

After Deterrence: Explaining Conflict Short of War

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Abstract

Policymakers are increasingly concerned about conflict “in the gray zone”— the region between peace and war where, it is feared, challengers are able to alter the status quo without fear of triggering a larger military confrontation. Paradigmatic examples include the Russian annexation of Crimea and incursion into Eastern Ukraine and China’s island building campaign in the South China Sea. Here, we define gray zone conflict in a manner that emphasizes theoretical consistency and highlights novel features and implications of its causes. While gray zone conflicts are often perceived as deterrence failures, they are better understood as responses to deterrence success. A key puzzle involves understanding why capable countries choose to fight in a limited fashion. To the degree that gray zone conflict results from prior deterrence successes, raising the cost of limited war could yield peace. Alternatively, the decision to fight in the gray zone could reflect an optimal low-cost war fighting strategy, in which case doubling down on deterrence risks escalation and broader war.

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1 Introduction

In the wake of the overthrow of Ukrainian President Viktor Yanukovych in February 2014, Russian special forces (“Spetsnaz”) and the 810th Independent Naval Infantry Brigade occupied the Crimean Peninsula. These forces had removed their military insignia, leading to initial speculation about their identity and whether or not their actions were sanctioned by the Kremlin. The undesignated Russian forces were accompanied by local police from the Berkut public order unit and were also joined by armed local self-defense volunteers. After the dust had settled, Russia’s role in coordinating this invasion as well as their goals of taking over Crimea became abundantly clear. The action prompted considerable concern in NATO countries about how to counter a novel threat that did not quite meet formal thresholds for a coordinated military response, but which was clearly destabilizing and inimical to western interests. As officials struggle to delineate an approach to new challenges that exist in this space between peace and war, the difficulty is as much definitional as practical. As General Joseph Dunford, Chairman of the Joint Chiefs of Staff, recently noted, “[o]ur traditional approach is either we’re at peace or at conflict. And I think that’s insufficient to deal with the actors that actually seek to advance their interests while avoiding our strengths.” (Dunford 2016)

Conflicts that occur in the “gray zone” between open war and stable peace appear novel largely because of *how* they are pursued; a capable actor with multiple elements of power at its disposal has chosen to limit the scope of an engagement. This limited use of force by a capable actor reflects conflicting incentives, simultaneously challenging some aspects of the status quo and seeking to sustain others. Gray zone challengers often appear eager to remain engaged in a larger, mutually beneficial set of relationships, even those involving the target and its friends and allies. For their part, the defending state and its security partners typically fail to escalate the conflict. Because the response to gray zone conflict are muted, challengers are able to revise the status quo without triggering a broader set of consequences.

Gray zone conflict itself is nothing new. Similar processes have occurred in other eras as revisionist leaders attempt to prevail at low cost or minimal disruption (disinformation campaigns, fifth columns, “salami tactics”). Where the gray zone is most distinct is in its separation from concepts like limited war and low intensity conflict that have retained the bulk of analytical attention in recent years (Charap 2015; Freedman 2014; Freysinger 1991; Grant 1991; Lepgold and Sterling 2000; Metz 1989; Powell 2015; Rosen 1982; Schelling 1957; Sullivan 2007; Turbiville 2002). These other types of conflict are characterized by the fact that at least one combatant is *unable* to fight on a larger scale or with higher intensity (disputes involving non-state actors and so-called “failed states”) (Hoffman 1992). In contrast, gray zone conflict consists of disputes in which adversaries are *unwilling* to broaden the scope or intensity of a military engagement, despite being able to do so.

Why would capable countries intentionally limit their chances of victory by leaving some of their most potent capabilities—weapons they might normally be expected to wield on the battlefield—at home? There are at least two answers to this question. The first is that challengers may be deterred from engaging in general war by positive inducements or negative incentives, preferring instead sub-optimal war making in the gray zone. The second, mutually compatible, possibility involves an intentional limited war strategy in which gray

zone conflict is militarily optimal for an attacker. We discuss each logic briefly below.

Initiators of gray zone conflict may pull their military punches—enduring a conflict that is prosecuted in a non-optimal manner from their perspective—because the alternative risks escalation, such as drawing in additional adversaries that increase the cost of fighting beyond acceptable levels. Initiators in these circumstances are not choosing to fight in the manner they prefer but are instead being deterred from their “optimal” mode of conflict. There are in turn two basic reasons that this might occur (both can exist simultaneously). First, an adversary may possess benefits that would be endangered by escalation to higher conflict intensity or greater conflict scope. Globalization and its associated network of economic interdependencies creates collective incentives to avoid large conflicts that would disrupt commerce. While the effects of interdependence on peace are not new, the role of globalization in shaping the type or *intensity* of conflicts, rather than deterring all contests outright seems especially germane to the origins of gray zone warfare (Gartzke and Li 2003; Gartzke and Westerwinter 2016). Russia, for example, clearly hoped that incursion into Ukraine would not prevent it from supplying Europe’s energy needs, even as Europeans were concerned that their response might endanger access to Russian natural gas.

