/fundamentalism>

⁶⁰ Dawkins, Richard, *The Selfish Gene*, 40th anniversary edition published by Oxford Landmark Science in 2018, original published in 1978.

⁶¹ The fields of evolution, population genetics and behavior genetics are obviously more complicated than this brutally simplified conclusion.

Two more complications from social psychology deserve some attention here. The hardest is the impact of psychopaths on societies.⁶² Psychopaths are evil, powerful, and are especially adept at exploiting secret power systems.⁶³ Secret power systems are more common than many suppose.⁶⁴ The other complication, but a key to solutions, is that dimension of “Compassion versus Compulsion” mentioned by Eckhardt, and also by at least a few ancient philosophers.⁶⁵

Relatively early in my study of the dark side of secret power systems, I got a challenging clue from a former CIA psychologist that: “The agency sometimes recruits for psychopaths, because they make better spies ... *if they can be controlled.*” Why? Well it is much easier for psychopaths to fool lie detector tests, for example. Psychopaths lie like normal people breath, and living double lives is routine for them. Psychopaths also have few, if any, moral objections to many of the more severe techniques that are sometimes employed by intelligence agencies.

But true psychopaths are also extremely hard to control, and they thrive in secret power systems which every intelligence agency is. If they are ‘high functioning’ psychopaths, they often excel in bureaucratic knife fighting, so they can become more concentrated at the top than at entry levels.⁶⁶ Ordinary society endures perhaps a one percent incidence of psychopathy, depending of course on how that is defined and measured.⁶⁷

⁶² The classic work on psychopathy in the English language is *The Mask of Sanity*, by Hervey M. Cleckley first published in 1941. M. Scott Peck added to the study of this profoundly dangerous problem in 1983 with *People of the Lie: The Hope for Healing Human Evil*. And Kevin Dutton broadened this discussion by pointing out how high-level (more functional) psychopaths can achieve distinction in *The Wisdom of Psychopaths: What Saints, Spies and Serial Killers can Teach Us about Success*, published by Scientific American press, New York, in 2012.

⁶³ Secret power systems include organized crime cartels, intelligence agencies, some banking systems, many cults, and a plethora of secret societies each of which intends to control the whole earth if they can.

⁶⁴ Priest, Dana and William M. Arkin, *Top Secret America: The Rise of the New American Security State*, New York, NY: Little Brown and Company, 2011.

⁶⁵ Like Gautama the Buddha, and Jesus of Nazareth, whether divinely conceived or merely inspired by our Creator. “Compassion” was also recommended by many pure philosophers, like Plato of Greece, Confucius of China and the contemporary Dalai Lama. His “Little Book of Wisdom” is worth reading often.

⁶⁶ Another large group of ‘secret power systems’ is organized crime cartels. They also tend to concentrate psychopaths at the top where their exceptional skills at deception, betrayal and ruthlessness are useful.

⁶⁷ Parry, Wynne, “How to Spot Psychopaths: Speech Patterns Give Them Away,” in *Livescience*, October 20, 2011, accessible at: <https://www.livescience.com/16585-psychopaths-speech-language.html#:~:text=Psychopaths%20make%20up%20about%201,profoundly%20selfish%20and%20lack%20emotion>. This author provides some additional context worth noting: “Psychopaths make up about 1 percent of the general population and as much as 25 percent of male offenders in federal correctional settings, according to the researchers. Psychopaths are typically profoundly selfish and lack emotion. ‘In lay terms, psychopaths seem to have little or no ‘conscience,’” write the researchers in a study published online in the journal *Legal and Criminological Psychology*.” That lack of conscience is quite critical.

That number becomes much higher in prisons, organized crime entities and intelligence organizations, unless stringent efforts are employed to restrain that process. I have been told by one French intelligence official in a position to know, that this is why the French screen specifically for psychopathy in entry tests, to *exclude* them from the secret services despite their unusual skills and operational efficiencies.

