Dr. Gingrich AP Language and Composition March 2006
MAD About Vertical Proliferation of Nuclear Weapons

Was everything much easier when the only threat to the human race was
annihilation from nuclear war between the United States and Soviet Union?
In August of 1945 the world watched more than 100,000 people die as the United States abruptly brought an end to World War II by dropping atomic bombs on Hiroshima and Nagasaki, Japan. The attacks were the culmination of the Manhattan Project, a joint Anglo-American undertaking to expand upon the work of physicists like Albert Einstein for the purpose of developing nuclear weapons. By July 1945, the world's first four atomic bombs had been created and were ready for detonation. On the morning of July 16, the US Army planned to conduct a test of the weapon in Los Alamos, New Mexico. The bomb that was dropped utilized an implosion type core, where a chain reaction of ordinary explosions would squeeze the plutonium core to the size of a walnut. When the core reached its "critical mass" the nuclei of the atoms would begin to collide with enormous frequency creating an immense release of energy which results in a nuclear explosion.

Scientists involved in the project expected one of three outcomes from the test at Los Alamos. The test may have fallen short of expectations and only explode in the range of 3,000 tons of TNT, only slightly more powerful than the most potent conventional weapons of the time. The explosion might have failed entirely in creating a nuclear explosion, making the Manhattan Project the world's most costly scientific failure, even to the present day. The third possible consequence of the explosion was more horrific than failed expectations or monetary loss. Speculation among some scientists held that the explosion could conceivably ignite the atmosphere, causing an extinction of nearly all life on Earth. Yet much to the delight of some scientists, and the dismay of others, the test successfully created an explosion equivalent to nearly 20,000 tons of TNT. The event that occurred at 5:29:45 AM on July 16, 1945 in Los Alamos, New Mexico changed the world more than perhaps any other single event in human history (Szasz).
Since the end of World War II, ten countries have successfully developed their own nuclear weapons. Five of them, the United States, Russia, England, France and China, have officially acknowledged their status as nuclear states. Two others, India and Pakistan, have conducted their own nuclear tests, most recently in 1998. South Africa at one time possessed nuclear weapons, but has since disarmed. Israel and North Korea, though never acknowledging nor denying their status as a nuclear power and having never conducted nuclear tests, are each known to possess nuclear weapons; Israel is thought to have in excess of one hundred nuclear capable warheads. ("Countries with Nuclear Weapons Capablity")

The proliferation of nuclear technology and weapons raises many questions within the international community. Does the spread of nuclear weapons destabilize regions and create the possibility for war? Or can proliferation be a positive catalyst for peace by creating a deterrent to large scale war? Are the calls from western countries for non- proliferation rooted in racist or Eurocentric predispositions? Does a country have a right to possess the capability of powering its cities with nuclear energy? Where should we draw the line when limiting the spread of nuclear weapons? And should countries that already possess nuclear weapons be permitted to expand upon their arsenal? These questions make up the complicated debate in world politics today about the spread of nuclear weapons.

Kenneth Waltz has become one of the foremost authors who writes about nuclear proliferation. His name has become synonymous with nuclear deterrence, the idea that the risk of destruction from nuclear war prevents countries from going to war. During the 1980s he made the astute observation that the nuclear era has created "some of the longest periods of great power stability in all of modern history" (Sagan and Waltz, 54). Waltz also recognizes that the twentieth century began as the most bloody in human history. Twenty million died in the First World War, another five million in Russia's Leninist Revolution, and over fifty million in World War II ("List of wars and disasters by death toll"). Yet following World War II, the death toll resulting from wars sharply decreased. Although conflict between nuclear states did not disappear, Waltz reasoned that "the presence of nuclear weapons prevented escalation from major skirmish to full-scale war". The reason behind this relative peace is simple: Mutually Assured Destruction, M.A.D. for short. The Cold War was a period of peace between the world's superpowers because each recognized that a full scale war would not create a winner and a loser; each country would lose because of the destruction and death that would result from a nuclear conflict. Imagine American military commanders seeing hundreds of missiles approaching the United States on the radar. The President gives the order to launch hundreds of nuclear weapons at Soviet military and civilian points of interest. The two countries become locked in a back and forth battle which leaves nearly every major city in North America, Asia, and Europe in ruins. For the leaders of nuclear states across the world, this risk of massive death was ethically unjustifiable, regardless of their political predisposition. Thus nuclear weapons would prevent the escalation of wars. This reasoning is the heart of Waltz's philosophy on the spread of nuclear weapons: the more the better (Sagan and Waltz, 58).

