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HST - 415

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Week 4: Controlling the Atom

1. A question that came to mind while listening or reading the above! More than one is also fine!
    a. In the Acheson-Lilienthal Report, they say: “our raw material supplies; the plants at Oak Ridge and Hanford now operating to make atomic explosives; the stockpiles of bombs now in our possession…” (56). They mention “stockpiles” so how many bombs did they have? I feel like this may be a bluff.
    b. Was the Acheson-Lilienthal Report a backhanded plan suggestion with an undertone of a threat towards the end? They say, “Thus, should there be a breakdown in the plan at any time during the transition, we shall be in a favorable position with regard to atomic weapons” (56). This leads me to believe that the US was trying to bully everyone into either accepting the plan or as a form of unwritten punishment of violation.
2. How practical do you think the Acheson-Lilienthal Report's proposal was? Do you find it compelling today? What is or isn't appealing to you?
    a. The Acheson-Lilienthal Report was practical in the sense that it allowed for future plans to have a solid base to build upon. It was mentioned in the beginning that the report was in no way meant to be a fully fleshed out international atomic energy plan, but instead something to be referenced and used

in order to lead to such a plan.

Where I believe the report truly shines is in pointing out the drawbacks of implementing a purely inspection and policing based international control system. It was stated that the development of atomic energy for peaceful and wartime purposes are nearly identical thus leading to a nation's sole word as being proof of not violating the atomic agreement. If the idea of inspection were to be used, it was shown that the workforce needed would be far too vast and they would have to be very well-educated and up-to-date with the atomic field. Not only is this unrealistic, but it gives way to another issue with the idea of having scientists lead inspections and policing; the population of scientists who have the personality to also be policing entire nations is slim. The final issue pointed out has to do with the friction that would be created when giving "foreigners" to a nation special privileges to poke and prod at these facilities. This can lead to several political issues as those who are living in the nation may not like the idea of someone from the outside having access to such highly secret operations.

By outlining the aforementioned issues with inspection and police based forms of atomic control, the proposal of having an international entity in charge of the distribution fissile material had promise to it. However, I feel as though it gets undermined by the multiple mentions of the consequences if the plan is violated during the transition period. Spread throughout the last section, it is said that the United States is still the superpower of the world in terms of atomic energy, and if any nation were to violate the proposed plan, then it is implied that the United

States will swiftly take care of the issue. This backhanded plan proposal with the United States threat in the background is where it falls short in my opinion.

3. Lastly — describe the issue of BAS that you chose above. Is there anything surprising or unexpected in it? Anything of particular interest? How do you think you would think about the issue if you were a reader at the time, versus today?

    a. Reading the April 15, 1946 edition of the Bulletin of the Atomic Scientists, the one odd headline that strikes me is “Cluster and Linear Cities” where they discuss the idea of spreading out the cities in the case of an attack. This was similar to the proposal made in the Franck Report where it was stated that the United States would suffer more damage from an atomic bomb whereas Russia would not since they do not have as many densely populated areas such as New York City, Chicago, or Washington D.C.. Also mentioned is a rule which says, “one might propose that the distance between any two town should just exceed the diameter of the destruction area of the bomb. Bombs of the Hiroshima type would call for dispersal into evenly spaced towns set, say, 3 miles apart” (Marshak, Teller, and Klein 13). To spread out towns based on blast radius would be problematic when it comes to densely populated areas, and can potentially lead to cluster cities where each town is just a highly populated area that can be taken out with a well placed bomb. And so as a solution, they mentioned a “linear” or “ribbon” style of town system that would run in strips this way if it were to be bombed, a minimal amount of damage would be done as the entire “ribbon” of homes would not be destroyed, only a small portion. However, along with this they propose that it be spread out across the entire United States running along the

cardinal coordinates which while it sounds like a good plan, it will not simply work. This is another case of an idea that works well in theory, but in actuality, implementing such a town system across the entire country would be very difficult or impossible.

I pledge my honor that I have abided by the Stevens Honor System. -Eric Altenburg