If interdependence is a “carrot” encouraging discreet aggression, then deterrence is the “stick” that makes it costly for an aggressor to go too far. The risk of triggering a robust NATO reaction arguably mitigated any military logic for a more extensive or overt use of Russian military power in Eastern Ukraine. The fear on both sides of possible NATO involvement arguably led to circumspection in the Russian approach to intervention. When Malaysian Airlines flight MH17 was shot down over Donetsk by a Russian BUK anti-aircraft missile, Moscow was quick to withdraw these and other heavy weapons from the battlefield.

The gray zone thus functions in an area below the threshold created by deterrent threats or economic opportunity. Competition is bounded by the incentives to cooperate (in the case of interdependence) or at least coordinate (deterrence). Adversaries no longer possess monolithic interests, preferring to compete around the edges, rather than openly thwart the other side in a manner that might maximize military efficiency, but would undermine larger political objectives. Aggression among the interdependent or mutually constrained must be pursued somewhat more furtively, so as not to endanger a broader set of compatible goals.

If the first explanation for gray zone conflict involves inherent tensions between the use of force and its consequences, the second argument requires no such contrast. Initiators (and their targets) may have decided that pulling one’s military punches is, in fact, optimal. A challenger that is patient and capable relative to its adversaries at low intensities could benefit by choosing a gray zone strategy. Big contests are costly and may not improve one’s prospects for victory, especially if a limited contest poses advantages in terms of an initiator’s force structure or force posture. Since the 1990s, Russia has had only a limited ability to field and sustain main force units abroad, especially in the face of capable tactical air power.¹ A major upgrade of Ukrainian military capabilities by Western powers would force Russia into a long and costly war of attrition. Better to fight a long and relatively cheap war of attrition, one that Moscow can expect to win. Fighting small can also be advantageous for

¹As the risk of NATO involvement in Ukraine increased, Russian officials laid heavy hints of their willingness to deploy tactical nuclear weapons. The Russian doctrine of “escalate to deescalate” is designed to allow Russia to maintain its conventional advantage against local opponents, while deterring NATO.

even a large disputant, if they possess a modest number of highly trained forces.

It is also important to note that the use of gray zone tactics is generally viewed pessimistically in the West. Gray zone conflict is seen as a dangerous new approach assumed to be available only to adversaries and thus inherently threatening. Gray zone conflict has been described as “a carefully planned campaign operating in the space between traditional diplomacy and overt military aggression” employed by states with grand geopolitical ambitions. (Mazarr 2015) Fear of gray zone conflict has even led some to advocate revamping deterrence to prevent these threats. (Santoro and Blosserman 2016; Jackson 2016; Foust 2016) Yet, NATO and U.S. deterrence policy has arguably succeeded in keeping more overt forms of aggression in check. Paying attention to why a challenger has chosen gray zone conflict is not only useful, but it also emphasizes that gray zone strategies are available *to both sides*. A neutral theoretical approach thus implies unexpected advantages in gray zone conflict; the very fact that an adversary is engaging in limited conflict suggests vulnerabilities and opportunities for increased effectiveness on the part of the target and its partners.

In sum, we offer a re-conceptualization of gray zone conflict through the lens of deterrence. Understanding a nation’s motivation behind the decision to operate in the gray zone enables the target to determine its best response. A challenger that initiates gray zone conflict has made a calculation about the type and degree of provocation that would trigger an escalatory response from the defender. Our theory notes that the risk of high level conflict may fail to disincentivize, and may even facilitate, low level conflict. (Snyder 1967) Gray zone strategies have developed as a response to the success of “high stakes” deterrence, as an end run around their (effective) restrictions. “Low stakes” gray zone conflict emerged as actors dialed back the level of violence to minimize exactly the risks posed by classical deterrence in practice.

This paper proceeds as follows. The next section examines existing policy and academic understandings of gray zone conflict. We then introduce a new definition of gray zone conflict framed through the lens of deterrence that differentiates it from other forms of 21st century combat. A subsequent theory section describes the implications of this new definition for understanding the changing landscape of war in terms of its duration, escalation, and revision. Finally, we provide an extensive series of implications of our argument and conclude.

2 Existing Theories

2.1 Practitioners’ Dilemmas

We often think of peace and war as dichotomous categories, but we know there is really a continuum where many kinds of tension and violence exist in between (Lebow 2010). The fact that peace and war are legal categories further complicates this matter and has placed a premium on the study of the middle section of this continuum. Despite knowing that war is complicated and takes many forms, the policymaking community has been resistant to doctrinal changes.