Polite societies have had to deal with psychopaths in the criminal, political and business sectors for millennia, so this is not really a new problem. But “normal” people, who are pretty nice most of the time, are very vulnerable to psychopaths’ skills in manipulation, deception and betrayal. This topic and the related topic of “forces of evil” are too complicated for this short review, so I will close those topics here with one rare reference.

Andrew Lobaczewski was a Polish psychologist who survived World War II and post-war occupation by the Soviet communists. With much help from a team of like-minded social scientists, he wrote a study of the founders and supporters of oppressive political regimes called *Political Ponerology: A Science on the Nature of Evil Adjusted for Political Purposes* in 1984.⁶⁸

Finally, it must be noted that while natural psychopaths are rare,⁶⁹ some organizations have learned how to get a large fraction of ordinary people to behave like psychopaths if so ordered by certified ‘authorities,’ especially in secret power systems.⁷⁰ This is how Hitler’s regime got millions of “Good Germans” to support genocide against Jews, Gypsies and millions of others including their own citizens. It is also how millions of very good Americans joined US military and intelligence organizations for patriotic reasons focused on protecting our citizens and our Constitution, only to learn later that we often supported corrupt dictators and cruel authoritarians of many kinds in service to somebody’s idea of our “national security interests.” Every nuclear weapons power on earth today uses similar methods to help millions of people to work without noticeable psychological distress on building a system designed to destroy civilization itself.

⁶⁸ Lobaczewski, Andrew M., *Political Ponerology: A Science on the Nature of Evil Adjusted for Political Purposes*, original in Polish published 1984, translated to English in 1985, corrected by the author in 1998 and republished by Red Pill Press in Grand Prairie AB, Canada in 2006. This one is not an easy read.

⁶⁹ Psychopaths can never become majorities in a functional society, because they are fundamentally parasitic on other people who produce wealth, heal the sick and so forth. If true psychopaths become too common, the society eats itself and disintegrates. But they can become concentrated at higher levels of power and wealth due to their exceptional skills, lack of genuine morals, and ruthless pursuit of power and wealth. From there, they often distort the laws of polite society to support their parasitic existence.

⁷⁰ The classic English language works in this domain are Stanley Milgram’s *Obedience to Authority: An Experimental View*, (first published in 1974) and Philip Zimbardo’s 1971 “Stanford Prison Experiment,” which can be accessed at: <https://www.prisonexp.org/>

Syria, 2010 – 2020

In 2010, Syria's population growth rate was about 2.4%.⁷¹ This results in a doubling time of less than 30 years and a highly pyramidal age distribution with momentum.⁷² Such demographic statistics can have huge consequences, depending on the rest of the context. It is difficult for developed economies to sustain economic growth rates that large in good times, and Syria had other big problems to contend with including all of the factors discussed in this paper as "the Developing Global Crisis." By 2011, those problems morphed into barbaric repression of dissent by Syrian military forces and complex civil wars. By 2015, half of Syria's pre-war population of 22 million people had been displaced. Six million fled the country entirely, spreading population pressure to every neighbor except for Israel, which would kill them if they tried to enter there.⁷³ About eight million Syrians were "internally displaced" and one million Syrian refugees went on from near neighbors to Europe causing major political dislocations there.⁷⁴ International crises are always far more complicated than analysts can describe (or readers can bear to read) with complex internal politics, external actors some of whom flock to crises with agendas of their own, and a myriad of other factors.⁷⁵ Perspectives on which factors or politics are most important always vary with observers, so a diversity of sources is essential.⁷⁶ Rigorous academic studies often dive deep into political or sociocultural variables.⁷⁷ They seldom look hard at basic demographic or biological variables, however, which is more than unfortunate. So, we will examine in more detail how climate change (a derivative of population pressure) affected Syria's situation, after reviewing a source that integrates factors of the developing global crisis.

