

EE190: Nuclear Weapons, Risk and Hope

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Reading for next class

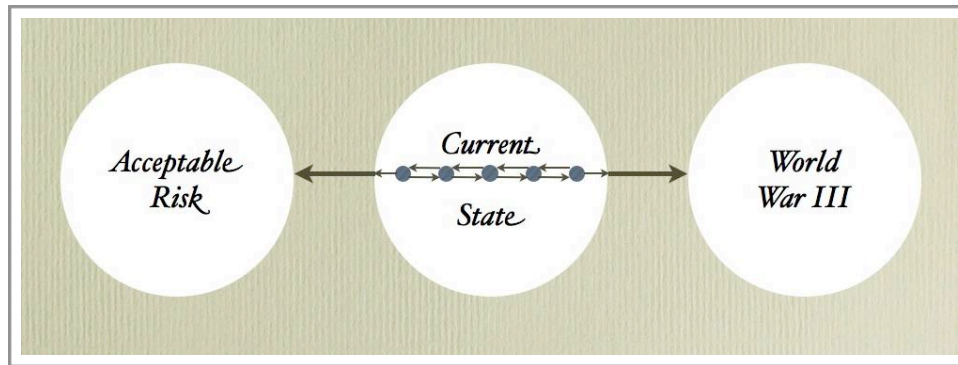
Read this handout.

Read at least #1, #2, #9 and #10 of the following brief articles (but not the reader comments) on the August 2008 Georgian war. The others are optional, but highly recommended. If you don't have time to read them all, try some at random to get a flavor. My goal is to illuminate the risk involved when Americans see unprovoked Russian aggression, while Russians see themselves as attacked by Georgia:

1. [A Newsweek article on the danger of appeasing the Russians](#)
2. [The view of a former Special Assistant to President Reagan](#)
3. [The view of a former advisor on Soviet affairs to President Nixon](#)
4. [The danger present even in our limited response](#)
5. [The view of conservative columnist Patrick Buchanan](#)
6. [More from Patrick Buchanan](#)
7. [The view of a former State Department and Pentagon official](#)
8. [Der Spiegel's take on the EU Investigation](#) (when the report later came out, it found neither side was blameless, but that Georgia fired the first shots).
9. [A year after the war, there is danger of a rematch](#)
10. [A dangerous Georgian hoax](#)

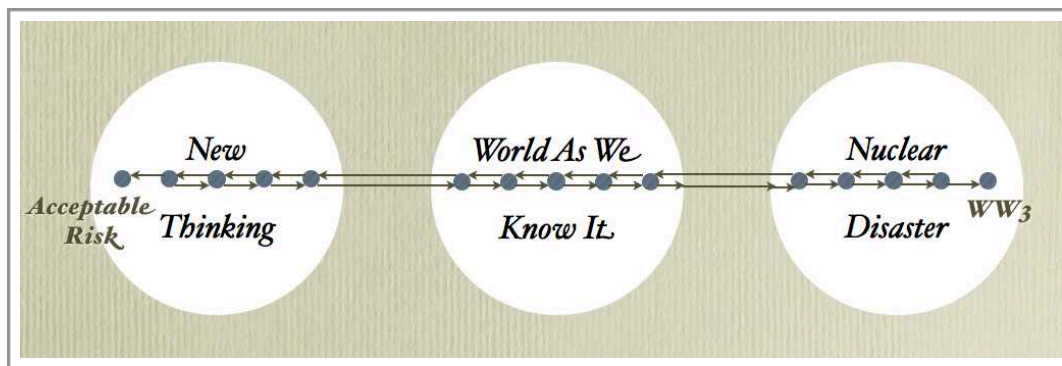
Envisioning the Inconceivable

My article "[Soaring, Cryptography and Nuclear Weapons](#)," presents the ideas behind risk analysis in a non-technical way in a 10-15 minute read. However, it does not adequately link the danger of nuclear war with those of nuclear terrorism and proliferation. I am working on a re-write to do that, and in the meantime, this update gives the key change in that regard: The current version of the paper uses the following diagram to illuminate how a sequence of mistakes can lead to full-scale nuclear war.



Most of the time, we are in a relatively safe state toward the middle of the world's *Current State*. The danger occurs rarely – but not rarely enough – when we move to one of the riskier states closer to the brink. For example, the article lists six key steps that led to the Cuban Missile Crisis and describes modern-day analogs to five and a half of those that had occurred by July 2008. We have since recovered from that extremely dangerous situation and, since the last half step to a full-blown crisis did not occur, most people are unaware how close we came. (See the article for details.)

