

The Limitations of Safety

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Brief History

○ History has proven that if something can go wrong, it will go wrong.



Chernobyl, Ukraine

- ✧ The worst nuclear disaster in world history
- ✧ Millions of people exposed to radiation
- ✧ 400 times more nuclear fallout than Hiroshima Hydrogen Bomb



Brief History (Cont.)

- There has never been a nuclear disaster in American history.
- Thus, most Americans believe nuclear weapons are handled very responsibly.
- However, Sagan offered a very sobering light regarding the handling of nuclear weapons and believes it's only a matter of time before disaster strikes.



Normal Accident Theory

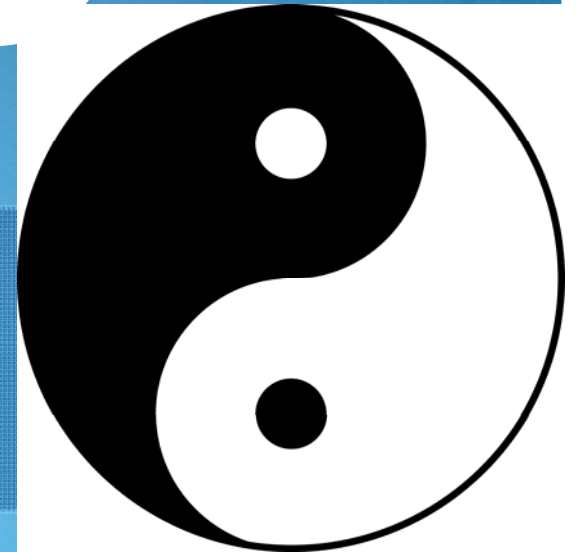
- Pessimistic point of view (if something can go wrong it will go wrong)
- There is no way to prevent an accident from happening, only to learn from the accident when it eventually happens



High Reliability Theory

- Optimistic Point of View (aims to keep chances of a disaster as small as possible).
- The truth is, there has not been a nuclear accident in American history; therefore, our preventive methods should be considered reliable.

Yin-Yang Concept



- The way we handle nuclear weapons shouldn't be based off of a single theory.
- Instead the theories are meant to work together in order to achieve the appropriate balance ("Yin-Yang").
- We shouldn't be overly pessimistic nor overly optimistic



Conclusion

- Nuclear weapons are accidents waiting to happen; however, this doesn't mean they should be outlawed altogether.
- The United States should continue to employ preventive measures to keep the probability of a nuclear disaster unlikely.



Questions?