

GreenPolicy360 points our readers to a featured online site this week, **TomDispatch**.

As we posted of two of the greatest threats to humanity and quoted the great mind of Stephen Hawking earlier, today we witness Tom Engelhardt's excerpt from the latest book by another of the world's great minds, Noam Chomsky... Here's Stephen and Noam with their warnings to us.

[GreenLinks Trending News](#)

June 2016

As Stephen Hawking points to "runaway climate change", he also points at the other existential threat he sees -- [nuclear weapons](#). We at GreenPolicy360 and our associate [Strategic Demands](#) continue to point out escalating threats on both fronts, even as the political establishment rushes forward to modernize a new generation of nuclear, 'smart' weapons and the fossil fuel industry fights to continue business-as-usual with unmatched money and political influence.



Arms Control Assoc @ArmsControlNow · 17m

Weber: Nuclear cruise missiles are the most destabilizing form of nuclear weapons. #ArmsControl16

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Tick... Tick... Tick...

Posted by [Noam Chomsky](#) at 5:04pm, June 12, 2016

[Excerpted](#) from Noam Chomsky's new book, [Who Rules the World?](#)

He hadn't been in office three months when he went to Prague, capital of the Czech Republic, and [delivered remarks](#) on the world's nuclear dilemma. They proved to be of a sort that might normally have come from an antinuclear activist or someone in the then just-budding climate change movement, not the president of the United States. While calling for the use of new forms of energy, Barack Obama spoke with rare presidential eloquence of the dangers of a planet in which nuclear weapons were spreading and of how that spread, if unchecked, would make their use "inevitable." He called for a "world without nuclear weapons" and said bluntly, "As a nuclear power, as the only nuclear power to have used a nuclear weapon, the United States has a moral responsibility to act." He even promised to take "concrete steps" to begin to build just such a world without such weapons.

Seven years later, the record of America's first and possibly only abolitionist president is in. The U.S. nuclear arsenal -- at 4,571 warheads (far below the almost 19,000 in existence in 1991 when the Soviet Union imploded) -- remains large enough to destroy several Earth-sized

planets. [According to](#) the Federation of American Scientists, the latest Pentagon figures on that arsenal indicate that “the Obama administration has reduced the U.S. stockpile less than any other post-Cold War administration, and that the number of warheads dismantled in 2015 was [the] lowest since President Obama took office.” To put that in perspective, Obama has done significantly less than George W. Bush when it comes to drawing down the existing American arsenal.

At the same time, our abolitionist president is now presiding over the so-called [modernization](#) of that same arsenal, a massive three-decade project now [estimated](#) to cost at least a [trillion dollars](#) - - before, of course, the usual cost overruns set in. In the process, new weapons systems will be produced, the [first “smart” nukes](#) created (think: “precision” weapons with far more minimal “yields,” which means first-use battlefield nukes), and god knows what else.

He does have one antinuclear success, his agreement with Iran ensuring that country will not produce such a weapon. Still, such a dismal record from a president seemingly determined to set the U.S. on the abolitionist path tells us something about the nuclear dilemma and the [grip](#) the national security state has on his thinking (and assumedly that of any future president).

It’s no small horror that, on this planet of ours, humanity continues to foster two apocalyptic forces, each of which -- one in a relative instant and the other over many decades -- could cripple or destroy human life as we know it. That should be sobering indeed for all of us. It’s the subject that Noam Chomsky takes up in this essay from his remarkable new book, [Who Rules the World?](#) -- Tom

The Doomsday Clock

Nuclear Weapons, Climate Change, and the Prospects for Survival

By [Noam Chomsky](#)

[*This essay is excerpted from Noam Chomsky’s new book, [Who Rules the World?](#) (Metropolitan Books).*]

In January 2015, the *Bulletin of the Atomic Scientists* advanced its famous Doomsday Clock to three minutes before midnight, a threat level that had not been reached for 30 years. The *Bulletin’s* statement explaining this advance toward catastrophe invoked the two major threats to survival: nuclear weapons and “unchecked climate change.” The call condemned world leaders, who “have failed to act with the speed or on the scale required to protect citizens from potential catastrophe,” endangering “every person on Earth [by] failing to perform their most important duty -- ensuring and preserving the health and vitality of human civilization.”

Since then, there has been good reason to consider moving the hands even closer to doomsday.

As 2015 ended, world leaders met in Paris to address the severe problem of “unchecked climate change.” Hardly a day passes without new evidence of how severe the crisis is. To pick almost at random, shortly before the opening of the Paris conference, NASA’s Jet Propulsion Lab released a study that both surprised and alarmed scientists who have been studying Arctic ice. The study showed that a huge Greenland glacier, Zachariae Isstrom, “broke loose from a glaciologically stable position in 2012 and entered a phase of accelerated retreat,” an unexpected and ominous development. The glacier “holds enough water to raise global sea level by more than 18 inches (46 centimeters) if it were to melt completely. And now it’s on a crash diet, losing 5 billion tons of mass every year. All that ice is crumbling into the North Atlantic Ocean.”