⁷¹ The CIA's *World Factbook*, published by their Institute for the Study of Intelligence, is one good source for such numbers, another is the UN Demographic Yearbook. I tend to use the Factbook simply because it covers more variables, comes out every year and is easier to access, while the Demographic Yearbook is biannual and more narrowly focused. The World Bank also publishes systematic demographic data. The 2010 edition of the World Factbook can be accessed at: <https://www.cia.gov/library/publications/download/download-2010/index.html>

⁷² The shorthand formula for doubling times is $70/\text{growth rate in \%}$, and the accurate formula is natural log of 2 divided by the growth rate. It is exactly the same for compound interest on investments as it is for population growth.

⁷³ *UNHCR Syria Regional Refugee Response/Total Persons of Concern" UN High Commissioner for Refugees, 29 August 2015.*

⁷⁴ Migration Policy Institute, "Moving Europe Beyond Crisis." This is an aggregation of academic work on migration in Europe, archived at: https://www.migrationpolicy.org/programs/moving-europe-beyond-crisis?gclid=Cj0KCCQjw3Nv3BRC8ARIsAPh8hgKwoIcOxALNHnh1iP51m0tWSsdjvp4N4HGXI53kqjMEhy8xwqYO4V8aAjB9EALw_wcB This was accessed by this author on 27 June, 2020.

⁷⁵ BBC World News, "Why is there a war in Syria?" 25 February, 2019, accessible at: <https://www.bbc.com/news/world-middle-east-35806229>

⁷⁶ Al Jazeera, April 14, 2018, "Syria's War Explained from the Beginning," accessible at: <https://www.aljazeera.com/news/2016/05/syria-civil-war-explained-160505084119966.html>

⁷⁷ Ferris, Elizabeth, and Kemal Kirisci, *The Consequences of Chaos: Syria's Humanitarian Crisis and the Failure to Protect*, Brookings Institution Press, 2016.

Other Syrian scholars tried to explain those factors to the World Bank (like Andrea Liverani).⁷⁸

In 2020, Primoz Manfreda tried to summarize this complex genesis of a real series of civil wars that virtually destroyed a relatively well-developed country in “10 Factors that led to the Syrian Uprising.”⁷⁹ His first factor is “political repression” (which I would label authoritarian law). His fourth factor is “drought.” His fifth is “population surge.” His seventh is “corruption.” His eight is “state violence.” His ninth, “minority rule.” His sixth on “social media” and his tenth on “Tunisia effect” reflect truly new factors, like the revolution in technologies available to people today, and what others have come to label the “Arab Spring.” That echo of events in Tunisia inspired many previously repressed populations in the Levant to protest bad governments.

Seldom mentioned in less comprehensive reviews was the role of drought, Manfreda’s 4th factor. About 85% of Syria’s livestock perished in 2010 during the worst drought there in recorded history.⁸⁰ Something like 1.3-1.5 million farmers left barren land to find help in overcrowded cities with large teen-aged populations who lacked opportunities to build normal, hopeful lives.⁸¹ The power of that drought was reviewed by *The Guardian* six years later.⁸² *Vice* news summarized, that “The drought collapsed agricultural yields and livestock herds, driving as many as 1.5 million Syrians from rural areas into cities, where resources were already scarce.”⁸³ It is harder to write about population pressure or derivatives like climate change, which increases droughts around the world, than it is to describe the evils of politicians (like Syria’s Bashar al-Assad, or Russia’s Putin, or American leaders who got involved, or even Israeli military attempts to change the balance of power in the area). Focus on blame ignores powerful underlying forces.

