

Why Population Pressure and Militant Religion are the most important Causes of the Developing Global Crisis

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from Michael Andregg, University of St. Thomas JPST program, mmandregg@stthomas.edu

"A great civilization is not conquered from without until it has destroyed itself from within."

-- W. Durant, The Story of Civilization, Vol. 3

DRAFT 7

Abstract and Introduction

Population pressure and militant religion are the most important causes of the crisis before us today because we can do something about them, and if we don't we are doomed.

The history of the earth is vast and many civilizations have risen, fallen, transformed, and sometimes collapsed catastrophically. All of this is extremely complicated, so to boil it down to a couple of variables is ridiculously simplistic. That is, however, one role of theory for complex processes, reducing dozens or even hundreds of variables into a smaller number that minds can more easily manage. So this is a position paper, not empirical research. Controversies accompany definition of many key terms like "civilization," "religion" (militant and otherwise), "genocide," "human nature," "population pressure" and so forth. These will be set aside so that the key thesis can be presented in the space available. I encourage anyone to disprove or improve on these ideas, because however you describe it our global civilization is entering a period of profound crisis. Practical answers matter more than words, and accuracy matters more than ideology. In the past, as cases here show, some civilizations facing similar challenges survived while others perished forever from this earth. So the question of why some fail and why others succeed is not a mere theoretical question.

There are many other variables important to the rise and fall of civilizations, but most will not destroy you if neglected. Population pressure and militant religion can. Plus, we can affect these factors, while goals like changing human nature or eliminating sin are ephemeral.

This paper is built on foundations laid by authors like Clive Ponting, Jared Dimond and Tatu Vanhanen (of Britain, the USA and Finland respectively). But almost every concept is disputable, from the definition of civilizations to the "evolutionary roots of politics" that Vanhanen discusses (and Azar Gat elaborates, 2006) which drive some of their political science colleagues into vehement denials that biology has anything at all to do with politics. The critics are wrong, but rather than argue each of these and many other relevant items extensively here, I will just declare my opinion. Having considered these complex and sensitive topics as carefully as I can, these are my conclusions. Readers may critique and prove or disprove them as they like. My goal is human survival, which I think is at risk to these two factors specifically.

The “Developing Global Crisis,” Civilizations and Genocide

Both Diamond and Ponting spend considerable time on the case of Easter Island where Polynesian colonists created a culture sustaining about 20,000 people that developed writing, built dramatic monuments, then collapsed to barely a thousand, near-starving survivors when they were discovered by European explorers. Subsequent archaeology reveals that the collapse was accompanied by total deforestation and a bizarre religious period with cannibalism and chronic violence among clans. This case is special because the limits of islands are so obvious and the isolation of Easter Island from other common factors (like invasion) was so complete.

Both authors attend to the mysteries of the Southern Mayan Empire, which suffered a 90% collapse of population over a single century (Diamond, 2005; Ponting, 2007). As usual, there are competing hypothesis – was it soil erosion, disease, invasions, climate change or something more mysterious? Another case can be found on the very ground I stand on, which in 1800 CE was inhabited by 99% Native Americans, who by 1900 CE had been replaced by 99% whites of European heritage (Andregg, 2008). Many would dispute whether this case counts as a civilizational encounter (on the grounds that the native Dakota and Ojibwe were not sufficiently “civilized”) or that any genocide occurred (on grounds of definition, or that driving people off to barren lands to die unseen is not equivalent to burning them in ovens).

I will set aside those perfectly appropriate discussions of terms so that we can look at the underlying reality. Whatever you call it, thousands of peoples have been wiped out by other groups of people during the history of the earth. Thousands of peoples have also been wiped out by starvation or disease without help from (or murder by) neighbors. These might be issues of mere academic interest, except that most scholars are well aware that the entire planet is now showing signs of great distress. There are too many people on too little land, and violence over resources is endemic. So some wonder what we can learn from civilizations of the past, all of which faced challenges that only some survived.

This prompted scholars like Diamond and Ponting to spend their professional lives looking at civilizations in distress, and Tatu Vanhanen, a Finnish political scientist, to ask whether biology might have something to do with the fate of nations. Vanhanen found so much evidence for that in contemporary quantitative data that his books were criticized when he ventured into why some cultures are wealthier than others.