In order to better illuminate the links between nuclear war, nuclear terrorism and nuclear proliferation, I am planing on using the new diagram shown below in the re-write.



Now, World War III is the final state within a *Nuclear Disaster* super-state. The area between the *World As We Know It* and *Nuclear Disaster* is the nuclear threshold and is crossed when a first nuclear weapon is used in anger.

The first state within the *Nuclear Disaster* super-state could be a nuclear terrorist incident, a nuclear war between India and Pakistan, or an accidental use of an American or Russian nuclear weapon. Clearly, once the nuclear threshold is crossed, we are in a totally new situation where the risk of a Russian-American confrontation is greatly increased. While fictional and with some holes in it, the movie *The Sum of All Fears* graphically communicates how a terrorist nuclear attack could produce a crisis with the potential to catalyze a full-scale nuclear war.

The new diagram also helps illuminate the possibility of a solution by breaking down the move to a state of acceptable risk into the crossing of a positive threshold, followed by a sequence of moves that eventually lead to a state of acceptable risk. The new superstate is labeled *New Thinking*, based on Albert Einstein's famous statement: "The unleashed power of the atom has changed everything save our modes of thinking and we thus drift toward unparalleled catastrophe." If "old thinking" leads to catastrophe, "new thinking" is needed to avert it.

I define this new, positive threshold as being crossed when the world's nuclear arsenals have been reduced to a total 500 weapons. While still a very dangerous state, that would imply that the US has less than 300 weapons and has moved beyond the current thinking that a very large number of nuclear weapons is essential to our national security. In contrast, Clinton's nominee for Secretary of Defense, Adm. Bobby Inman¹, has signed my [statement](#) that says "Russia and the United States each have thousands of nuclear weapons, whereas a few hundred would more than deter any rational actor and no number will deter an irrational one. Either side could therefore reduce its nuclear arsenal with little to no loss in national security, even if the other side did not immediately reciprocate. In light of the growing specter of nuclear terrorism, a reduced nuclear arsenal could even enhance national security by lessening the chance for theft or illicit sale of a weapon."

These diagrams, and particularly the new one, help explain why people have difficulty envisioning both the negative and the positive possibilities. Right now, we are in one of the states in the middle of the *World As We Know It* super-state, and there is almost no chance of either World War III or reducing the risk to an acceptable level. But, just as six missteps led to the brink of the nuclear abyss in 1962 that was previously inconceivable, a small number of positive steps might take us to a vantage point from which we will be able to envision a world far better than any now conceivable. The brief euphoria surrounding the end of the Cold War, may have been such a time and could account for that era's [vision of Reykjavik](#) that George Shultz, William Perry, Henry Kissinger and Sam Nunn are trying to revive.

Excerpts from Peter Vincent Pry's book, *War Scare* (Praeger, Westport, CT, 1999)

Note: If you would like to borrow my copy of the book or see all my notes on it, let me know. There was too much to ask you to read it all. Some have accused Pry of scare mongering, but reading just for the facts (and discounting his opinion) can eliminate any danger of that.

Page x: (referring to the September-October 1993 Russian coup attempt) What were you doing on October 4, 1993? I was making a desperate phone call from

¹ When a confirmation battle loomed, Adm. Inman withdrew his name and William Perry subsequently became Secretary of Defense.

the headquarters of North American Air Defense and Space Command in Colorado Springs, to my wife in Washington, D. C. I told her to take our kids out of school and head for the hills, because the Russians might launch a nuclear attack.

This was no joke. On that day, a half-dozen other intelligence and strategic warning officers from the Central intelligence Agency, National Security Agency, and Defense Intelligence Agency made similar phone calls to their families.

I remember October 4, 1993 with the same crystalline clarity that I recall October 22, 1962.