⁷⁸ Liverani, Andrea, “A Syrian Refugee at COP21,” October 21, 2015, accessible at: <http://blogs.worldbank.org/peoplemove/syrian-refugee-cop21>

⁷⁹ Manfreda, Primoz, “10 Factors that led to the Syrian Uprising,” ThoughtCo.com, updated January 14, 2020, accessible at: <https://www.thoughtco.com/top-10-reasons-for-the-uprising-in-syria-2353571>

⁸⁰ NOVA, “H₂O: The Molecule that Made US: Civilizations,” premiered on April 29, 2020, is accessible at: <https://www.pbs.org/wgbh/nova/series/molecule-made-us/>

⁸¹ Worth, Robert F. “Earth is Parched where Syrian Farms Thrived,” in the *New York Times*, October 13, 2010, accessible at: <https://www.nytimes.com/2010/10/14/world/middleeast/14syria.html>

⁸² Kahn, Brian, “Syria’s drought ‘has likely been its worst in 900 years,’” in *The Guardian*, 2 March, 2016, accessible at: <https://www.theguardian.com/environment/2016/mar/02/syrias-drought-has-likely-been-its-worst-in-900-years>

⁸³ Stokes, Elaisha, “The Drought that Preceded Syria’s Civil War was likely the Worst in 900 Years,” in *Vice News*, 3 March, 2016, accessible at: https://www.vice.com/en_us/article/3kw77v/the-drought-that-preceded-syrias-civil-war-was-likely-the-worst-in-900-years

So, most attention goes to the usual suspects, bad or even evil political leaders and historical conflicts between neighbors in rough neighborhoods, while deeper factors like demographics and interactions between authoritarian law and militant religions are neglected. Very simplistically put, when drought and population pressure sent millions of desperate rural Syrians into cities already filled with better educated teenagers seeking opportunities of their own, they faced a corrupt Syrian government that reserved most opportunities for Assad's Alawite minority (about 11% of the population in 2010) and some Christian and other allies. Majority Sunni Muslims (about 74% of the Syrian population then) did not get equal opportunities. Rather, they got barrel bombs targeting hospitals and occasional banned chemical munitions. When students protested seeking more economic justice (inspired by the Arab Spring, but also driven by desperation) Bashar al-Assad responded with brutal repression like his father had in Hama decades earlier.⁸⁴ But this time, protestors had smart phones and computers, and militant forms of "religion" like ISIS were rising in the area. The combination of corrupt, authoritarian government with militant religions and powerful demographic forces at work proved to be explosive, like combining charcoal, saltpeter and sulphur can create gunpowder. Each factor is not very dangerous alone. Put them together, ignite, and you can change nations or destroy civilizations.

War, Genocide, Terrorism, Failing States, WMD and the Fate of Civilizations

Nuclear weapons introduced humanity to the concept of "half-lives." Radioactive elements or isotopes of elements decay into more stable isotopes over time such that half of their total changes over a period unique to each radioactive element or isotope.⁸⁵ This concept can also be applied to civilizations faced with the dilemmas of general nuclear war.

We introduce this concept here, because the largest military powers on earth today behave as though they can watch chaos spread around the world forever, safely, so long as they retain the ability to annihilate anyone who threatens us with military force. But that is an illusion promoted by a flawed strategic concept called "Mutual Assured Destruction" (aptly reduced to "MAD" in many publications). This idea was created during the earliest days of the nuclear arms race between the US and then Soviet Union. But it is flawed by something called the "rational actor assumption." In purest form, this assumes that all world leaders are "rational" all of the time, according to definitions of a few physicists and economists. The idea that anyone can surround their home with the most terrible weapons ever made, confident that these will never be used, is worse than unwise.

⁸⁴ Wikipedia, "1982 Hama Massacre," accessible at: https://en.wikipedia.org/wiki/1982_Hama_massacre

⁸⁵ Encyclopaedia Britannica, entry on half-life definition and properties, accessed 28 June, 2020 at: <https://www.britannica.com/science/half-life-radioactivity>

It is a theory that enabled development and deployment of a doomsday system of weapons, now owned by many, oblivious to responses by the targets of such terror.⁸⁶

Cutting through many details, a general thermonuclear war would probably destroy all of human civilization. MAD theory says that this should convince every leader on earth never to use such weapons because they assure destruction of nearly everyone. But theories of war that rely on human behavior and historic experience, rather than on sterile abstractions created by people to justify massive expenditures on exotic new weapons, are less optimistic. What is the exact probability that a general nuclear war will be triggered by some madman in some country, by accident,⁸⁷ or by some clever attack by terrorists who acquire a few nuclear warheads by any method? No one knows or can know that theoretical number. But we can calculate the half-life of human civilization for any such probability using Poisson statistics.⁸⁸

