

- Why did the cold war, not become a hot war?
  - o Mutually assured destruction
- MAD (Mutually Assured Destruction)
- ND (Nuclear Deterrent)
- No major power has gone to war with each other since 1945 because of mutually assured destruction.
- WMD (Weapons of Mass Destruction): Does not discriminate between its victims
  - o Chemical Weapons
  - o Nuclear
  - o Radiological
- Thomas Schelling: Harvard professor who developed the model that we think of MAD and ND.
- John Foster Dulles: was Eisenhower's Secretary of State and coined the phrase "Massive Retaliation".
  - o Became the basis of our military foreign policy towards the USSR
- How can the United States prevent a surprise attack?
  - o Applied "Game Theory"
  - o Expect the unexpected
- Tom Nash helped give birth to Game Theory.
- Two actors will never cooperate with each other even if it's in their best interest.
- Great for cold war US vs USSR, now it's difficult because it is not 1:1.
- *The Equalizer*: The 6-shooter pistol, made it less important for each shooter to have good aim. Made things more equal.
- The advantage of shooting first is apparent
- Triggered by self defense mechanisms
- If each shooter could live long enough to shoot back, then there would be no advantage in shooting back.
- Collective Logic
- Borders always create issues.
- North Korea wants weapons to Blackmail other countries.
- All united in working to fend off any effort by the international community (United Nations)
- Voted on a resolution to ban atomic weapons for good.
- Awarded to Obama for his vision of a world without nuclear weapons
- When this resolution was first developed 50 nations backed/ cosponsored it.
- Robert Wood: The United States' special representative for the UN. And had a conference for disarm
- These weapons play a role in maintaining peace and stability among the world

# 10/31 Submit Notes. 1.5 XC points.: Dante Camacho

The Cold War never became a hot war due to the threat of mutual destruction.

Why haven't we had any great powers go to war since 1945? Because of nuclear deterrents.

Economists always assume that everyone acts through a cost benefit analysis.

This professor's name is Thomas Shelling. Shelling developed the MAD model, the model by which we think of nuclear deterrents.

Eisenhower was really the first the president to create nuclear foreign policy.

John Foster Dulles gave Eisenhower the phrase massive retaliation. This is the way Dulles articulated the same theory of mutual destruction.

With a weapon of mass destruction the idea behind it is not supposed to be strategic. The sheer potential for destruction is the deterrent behind military action.

Shelling was obsessed with how the U.S. could prevent a surprise nuclear attack. He is going off the assumption that if the Soviet Union thought the benefits outweigh the costs on a nuclear attack they would go through with it.

To understand this, as an economist, he applied game theory. Game theory is the theory that allows you to understand a situation by having actors play hypothetical games with each other.

If every state or individual can be considered a rational actor and you need to understand their behavior in an abstract way, you must apply mathematics.

John Nash helped give birth to the game theory.

In order for the MAD theory to work you need a clear power rivalry.

Shelling enjoyed old Western films. The idea he used was the idea of the the equalizer. In the Old West, the equalizer was the six shooter. The six shooter was the equalizer because you had such an advantage because you have more than one bullets. It made it less important for each person doing their target practice on the other to have good aim.

The six shooter equalizer made it easier to kill each other but never assured death for either side. The advantage to be able to shoot first aggravates the intentio to shoot.

If both of these shooters with this six shooter gun, if both of them were assured of living long enough to shoot back with unimpaired aim, then there would be no advantage in jumping the gun. The advantage to shoot first would be negated.

The nuclear missile has the unimpaired aim of the six shooter.

Anyone who aspires for nuclear weapons does so because they understand the benefit of the deterrant. They're attempting to prevent a surprise attack.

Iran and North Korea aspire for nuclear weapons. The U.S., France, the U.K., Russia, China, India, Pakistan, and Israel have nuclear weapons.

We have evidence that all these nations that hold nuclear arsenals agree against getting rid of nuclear weapons. Late October 2016 the United Nations voted to ban atomic weapons for good.

Often times nobel peace prizes are awarded to further some sort of agenda. In the case of the recent U.N. vote, President Obama gave a resounding no on the proposed ban of nuclear weapons despite his past rhetoric about creating a more peaceful world without the nukes.