Yet there was little expectation that world leaders in Paris would “act with the speed or on the scale required to protect citizens from potential catastrophe.” And even if by some miracle they had, it would have been of limited value, for reasons that should be deeply disturbing.

When the agreement was approved in Paris, French Foreign Minister Laurent Fabius, who hosted the talks, announced that it is “legally binding.” That may be the hope, but there are more than a few obstacles that are worthy of careful attention.

In all of the extensive media coverage of the Paris conference, perhaps the most important sentences were these, buried near the end of a long *New York Times* analysis: “Traditionally, negotiators have sought to forge a legally binding treaty that needed ratification by the governments of the participating countries to have force. There is no way to get that in this case, because of the United States. A treaty would be dead on arrival on Capitol Hill without the required two-thirds majority vote in the Republican-controlled Senate. So the voluntary plans are taking the place of mandatory, top-down targets.” And voluntary plans are a guarantee of failure.

“Because of the United States.” More precisely, because of the Republican Party, which by now is becoming a real danger to decent human survival.

The conclusions are underscored in another *Times* piece on the Paris agreement. At the end of a long story lauding the achievement, the article notes that the system created at the conference “depends heavily on the views of the future world leaders who will carry out those policies. In the United States, every Republican candidate running for president in 2016 has publicly questioned or denied the science of climate change, and has voiced opposition to Mr. Obama’s climate change policies. In the Senate, Mitch McConnell, the Republican leader, who has led the charge against Mr. Obama’s climate change agenda, said, ‘Before his international partners pop the champagne, they should remember that this is an unattainable deal based on a domestic energy plan that is likely illegal, that half the states have sued to halt, and that Congress has already voted to reject.’”

Both parties have moved to the right during the neoliberal period of the past generation. Mainstream Democrats are now pretty much what used to be called “moderate Republicans.” Meanwhile, the Republican Party has largely drifted off the spectrum, becoming what respected conservative political analyst Thomas Mann and Norman Ornstein call a “radical insurgency” that has virtually abandoned normal parliamentary politics. With the rightward drift, the Republican Party’s dedication to wealth and privilege has become so extreme that its actual

policies could not attract voters, so it has had to seek a new popular base, mobilized on other grounds: evangelical Christians who await the Second Coming, nativists who fear that “they” are taking our country away from us, unreconstructed racists, people with real grievances who gravely mistake their causes, and others like them who are easy prey to demagogues and can readily become a radical insurgency.

In recent years, the Republican establishment had managed to suppress the voices of the base that it has mobilized. But no longer. By the end of 2015 the establishment was expressing considerable dismay and desperation over its inability to do so, as the Republican base and its choices fell out of control.

Republican elected officials and contenders for the next presidential election expressed open contempt for the Paris deliberations, refusing to even attend the proceedings. The three candidates who led in the polls at the time -- Donald Trump, Ted Cruz, and Ben Carson -- adopted the stand of the largely evangelical base: humans have no impact on global warming, if it is happening at all.

The other candidates reject government action to deal with the matter. Immediately after Obama spoke in Paris, pledging that the United States would be in the vanguard seeking global action, the Republican-dominated Congress voted to scuttle his recent Environmental Protection Agency rules to cut carbon emissions. As the press reported, this was “a provocative message to more than 100 [world] leaders that the American president does not have the full support of his government on climate policy” -- a bit of an understatement. Meanwhile Lamar Smith, Republican head of the House’s Committee on Science, Space, and Technology, carried forward his jihad against government scientists who dare to report the facts.

The message is clear. American citizens face an enormous responsibility right at home.

A companion story in the *New York Times* reports that “two-thirds of Americans support the United States joining a binding international agreement to curb growth of greenhouse gas emissions.” And by a five-to-three margin, Americans regard the climate as more important than the economy. But it doesn’t matter. Public opinion is dismissed. That fact, once again, sends a strong message to Americans. It is their task to cure the dysfunctional political system, in which popular opinion is a marginal factor. The disparity between public opinion and policy, in this case, has significant implications for the fate of the world.

We should, of course, have no illusions about a past “golden age.” Nevertheless, the developments just reviewed constitute significant changes. The undermining of functioning democracy is one of the contributions of the neoliberal assault on the world’s population in the past generation. And this is not happening just in the U.S.; in Europe the impact may be even worse.