So, simply put as always, if the probability of a general nuclear war is 1% (one percent) per year, the half-life of our civilization would be about 69 years. If global civilization avoids that dark fate for 69 years, but retains the hardware, weapons, doctrines, and mindset of MAD, then the danger continues according to the same arithmetic. The combined probability of the rare event occurring (in this case a general nuclear war) asymptotes to .9999 (near certainty) very quickly on the time scale of civilizations. The practical result of such calculations is to recognize that humankind does not have forever to solve the “Developing Global Crisis” which already generates tens of millions of desperate young men every year with very stark economic futures. People who have nothing to lose and plenty to envy can be remarkably dangerous even with primitive weapons. Dominant powers call them terrorists, but they call themselves freedom fighters for oppressed peoples. And some of them spend every day trying to build or acquire the same weapons that dominant powers now use to sustain their dominance of global affairs.

⁸⁶ *The Bulletin of the Atomic Scientists* was created by Nobel Prize winning physicists who helped create the first nuclear weapons during the urgencies of World War II. They recognized the long-term danger of reliance on global destruction for safety, or what is now called “MAD.” Since 1947 they have maintained a metaphorical “doomsday clock” that indicates their estimate of how close we are to a nuclear midnight that would end civilization “as we know it.” Today that clock sits at 100 seconds to midnight. Each year the Bulletin’s board revisits this issue, issues a new estimate, and publishes the evidence and reasons behind their decisions. The whole Bulletin is a warning to humankind that this system cannot last forever. Their 2020 estimate and reasons can be accessed at: https://thebulletin.org/doomsday-clock/?gclid=CjwKCAjw_-D3BRBIEiwAjVMY7ABUnnqA2jfgkOOZZGM78hIH-nbhiMwHkekFOCn8-i1_5QXXBl49dhoCvpAQAvD_BwE

⁸⁷ Gorvette, Zaria, “The nuclear mistakes that nearly caused World War Three,” at BBC.com, August 7, 2020, accessible at: <https://www.bbc.com/future/article/20200807-the-nuclear-mistakes-that-could-have-ended-civilisation>

⁸⁸ Koehrsen, Will, “The Poisson Distribution and Poisson Process Explained,” in [towardsdatascience.com](https://towardsdatascience.com/the-poisson-distribution-and-poisson-process-explained-4e2cb17d459), 20 January, 2019, accessible at: <https://towardsdatascience.com/the-poisson-distribution-and-poisson-process-explained-4e2cb17d459>

Elsewhere many people have described hundreds of scenarios where this might occur.⁸⁹ So, I will illustrate it with a single example here. Suppose that a well-financed terrorist group like ISIS managed to purchase just a few modern nuclear warheads, from say Pakistan that is sympathetic to many goals of militant Islamic groups. Smuggling heavy items is remarkably easy in our fractured world; ask any drug cartel. Suppose these “terrorists” choose to use the same tactics that dominant powers use, attacking enemies that bomb them every year.

Imagine one warhead in Washington D.C., one in Moscow, and one in Tel Aviv Israel, set to detonate simultaneously. Is anyone sure none of those nuclear powers would retaliate against targets they suspect? When the US wargames such nuclear scenarios, most of them escalate quickly to general nuclear war due to the exigencies of attack and uncertainties of the “fog of war” when capitols disappear in radioactive fire. Recognizing this basic instability of the MAD doctrine, four of the architects of America’s nuclear deterrence system called for the elimination of all nuclear weapons worldwide.⁹⁰ They too have been ignored by a system that continues due to economic momentum among vested interests as much as for any strategic security reasons.