# 10/31 Submit Notes. 1.5 XC points.: Sean Doughty

- MAD= mutually assured destruction
- Eisenhower was the first US president to follow and develop this policy
- Foster Dulles coined the phrase Massive Retaliation
- MR= Massive Retaliation is the same thing as MAD
- Says that if the Soviets do anything in Europe then the US will not attack strategically, they will attack with weapons of mass destruction
- US wont engage in a conventional war in Europe vs the Soviets
- WMD= Weapon of Mass Destruction
- How can the US prevent a surprise nuclear attack
- Game Theory= come up with a theory by using players
- Mathematics is a good way of representing all the countries in the world in this model
- Mathematics can weigh decisions the same way that leaders of countries do
- Prisoners Dilemma= explains why countries do things like stock pile weapons
- MR wont work well in today's world due to the variety of threats that the world has today
- Will still work with some large states that are clear power rivals
- The great equalizer world wide are nuclear weapons
- The US and Soviets could have different numbers of tanks, airplanes, or military personal but with a strong weapon like nukes the two sides start to appear more even
- If one side (Soviet or US) shot a nuke off first the other country is guaranteed to be able to retaliate before it is destroyed
- Sense the cold war great powers have not gone to war with one another
- Nukes have been said to be "Peace Makers"
- Based off of this theory the great powers of Earth are India, Pakistan, France, United Kingdom, China, United States, Russia, Israel
- Aspirants are North Korea and Iran
- North Korea agrees with MAD however they want to use nukes as blackmail
- North Korea wants to use blackmail in order to lift US sanctions
- All of the great powers of the world will do anything in their power to prevent the removal of nuclear weapons from their countries
- If the Unites Nations votes for a resolution to ban nukes all the great powers will vote against the resolution
- Obama was awarded the Nobel Peace Prize right after he won the US presidency because of his vission of a world without nuclear weapons
- When the US lobbied against the resolution to ban nukes we said "why should we ban these when we rely on them for our security"
- Nukes play a role in keeping the peace
- (US rep said at United Nation's convention)If the ban does pass the security or these reagions will be undermined
- Bans on chemical/biological weapons, land mines, and cluster bombs exsist of which all the great powers adhear to

## 10 31 notes

- Why did cold war not become hot war?
  - Mutually assured destruction
    - The model name for nuclear deterrence
  - MAD- ND (nuclear deterrence)
    - Discourage attacks because such a enormous threat
    - Ex Ronald Reagan's "peace-maker"
    - This is why no super powers have gone to war since 1945
- It doesn't have to be ND to be a deterrence now because there are weapons now that aren't nuclear but are still huge
  - Isn't quite a ND
- WMD- weapons of mass destruction- don't discriminate against targets
  - Chemical weapons
  - Biological weapons
  - Nuclear
- John foster Dulles
  - Ikes sec of state
    - Gave ike the label MR
    - The way to articulate this is if soviets do anything in Europe we won't be strategic, we will use a WMD
      - Our military policy towards the Soviet Union
      - We don't have this policy to every nation anymore
- MAD doesn't work for every level of threat
  - Only certain enemies
  - Still works with Russia
  - Works with Pakistan and india
  - Wouldn't work against al queda
- Thomas shelling
  - Trained economist- Nobel prize for economics- economists always thinks about rational actors
  - Developed theory or MAD
    - The way we think about ND
  - Because of him that ike thought about ND this way
    - First president for formalizing our Nuclear weapons foreign policy as MAD he called it "massive retaliation"- MR
  - Obsessed with how can US prevent a surprise nuclear attack
  - He applied game theory
    - Act of coming up with theories by having your players play a game against each other
    - Mathematical models of their decision making

