

Cross-Domain Deterrence Workshop: July 16, 2014 in La Jolla, CA

The "Deterring Complex Threats" research group met with prominent security studies scholars in La Jolla, California on July 16, 2014 to discuss the conceptual underpinnings of cross-domain deterrence (CDD) in US foreign policy, and recent cases of CDD, including those in Ukraine and China. All participants were active discussants, and the group advanced towards a greater mutual understanding of what CDD is, in both theory and practice. The meeting was broken into two sessions: CDD concepts and CDD case studies. The following details the main conversation points and analyses discussed in these sessions.

Session I: Cross-Domain Deterrence Concept, its relation to classical deterrence, and its scope:

The major themes that emerged from our discussion are: how to define domains and CDD; asymmetry in means and outcomes of deterrence; complexity and ambiguity in political environments and deterrence; and narratives and norms.

How do we define domains and CDD?

One line of thinking about CDD is that it is not unique and that it is no different than classical deterrence. One might argue that while distinctions between CDD and classical deterrence may be drawn, CDD is not new. CDD existed in the 19th century when new technologies in warfare emerged. More importantly, what attracts the policy community to the new iteration of CDD is the question of what competition in new domains implies for stability in old domains, particularly the nuclear domain. We must, however, be careful about making Cold War assumptions about nuclear weapons and conflict—there are 21st century pathways to nuclear exchange based on limited wars and very regionalized conflicts.

If we can see how both challenger and defender have new problems, then we can clearly distinguish CDD from classical deterrence. In a CDD environment, the challenger is looking for new ways to tweak the system without catastrophe, and the defender is trying to figure out what to do in absence of taboos. In perfect deterrence regimes, challengers can map prescribed actions for credible threats of punishment, but with new actions, challengers are suddenly unsure of the reliability and utility of mapping.

From this arises a dilemma: the challenger/defender framework has a normative subtext that is friendly to US. Under this framework, the US can be a challenger in Iran with cyber capabilities. We might see this as escalation dominance rather than offence dominance. It also raises the question: how do we get beyond the realm of understanding the US as the defender?

Parallel to the challenger/defender problem is the problem of attribution, which becomes evident with some actions in space. GEOSSA (Geospatial Space Situational Awareness) constellation, which observes other satellites, was recently declassified—was this revelation intended for deterrence?



Today the ability to deter or to compel depends on projectable presence. For the US and other countries, an early deterrence advantage a long way away, and it is a *fait accompli* unless we have early deterrence. For now, the article of faith is that the US's conventional supremacy is there.

One objective of this work could be to make the US a skillful beneficiary and reinforce deterrence across domains, and to make sure that the US is not a victim of the skill of others. There needs to be a CDD bargaining idiom, and we need to define success in CDD differently than in classical deterrence. CDD is more about playing the game well.

Another question continues to persist: how do we define a domain? While thinking about domains is interesting and useful, it might be more useful to start talking about CDD independently of domains. However, we do need to ask: how do circumstances in one domain cause changes in dynamics in another domain, e.g., how does a conventional environment respond to nuclear environment? Deterrence itself is about ends and about changing behaviors, but the focus of CDD research is on means and the way things are conducted. This research attempts to address the question of when changing the means matters.

Asymmetry in Means and Outcomes

CDD comes into its own when dealing with limited reactions and responses. When one side lacks higher order, it tries to shape bargaining paths with its available means. The logic of meeting like with unlike seems to matter where there are limitations with what kinds of signals a political entity can show. In an asymmetric environment, involved parties are constantly fighting on multi-valued score card. For example, a single blinding strike on satellite would have different strategic impact than taking out something else. Declaratory policy doesn't rule anything in or out.