Glimmers of Hope

In 2017, the Nobel Peace Prize went to an International Campaign to Abolish Nuclear Weapons (ICAN) “for its work to draw attention to the catastrophic humanitarian consequences of any use of nuclear weapons and for its groundbreaking efforts to achieve a treaty-based prohibition of such weapons.” The UN responded by convening an international conference to negotiate a “legally binding” treaty called the Treaty on the Prohibition of Nuclear Weapons (TPNW) that was quickly supported by a vote of 122 states in favor, with one vote against and one abstention. This Treaty was opened for signature on September 20, 2017, but every nuclear weapons state has declined to participate at time of writing.⁹¹ Thus, “legally binding” is toothless in this case.

Nuclear weapons treaties that are ignored by all of the nuclear weapons powers are notoriously ineffective, but they can lay groundwork for real progress if geopolitical moods change. Large changes in that arena are often possible only after great disasters, or in nuclear issues, close calls with the global holocaust that MAD theory proclaims we must constantly prepare for.

⁸⁹ Ludlam, Scott, “Nuclear Brinkmanship and the Doomsday Scenario,” in *The Monthly* (Australia), April, 2018, accessible at: <https://www.themonthly.com.au/issue/2018/april/1522501200/scott-ludlam/nuclear-brinkmanship-and-doomsday-scenario#mtr>

⁹⁰ Shultz, George P., William J. Perry, Henry A. Kissinger and Sam Nunn, “A World Free of Nuclear Weapons,” in the *Wall Street Journal*, 4 January, 2007, accessible at: <https://www.wsj.com/articles/SB116787515251566636>

⁹¹ United Nations, “Treaty on the prohibition of nuclear weapons,” accessible at: <https://www.un.org/disarmament/wmd/nuclear/tpnw/>

The dyad of Kim Jong-un in North Korea and Donald Trump in the US seemed particularly ripe for a stark test of that “rational actor assumption” discussed in previous sections. Others are inevitable.

On the environment and global warming fronts, US withdrawal from the Paris Climate Accords was a huge setback. Despite this paralysis, maintained by corruption in a government addicted to payoffs from legacy fossil fuel interests, hundreds of large corporations and even several US states have declared their intentions to work hard to achieve Paris climate goals despite resistance from federal agencies.⁹² Tens of millions of US citizens also act in many different ways each day to accomplish those goals. There is a lot of hope in younger generations worldwide, if current powers that be would just listen more to their cries for generational justice.

And while authoritarian political systems (which are doomed to perpetual conflict) are rising today against truly representative democracies, people worldwide continue to rebel against such systems and are slowly learning how to use the new information technologies more nimbly than repressive governments. The art of rigging elections has been perfected, but the struggle between freedom and tyranny as organizing political principles has not been lost yet.⁹³

Why Asia Needs to Lead

We who study threats to all of human civilization sometimes write about the “fast death” of a general or catastrophic nuclear war, and the “slow death” of grinding, incremental destruction of the living system that sustains us all. The latter will lead to a world of failed states unless and until population pressure is reduced by enlightenment and positive changes, or by far higher death rates than any compassionate person desires. On both nuclear and environmental issues, it is time for Asia to lead because the West (or at least America) cannot anymore.

Half of the nuclear weapons states today are Asian (Russia is both Asian and European).⁹⁴

⁹² Environmental Defense Fund, “California leads fight to curb climate change,” accessed August 16, 2020 at: <https://www.edf.org/climate/california-leads-fight-curb-climate-change>

⁹³ Belarus is the latest test case of this proposition. It is too early in 2020 to know how this will turn out, but the people are showing surprising resilience in the face of repression from Europe’s “last dictator.” Their dictator, however, has shown that modern technology and repression can radically distort results.

⁹⁴ A more thorough discussion of why Asia could and I urge should lead on nuclear weapons issues today will be published in the *Journal of Asian Politics and History* in 2021, under the title “Why Asia Needs to Lead a Global Push to Eliminate Nuclear Weapons,” by Andregg, M.