Yet even the simplest businessman knows that commerce involves a Darwinian-like competition among different commercial entities for limited resources, and that some live by eating the weak while others die. This is not nice at all, but it is real. Businesses that compete better grow or proliferate, as do societies that prey upon their neighbors (and get away with it).

I will get to moral issues relevant to such harsh truths before we are done. They matter a lot to me. But first I want to express the clearest clinical view I can about what is actually happening. In medicine, if you get a wrong diagnosis of disease your “treatments” are doomed to fail. And romance, religion, ideology or warm fuzzy views on what is going wrong are not the most accurate way to diagnose medical problems. So I turn now to behavior genetics, which shines a bright light on human behavior under stressful circumstances.

A Behavior Genetic Perspective

Evolutionary theory predicts that people will be quite ruthless in their competitions with other people over scarce resources, because all living systems compete first and most with their own kind to fertilize their gene pool. Of course they must also struggle with nature in general, because if they do not survive their reproductive value will be zero. So the whole contest involves two core components, survival and reproduction. Therefore a derivative prediction is that people will defend both rights to life and rights to unrestricted reproduction above all other values. “All is fair in love and war” expresses this view bluntly.

Certainly the history of earth is filled with examples of tribes, clans, nations and even civilizations clashing violently over who will control the land and other resources on which human life depends. But people are not merely barbarians, and a great deal of cooperation is essential to the social life upon which all complex societies depend. So a derivative question of great interest a generation or two ago was how “altruism” and other apparently self-sacrificial behaviors could arise in a fundamentally competitive context (Axelrod, 1984).

From this came the concept of “kin selection” or the idea that self-sacrificial behaviors could be advanced if they increased the survival rate of close relatives. Small primate social groups are mainly close relatives, and so are small groups of tribal or indigenous humans.

So long ago I did a simple, numerical, computer simulation of “interdemic selection” where an “altruistic” gene was posited that posed some risk to its individual carrier but some benefit to the group (Andregg, 1977 a & b). By varying risks, benefits and group parameters, two simple answers emerged. Yes, you can drive altruistic genes to high frequency if the whole gene pool is organized in small groups which themselves live or die as social groups. But to do so you must have fearsome rates of group mortality.

How genes influence complex human behaviors is too subtle to deal with here except to note that humans show more “predilections” of behavior than simple instinctive reactions or the fixed action patterns found in simpler creatures. Parents, education, culture, art, law and all the moderating forces of societies also play large roles in molding human behaviors without which we would still be sharing caves and huts with lice. But so far, none of these has been sufficient to eradicate the predatory behaviors that make police an essential element of large social groups, and armies among the most important institutions of states that desire to endure.

It appears that small human groups were traveling hither and yon for thousands of generations as hunter-gatherers before the advent of agriculture and after that cities, two of the benchmarks for the term “civilization.” What would evolutionary theory predict if survival depended on small groups that compete with each other for the means of life in complex environments that change over time? The most important prediction relevant to the current discussion is that there would be a difference between behavior toward members of “your” group versus other groups of conspecifics. Be good to yours; be suspicious and sometimes hostile to groups that are not yours. Avoid fighting if you can (because fighting is dangerous and there is no genetic value in dying before you reproduce). But if you cannot avoid fighting, then fight like your entire clan depends on your success, because it may.

This “in group/out group” dichotomy is one of the most studied phenomena in social psychology, sociology and similar disciplines. Whether predictable or not from any theory, it is one of the most universal aspects of human social behavior. A thorough discussion of this topic is in “War in Human Civilization” (Gat, 2008). Now I will take this one step further.

If humans existed for thousands of generations in an environment of small group competition such as I describe, genes for two quite different behavior sets should be advanced. One is a relatively “good” set of cooperative behaviors to moderate conflicts and to maximize nurturing, helping, survival behavior so that the group can live and reproduce. This “good” set applies to your “in-group.” The other is a relatively “bad” set of competitive and even hostile behaviors available at any moment should barbarians arrive at the gates of your village or edge of your territory. This “bad” set of behaviors applies to your “out-groups” a.k.a. enemies.