This form of conflict prevention was fully played out in October of 1962. The United States military had detected nuclear sites being constructed in Cuba, just ninety miles off of Florida. The Soviet Union was placing on the island nuclear weapons that had the potential to strike almost anywhere in the continental US. President Kennedy was faced with a grave catch-22. To take action against Cuba or the USSR would almost certainly invoke nuclear conflict between the superpowers, but to do nothing would also invite Soviet attack predicated upon the perception of weak American resolve. Kennedy decided to take several steps in order to toe the line. He began by immediately imposing a naval "quarantine" of Cuba, to prevent the influx of more Soviet ships. The President then used a tool rarely utilized in the face of such conflict. He did not make an aggressive move against the USSR, nor did he decide to immediately engage in diplomatic negotiations with the Soviets. All Kennedy did was make a speech to the American people and people of the world explaining the situation in the Caribbean and denouncing the Soviet Unions actions as cowardly. The President then informed the world that an attack on the United States would surely be followed by "a full retaliatory response upon the Soviet Union." His dogged stance epitomized a decision made with mutually assured destruction in mind. Rather than confront the Soviet Unions actions directly, President Kennedy simply reminded Soviet premier Nikita Khrushchev of the potential consequences of aggressive actions by either nation. In a quite ironic way, the mere threat of the use of nuclear weapons prevented a nuclear or conventional war ("Cuban Missile Crisis").

Throughout the Cold War, the M.A.D. model of conflict prevention seemed to be an effective one. Nuclear war was successfully avoided and Waltz's theory on nuclear deterrence was substantiated over and over again. But the end of the Cold War ushered in a new era of nuclear proliferation. Smaller, less stable countries like North Korea have begun to seek their own nuclear arsenals, creating significant international instability. North Korea primarily sought its nuclear weapons as a means of deterrence. It feared a 'regime change' by the United States and chose to use nuclear weapons as a deterrent to American attack. This form of deterrence has negative consequences. Scott Sagan argues that nations acquiring nuclear technology for the first time will tend to have less sophisticated security measures and information channels. For this reason, an accidental launch is more likely. Many people recognize the Cuban Missile Crisis as the closest that the United States and Soviet Union came to nuclear conflict, but very few are aware of how dangerously close we came to nuclear war after the Cold War ended. On January 25, 1995 the Russian military saw on radar what appeared to be a United States submarine-launched, multistage rocket equipped with a nuclear warhead. What they were actually seeing was a research rocket fired by the United States and Norway from an island near the border of Russia. Russian President Boris Yeltsin, believing to be under attack, came within minutes of ordering a retaliatory attack on the United States. For the first time in Russian or Soviet history, the briefcase that is used to order nuclear attacks was activated for emergency use. Just minutes before Russia was to launch nuclear weapons at the United States, the radar crew saw the rocket make a turn and head toward the open ocean (Kimball). This scenario plays out Sagan's worst fear; if an accident, miscalculation or blip on the radar can cause a near- accidental launch by Russia, what will prevent new nuclear states with inferior technologies from starting accidental wars of their own? For Sagan and other anti-proliferation advocates, the use of any nuclear weapon is unjustifiable and the fewer nuclear weapons that exist is less likelihood that of one of them would be used (Chapman).

This risk of accidental launch by a new nuclear state is especially troubling now, with Iran seeking its own nuclear capability. Although most nations believe the country is pursuing nuclear weapons, Iran vehemently argues that its nuclear research is only for peaceful means. This begs the question, does a country have a right to harness nuclear power produced within their border, just as it has a right to utilize the oil or natural gas it creates? Nuclear energy certainly provides benefits to a nation's economy and environment that other forms of energy cannot create. Nuclear reactors have been found to be some of the most efficient mechanisms for creating energy. For a developing nation, the availability nuclear power would circumvent the necessity to build up its economy in order to import oil or other energy sources. A single nuclear reactor could potentially power an entire city. Some environmentalists also support the use of nuclear energy. Safe and secure nuclear facilities protect the environment by eliminating the large amounts of toxic emissions created by oil or coal fueled power plants (Lipper and Stone). Given these benefits, some non- nuclear states cry foul at opposition, by mostly western nations, to the spread of nuclear technologies. Some advocates of nuclear technology spread go so far as to consider anti-proliferation rhetoric as Eurocentric, even racist. They believe that it underscores the belief that western countries that possess nuclear technology are, for some reason, more responsible than other "irresponsible" nations (Kapur).

This line of reasoning has its faults though. Although only nine countries possess nuclear weapons, thirty two currently have at least one nuclear reactor producing energy. When it comes to nuclear energy, the international community has been relatively liberal in allowing countries to harness the power of the atom. There are 441 reactors currently in operation in all continents except Australia and Antarctica. Iran claims that the opposition to its nuclear program discriminates against the Muslim nation, but it ignores the fact that both Turkey and Egypt have nuclear programs that are endorsed by the international community. The reality is that in India and Pakistan the construction of nuclear reactors for "peaceful" uses preceded the construction of nuclear weapons (World Nuclear Reactors). There is no discrimination going on against Iran, the issue is merely a question of balancing ethics with utilitarianism. There are effective means for countries to acquire nuclear energy sources. A country that wishes to receive nuclear power should be able to appeal to the United Nations and Nuclear Suppliers Group. Under strict surveillance from the International Atomic Energy Agency, a country could begin to use nuclear power. In instances where a country is unwilling to cooperate with international actors, opposition to its nuclear program and sanctioning would be a legitimate course of action. It would also be acceptable for the United Nations to require a country to ratify the Non-Proliferation Treaty before being granted nuclear energy.