The most unstable dyad in that arena might be Pakistan and India because of their history of conflicts.^{95,96} But the entire nuclear deterrence system is unstable. Japan has the strongest moral position on this issue of any nation on earth, and substantial economic and technical resources it could devote to implementation of progressive changes should wisdom dawn. The US and Russia are paralyzed because of strong domestic constituencies devoted to endless arms races, among other reasons, while France and Britain are too small to become prime leaders of a global push to eliminate (or radically reduce) nuclear weapons inventories. One key must thus be China.

On the environmental front, Chinese appetites for exotic parts of rare animals (like rhinoceros horns, or tiger parts) are the leading threat to extinction of such animals today.⁹⁷ Entire habitats of forest and jungle are also being harvested at ever-growing rates to feed global markets for timber and palm oil. Chinese fishing fleets roam everywhere, sometimes quite indifferent to laws of the sea and international conventions on sustainable management of resources. China also is a command economy that could change such priorities more quickly than most, if leadership there concluded that survival of human civilization is at least as important as dominance by the Chinese Communist Party. And no one has had more experience with the great difficulties of trying to create, implement, and adjust national population policies over two generations.

Therefore, with help and inspiration from visionary statesmen in Mongolia like J. Enkhsaikhan,⁹⁸ I have concluded that both large and rich nations like China and Japan, and small, relatively poor countries like Mongolia, which are rich in global vision, are in a good position to catalyze real change in global norms to promote a sustainable future for all of humankind.⁹⁹

⁹⁵ Waqar, Annie, "Nuclear War between India and Pakistan? An expert assesses the risk," in *The Conversation*, March 6, 2019, accessible at: <http://theconversation.com/nuclear-war-between-india-and-pakistan-an-expert-assesses-the-risk-112892>

⁹⁶ Thränert, Oliver, "New Challenges in Nuclear Arms Control," in *CSS Analysis in Security Policy*, No. 232, October 2018, Switzerland, accessible at: <https://css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/CSSAnalyse232-EN.pdf>

⁹⁷ Liu, Hongqiao, "Is China's appetite for rhino horn increasing?" in *China Dialogue*, December 16, 2013, accessible at: <https://chinadialogue.net/en/nature/6580-is-china-s-appetite-for-rhino-horn-increasing/>

⁹⁸ Enkhsaikhan, J., "Mongolia's Non-Nuclear Status: An Important Element of Foreign Policy," in *The Mongolian Journal of International Affairs*, No. 13, 2006, pp. 13-25.

⁹⁹ Andregg, M., "Why Asia Needs to Lead a Global Push to Eliminate Nuclear Weapons," in press at the *Journal of Asian Politics and History*, due out in 2021.

Conclusions

For thousands of years, thousands of people have predicted the end of the world in various ways for various reasons, and every one of them has been wrong ... so far.¹⁰⁰ Therefore, my alarming conclusions should be assessed with all due skepticism and withering criticism of errors of fact, hidden assumptions, or possible unintended consequences of proposed solutions. On the other hand, who can deny that weapons of mass destruction have affected such estimates? The world's human population has also quadrupled during the last century. Who can deny that this affects the fate of the living system which sustains us all, and the prospects for conflicts of all kinds?

Therefore, I suggest a dual track approach to these problems. One track would be incremental change, like we see today but with a greater sense of urgency and more international cooperation to avoid both the quick death of nuclear holocaust and the slow death of incremental destruction of Earth's living system. The other track would be preparation for if the nuclear war comes.

In the 1980's ordinary American citizens without great resources sponsored thousands of public education programs about nuclear weapons in efforts to restrain the arms race between primarily the US and the Soviet Union at that time.¹⁰¹ These events were accelerated by growing public talk about the feasibility of waging, and winning, a "limited" nuclear war with the Soviets.¹⁰² Internal Pentagon estimates of resulting US casualties were about 60 million dead in America, which some people considered acceptable if the alternative was surrender to the Russians. No estimate of worldwide casualties made it outside of the military security bubble of that time.