The Black Swan We Can Never See

Let us turn to the other (and traditional) concern of the atomic scientists who adjust the Doomsday Clock: nuclear weapons. The current threat of nuclear war amply justifies their

January 2015 decision to advance the clock two minutes toward midnight. What has happened since reveals the growing threat even more clearly, a matter that elicits insufficient concern, in my opinion.

The last time the Doomsday Clock reached three minutes before midnight was in 1983, at the time of the Able Archer exercises of the Reagan administration; these exercises simulated attacks on the Soviet Union to test their defense systems. Recently released Russian archives reveal that the Russians were deeply concerned by the operations and were preparing to respond, which would have meant, simply: The End.

We have learned more about these rash and reckless exercises, and about how close the world was to disaster, from U.S. military and intelligence analyst Melvin Goodman, who was CIA division chief and senior analyst at the Office of Soviet Affairs at the time. “In addition to the Able Archer mobilization exercise that alarmed the Kremlin,” Goodman writes, “the Reagan administration authorized unusually aggressive military exercises near the Soviet border that, in some cases, violated Soviet territorial sovereignty. The Pentagon’s risky measures included sending U.S. strategic bombers over the North Pole to test Soviet radar, and naval exercises in wartime approaches to the USSR where U.S. warships had previously not entered. Additional secret operations simulated surprise naval attacks on Soviet targets.”

We now know that the world was saved from likely nuclear destruction in those frightening days by the decision of a Russian officer, Stanislav Petrov, not to transmit to higher authorities the report of automated detection systems that the USSR was under missile attack. Accordingly, Petrov takes his place alongside Russian submarine commander Vasili Arkhipov, who, at a dangerous moment of the 1962 Cuban Missile Crisis, refused to authorize the launching of nuclear torpedoes when the subs were under attack by U.S. destroyers enforcing a quarantine.

Other recently revealed examples enrich the already frightening record. Nuclear security expert Bruce Blair reports that “the closest the U.S. came to an inadvertent strategic launch decision by the President happened in 1979, when a NORAD early warning training tape depicting a full-scale Soviet strategic strike inadvertently coursed through the actual early warning network. National Security Adviser Zbigniew Brzezinski was called twice in the night and told the U.S. was under attack, and he was just picking up the phone to persuade President Carter that a full-scale response needed to be authorized right away, when a third call told him it was a false alarm.”

This newly revealed example brings to mind a critical incident of 1995, when the trajectory of a U.S.-Norwegian rocket carrying scientific equipment resembled the path of a nuclear missile. This elicited Russian concerns that quickly reached President Boris Yeltsin, who had to decide whether to launch a nuclear strike.

Blair adds other examples from his own experience. In one case, at the time of the 1967 Middle East war, “a carrier nuclear-aircraft crew was sent an actual attack order instead of an exercise/training nuclear order.” A few years later, in the early 1970s, the Strategic Air Command in Omaha “retransmitted an exercise... launch order as an actual real-world launch

order.” In both cases code checks had failed; human intervention prevented the launch. “But you get the drift here,” Blair adds. “It just wasn’t that rare for these kinds of snafus to occur.”

Blair made these comments in reaction to a report by airman John Bordne that has only recently been cleared by the U.S. Air Force. Bordne was serving on the U.S. military base in Okinawa in October 1962, at the time of the Cuban Missile Crisis and a moment of serious tensions in Asia as well. The U.S. nuclear alert system had been raised to DEFCON 2, one level below DEFCON 1, when nuclear missiles can be launched immediately. At the peak of the crisis, on October 28th, a missile crew received authorization to launch its nuclear missiles, in error. They decided not to, averting likely nuclear war and joining Petrov and Arkhipov in the pantheon of men who decided to disobey protocol and thereby saved the world.

As Blair observed, such incidents are not uncommon. One recent expert study found dozens of false alarms every year during the period reviewed, 1977 to 1983; the study concluded that the range is 43 to 255 per year. The author of the study, Seth Baum, summarizes with appropriate words: “Nuclear war is the black swan we can never see, except in that brief moment when it is killing us. We delay eliminating the risk at our own peril. Now is the time to address the threat, because now we are still alive.”

These reports, like those in Eric Schlosser’s book *Command and Control*, keep mostly to U.S. systems. The Russian ones are doubtless much more error-prone. That is not to mention the extreme danger posed by the systems of others, notably Pakistan.

“A War Is No Longer Unthinkable”

Sometimes the threat has not been accident, but adventurism, as in the case of Able Archer. The most extreme case was the Cuban Missile Crisis in 1962, when the threat of disaster was all too real. The way it [was handled](#) is shocking; so is the manner in which it is commonly interpreted.

