

# Controlling the Atom

## Responses to the bomb

- Los Angeles Times cartoon (August 7, 1945): wartime propaganda! Like wow! Kapow type
- Atlanta Constitution (August 8, 1945): Japanese getting blown out of country
- Lots of nonhuman depiction of the Japanese.
- Fear of Atomic war polling: If there was another world war, a majority of people thought that city people were going to get fucked by atomic bombs

## Domestic Control of the Bomb

- Manhattan Project, 1945: a 2 billion, country-spanning, bomb-making industry
- **Wartime planning:** Vannevar Bush and James B. Conant
- “What is this going to look like during peacetime?”
- What are the limits for scientists?
- 1944-1945, Bush and Conant: Postwar Atomic Energy Commission should be an OSRD-like funding agency + FDA-like regulatory agency
- They are worried about uncontrolled experimentation
- Gen. Kenneth Royall (Army Lawyer)
- **July 1945:** Royall-Marbury Act -> Postwar atomic energy commission (AEC) would have vast ownership and regulatory powers
  - All nuclear energy research under control of AEC
  - AEC would have powers to issue regulations to govern all info, data, documents, equipment, material, etc about nuclear energy
- **Responses to Royall-Marbury:** asking for way too much power, control measures and undesirables and they do not believe that secrecy will work. Conant thinks it is too much secrecy and should release all technical data except details of how specific bombs are built.

## Scientists' Movement

- **October 1945: May-Johnson Act:** introduced by the War Department (military has a strong role, lots of secrecy, high penalties). Many scientists oppose, fear of continued military control.
- The Federation of American Scientists came out of this. They are in huge opposition of this bill.
- **Quickly organize to lobby** -- Bulletin of Atomic Scientists and other organizations
- **Mantra/Slogan:** No Secret, no defense, international control
  - If they are secrets of nature, they are not really secrets
- May-Johnson falters, even Truman eventually withdraws support

## Postwar Atomic Legislation

- **December 1945: McMahon Act** -- wants to have a lot of hearings with these scientists and comes up with a new framing
- **Senator Brien McMahon** creates and chairs Senate Special Committee on Atomic Energy
- Puts forward new law, meant to appeal to scientists
- More focused on how the AEC will fund research than on control mechanisms
- “*Civilian*” versus “*Military*” atom framing: military = bad, civilian = good
- **February 1946: Gouzenko Affair**

- Minor spy scandal. Claimed that in Canada there was a spy.
- **April 1946: McMahon Act, version 2**
  - Complete revision of information section: from Dissemination of Information to Control of Information
  - Created “Restricted Data” (RD) -- new category for nuclear secrets
  - AEC regulates RD and penalties for misuse, transmission (20k and/or 20 years)
  - Foreign exchange of RD banned (no sharing without international control)
  - The British have been cut out from here on out
- **Restricted Data:** All data concerning the manufacture or 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 things as secret and the AEC can declare things as not secret. It can decrease the number of secrets, not increase them.

### Postwar Atomic Legislation

- Scientists support McMahon Act because they are tired of fighting and prefer it to alternatives
- House of Reps adds death penalty for sharing secrets
- Truman signs it and it becomes the Atomic Energy Act of 1946
  - Same thing, a little different than May-Johnson
- Creates AEC (US Atomic Energy Commission) takes over from Groves in January 1947

### US Atomic Energy Commission

- Five man civilian commission, but chairman sets the tone
- Charged with all aspects of atomic energy regulation: research, production, use of bombs: civilian/military divide originally carefully enforced
- Unusual setup for USA -> an island of socialism in the midst of a free-enterprise economy
- This is a politically weak commission and is only as strong as the President wants it to be.
- Congressional oversight provided by the **Joint Committee on Atomic Energy** (JCAE) (very powerful)
- Connections between AEC and military done by **Military Liaison Committee** (tricky relationship)
- Independent scientific consultation given by the **General Advisory Committee** (GAC) and is headed by Oppenheimer, many other Manhattan Project veterans.
- Background investigations for all access to RD by the FBI. This becomes a huge problem because even the people just laying the concrete on the factory need a clearance.
- Only US President can authorize transfer of fissile material from AEC to military -- “custody”
- The Lilienthal AEC: Robert Bacher, David Lilienthal, Lewis Strauss

### The International Control of Atomic Energy

- Big question at the end of WWII: What are the implications of nuclear weapons for international order? Can the bomb be controlled?
- Early efforts: Niels Bohr during WWII.
  - Contacts FDR and Churchill, is quietly rebuffed

- Neither took his ideas seriously. Bohr mumbled and just did not have the rhetorical skills.
- His idea was the only way to avoid the atomic arms race is through scientific openness.
- Influential on younger scientists at Los Alamos
- **Early efforts: during WWII**
  - Bush and Conant -- September 1944: Warn FDR that censorship in peacetime would be quite impossible. Secrecy would mean an international arms race: basic knowledge of the matter is widespread. ONLY way out: total freedom of information and lack of restrictions
- **Postwar effort: Acheson-Lilienthal**
  - Sets up a committee if US makes a bid without nuclear weapons
  - Lilienthal does this job before AEC head.
  - Oppenheimer has his influence in this committee and any plan they do will make technical sense.
- **Acheson-Lilienthal Report**
  - Would create an Atomic Development Authority run out of the UN
  - ADA would have power to monitor all facilities that can generate fissile material
  - Would maintain control of all world's uranium stockpiles - no uranium, no bomb
  - USA would eventually give up monopoly on nuclear weapons, give its own weapons to the ADA for stewardship
  - **Focus on materials, not secrets**