Can humans accommodate such contradictory behavior sets? Of course; watch fans of sports teams. The division between sexes also illustrates this well. Males are less inclined to be nurturing on the average than females, and females are less inclined to fight (at least with heavy weapons). But when it is necessary men can certainly care for infants and women can certainly fight to defend them. There are statistical predilections and a customary division of labor carried down from ancient times. But both sexes are clearly capable of both nurturance and fighting. This is one example of a split with profound consequences for civilizations.

For the rest of this paper I will label these alleged behavioral sets the “altruistic” social variant and the “fascistic” social variant. Other labels could be chosen and it is just a theory. But soon I will be dealing with concepts called “authoritarian law” and “militant religion” for which the “fascistic” label is especially appropriate. The next section on Population Pressure attempts to dispel some myths or perhaps mere misunderstandings about that.

Population Pressure

The most important aspect of “population pressure” is that it is not population size or density. Those factors are related, but “population pressure” refers to the degree to which a group is pushed to expand into other lands due to resource needs. Thus it is highly dependent on environments as well as on demographics and particular technologies and cultural practices a people use to exploit those environments. A high-tech, high energy use, modern, industrial-agricultural economy can support hundreds of times more people on the same land that hunter-gatherers struggled to avoid starvation on centuries ago. Population pressure is also sensitive to carrying capacities that can change a lot as climates do. So population pressure is a very complex force derived from other complex phenomena (Choucri and North, 1975).

The second most important thing to recognize about this domain is an iron law of biology that is simple to state but extremely difficult to deal with. In the long run, birth rates determine death rates and life expectancy, period. Or, **BR** => **LE** (Andregg, 2007, pp 62-73).¹

¹ In the long run, birth rates must equal death rates since every living thing born eventually dies. And since life expectancy is defined as 1000/death rate, this can be reduced to birth rates determining life expectancy at equilibrium. Complications of growth, decline, and migration can confuse the arithmetic and obscure root causes. But the bottom line is an iron law of biology which can be stated in another way. You can have either high birth rates with high death rates, or low birth rates with low death rates, but you cannot have what selfish genes desire, which is high birth rates and low death rates.

The third most important thing to recognize is that people REALLY do NOT want to deal with that by measured, rational mechanisms. Instead, they are inclined to fight fiercely over unfettered rights to reproduce, as they have thousands of times in human history. But these fights are not described as selfish greed, rather in terms of political or religious ideals.

Now, it is not necessary to fight if some will accept very high death rates stoically, and people have also done that many times. South Asian history shows that commoners can starve periodically for thousands of years while rich Brahmans enjoy luxury, so long as there is a cultural tradition that encourages acceptance of suffering as fate, like karma and caste. Likewise, China endured for millennia with cycles of “warring states” periods alternating with authoritarian empires that suppressed internal dissent even while millions of people starved when “bad harvests” came. Those “bad harvests” reflect the inevitable ups and downs of agricultural production challenged by a population that is always pressed against a starvation boundary due to its natural growth whenever harvests are good.²

A 12 page treatment of this topic in “On the Causes of War” (1997; 2007, pp 62-73) includes a detailed response to the common claim that “everyone could be fed with what we already produce.” That claim is a sincere but partial truth that typically omits discussion of the enormous costs of moving food from where it is abundant to where it is scarce. There are many injustices and inequalities of wealth on earth that complicate the issue. But the bottom line is that starvation will not end by redistribution alone until YOU are willing to pay the huge costs of transportation and redistribution.³ We are not at this time so people continue to starve every day in the poorest places even though humans have increased food production thousands of times in the history of civilizations. In fact, genocides occur today in places like Darfur precisely because competing peoples there and elsewhere are not willing or able to pay to feed each other, yet population grows. So some fight over who will live and who not.⁴

Authoritarian Law and Militant Religion

Authoritarian law and militant religion are not identical, but they are intimately related and interact such that both in combination are far more powerful in imperial expansion and in civilizational collapse than either alone. They are also generally pronatalistic, which increases population pressure, so all three major variables have synergistic effects on the probabilities of war, ecological decay or even civilizational collapse in the most extreme cases.