¹⁰⁰ Editors, History.com, "Nostradamus," updated May 14, 2020, accessible at:

<https://www.history.com/topics/paranormal/nostradamus>

Nostradamus was a French astrologer and physician who published a book in 1555 CE called *The Propheties* where he predicted the end of the world in the year 3797. If he had picked an earlier date, like thousands of others have, events would have proven him wrong by now. Instead, he gained international fame and his book is still in print today.

¹⁰¹ For one example, one tiny, non-profit, all-volunteer, education group in America called Ground Zero Minnesota sponsored about 5,000 educational programs in schools, churches and civic groups in a five-state region during this time. We were microscopic compared to larger efforts like when one of America's three national TV networks (ABC) sponsored a movie called "The Day After," which was seen by more people in the USA than any other program in our history to that time. This was even shown on the Soviet Union's state TV in 1987. More information on this extremely rare, made for TV educational effort can be found in Wikipedia, at: https://en.wikipedia.org/wiki/The_Day_After

¹⁰² Weinberger, Caspar W. (US. Secretary of Defense at that time) and Theodore H. Draper, "On Nuclear War: An Exchange with the Secretary of Defense," in *The New York Review of Books*, August 18, 1983, accessible at: <https://www.nybooks.com/articles/1983/08/18/on-nuclear-war-an-exchange-with-the-secretary-of-d/>

To the great surprise of millions of people, our country (and many others) thought through the consequences of even “limited” nuclear wars and decided that this would not be good for America or the world. So major efforts at more significant nuclear arms control began, resulting in an Intermediate Nuclear Forces treaty (INF), SALT, SORT, START (all bilateral treaties between the US and the Soviet Union) and other multilateral agreements like the Comprehensive Nuclear Test Ban Treaty. Therefore, today, those largest nuclear inventories of Russia and the USA are at most one-fourth of what they were at their peaks, and there is better surveillance.

So, once in a while, citizen efforts can make a real difference in the fate of nations. Tragically, much of that progress has been reversed in the last few years by the latest group of people who can never get enough nuclear weapons, or money to create, refine and deploy them. And as noted earlier, both Russia’s President Putin and America’s President Trump have talked publicly and recently about using nuclear weapons in “tactical arenas” like Eastern Europe and North Korea.

Therefore, I tell those who ask today that they should work hard for peace in incremental ways, but also prepare for worst case scenarios like another World War. I have often claimed that even after a general nuclear war, “there will be survivors, and they will build a better civilization.” But that is more aspirational hope than calculated conclusion based on empirical evidence.

Turning the nuclear arms race around was incredibly hard, and imperfect. How much harder must restraining the corruption which runs rampant in our countries be? Much harder. How hard will it be to restrain the appetites for authoritarian law that emerge with every generation that wants to blame its problems on some “other?” Very hard. And who can persuade militant fundamentalists of any religion that the Creator of us all really does not want us killing each other’s children? Well some people try every day, but progress on that front is remarkably slow.

I offer two last concepts here that might help, one given by some of the Native Americans who were almost exterminated by westward expansion of European peoples across North America. This is planning for the welfare of the *seventh generation* when politicians make big decisions for our countries, towns and villages. If modern politicians truly cared about the welfare of the seventh generation after they made public policies, most of these great crises could be resolved.

China is alleged to take a long view of international relations.¹⁰³ It is also written that creating a “Great Harmony” or “Great Unity” is integral to Confucian philosophy, and as I read Confucius, this does not imply police-state governments afraid of independence anywhere.

¹⁰³ Pomfret, John, *The Beautiful Country and the Middle Kingdom*, New York, NY: Henry Holt and Company, 2016, pp. 144-45, 258, 368, 401, 439, 443, 534, 593, 611-12, 631, 634.

If modern China could actually embrace that goal, many current frictions could be set aside in the interests of our common, human survival. If elites in Japan and the US could join or lead that enlightened spirit of reconciliation, and restrain the factions ever eager to exploit conflict, anything is possible.