The initial reluctance of policymakers to confront challenges posed by new forms of conflict is best summarized by former Undersecretary of Defense for Policy Fred Ikle who proclaimed at the Proceedings of the Low Intensity Warfare Conference that “debating the definition of low intensity warfare” was “for small minds” (Shultz 1991). Fortunately,

the Reagan administration realized the folly of this strategy of denial and the 1987 National Security Strategy (NSS) defined low-intensity conflict as “waged by a combination of means, including the use of political, economic, informational, and military instruments...major causes of low intensity conflicts are instability, and lack of political and economic development in the Third World.” (Shultz 1991). The Vietnam war was one of the main motivations for an understanding of ‘conflict short of war’ as conventionally understood. Previous versions of Joint Publication 3-0 Doctrine for Joint Operations made a distinction between war and “military operations other than war” (MOOTW) which includes humanitarian assistance, counter-terrorism, peace enforcement, and counter-insurgency ². These examples illustrate attempts to identify military operations that focus on deterring war and promoting peace. JP 3-0 then distinguished between MOOTW that involves the use or threat of force (peace enforcement, counter-terrorism, counter-insurgency) and those which do not (peacekeeping, humanitarian assistance, counter-drug operations) (Kinross 2004).

Among the shifts in definitions, a common thread among the types of conflict that have troubled policymakers has been how and whether to respond. There is an element of ambiguity in cases like Nicaragua hiding the fact they were hiring Cubans to teach them about communism or Grenada hiding the fact they were constructing secret bases for the USSR that makes the US reluctant to respond. However, the desire to respond remains lest other nations see the US as helpless to defend our national interests (Schultz 1986). Since the end of the Cold War, the terminology and focus of the DoD’s analysis of conflict short of war has continued to evolve. United States Special Operations Command (SOCOM) now defines gray zone conflict as “a conceptual space between peace and war, occurring when actors purposefully use single or multiple elements of power to achieve political-security objectives with activities that are typically ambiguous or cloud attribution and exceed the threshold of ordinary competition, yet intentionally fall below the level of direct high-intensity military conflict, and threaten US and allied interests by challenging, undermining, or violating international customs, norms, or laws.” (Votel et al. 2016) This idea of the role of international norms is further seen in speech made by Secretary of Defense Ashton Carter about Chinese actions in the South China Sea where he noted “Beijing sometimes appears to want to pick and choose which principles it wants to benefit from and which it prefers to try to undercut” (Carter 2016).

Despite this definition, the military believes that gray zone conflict needs to be described, not defined. As a result, they have identified three common characteristics of gray zone conflict (Freier et al. 2016; Maxwell 2016). The first is hybridity, gray zone conflict combines methods and strategic effects which is illustrated in the SOCOM definition. Secondly, gray zone is a menace to defense and military convention because it does not conform neatly to a linear spectrum of conflict or equally linear military campaign models. The role of the military in gray zone conflict is unclear; maybe there is a lessened role of the military as we move further towards the peaceful end of the conflict spectrum or maybe the military just has to adapt to new forms of limited war Lastly is risk-confusing, meaning gray zone conflict is seen as presenting a paralyzing choice between high-risk action and equally high-risk

²The 2006 JP 3-0 revision consolidated JP 3-07, Joint Doctrine for Military Operations Other Than War, and JP 3-0 formerly titled Doctrine for Joint Operations. The term and acronym have since been discontinued

inaction. This presents “horns of the strategic dilemma” present themselves because since the risks of action and inaction make both seem like problematic responses, that causes the US to surrender the initiative to competitors and adversaries (Maxwell 2016).

During the Cold War, former Secretary of State Schultz noted that the US needed an active strategy to deal with ambiguous warfare that made it unambiguously clear the US would fight back, made the fullest use of nonmilitary weapons in our arsenal, and used new military weapons, doctrines, and tactics as appropriate (Schultz 1986). All three of these recommendations demonstrate the desire for response to gray zone conflict. The current US response to gray zone conflict can be broken up into three categories. The first strategy is countering misinformation (Paul and Matthews 2016). One of the ways that countries like Russia help ensure the success of their gray zone strategies is through a “firehose of falsehood” model of propaganda by which they continuously bombard their public with false information until the public simply accepts this information as true (Paul and Matthews 2016). The second strategy the US employs is adapting to risk sensitivity (Maxwell 2016). Lastly, the US believes that gray zone conflict is immune to traditional military responses as well as traditional soft power strategies like diplomacy and economic aid. As a result, non-military means of coercion, deterrence, weakening, and punishment have been advised. This includes means like financial sanctions, supporting non-violent political opposition to hostile regimes, offensive cyber operations, energy independence, and monitoring of financial assets.

Yet in this same speech given by Schultz at a Pentagon conference on low-intensity conference is the only known reference to the silver lining of gray zone conflict that our theory hopes to re-emphasize. “The ironic fact is, these new and elusive challenges have proliferated, in part, because of our success in deterring nuclear and conventional war. Our adversaries know they cannot prevail against us in either type of war. So they have done the logical thing: they have turned to other methods. Low-intensity warfare is their answer to our conventional and nuclear strength a flanking maneuver, in military terms. They hope that the legal and moral complexities of these kinds of challenges will ensnare us in our own scruples and exploit our humane inhibitions against applying force to defend our interests” (Schultz 1986).

