CTC #8

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CSCE 525

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31 Oct 18

Cyber and nuclear deterrence are subjects of debate on their similarity and differences. We highlight some of these here. First, we will look at the similarities. Understanding cyber and nuclear deterrence implies an implicit understanding of what deterrence means. Traditionally, deterrence has meant four things: The threat has been communicated clearly, the target understands what the threat is, the target thinks that undertaking an action will incur severe cost, and the target thinks that the person utilizing deterrence will undertake their stated actions. [[1]](#footnote-1)

At first glance, cyber and nuclear deterrence appear to be very different, so we will look at the differences first. First are the barriers to entry. The barriers to entry for nuclear deterrence are incredibly high, so only a small handful of nation states have nuclear weapons. This means that if a nuclear weapon is used it is very clear who used it. With cyber deterrence it is often hard to attribute an attack to a specific entity and if it is attributed, it may just be a single person rather than a nation-state in the case of nuclear deterrence. As Martin Libicki put it in his book *Cyberspace in Peace and War*, the core message of deterrence is “If you do this then I will do that.”[[2]](#footnote-2) Additionally, the “do” part of the message implies that the action is detectable. With some cyber attacks the attack itself is often not detected which is a clear difference from the case of nuclear deterrence. [[3]](#footnote-3)

One similarity the exists between cyber and nuclear deterrence is that of deterrence by denial. The idea behind this is to make it so expensive (or make the attacker believe) that they will incur a great expense if they attack and fail, thus inducing a fear of failure.[[4]](#footnote-4) In the case of cyber deterrence, this cost is not only the time to develop the weapon but also the likelihood that they will be exposed during the attack. The principle is the same for nuclear deterrence. Using a nuclear weapon incurs such a great cost both monetarily and in human life, that deterrence by denial is somewhat effective here.

1. Reith, “Brandishing Our Air, Space, and Cyber Swords: Recommendations for Deterrence and Beyond.” [↑](#footnote-ref-1)
2. Libicki, *Cyberspace in Peace and War*. [↑](#footnote-ref-2)
3. Libicki. [↑](#footnote-ref-3)
4. Reith, “Brandishing Our Air, Space, and Cyber Swords: Recommendations for Deterrence and Beyond.” [↑](#footnote-ref-4)