From this arises asymmetric vulnerability: if there is asymmetric vulnerability, then CDD is part of the bargaining for strategic equilibrium. How, then, should we think about asymmetric vulnerability? There is the assumption that because the US has more, it has more to lose. But, with CDD, one can win in one domain in order to win in another domain. For example, if there is asymmetric vulnerability in space, then a political conflict in space could end in space without having to bring in nuclear weapons; if there is symmetric vulnerability, then catastrophe is more likely and it would be hard to imagine that a conflict in space would end in space without the use of nuclear weapons. Vulnerability and catastrophic capabilities matter.

This points to a larger issue: the existence of asymmetric information, which is evident in dealings with cyber and space, and to a lesser extent, lesser financial sanctions. In these situations, the defender might know the cost of a particular action, but it won't be clear to aggressor.

Escalation makes expectations about the bargaining process, but if an interested party is trying to disincentivize escalation, does it matter that the process is asymmetric? One might look to space, where catastrophe effects everyone equally.



Complexity and ambiguity in political environments and deterrence

One hypothesis about complexity is that it increases the probability of escalation and it also magnifies the threat of something being left to chance. The counter hypothesis that complexity decreases probability of escalation precisely because it magnifies the threat of something being left to chance. Alternatively, we can see this as a continuum of intensity, where there are few moves with clear—and clearly bad—consequences as compared with many moves with ambiguous consequences. This points to the need to tease out causal logic of when complexity increases or decreases risk.

If complexity gives rise to escalation, then where does escalation stop and why does the process of escalation have to stop? If it never stops, then it makes concept of crisis difficult; if it never stops, then we are always in crisis. Consequently, this poses challenges in distinguishing signals from noise and inducing restraint. For the US, inadvertent escalation is a major concern, especially with the false hypothesis from China and Russia that cyber and space are de-escalatory.

Parallel to complexity is ambiguity in political environments and deterrence. Where does persistent ambiguity come from? It comes from the margins, and it is our job as researchers to parse interactions on the margins. Our inquiry raises questions about complexity and ambiguity, which raises fundamental issues for stability and instability.

Narrative and Norms

In a CDD environment, no norms exist, and political entities have to rest on assumptions of how their opponents will react. In new domains will key actors be socialized to believe in catastrophic capabilities, and will outliers matter?

As with earlier points about defining domains, it is important to understand how policy makers have bought into understandings of domains. Nuclear weapons took time to understand (Eisenhower said nuclear weapons were as accessible as any other conventional weapon), and restraint took time to develop. This raises the questions of: how and when does restraint kick in? Do leaders believe that certain means have an asymmetric advantage? When do you get that restraint environment with other domains that we have with nuclear weapons? This matters for developing international norms, and the success or failure of narratives about threats in these new domains impacts deterrence

Session II: Case Studies

The Benefit in looking at cases in China and Russia were discussed at great length. One participant suggested it is easier to understand how China and Russia think about CDD than it is to understand this as a global problem. Both Russia and China have developed theories about CDD. Russia has developed a theory of non-linear/non-contact, and has confidence that it can induce behaviors from US that helps them obtain deterrence objectives. What most worries pentagon with CDD is inadvertent escalation with either or both China and Russia.

Russia and Ukraine



Cross-domain deterrence can help us to understand the current crisis—and the international community's response to the crisis—in Ukraine. In Ukraine, the US could have responded with ground forces, which would have been a symmetric response, but chose airpower instead; this is a case of one domain confronting another.

Some have argued that US responses to the Ukraine crisis indicate a failure of the US to deter Russia insofar as the US responded was diplomacy and financial sanctions, which left many uncertain as to whether the US response was a deterrence response. Since Ukraine is at the margins of international politics, and it is not a vital interest, one could understand the crisis in Ukraine as a failure of deterrence. This may also be evidence of the US's eroding ability to project power and dominance, particularly as it is seen in maritime.

An alternative, and possibly stronger argument is that Russia's actions are not a failure of US deterrence – these actions are not ones the US set out to deter or had the means to deter—rather, this is a failure of statecraft and use of incentives to shape Russian behavior.

