



POLI 150: Weapons of Mass Destruction

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Today's Class

- Writing Expectations
- Weapons of Mass Destruction
- History of Nuclear Weapons
- Spread of WMD



Writing Expectations

- The writing assignments for this course are designed to be analytical
- Because of this, I expect submissions to answer the prompt by formulating and supporting an argument
- As you can see from the grading rubric, this is where the majority of the the grade is earned



A Basic Template

- 1 Introduction: motivate the topic & write down **thesis statement**
- 2 Argument: contextualize and expand upon the claims you make in your thesis statement, referencing specific theories or ideas from readings or lecture
- 3 Evidence: be sure to support your argument using empirical evidence (e.g. real world examples, data)
- 4 Conclusion: summarize and reflect upon your argument and evidence



Writing Support

- The first assignment is due two weeks from today, so you have time to get support!
- The **Writing Center** at UNC has great tools, and you can schedule appointments with them
- I am happy to read and discuss thesis statements or look at outlines



CBRN Weapons

- Chemical: weapons that use chemicals to inflict death (e.g. mustard gas in WWI)
- Biological: weaponizing bacterium or virus (e.g. anthrax in 2001)
- Radiological: warfare involving intentional radiation poisoning (e.g. “dirty bomb” attacks by Chechen separatists)
- Nuclear: explosive device that results from nuclear reactions—either fission or fusion (e.g. Hiroshima and Nagasaki)



Chemical Weapons

- Originally developed in the modern age for use in WWI
- Have developed from simple containers that were placed downwind to nearly undetectable nerve agents
- Has been used by states (Syria) and terrorist groups (Aum Shinrikyo) with devastating effects
- Chemical Weapons Convention (1997) outlaws production and stockpiling; 97% of the worlds' stockpiles have been destroyed since



Biological Weapons

- Historically used before modern age (e.g. smallpox during French and Indian War)
- Developed further for use during the World Wars
- Used in bioterrorism from Salmonella in Oregon to the anthrax outbreak in 2001
- Biological Weapons Convention (1972) bans use and stockpiling, but some states maintain offensive capacity



Radiological Weapons

- While generally classified as WMD, can also be targeted
- Dirty bombs are inefficient ways to spread radiation
- Could be used to target humans, but also may be used to disrupt economic activity
- The effects of a radiological attack are not well understood and may be overstated



Nuclear Weapons

- Developed in the 1930s and 1940s
- Used twice in war (Hiroshima and Nagasaki)
- Only possessed by nine countries
- Non-Proliferation Treaty has attempted to prevent the spread of nuclear weapons since 1968 to mixed results



A History of Nuclear Weapons

- First developed by the United States in response to Germany's attempts
- Later stockpiled by the Soviet Union, reaching massive heights during the Cold War
- Other states developed nuclear capabilities out of global or regional security interests
- History of detonations



Puzzles of Nuclear Politics

- Why do we care about nuclear weapons today?
- What are the implications of nuclear proliferation?
- What can the international system do to prevent hostile actors from acquiring nuclear weapons?



Why Do We Care?

- During the Cold War, fear of nuclear war shaped daily life
- Should there be concern about nuclear weapons today?
- Modern nuclear crisis simulation



Nuclear Proliferation

- Nuclear proliferation is often discussed as a massive problem facing the world
- Given the destructive capacity of nuclear weapons, the international community may be safer without nukes
- However, it is possible to argue that nuclear proliferation is a force for peace and stability



Theoretical Justifications

- We assume that international actors are rational and survival is an actor's greatest interest
- Nuclear war is arguably the worst possible outcome for a state
- Mutual deterrence or mutually assured destruction should force states to find different resolutions to disputes



Mutual Deterrence

- MAD requires that each side has second-strike capabilities to discourage pre-emptive war
- Leaders must care about their survival
- Weapons must not be easily subject to accidental launch
- Each side has to be able to determine where the attack came from



Doomsday Machine

- “Deterrence is the art of producing in the mind of the enemy...the fear to attack.”



Nuclear Concerns

- Given the track-record of deterrence, why do we care about nuclear proliferation?
- Even if they reduce the probability of nuclear war, nuclear weapons influence the distribution of power
- Some states may not meet the requirements for effective deterrence
- There is a risk of a non-state actor gaining possession
- Mistakes happen!



Goldsboro, NC Accident





Preventing the Spread of Nuclear Weapons

- With these concerns in mind, actors have attempted to prevent nuclear proliferation
- Two ways to do so: altering incentives & preventing actors from accessing materials
- Strategies can work in tandem
- Some will work better against states vs. non-state actors



Preventing Proliferation

- States attempt to acquire nuclear weapons out of insecurity
- Guaranteeing their security can prevent them from seeking weapons of their own
- Coercive disarmament: threatening or using military force to disrupt or prevent nuclear development
- International institutions: the nuclear Non-Proliferation Treaty (NPT)



Assessing the NPT

- Treaty prohibits all states except for the original five nuclear states from having nuclear weapons
- Provides for monitoring and compliance through the International Atomic Energy Agency
- If the IAEA discovers cheating, it can submit charges to the UNSC to impose sanctions
- Has had successes (South Africa, Brazil, Argentina); and also weaknesses (North Korea, Iraq, Iran, Libya)



The Global Zero Movement

- Recently, a movement to eliminate nuclear weapons called Global Zero has emerged
- Global leaders have endorsed it, and public opinion is in their favor
- Is this possible and desirable?
- Joffe & Davis argue that nuclear proliferation hasn't really happened, nuclear stability is desirable, and the world wouldn't be safer without nukes



Iran's Nuclear Program

- Iran has actively pursued nuclear research for both energy and weapons
- Has faced harsh international sanctions for its efforts
- In 2015, a deal was reached to lift sanctions in exchange for a large scale reduction in its nuclear program
- Waltz argues that Iran should be allowed to pursue a nuclear weapon for the sake of stability in the Middle East