Evolving Notions of “Conflict Short of War”

While the policy community has come around on the idea that gray zone conflict has been occurring for quite a while, most of the academic community has not investigated the novelty of this form of conflict in great detail. On the one hand, there are few cases of a great power choosing tactics that are more typical for the underdogs in asymmetric conflict. On the other hand, the US probing of USSR air defense systems during the Cold War indicate the tactic is not new.

Regardless of whether the phenomena itself is new, the proliferation of terminology regarding gray zone conflict, hybrid warfare, irregular warfare, non-linear warfare, limited war, or guerrilla geopolitics demonstrates a lack of consistency and agreement on the defining features of this phenomena as well as its implications. This is sometimes characterized as a situation where “a would-be great power, aware that its ambitions outstrip its military resources, seeks to leverage the methodologies of an insurgent to maximize its capabilities”

(Galeotti 2016).

Forms of conflict short of conventional war first garnered attention in the late 1970's and were understood as "low intensity conflict" (LIC) (Shultz 1991). However, opinions on what exactly what makes LIC distinct from conventional war differ. In some cases, it's about means. LIC is unique in that it emphasizes psycho-social, economic, or political means of warfare more so than military doctrine which is why the approach by conventional armies has failed (Adams 1990; Kornbluh and Hackel 1986). Alternatively, LIC could be about the actors involved. The post-Cold War era has moved away from state conflict towards irregular warfare so we need a new conception of conflict that encompasses insurgency and counterinsurgency, terrorism and counterterrorism, and peace enforcement (Downie 1992; Kinross 2004). One commonality among these examples is a focus on strategies used by the weak against the strong and that thus occur mostly in the Third World (Kober 2002; Kornbluh and Hackel 1986; Hammond 1990). Problematically, definitions of low-intensity conflict that try to explain new innovative forms of conflict like unconventional warfare, urban guerilla warfare, civil wars, separatist movements, communal violence, insurrection, coup d'etat, terrorism, insurgency, anti-communist resistance movements, revolutions without guerilla warfare, state-sponsored insurgency, state-inspired subversion, and international narcotics have become so broad as to be virtually unlimited and ultimately not useful conceptualizations (Shultz 1991; Hammond 1990). For others, LIC is not a distinct concept from war at all and it is in fact dangerous for the US to approach it as distinct (Hammond 1990; Kober 2002). Low-intensity conflict is not low because the circumstances where it is deployed can be high in salience, cost, and consequence, its intensity is relative and depends on perspective, and it is a type of conflict that should be called war (Kinross 2004).

Powell's recent work represents the newest attempt to theorize this new relationship between power and risk (Powell 2015). He develops a formal model where the challenger decides how much military power to use to achieve its ends. The more power it uses, the higher its chance of winning, but the higher the potential risk of escalation as well. The defender chooses how much of the escalation potential to exploit to try to get the challenger to back down. He argues that when there is greater instability (meaning a higher risk of escalation and a sharper trade-off between power and potential risk), conflict at higher levels of violence becomes less likely and conflict at lower levels of violence becomes more likely (Powell 2015). This is consistent with much literature on nuclear deterrence that points to the increased risk of conventional conflict that accompanies adversaries that each have nuclear arsenals (Sagan and Waltz 2003; Kapur 2007; Russell 2003).

Powell describes this as requiring a new theory about the trade-off between power and risk that matter in empirical escalation dynamics (Powell 2015). This paper seeks to add insight to theoretically defining gray zone conflict by incorporating a deterrence-oriented perspective. We argue here that gray zone conflict occurs when both parties prefer low-intensity conflict to high intensity conflict. This can happen when the initiator believes it can achieve its objectives at a lower intensity and cost than high intensity conflict, meaning gray zone conflict appears efficient, or it can occur when the target has raised the cost of high intensity conflict to an unacceptable level for the initiator, meaning the initiator is deterred. In short, a capable actor chooses to fight low intensity gray zone conflict either because it's the cheapest arena where victory is likely or because deterrence has taken high intensity conflict off the table.

Snyder described the importance of this phenomena long before gray zone conflict was an object of inquiry. “With the emergence of bipolarity, the uncertainty about alliance partners drastically declined, but nuclear technology introduced a new form of intent-perception and a new form of uncertainty – that concerning what types of military capability the opponent was likely to use and what degree of violence he was willing to risk or accept” (Snyder 1967). This paper seeks to better understand what type of military capability a country chooses and what degree of violence they are willing to risk or accept by looking at cases where a capable actor chooses a type of military capability that is less than the options they have available and why this decision is made.