Even though the resource of nuclear energy should be made more available, the creation of nuclear weapons, whether to new nations or within countries that already have the bomb, should be contained. To achieve this ideal would take numerous steps. First, it must be recognized that the MAD model of deterrence essentially fails in today's world. During the Cold War, the bipolar nature of international relations guaranteed that a country knew who was its friend and who was its enemy. Now the line has become blurred. Regional conflicts are more common, and the threshold for the use of nuclear weapons has been decreased. Also, the understanding of nuclear weapons by small countries has changed; no longer do all nuclear states view the weapons as a last resort, regional proliferators view nuclear weapons as weapons to be used early in a conflict (Joseph). Mutually assured destruction also fails to account for the possibility of nuclear terrorism. A proliferating nation with ties to a terrorist organization may be willing to provide the organization with nuclear materials. Once the terrorist acquires the weapons, she or he may see little disincentive to using it, as they would not fear a nuclear retaliatory attack (Sagan and Waltz).

A second step that must be taken in order to prevent nuclear weapon proliferation deals with a change in United States foreign and domestic policy. The primary reason that North Korea sought nuclear weapons was because of the risk of attack by the United States. North Korea, after seeing the United States begin a preemptive war in Iraq, feared the possibility that America may decide a regime change is necessary on the Korea Peninsula. The same holds true with Iran. If United States foreign policy were made less aggressive in nature, then countries like these would not take these steps to deter an attack. Issues of domestic policy must be resolved also. The United States must send the message to all countries that an end to nuclear testing is absolutely imperative. To do this, the Congress must both extend policies that exist in the status quo and create new ones. The moratorium on nuclear testing that has existed since 1992 must be continued. The Senate should ratify the Comprehensive Test Ban Treaty, which was signed by President Clinton. The treaty, opposed by President Bush, guarantees that signatories will not engage in nuclear tests of any kind (United States Overview).

The conclusion of the Cold War may have created more problems with regard to nuclear proliferation than it resolved. Becuase United States was left as the world's only superpower, other countries have begun to contend for global preeminence. The way in which the United States deals with these countries is the critical question in world politics today. Because an aggressive, unilateral approach only invites counter-balancing and proliferation, America must create cooperation in the international community in order to address these problems. Accommodating the energy needs of nations, while at the same time doing everything necessary to prevent the creation of nuclear weapons is the best way to make the world more peaceful.Perhaps Albert Einstein had the right idea when he said of nuclear technology, "If only I had known, I should have become a watchmaker."

"Countries with Nuclear Weapons Capability." Infoplease. 2005. High Beam Research. 2006 March 11. < http://www.infoplease.com/ipa/A0762462.html> Chapman, Steve. "Learning to Love the Bomb: Is Nuclear Proliferation Inherently Dangerous?" Reason Online. February 2003. Reason Foundation.
<http://www. reason.com/0302/cr.sc.learning.shtml> "Cuban Missile Crisis." Encarta Encyclopedia Deluxe 2003. CD-ROM. Redmond, WA: Microsoft, 2002. Joseph, Robert G., "Nuclear Deterrence and Regional Proliferators." The Washington Quarterly. Summer 1997: 167. Kapur, Ashok. "Western Biases." Bulletin of Atomic Scientists. January/ February 1995: 56-61. Kimball, Daryl. "Standing Down US and Russian Nuclear Weapons: The Time for Meaningful Action is Now." Coalition to Reduce Nuclear Dangers. 2001 April 27. 2006 March 11. < http://www.clw.org/archive/coalition/briefv5n8.htm> Lipper, Ilan and Jon Stone. "Nuclear Energy and Society." How to Build a Habitable Planet. 1998. University of Michigan. 2006 March 22. < http://www.umich.edu/ ~gs265/society/nuclear.htm> "List of wars and disasters by death toll." Wikipedia. 2006. Wikipedia Foundation, Inc. 2006 March 11. <http://en.wikipedia.org/wiki/List\_of\_wars\_and\_disasters\_by\_
death\_toll> Sagan, Scott D., and Kenneth N. Waltz, The Spread of Nuclear Weapons: A Debate Renewed. New York: W.W. Norton & Co., 2002. Szasz, Ferenc Morton. "Manhattan Project." Encarta Encyclopedia Deluxe 2003