Authoritarianism refers to legal and political structures; Militant Religion refers to religious beliefs and institutions. One emphasizes the practical matters of waging war, the other the moral. When both are vigorous and society has a good resource base, organization

² China pulled itself away from this “starvation boundary” in the late 20th century, but only by instituting a strict national population policy with both strong economic incentives and serious sanctions.

³ And even then relief will be quite temporary unless growth of demand (population) is also stopped.

⁴ Evil motives are not necessary for awful outcomes. For example, the Catholic church ban on birth control promotes starvation and war while Popes declare that this is entirely about respect for life.

can grow to empire scale and expansion can be very dramatic over decades or even centuries. This requires conquering a lot of out-groups, who usually pay a very stiff price⁵ for that.

Authoritarian law embodies the idea that it is legitimate for governments to use violent means to accomplish their desires (not just for defense). This one concept is as important as all the functional ways by which Authoritarian law makes wars easier to start and prosecute.

Authoritarianism concentrates decision making power, in the extreme to a single leader (a.k.a. dictator). But most ancient civilizations had divisions of power, with both secular and religious elements interacting and often dependent on each other. Religion plays roles in every civilization although in China they have taken more philosophical and less personal or mystic forms. The Egyptians, Greeks and Romans all had gods that played real roles in the courts of emperors. The Mayan Empire provides especially vivid examples of militant religion in the service of city-states, with human sacrifice for crop production and monument consecration.⁶ The Islamic outpouring of the 7th and 8th centuries CE is another example of these variables interacting. This was also one of the dramatic expansions which did not lead to collapse, but rather to a pretty stable equilibrium notwithstanding the Ottoman Empire phase.⁷

It should be obvious, but bears emphasizing, that these factors resonate powerfully with the raw, Darwinian selfishness predicted of small groups competing over thousands of generations of evolutionary time. An ability to rally around leaders and defend group assets would be useful to groups in general. In extremis it is fascistic. Thus both “good German” responses to authoritarian leaders, and “devout member of THE faith” responses to religious leaders may be expressions of an underlying behavioral template with more primitive roots.

The Nazi experience generated research on why so many “good, Christian” people could be induced by Hitler’s authoritarian regime to support atrocities like the Holocaust. Stanley Milgram’s work on “Obedience to Authority” (1974) showed that a shockingly high percentage of normal people could be persuaded to harm others by simple command by a guy in a lab coat. Phil Zimbardo (1971) conducted a similar experiment with Stanford students playing prisoners and prison guards. The descent into petty sadism by the “guards” was so fast that this experiment had to be stopped after 6 days, and I do not think society has come to grips with its results yet. Power corrupts, and absolute power over vulnerable others leads to behaviors that many would prefer not to think they have buried deep inside.

Militant religion is more subtle than authoritarian law, but no less important. It is not identical to fundamentalism or literalism, but is found more commonly among fundamentalist, literalist and orthodox groups (of all major faiths, by the way). But remember, some orthodox are strict pacifists, for example, taking words like “do not kill” seriously. The real key is the embrace of force to promote the church or clan. When religious enthusiasts adopt violent means to achieve their ends, they express the Darwinian trait, and threaten all under heaven.⁸

⁵ That price was often death or slavery in ancient times, and unfortunately sometimes today as well.

⁶ The Aztecs were even bloodier, sacrificing thousands to a belief that the sun required their blood.

⁷ That noted, it should also be observed that a large fraction of the current civil wars/conflicts on earth involve Muslim factions competing with Christian, Jewish, animist or Hindu others as in Nigeria, Israel, Sudan, Thailand, Philippines and India (vis. Pakistan, Kashmir, and large scale communal violence). This is partly driven by very high Muslim birth rates, which always yields severe population pressure.

⁸ “All under heaven” is a phrase from Chinese culture that is especially appropriate here.

The “Taliban” comes to mind as a vivid current example. It is, but there are many other militant religious groups in the history of civilizations. The Crusades relied as much on militant religion from self-described Christian people and institutions. William Eckhardt was among the best counters of wars, battles and casualties of his time. His “Civilizations, Empires and Wars” (1992) observed that religion broadly defined was a common cause of war, and he commented on “compassionate” vs. “compulsive” personality types, which are related to the militant religious forms. In this context, what matters most is recognizing what distinguishes those cultures that adjusted and lived, from those that did not and therefore crashed and died.

