Eric Altenburg **HST-415** **October 7, 2020**

Week 4: Controlling the Atom — Video

1. Nuclear Monopoly
   - Only US has the a bomb
   - How do we control the atom? Will it control us?
   - Future of US nuclear weapons? Arms race with other nations?
2. Polling
   - Lots of the US were on-board with committing genocide on the Japanese
   - Some weren't sure
   - Future of the weapon: Russia is coming up
3. Domestic control of the bomb
   - What will happen to the Manhattan Project?
4. Wartime Planning
   - Bush and Conant:
     - What will be the limit for outside scientists on nuclear innovation?
     - How to not stifle scientific development?
     - How to protect citizens from experimentation?
     - **Should be organization post-war (Atomic Energy Commission)**
       * OSRD (funding agency) + FDA (regulatory agency)
   - July 1945: Royall-Marbury Act proposed by Royall
     - Postwar Atomic Energy Commission (AEC) would have **vast** ownership and regulatory powers
     - **ALL** nuclear energy research under control of AEC
     - Bush: "too much power, futile to control scientific info, unenforceable"
       Conant: "too much secrecy, release all technical data **except** of how to *specifically* build bombs"
5. "Scientists' Movement"
   - October 1945: May-Johnson Act:
     - Introduced by War Department (strong military, lots of secrecy, high penalty)
   - Many scientists oppose - fear of continued military control
   - Quickly organize to lobby:
     - **Federation of Atomic Scientists** (later American), **Bulletin of the Atomic Scientists**, other organizations
   - Mantra/PR: "No secret, no defense, international control"
   - May-Johnson falters — even Truman eventually withdraws support
6. Postwar atomic legislation
   - December 1945: McMahon Act
     - Similar to Conant's original idea of more knowledge but restrict the really technical stuff
     - Senator McMahon does lots of hearing for the scientists to appeal to them
     - More focused on how the AEC will fund research than control mechanisms
     - Civilian vs Military atom framing:
       * Military = bad
         Civilian = good
   - February 1946: Gouzenko Affair
     - How did it get in the paper? Groves likely leaked it to derail the McMahon Act
   - April 1946: McMahon Act, version 2
     - Complete revision: From Dissemination of Information -> Control of Information
     - "Restricted Data"
     - AEC regulates RD and penalties for misuse
     - Foreign exchange of RD banned (no sharing without international control)
       * British are now cut out
     - RD defined as:
       * **All data** concerning the manufacture of utilization of atomic weapons, the production

of fissionable material, or the use of fissionable material in the production of power, but shall not include any data which the Commission from time to time determines may be published without adversely affecting the common defense and security
        * Congress declares everything secret, AEC will gradually let things out. AEC never adds to the list of public knowledge. Everything goes to Congress first.
    - Scientists support the version 2 of the bill because they're tired of fighting
7. US Atomic Energy Commission
    - 5-man civilian commission but chairman sets the tone
    - Atomic control over: Research, production, use of bomb
    - Politically weak organization
        - Only as strong as the president wants it to be
    - Scientists hate it
    - Congress wants oversight so they make Joint Committee on Atomic Energy (JCAE)
        - Very powerful
    - Relationship between military and AEC is done through Military Liaison Committee
        - Tricky relationship
    - Independent scientific consultation given by General Advisory Committee (GAC)
        - Manhattan project veterans
    - Background investigation by FBI for access to RD
        - Too many people for this (people who did minor things)
    - Only the US president can authorize transfer of fissile material from AEC to military - "custody"
8. International Control of Atomic Energy
    - What are the implications for nuclear weapons for international order?
    - Bush to Truman:
        - Go down the path where life can be promising (international collaboration)
        - Go down the path where war can flourish
9. Early efforts: During WWII
    - Niels Bohr during WWII:
        - Believes that the only way to avoid atomic arms race is through scientific openness
    - Bush and Conant:
        - Censorship in peacetime would be "quite impossible"
        - Only way out: total freedom of information and lack of restrictions on inspection
10. Acheson-Lilienthal Report
    - Create an Atomic Development Authority run out of the UN
    - ADA will oversee all facilities that make fissile material
    - ADA will control Uranium stockpiles
    - Focus on materials and not secrets
        - Regulate what you can (material) but you can't regulate people's mind (gets away from secrecy)
11. Acheson-Lilienthal Report becomes Baruch Plan (1946)... and fails
    - Focuses on what happens when someone is caught cheating (punishment)
    - Met with backlash
        - However, any treaty proposed without this punishment usually fails
    - US says they won't do anything about bomb production or disassembly unless Soviets destroy their stuff and won't produce any bombs
    - Soviets think why should we have to do this stuff when the US is the only country that has bombs and has used it on another nation
    - Nothing gets done here because Soviet doesn't like the Baruch plan and US doesn't like Soviet plan of "how about we just don't make any nukes, no inspection and no punishment"
        - Is seen as a ploy to get the US to get rid of their bombs
    - ***International control subsequently fails***