Putin, however, appears to be using CDD – we can see unlike capabilities and both players start mutually deterring one another. Putin has shown some restraint insofar as he appears willing to recognize the legitimacy of the elections, and that he has not moved further into Ukraine. However, it may be that Putin did not adequately think threw these scenarios and might just be an opportunist.

There is also evidence to suggest this may be a case of deterrence: NATO and US officials pressed Russia to not invade Eastern Ukraine and to withdraw from the eastern border. Additionally, there has been a notable absence of certain behavior from Russia. The argument could then be made that US pressure caused Russia to not invade and to withdraw from border, and that looks more unequivocal.

The deterrent effect in this crisis is then twofold: 1) Russia deterred Ukraine's entry into EU and 2) the US deterred Russia's movement into Eastern Ukraine. The effect, however, of Russia's capital flight is huge, and it may be easier to draw conclusions on Russian capacity and Russian efforts to not be diplomatically isolated rather than on NATO's capacity.

What this case does is highlight is the difference between vulnerability and sensitivity – while some parties might be only somewhat vulnerable they might be highly sensitive. It also shows that all parties involved in this crisis are trying to influence asymmetrically but avoid symmetric intervention. With that said, the repercussions for Russia for its dealings with Ukraine have yet to come home to roost.

This case also raises the question: How much did Russia gain from Estonia? Russia thinks it gained greatly because it signaled, even though Estonia moved closer to NATO. However, Russia did not conceive of its intervention in Estonia as a military operation, but as an opportunity to teach Estonia a lesson. But, Russia overplayed its hand, which prevented Russia from effectively teaching a lesson. This may mean that Russia was signaling against expansion, but doesn't support Putin's attempts at coercion.

Ukraine: Impact on East Asia?



It is still unclear how the Ukraine crisis will impact US alliance and nonproliferation structures. It does, however, raise an important question: is it possible that China and other adversaries draw lessons from this, and what are they? The Ukraine crisis has had many of repercussions in East Asia, but most commentary on these repercussions has come from outside of East Asia. One hypothesis to this is that there is crisis of confidences in Japan and South Korea, but that might be overstated. Chinese officials have spoken of window of strategic opportunity that arose from this uncertainty.

China

In examining China, we begin to think through the perception and reality of CDD. In crises, the Chinese are incredibly restrained. These restrained moves differ from doctrine. This is evident in how aggressive Chinese space doctrine is, but how, in actuality, China is restrained.

In addition to its increased capabilities in space, China has developed its littorals. China now outnumbers the US in its littorals, with the US now having less than 300 ships, and China having them, globally. This might reflect the US's conventional weakness in littorals due to underinvestment in air and naval forces, and the continuing requirements for naval forces to support European contingencies.

CDD in China highlights eroding US power projection capability and the possibility for inadvertent escalation. But, while there might be the possibility of unintentional escalation, it might not be significant because neither side has an incentive to escalate to total war. The worst case scenario in this situation is that China has administrative control but no undisputed sovereignty. This then raises the question: is it a deterrence success if there is no conflict in East China Sea but China gets more administrative control? We should be interested in the friction, but also in outcomes.

Future Research

As participants advanced towards a greater mutual understanding of CDD, several issues remained contested; namely, what makes CDD new, and what, precisely, does CDD look like in contemporary political and security environments? Many questions were raised about "designer deterrence", what crafting deterrence policy and practice requires, and what these practices and policies look like when implemented. Much attention was paid to how to distinguish between signals and noise—and how to determine if particular actions constitute deterrence—and whether certain scenarios, such as those in Ukraine, suggest that CDD is being used and that it has utility. While preceding discussions and papers focused on cyber and how it facilitates CDD, most of the discussion was on the interaction between space and nuclear domains.

For inquires related to this report or to CDD research, please contact Project Manager Beth Prosnitz at bprosnitz@ucsd.edu