- If every state is treated as a rational state, mathematical models is a good way of figuring out what they are doing
  - A Beautiful Mind- movie about John Nash who helped give birth to game theory and taught Thomas Schelling
  - Machiavelli- successful leaders expect the unexpected
- Went to his love of old western movies
  - The Equalizer of that day- the six shooter
  - Made it less important to have good aim
    - US and USSR can have unequal tanks and weapons but a nuke equalizes the two
    - Advantage of shooting first now becomes great
      - It aggravates the incentive to shoot first
  - If each one is assured of living long enough to shoot back with unimpaired aim, then there would be no advantage jumping the gun or shooting first because you can strike back
    - Now you have little fear the other is going to try to shoot first
- This is why you don't see great powers going to war with each other
  - This is a collective logic
- Anyone who aspires for or acquires nuclear weapons thinks this way- wants to deter a surprise attack
- Based on this theory a great power is anyone with nuclear weapons
  - Have them- India, Pakistan, UK, France, China, US, Russia, Israel (don't admit it though)
  - Aspirants- NK, Iran
    - All these nations agree on not wanting MAD and ND denied to them
- If UN makes resolution to vote on getting rid of atomic weapons, None of these nations are would even vote on it because they all want them
  - This happened in Oct 2016 (right at end of Obama's presidency- possibly because Trump wouldn't be as receptive)
    - Basically, resolved that UN is banning all nukes for ever
    - They are still going to keep all their nukes
    - Hoped Obama would support it- didn't
  - In beginning of his term before he was even in office he was awarded Nobel Peace Prize- he hadn't done anything yet- used for political reasons to push something ahead in international community
    - Giving this to him for "his vision for a world without nuclear weapons" not for what he had already done
    - Thought he would want his legacy to be left as this but he gave a resounding no to getting rid of nukes
- This resolution would lead to a global conference to set up a legal process to ban nuclear weapons manufacture, possession, stockpiling and use
  - Massachusetts is loaded with nuclear development like Raytheon in Lexington
- When it was first developed, 50 nations backed it

- Allies of the nuclear nations
  - Expectation was getting 120 backing and got 140 backing it
- The resolution was nonbinding because it cant be
  - It would come up with a legal process that would be binding
  - None of nuclear nations wanted it
    - Begged for it to not even go to the floor
- The resolution did pass (Obama was pretty much the most against to this resolution)
- “How could a nation that relies on ND even entertain joining a negotiation to a resolution that stigmatizes these weapons”- US diplomat at Geneva conference for this resolution
  - they hold a role in maintaining peace and stability
  - if you do this, you risk undermining regional security

# 10/31 Submit Notes. 1.5 XC points.: Brian McCabe

Mutually assured destruction - the model name for nuclear deterrents

Conventional weapons are very destructive as well nowadays

WMD - weapons of mass destruction

Chemical, biological weapons are WMDs

Thomas Schelling developed the concept of Mutually assured destruction

Because of Schelling, Eisenhower viewed Nuclear weapons under the scope of mutually assured destruction

Eisenhower referred to it as Massive retaliation

John Foster Dulles secretary of state under Eisenhower, later CIA director, coined the term "Massive retaliation"

Schelling obsessed with how to prevent the US from experiencing a surprise nuclear attack

He applied game theory

game theory is the act of creating a theory based off of the "players" playing a game and making mathematical models based off of their decision making

Schelling's theory based in Machiavelli's principle of expecting the unexpected

thought back to Westerns, and the "Equalizer" (six shooter)

Schelling thinks if both of these shooters were able to live long enough to shoot back unimpaired, there would be no advantage in shooting first, or launching a surprise attack

France, Britain, China, India, Pakistan, US, Russia, Israel all have nuclear weapons

states such as North Korea, Iran, aspire to possess nuclear weapons so they can deter a surprise attack



# 10/31 Submit Notes. 1.5 XC points.: Christopher Morales

10/31/17

- The cold war did not become a hot war because of nuclear weapons
- The missiles Deterrence it what keeps us out of world wars
- MAD, mutually assured destruction
- WMD, Weapons of mass destruction
- Encomiast always act as if everyone thinks about there actions
- Thomas shelling
- MR, Massive Retaliation
- John foster dulses
- If the soviets do anything in Europe we will use a nuclear weapon
- Game theory is the act coming up with theory's by using actors and running the scenario
- Equalizers
- If a nation has a small army but has nuclear weapons it begins to equalizers
- Collective logic for those who have and those who want them
- All nular states belive in ND
- Band the making the stocking and use of weapons
- Non bonding resaution
- These weapons play a role in keeping the peace in the world between the world powers
- If you band treaty you run the risk of undermining world sercrity
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