Page 117, second full paragraph: The Ukrainian crisis and other recent events had put Moscow in a frame of mind to expect the worst as the Armenia-Azerbaijan war threatened to bring in Turkey, a NATO member. In February 1992, three months before the May crisis, a classified U.S. Defense Department study was leaked to the press, revealing that U.S. military planners were thinking about how to prosecute a war with Russia in the event that Moscow invaded the Baltic states [which were newly independent of the Soviet Union]. The Russian government and military widely condemned the U.S. research as, in the words of an Izvestia article, preparing for the ‘start of a large-scale war against Russia by the United States and NATO.’ ... The next month, March 1992, saw a spate of accusations by the Russian navy that U.S. nuclear submarines were invading Russian territorial waters [a quite possible scenario, something we and the Russians routinely did, at least in the past] ... A senior Russian Navy officer proposed to a reporter that Russia should attack the U.S. submarines... On February 11, 1992, the U.S. nuclear attack submarine Baton Rouge collided with a Russian submarine in the Barents Sea near the naval base at Murmansk. Moscow exploded with denunciations from the military, claiming proof positive of the United States’ immediate hostile intentions. [Yet,] in the United States, on January 2, 1992, CIA director Robert M. Gates testified before the Senate Armed Services Committee that the Russian threat of conventional or nuclear attack on the United States or its allies “has all but disappeared for the foreseeable future.”

Page 133, five lines from the bottom: Another example of Russian governmental failure occurred in 1993, involving General Aleksandr Lebed. As the controversial commander of Russia’s 14th Army, based in Moldova, Lebed appeared determined to remain in permanent occupation of that independent nation – in open defiance of Moscow. ... (page 134, last two lines) Russian society was sliding toward anarchy. ... (page 135, first full paragraph) Homelessness among about 180,000 Russian military officers had driven many to desperate measures to care for their families, including selling weapons and illegally serving as mercenaries in local border conflicts.... (page 135, second full paragraph) Russia’s burgeoning internal crisis could threaten the West directly if it led to irresponsible or criminal behavior among soldiers entrusted with weapons of mass destruction.... Deputy Defense Minister Andrey Kokoshin, in a July 1994 interview, admitted that “A real threat arose somewhere at the

beginning of 1992 of losing controllability of the armed forces”... Kokoshin acknowledged that the internal problems with the Russian armed forces threaten global security... (page 135, third full paragraph) Sergey Rogov, a prominent civilian defense expert and Deputy Director of the Institute of the USA and Canada made Andrey Kokoshin seem like an optimist. In Rogov’s view, given in a November 1993 interview, the Russian military was already out of control.... (last paragraph) In 1993 the Russian military appeared – and it still does today – to be pursuing a number of military programs autonomously, without the knowledge or approval of Russia’s President or other civilian leaders.... (page 136, first full paragraph) An uncontrolled Russian military could disobey its political masters and destroy the West. Ever since the collapse of the USSR, Russia’s political leaders and General Staff spokesmen have repeatedly told Western audiences that a war between former Soviet states, or a civil war within Russia, would somehow likely mushroom into a world nuclear holocaust.... It’s not clear whether this was a scare tactic to solicit help from the West, a friendly warning – or a threat.... Consider the views of the “Black Colonel,” Viktor Alksnis, expressed in December 1991, after the disintegration of the USSR: “It is impossible to predict the future of our nuclear weapons today. I talked to a commander of a submarine equipped with nuclear arms. He told me that he would immediately carry out the maximum strike possible if anyone should try to put our nuclear weapons under international control. He will not wait for an order from Moscow, he said... A civil war in the [former] USSR would lead to a Third World War ... If our state truly collapses, it will take the whole world with it into the grave.”

Page 146, first paragraph through fourth paragraphs: Arbatov [a dove] spoke, reluctantly and even painfully... “in the future, Russia will frankly acknowledge its nuclear first strike policy.... Russia may acknowledge the possible preemptive use of nuclear weapons at an early stage of conventional war.” Stunned silence. ... “The first use option is not directed at all against the West or the US, but rather obviously against China. But should NATO extended southeastward and move directly up to Russia’s border, and Russia would feel threatened and the first use option would apply against NATO as well.” [This was said on June 11, 1993. Since then NATO has expanded right up to the Russian borders, and most Americans seem to support NATO membership for Georgia and Ukraine.]

Page 178: Nothing less than planetary survival was at stake during the failed coup of September-October 1993. As during the coup of August 1991, the Russian General Staff again feared that the West might see the disruption among Russia's armed forces and populous as an opportunity for launching a surprise attack. As noted earlier, Russian preparations for war were manifold.... Russia's war preparations were scarcely noticed in the Western press and, when noted, were misconstrued as being focused inwardly against the coup, not against the United States.