With this grim record in mind, it is useful to look at strategic debates and planning. One chilling case is the Clinton-era 1995 STRATCOM study “Essentials of Post-Cold War Deterrence.” The study calls for retaining the right of first strike, even against nonnuclear states. It explains that nuclear weapons are constantly used, in the sense that they “cast a shadow over any crisis or conflict.” It also urges a “national persona” of irrationality and vindictiveness to intimidate the world.

Current doctrine is explored in the lead article in the journal *International Security*, one of the most authoritative in the domain of strategic doctrine. The authors explain that the United States is committed to “strategic primacy” -- that is, insulation from retaliatory strike. This is the logic behind Obama’s “new triad” (strengthening submarine and land-based missiles and the bomber force), along with missile defense to counter a retaliatory strike. The concern raised by the authors is that the U.S. demand for strategic primacy might induce China to react by abandoning its “no first use” policy and by expanding its limited deterrent. The authors think that they will not, but the prospect remains uncertain. Clearly the doctrine enhances the dangers in a tense and conflicted region.

The same is true of NATO expansion to the east in violation of verbal promises made to Mikhail Gorbachev when the USSR was collapsing and he agreed to allow a unified Germany to become part of NATO -- quite a remarkable concession when one thinks about the history of the century. Expansion to East Germany took place at once. In the following years, NATO expanded to Russia's borders; there are now substantial threats even to incorporate Ukraine, in Russia's geostrategic heartland. One can imagine how the United States would react if the Warsaw Pact were still alive, most of Latin America had joined, and now Mexico and Canada were applying for membership.

Aside from that, Russia understands as well as China (and U.S. strategists, for that matter) that the U.S. missile defense systems near Russia's borders are, in effect, a first-strike weapon, aimed to establish strategic primacy -- immunity from retaliation. Perhaps their mission is utterly unfeasible, as some specialists argue. But the targets can never be confident of that. And Russia's militant reactions are quite naturally interpreted by NATO as a threat to the West.

One prominent British Ukraine scholar poses what he calls a "fateful geographical paradox": that NATO "exists to manage the risks created by its existence."

The threats are very real right now. Fortunately, the shooting down of a Russian plane by a Turkish F-16 in November 2015 did not lead to an international incident, but it might have, particularly given the circumstances. The plane was on a bombing mission in Syria. It passed for a mere 17 seconds through a fringe of Turkish territory that protrudes into Syria, and evidently was heading for Syria, where it crashed. Shooting it down appears to have been a needlessly reckless and provocative act, and an act with consequences.

In reaction, Russia announced that its bombers will henceforth be accompanied by jet fighters and that it is deploying sophisticated anti-aircraft missile systems in Syria. Russia also ordered its missile cruiser *Moskva*, with its long-range air defense system, to move closer to shore, so that it may be "ready to destroy any aerial target posing a potential danger to our aircraft," Defense Minister Sergei Shoigu announced. All of this sets the stage for confrontations that could be lethal.

Tensions are also constant at NATO-Russian borders, including military maneuvers on both sides. Shortly after the Doomsday Clock was moved ominously close to midnight, the national press reported that "U.S. military combat vehicles paraded Wednesday through an Estonian city that juts into Russia, a symbolic act that highlighted the stakes for both sides amid the worst tensions between the West and Russia since the Cold War." Shortly before, a Russian warplane came within seconds of colliding with a Danish civilian airliner. Both sides are practicing rapid mobilization and redeployment of forces to the Russia-NATO border, and "both believe a war is no longer unthinkable."

Prospects for Survival

If that is so, both sides are beyond insanity, since a war might well destroy everything. It has been recognized for decades that a first strike by a major power might destroy the attacker, even without retaliation, simply from the effects of nuclear winter.

But that is today's world. And not just today's -- that is what we have been living with for 70 years. The reasoning throughout is remarkable. As we have seen, security for the population is typically not a leading concern of policymakers. That has been true from the earliest days of the nuclear age, when in the centers of policy formation there were no efforts -- apparently not even expressed thoughts -- to eliminate the one serious potential threat to the United States, as might have been possible. And so matters continue to the present, in ways just briefly sampled.

That is the world we have been living in, and live in today. Nuclear weapons pose a constant danger of instant destruction, but at least we know in principle how to alleviate the threat, even to eliminate it, an obligation undertaken (and disregarded) by the nuclear powers that have signed the Non-Proliferation Treaty. The threat of global warming is not instantaneous, though it is dire in the longer term and might escalate suddenly. That we have the capacity to deal with it is not entirely clear, but there can be no doubt that the longer the delay, the more extreme the calamity.

Prospects for decent long-term survival are not high unless there is a significant change of course. A large share of the responsibility is in our hands -- the opportunities as well.

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