Calculated Ambiguity

A separate parallel can be made between this analysis of gray zone conflict and the discussion of “calculated nuclear ambiguity” that surrounded the first Gulf War. Former US Secretary of State James A Baker III described US nuclear policy in the Persian Gulf War as one of calculated ambiguity in reference to the alleged US response to Iraqi use of chemical and biological weapons (CBW) (Arkin 1996). In 1996, Secretary of Defense Perry said that the US response to Iraqi CBW usage was intentionally ambiguous because the US thought that if Iraq was unsure about what the response to CBW use was, they would be deterred from using them (Sagan 2009). This held true despite a private decision by the White House to not use nuclear weapons in response to a chemical attack, a decision the White House kept secret from the Iraqi government and the Pentagon. The purpose of this ambiguity was the convince the opponent that the worst could happen.

However, calculated ambiguity required a careful line to be toed in being ambiguous. On one hand, President Bill Clinton wanted to avoid falling into the commitment trap that Kennedy faced during the Cuban Missile Crisis where a clear promise about a US response obligated that response because officials felt the US reputation was at stake (Sagan 2000). Furthermore, the US did not want to create a visible nuclear option during the Gulf War because of the domestic and international political cost it would face from doing so (Arkin 1996).

On the other hand, the threat made by the US had to be seen as credible, requiring Clinton to say something. Deterrence is a product of capability and credibility. For deterrence to succeed, the expected cost of punishment multiplied by the probability that the threat will be implemented has to exceed the aggressor’s expected gain from initiating a conflict (Sagan 2000). What further complicated the Iraqi situation was that the US had forsworn the use of chemical weapons, meaning it could not credibly threaten to response to CBW use in kind. So instead, it opted to escalate with an ambiguous asymmetric nuclear response.

Calculated ambiguity plays an important role in understanding the uniqueness of gray zone conflict because nuclear weapons have forced strategic planners to consider a range of alternative uses of military forces that were not just the upper limit of general nuclear war (Stephens 1994). After World War II, countries wondered how to fight a conventional war in Europe without it escalating to nuclear use. In 1957, Kissinger and Osgood tried to figure out limited war and avoiding escalation by placing restrictions on the types of targets and weapons systems as well as ways to limited the geographic scope of a conflict (Woodman 1991). In this sense, although gray zone conflict may not be something new, the scope of

gray zone conflict may have shifted as a result of historical events. Conflict is certainly a continuum, but we need to do a better of describing where the breaks in that continuum lie. The importance of a new definition of gray zone conflict then is a renewed understanding of the conditions that motivate forms of conflict that lie beneath the break of conventional conflict but above the break of ordinary interstate competition.

3 New Theory of Gray Zone Conflict

Problems with old definition

The SOCOM definition described earlier can be enumerated as having five primary components (Votel et al. 2016):

1. conceptual space between peace and war,
2. occurring when actors purposefully use multiple elements of power to achieve political-security objectives
3. with activities that are ambiguous or cloud attribution
4. and exceed the threshold of ordinary competition, yet fall below the level of direct high intensity military conflict,
5. and threaten US and allied interests by challenging, undermining, or violating international customs, norms, or laws.

Three of these components are worth revisiting. First, the idea that gray zone conflict is the purposeful use of multiple elements of power does not help distinguish it from other forms of conflict. *All* political-security objectives are achieved using multiple elements of power. Gray zone conflict is not the added deployment of non-military tools like political, economic, informational, or humanitarian means. Instead, what makes gray zone conflict unique is that it uses *less* elements of power. One current conception of gray zone conflict explains the addition of non-military means as “a recognition of the primacy of the political over the kinetic” which makes the actual strength of military forces irrelevant (Galeotti 2016).

Second, gray zone activity is sometimes ambiguous, but not always. Ambiguity can be used to give your opponent more options as in the classic chicken strategy explained by Schelling. However, ambiguity cannot be used to deter or reassure. This is problematic in the case of an initiator that does not want to escalate.

Last, the notion that gray zone challenges, undermines, or violates international customs, norms, and laws misses the fact that gray zone activity uses, reinforces, and changes norms. According to the conventional wisdom, gray zone threats can occur in three ways relative to international rules and norms. They can challenge common understandings, conventions, and international norms while stopping short of clear violations of international law as in China’s use of “little blue men” (Gady 2015). Secondly, countries can employ violations of both international norms and laws in ways that are intended to avoid the penalties associated with legal violations as in Russia’s activities in Crimea. Lastly, VEOs and non-state actors

can integrate elements of power to advance particular security interests. However, gray zone conflict is not just about *violating* norms, but is in fact closer to the opposite. If one possible goal of gray zone conflict is to avoid triggering an undesired reaction by the target, the initiator must maintain compliance with the letter of the law and instead choose a lower, more reserved action that seeks to change the spirit of the law. In this way, the initiator can try to ensure that its actions do not incite a backlash that undermine its objectives, but instead create new norms that allow its actions to serve its national interest.