Militant religion endorses the use of violent means to achieve ends, including growth of THE church, providing a moral blessing that is essential for many people to do the job of killing infidels, heathen, pagans, goy, or some other negative label for the “others” who may be righteously killed. Militant religionists also tend toward dogmatic doctrine and divine inspiration of texts, or otherwise “unquestionable” truths, which makes them less tolerant of people with different views. This inflexibility of thinking, unwillingness to admit mistakes, and categorical condemnation of others who are different is a behavioral complex best described by Robert Altemeyer in “Understanding Right Wing Authoritarianism” (1988).

Militant religions often include a strong drive to proselytize, which combined with pronatalism and institutional self-righteousness increases long term frictions with neighbors (at the least) and results in genocide at the worst. Much more is said about these factors in Chapter 13 of “On the Causes of War.” (pp. 73-83). Remember that both factors combined (authoritarian law and militant religion) are more dangerous together than when they operate as competing power centers, which is the practical reason why “separations between church and state” are so important in advanced political theory. One solution is secular governments.

An interesting perspective on this can be found in Michael German’s “Thinking Like a Terrorist” (2007). You can find the same kinds of language the Taliban use, of a persecuted holy people besieged by an evil world, of hatred of Jews, the rich, and pretty much everyone not them, but his subjects of study were white supremacists and neo-Nazi’s among America’s very far right. He was an undercover agent for the FBI. He also found the same kind of bans on birth control, abortion or any restraints that would compromise their ability to outbreed the “mud people” and the same kinds of male-only power structures one sees in the Taliban, et al.

Practical Implications: Easter Earth or a Global Civilization where ideals can flourish?

The earth certainly does not have a “global civilization” now, but several factors with powerful consequences are driving us toward fateful decisions. Integration of global economy (a.k.a. globalization), climate change, the technical revolutions that make information flow faster as well as emergent disease organisms, and weapons of mass destruction in ever more, and potentially angrier hands; all contribute to a global angst over the future of humankind.

When Diamond looked at the many island communities of the South Pacific, he found some that survived crises (like Tonga, Mangareva and Fiji) while others perished (like Easter, Pitcairn and Henderson islands). Resource depletion and especially deforestation is a problem common to all, but his models are more complex than mine, with from five to nine variables including trade relations (Diamond, 2005, p. 11-15, 116). While he mentions militant religion, especially in the dramatic and bloody collapse of Easter Island, this is not a main variable to him. Rather he highlights the willingness or lack thereof of leaders to change their old ways

when resource crises came. Other vivid examples were the end of 500 years of Norse colonies in Greenland, the end of the Anasazi Indians in the American Southwest and the near end of the Southern Mayan peoples a few centuries before the arrival of Europeans.

When Clive Ponting first published his “Green History of the World” in 1991 it was fairly radical for a British historian to warn about biological threats to whole civilizations. So he focused on getting good, hard numbers on population demographics, economic activity, soils and yields and production of food, timber, metals, debts, investments and financial flows of every kind available to economists and world organizations. Thus his revision in 2007 is a vast data dump intended to mollify (or at least occupy) the quantitative types who resist any synthetic views of human civilization unless they can be reduced to small, measurable things.

Both authors begin with Easter Island and the Mayan Empire, because they both see the train running right at modern civilization. So they dwell on the most dramatic examples of collapse due to resource stress and failure to change in a desperate attempt to save the current one. In ancient times whole peoples like the Mycenaean Greeks could disappear but the world endured. Nuclear and biological weapons of mass destruction make this less likely today.

The current crisis begins with population growth and its complicated derivative population pressure, which leads to deforestation and loss of topsoils (in the extreme to desertification which is spreading world-wide) and extinction of species (which has reached extraordinary rates found only five previous times in the geological history of the planet). People decide whether to adopt sustainable resource practices or to use a commons ever harder until it collapses under everyone. On that key decision, entire civilizations may live or die.

The biggest complication is that one option for elites is to try taking resources from neighbors near or far. This gave rise to empires of the past, and to geopolitics today. It does not require a Ph.D. to recognize that oil, water and food play big roles in where wars are fought, and why. To accomplish theft and murder on this scale requires some moral blessing. This is the prime service that militant religions often provide to the state.