This demonstrates an important relationship between higher and lower level forms of conflict. During the Cold War, the United States and Soviet Union had different technological strengths that lent themselves to opposing strategies for deterrence. In Europe, the Soviet Union had dominant conventional military capabilities while the US had better nuclear forces (Snyder 1967). Despite the US having better nuclear forces, it still maintained conventional forces, a tactical nuclear threat, and a strategic nuclear first-strike capability in Europe. The purpose of maintain (inferior) conventional forces was to make our nuclear deterrent more credible by forcing the Soviet Union to undertake a conventional attack that would exceed the US threshold for nuclear response (Snyder 1967). In other words, the US wanted to ensure that even though it had an inferior conventional force, it was still sufficient to ensure that the amount of violence the Soviet Union would have to employ to defeat the US conventionally would be a degree of force high enough to warrant a nuclear response. Thus, conventional aggression by the Soviet Union was deterred not because of superior US conventional forces, but rather because the threat of asymmetric retaliation to a winning conventional Soviet strike.

This underscores the biggest problem with the way gray zone conflict is currently conceptualized. It is thought of as something that is unique in its level of intensity, but that is not something that is new. Lower intensity conflict has existed for as long as conflict itself. Rather, the issue is how lower intensity conflict is used and thus the question of *why* it occurs should be central.

New Definition

Consequently, we present a new definition of gray zone conflict that begin from the SOCOM definition and adds a deterrence-oriented perspective. *Gray zone conflict is conflict involving actors who intentionally limit the intensity and capacity that they dedicate to fighting. In other words, gray zone conflict is a policy choice by capable actors who both prefer low-intensity conflict to high-intensity conflict.*

Three important innovations in this definition are worth highlighting. The first is that gray zone conflict is a choice. This differs from conventional understandings of “hybrid warfare” that describe these cases as dominant actors employing tools typically thought of as weapons of the weak (Galeotti 2016). In these cases, actors are fighting at low intensities because they are constrained in their capabilities. Gray zone conflict, by comparison, is not limited by a capability constraint but rather is a policy choice by more capable actors that have intentionally self-limited the intensity of their conflict either because they expect to win or because they fear escalation. The key question here is the motivation since actors are limited by their ends as opposed to their means.

Second, gray zone conflict is conflict between capable actors. Related the concept of

choice, this differentiates activities that Russia undertakes from actions taken by insurgent groups, for example, even in cases where they look observationally similar. In the case of the former, Russia may use certain limited tactics despite the fact that they are capable of doing more. In the case of insurgent groups, they use limited tactics precisely because that is all they are capable of doing. The relationship between the extent of the capabilities utilized and the potential capabilities that actor could have utilized limits gray zone conflict to being a strategy of capable actors pulling their punches rather than less capable actors who just do not have much of a punch to give. Table 1 illustrates this distinction.

		Ends	
		Limited	Not Limited
Means	Limited	Limited War	N/A
	Not Limited	Gray Zone	Traditional Conflict

Third, gray zone conflict is a mutually preferred outcome. This outcome initially seems puzzling, given the discourse surrounding the desire for an appropriate US response to gray zone warfare by our adversaries. However, the table above demonstrates that gray zone conflict is characterized by a situation where both actors have the ability to escalate, but neither has the willingness. For the initiator, gray zone conflict is preferred to traditional conflict either because fear of retaliation has successfully deterred them or because gray zone conflict is a more efficient means of achieving their desired objective. For the target, gray zone conflict is not desired, but it is tolerated. The target would rather their opponent engage in gray zone conflict than engage in traditional conflict as a result of the target's reaction to that gray zone conflict. In a conventional conflict, at least one side is willing to escalate the conflict and there is no mutually agreed upon ceiling of escalation. This difference occurs because gray zone conflict is fundamentally about limited means and ends. One implication of this definitional distinction is that gray zone conflict can escalate to war but war cannot "escalate down" to gray zone conflict because gray zone conflict involves the intentional selection of means and technologies that are ambiguous in their intention or attribution precisely because that avoids traditional conflict and all its attendant costs.

This refined definition omits the notion of ambiguity and international norms and adds the idea that while the actors have multiple options for engagement, they have intentionally limited their engagement to remain within the realm of low-intensity conflict. In this way, gray zone conflict can now be viewed as being about objectives. It is a strategy which means we need to look at the context in which this strategy is applied. An action that would be considered gray zone conflict between two particular actors at one point in time may not be gray zone activity at a later juncture or between two entirely different actors.

The Importance of Motivation

One of the first observations made about gray zone conflict was the uniqueness of its intensity, but the historical examination demonstrates this is not so unique after all. Rather, the issue is why are capable actors motivated to pull their punches and engage in gray zone conflict. Thus, the key insight is that gray zone conflict is a choice by actors who are not limited by their means, but may be limited by their ends. Our theory helps explain the strategy and motivation for that action. Here we present two explanations, deterrence and efficiency.

First, gray zone conflict may be the product of prior successes in deterrence. If an initiator has intentionally chosen to limit its engagement, this could represent not a “new way of war”, but instead it is simply an adversary that wishes to avoid triggering escalation. Ukraine is a commonly misunderstood example. Here, the target and/or its allies (Ukraine and NATO) have escalation dominance. Russia knows that were high intensity conflict to occur over Ukraine, it is likely to lose that conflict and thus they are afraid to risk triggering escalation. Witnessing gray zone conflict here is evidence of deterrence success at higher levels of conflict intensity.

This type of gray zone conflict is thus best thought of as “war with inhibitions.” The initiator’s strategy is a compromise between what it does best militarily and what it fears will happen if it adopts its optimal battlefield strategy and tactics. As a result, the initiator cannot expect to perform especially well on the battlefield because their fear of escalation has dissuaded them from implementing their most effective strategy. These actors have risked additional delay, expense, and inconvenience because they have made compromises from what they would do in an unconstrained environment in order to avoid triggering the escalatory responses of targets and target allies.

One implication of this perspective is that raising the cost of gray zone conflict can cause the initiator to stop without risking escalation. If we are in a world where gray zone strategy has been chosen because of a fear of escalation, then the target making gray zone conflict prone to escalation or retaliatory response should cause the risk-averse initiator to avoid both high and low-level conflict.

A second, alternative reason initiators may initiate gray zone conflict is that limited war is a choice not because of prior successes of deterrence, but instead because limited conflict is the initiator’s best option. Here, the initiator seems themselves as having a new way of war available that is likely to succeed without engendering unnecessary costs. While high intensity conflict may accomplish the initiator’s goals, it can be perceived as unnecessary overkill if they believe they can accomplish those same goals with reduced effort.

This scenario carries the opposite policy implication from the deterrence case. If gray zone conflict was chosen by the initiator because it is a lower-cost means to achieving their goals, then raising the cost of gray zone conflict risks encouraging the initiator to escalate. This may, in fact, be desirable for the target. Assuming that gray zone conflict is not optimal for the target, the target can exploit the escalation effect of inefficient warfare by raising the cost of gray zone conflict, thus preventing the initiator from being able to exploit its low cost means of achieving their goals. In essence, by raising the cost of gray zone conflict, the target and their allies can force the initiator into fighting inefficient warfare.

Why these two possible motivations have contrasting predictions about the consequences of dissuading gray zone conflict requires comparing the options available to the initiator (Schram 2017). An actor wishing to change the balance of power can do so through ordinary competition, gray zone conflict, or traditional conflict. These strategies all differ in terms of their ability to change the balance of power as well as their costs.

An actor undertakes gray zone conflict when the expected utility of doing so exceeds the expected utility of ordinary competition and traditional conflict. In other words, it’s the most preferred choice. Thus, we can infer their preference ordering as being one of two possible options:

Gray zone > Ordinary competition > High intensity conflict
 Gray zone > High intensity conflict > Ordinary competition

These distinct preference orderings explain the importance of understanding the motivation behind gray zone conflict. The former is an example of gray zone conflict motivated by deterrence. The cost of traditional conflict is made sufficiently high by the threat of retaliation so the initiator has compromised and chosen avoided their optimal strategy. The latter is an example of gray zone conflict motivated by efficiency; the initiator would have been willing to go to war to achieve their desired objective, but gray zone conflict represented a way to acquire their objective without incurring unnecessary costs. Russia won't send an entire battalion of tanks to acquire territory in Crimea if it feels a few "little green men" are sufficient to accomplish that goal.

This point clarifies why raising the cost of gray zone conflict discourages escalation in some cases while possibly encouraging it in others. Raising the cost of gray zone conflict when it is motivated by deterrence discourages escalation since the threat of retaliation invokes the precise costs that the initiator was hoping to avoid in the first place. When motivated by efficiency however, the initiator has already decided that the expected gains from traditional conflict exceed the costs, and thus raising the cost of gray zone conflict simply result in a situation where their more efficient option is no longer efficient, but their objective is still important enough to warrant revisionist measures beyond ordinary competition.

Gray zone conflict will not always be the optimal choice for an actor. Every conflict happening today should not be considered a gray zone conflict and there is abundant evidence that ordinary competition continues to characterize most state interactions. If a capable state hopes to change the balance of power on the cheap and without triggering a reaction, then initiating gray zone conflict is a reasonable strategy. However, if an actor hopes to coerce another into changing its behavior, then gray zone conflict is less strategic. The appeal of gray zone conflict is the ability to challenge the balance of power while limiting the reaction of the target. Thus, foreign policy goals that are driven by coercion will not be best achieved by gray zone conflict. Rather, it is a tool best left to those hoping to shift the balance of power via attrition.