The perspective I add to this conundrum is speculation about what behavior genetics would predict for both individual and social behaviors in our species that depends on social organization more than most. I posit that there are broad templates of behavior in most normal human beings, a nice, kind, generous, forgiving altruistic variant for dealing with one’s family, tribe, or other “in-group” up to the nation-state or religious group, and a “fascistic” variant that sees humans not in the family, clan or in-group as enemies competing for scarce resources at the best, and out to kill the clan at worst. This has two big consequences for individuals and groups. For individuals, it creates the substrate of the warrior ethic, which literature and art help to flower into the hero’s willingness to die defending the tribe. For groups and demagogic leaders, it provides large numbers of followers who are prepared to support authoritarian leaders who promise safety, all the way to genocide in places like Rwanda, or Darfur, Sudan today, and in Germany, Cambodia, Turkey and North America of times past.

At this point it is worth consulting another classic, a review of archeological theories on “The Collapse of Complex Societies” by Joseph Tainter (1988). It was written three years before Ponting’s first edition and has many details on some of the same cases he and Diamond consider, the Anasazi, the Maya, and even more on the Romans and other classic civilizations. Tainter also discusses population pressure and energy issues. So some comparison is due.

First, Tainter classifies theories of collapse into 11 themes starting with depletion of resources and finds some merit in all of them except the mystical theories. But his favorite cause of collapse is a very abstract economic concept called “declining return on investment in complexity” which he finds the most “logical” among other virtues. His review of archaeology is rich in case detail with hundreds of references, so I commend it to scholars. His major types of theory also include “failure to adapt” theories like Diamond’s, where elites simply refuse to reconsider old ways when they are clearly failing. This is similar to, but not identical to my focus on militant religiosity with its rigid dogmas and incessant drive to control others.

The differences are details compared to the commonalities. All these authors recognize we are struggling to understand extremely complex processes that require us to simplify just to talk with each other. The outstanding problem is that very complex societies (or civilizations) can be going strong, then suddenly fail resulting in huge population losses. All these authors are animated to one degree or another by recognition that fascist thinking combined with nuclear and other weapons of mass destruction could bring the current ‘world order’ down in a heartbeat. They also all noticed that the natural world which sustains us cries out for relief.

So what are we to do? 75-95 percent loss of populations is a recurring theme we do not want to endure again. And why are population pressure and militant religion especially important among the kaleidoscope of forces that affect large and complex civilizations?

Solutions to all great problems begin with talking honestly about their causes. There is an unspoken but tangible taboo on discussing population growth or pressure except among intellectual and political elites who are all too aware of the dangers posed by large numbers of poorly educated and economically impoverished masses. But to bring this up in public is to invite attack by others who are angry at what they see as merely attempts to protect privileges of the already wealthy instead of attempts to save civilization entire. The taboo on discussing errors of militant religion is less strict, except in societies where militant extremists murder critics of the “One True Faith” of that area. Which some undoubtedly do on earth today.

I could discuss examples from all the major faiths, especially those based on allegedly “infallible words” (people of Books, a.k.a. Jewish, Christian and Islamic variants). But even the Hindu’s of India have a nationalist party with sometimes genocidal intentions toward their minority Muslim neighbors.⁹ Since I don’t want to be attacked by all of them, I will pick on the angry Muslims known as the Taliban (or Salafists, Wahhabis or other labels for those who would impose harsh Sharia¹⁰ on all). See “Infidel” for a scathing critique of that (Ali, 2008).

Well we need to talk candidly about these things, about population pressure and about fanatic, violent religious forms, because the full-flowered, fascist theocracies that can result are a real danger to all under heaven. Especially when weapons of mass destruction combine with doubt-free religious zeal. I propose we begin by challenging the façade that all totalitarian governments and philosophies use; the false claim that they are “moral leaders.”

Fascism is not morality. Murdering critics is not moral leadership. It was not during the Inquisition and pogroms and it is not today. It is mere Darwinian selfishness put into words to

⁹ The BJP party (Bharatiya Janata Party) or Indian People’s Party.

¹⁰ Tribal laws derived from medieval Arab culture as much as from the Qur’an.

rationalize violence against others to take their resources. Period. But as M. Scott Peck wrote in his seminal work on evil (1983) this kind of evil is obsessed with acquiring power and often cloaks itself in extreme devotion to some “moral authority.” It often finds this in organized churches of the NOT-ecumenical kind. Ecumenism is a theological term that recognizes some validity among differing religions on the grounds that people are imperfect, that even religious texts were written by many fallible human beings, and that God (whatever that is) appears to have spoken with many different people in every different culture and language many times. The ecumenicals are always searching for peace in a troubled world; they are not my problem. The violent zealots who really believe that God wants us to kill each others’ children are.

So, we must be brave enough to talk and write about population demographics and their relation to war and the destruction of the living system of the earth, even though many large and powerful churches are still in thrall to dogmas from centuries or millennia ago and react very poorly to anything that might restrict their rights to compete with other churches on the reproduction front as well as with words, books, social programs and comfort for troubled souls. And we must be brave enough to talk about the false “religions” that think God wants them alone to inherit an Earth destroyed by violence of “the pure” against all others.

If moderate, secular governments yield the moral high ground to religious fanatics they will not merely suffer; they will die along with modern civilization. Why? Because aggressive religious groups that really believe they are God’s select often promote very high birth rates to generate large numbers of supporters and willing warriors. And large numbers of unemployed and more propagandized than educated teenage males are a military force to be reckoned with regardless of ideology. When their ideology is formed by books written by tribal peoples ages ago (and impervious to change because they considered are “infallible”) young men can be remarkably ruthless toward their neighbors while remaining good husbands for their wives and fathers to their children. Why? Because every man and woman has a tiny fascist in them, a result of thousands of generations of small group competitions between tribal peoples. We have nurturing behavior sets also, the altruistic variant and good social norms that support the enlightened views of human potential that were expressed by the Buddha, Jesus, Gandhi, Lao Tzu, Micah and others from the Jewish tradition and the Sufi’s of Islam. We are not one, or the other—good, nor bad—we are both. And in the end, we decide which traits to express.

The enemy is not “them.” The enemy is a way of thinking that leads to war and sometimes genocide. Aleksandr Solzhenitsyn wrote from the Soviet gulag, “The battle lines between good and evil are not between political parties or nations. The battle lines between good and evil run through every human heart.” He was correct. But we wage wars on a fragile planet. Garrett Hardin warned us that the common resources of earth can easily be destroyed by individual greed (Hardin, 1968). Like the trees on Easter Island, they fall one tree at a time.

Many social scientists have criticized Hardin for later writing about “lifeboat ethics” and derivative topics, often on policy implications of the problem, but none have disproven his basic observation that “common resources” generally become degraded or even destroyed by overuse if not regulated by social conventions. The most obvious examples come from forest, fishery, and topsoil resources. So this distain for Hardin is not shared by most biologists who recognize that laws of nature are not really debatable, and don’t care what we think. It is what we should do about such natural laws and dynamics that generates political and other frictions.

Others fully recognize the power of these forces, but focus on different aspects at various times. For example, James G. Speth at Yale recently wrote a seminal book on the role of aggressive, growth oriented capitalism in this process (Speth, 2009) so some who prefer economic language incorrectly conclude that he has dismissed biology. But when he founded the National Resources Defense Council and helped publish the “Global 2000 Report to the President” for Jimmy Carter (Barney, 1980) as director of Carter’s Council on Environmental Quality, Speth was chock full of population demographics and resource projections of many kinds as he remains today. The dynamics of aggressive competition over limited resources can be described in economic language, in political language, in religious language or in biological language. These provide different words for the same phenomena. For example, any “chosen people” may pursue “no-restraints capitalism” to support “imperialist politics” to drive others from productive lands to provide more “Lebensraum” for the select elite. These are all just different ways to express the same fundamentally selfish, Darwinian goal of outbreeding others, and many variations can be found across political, geographic and ethnic spectrums.

A preferred term in national security circles for the current conflict is “The Long War” since many conclude that religious extremism will be with us for a very long time (much but not all Islamic), and much complicated by the proliferation of weapons of mass destruction. We are like the fragmented clans on Easter Island at its peak, where 20,000 or more people confronted the stark limits of their tiny island. Native Americans call this “turtle island” (either North America or the entire Earth depending on your informant). We must decide now whether to fight over who gets the rubble and deserts or to create a better future for all instead. The last vital lesson of behavior genetics is that while genes are powerful and environments are powerful molders of behavior, human beings have a get out of jail card called free will (Dobzhansky, 1962). This is not a myth. People can decide to do what is right, prudent and wise for the long term survival of both clan and the human species itself. Please do.

References:

- Ali, Ayaan Hirsi. Infidel. New York, NY: Free Press, imprint of Simon and Schuster, 2008.
- Altemeyer, Bob. Enemies of Freedom: Understanding Right-Wing Authoritarianism. San Francisco, CA: Jossey-Bass, 1988.
- Andregg, Michael. On the Causes of War. St. Paul, MN: Ground Zero Minnesota, 1997, 2007 (third edition). See especially Chapter 12 on “Population Pressure” and Chapter 13, on “Authoritarian Law and Militant Religion.” (pp. 62 – 83).
- Andregg, Michael. “Dakota Land in 1862, a Genocide Forgotten: How Civilizational Transformation Can Get Lost in the Fading Rate of History,” in Comparative Civilizations Review, No 59, Fall 2008, pp 73-98.
- Andregg, Michael. “An Interdemic Selection Model for the Evolution of Altruistic Traits.” In Genetics, 86:2, s2, 1977a.
- Andregg, Michael. “Interdemic Selection via Frequency Dependent Group Mortality.” In Behavior Genetics, 7:1, 1977b.
- Axelrod, Robert. The Evolution of Cooperation. New York, NY: Basic Books, 1984.

- Barney, Gerald O. ed. The Global 2000 Report to the President, ordered by Jimmy Carter, coordinated by the Council on Environmental Quality (under James G. Speth) and the US Department of State, and published by the US Government printing office, 1980.
- Choucri, Nazli and Robert C. North. Nations in Conflict, San Francisco, CA: Freeman, 1975.
- Diamond, Jared. Collapse: How Societies Choose to Fail or Succeed. New York, NY: Penguin Books, 2005.
- Dobzhansky, Theodosius. Mankind Evolving: The Evolution of the Human Species. New Haven CT: Yale University Press, 2009.
- Eckhardt, William. Civilizations, Empires and Wars: A Quantitative History of War. Jefferson, NC: McFarland and Co., 1992.
- Gat, Azar. War in Human Civilization. London, UK: Oxford University Press, 2006.
- German, Mike. Thinking like a Terrorist: Insights of a Former FBI Undercover Agent. Dulles, VA: Potomac Books, 2007.
- Hardin, Garrett. “The Tragedy of the Commons” in Science, Vol. 162, No. 3859, pp 1243 – 1248, December, 1968.
- Milgram, Stanley. Obedience to Authority: An Experimental View. New York, NY: Harper and Row, 1974.
- Peck, M. Scott. People of the Lie: The Hope for Healing Human Evil. New York, NY: Simon and Schuster, 1983.
- Solzhenitsyn, Aleksandr I. The Gulag Archipelago Volume I: An Experiment in Literary Investigation. Written in prison between 1958-68, first published in the west in 1973, reprinted in 2007 by Harper Perennial Modern Classics.
- Ponting, Clive. A New Green History of the World: The Environment and the Collapse of Great Civilizations. New York, NY: Penguin Books, 1991, 2nd edition, 2007.
- Speth, James G. The Bridge at the Edge of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability. New Haven, CT: Yale University Press, 2009.
- Tainter, Joseph A. The Collapse of Complex Societies. Cambridge, UK: Cambridge University Press, 1988.
- Vanhanen, Tatu. On the Evolutionary Roots of Politics. London, UK: Sterling Publishers, Private, Ltd., 1992.
- Zimbardo, Phil G. “The Power and Pathology of Imprisonment” in the Congressional Record (serial No. 15, 1971-10-25), Hearings before Subcommittee No. 3 of the Committee on the Judiciary, House of Representatives, 92nd Congress, First Session on Corrections, Part II, Prisons, Prison Reform and Prisoner’s Rights: California. Washington DC: U.S. Government Printing Office, 1971.