Distinctions in levels of conflict

If gray zone conflict is to be defined as political conflict between peace and war, an important task is demarcating where peace ends and gray zone conflict begins as well as where gray zone conflict ends and conventional conflict begins. Gray zone is different from peace because it is directed military or political maneuvering that is designed to change the status quo. By directed, we mean military and political maneuvering that has another international actor in mind as opposed to military actions that occur during peace like weapons testing or modernization. An important difference between ordinary competition and gray zone conflict is the manner in which it is resolved. When states compete peacefully, those competitions are more likely to be resolved through institutional or legal mechanisms as opposed to through conflict-prone anarchy. Gray zone conflict is distinct from conventional conflict because it occurs when both actors are willing to not escalate the conflict.

Schelling (1966) argues that "the main consequence of limited war, and potentially a main purpose for engaging in it, is to raise the risk of larger war." Our theory presents a

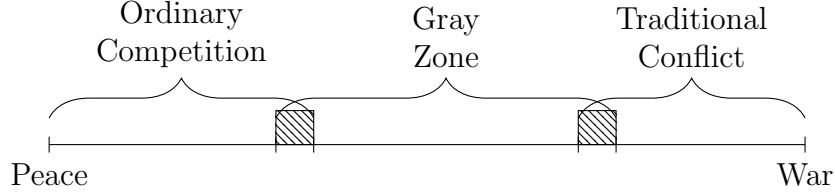


Figure 1: Model of Conflict

different relationship between, in his terms, limited war and larger war. Instead, a capable actor may choose to engage in limited war to *lower* the risk of larger war. We agree with Powell when he states “the amount of power the challenger brings to bear affects the stability of the conflict. More specifically, how much power the challenger brings to bear limits how much risk the defender can generate” (Powell 2015). Where we expand upon his model is in Powell’s conceptualization of the military might used by the challenger. Powell defines different values of military might (p) as different types or levels of conflict which leads him to the conclusion that the way states fight and the level of violence at which they fight affects the risk of all-out war (Powell 2015).

Our innovation demonstrates a shortcoming of prior conceptualizations of limited war; the term itself is ambiguous and whether the limited-ness of a war is defined simply by its intensity is unclear. This also helps clarify the relationship between nuclear weapons and limited war. It seems odd to argue that every non-nuclear conflict that a nuclear power engages in should be considered a limited war. When nuclear powers choose to forgo use of their nuclear arsenal, that decision should not be considered gray zone conflict by virtue of its reduced intensity. The level of conflict alone does not determine whether an action should be considered gray zone conflict since that action must be considered in light of its motivation.

But types and levels of conflict are not synonymous, nor should they be grouped together. Our theory expands Powell’s by looking at the relationship between *how* states fight and the level of violence at which they are fighting. This can help answer the question of whether or not shifting from one type of conflict to another necessitates an increase in the level of conflict simply because there is a shift. One reason an actor may shift from one type of conflict to another is to shift to a domain where they opponent has a relative weakness. In this case, the attack may not really be increasing the level of conflict on their end, but given defense capabilities that differ by domain for the defender, it could very well be an increase in conflict (the value of p) for them. In brief, a change in the type of p by the attack may be interpreted as increasing/decreasing p to different extents and in different directions for the aggressor than the defender.

One metric of intensity is resource allocation and this is where gray zone conflict is important since it can be a strategically calculated decision to under-allocate resources to a conflict (because of deterrence or efficiency) but that has two different outcomes in terms of escalation if the target responds. One could argue that some gray zone activities like cyber are low levels of conflict since they have low levels of resource allocation but they may be seen as escalatory since they are a different type of conflict/

Role of other actors

When there are more than two actors, as in situations where allies or proxies are involved, the presence of different audiences also complicates the gray zone conflict story. A gray zone initiator like Russia can be in a challenging position if their gray zone strategy entails a reliance on other forces or entities participating in the process. If the goal of gray zone conflict is to avoid escalation, Russia must delineate a ceiling for their intentions and goals to avoid triggering a reaction by NATO that would result in undesired escalation. However, in telegraphing limited intentions to your adversary, thus clarifying that you intend to remain in the gray zone of conflict, you are also telegraphing limited intentions to your allies which could backfire if they then choose not to fight.

Empirical Evidence

To test our theory that gray zone conflict is a policy choice by capable actors motivated by either the target's successful deterrence or the possibility of more efficiently achieving one's objectives, this paper employs a comparative case study method focused on Russian cyber attacks on NATO countries. We employ a most similar case comparison by choosing cases that have the same gray zone conflict initiator (Russia), the same target (NATO), the same means (cyber attacks), very similar time frames, but that differ in what motivated Russia to choose gray zone conflict over another ordinary competition or high intensity conflict.

One of the primary ways differences in motivation can be inferred is the result of the NATO response. Our theory predicts that when gray zone conflict is chosen because of successful deterrence, responding to gray zone conflict will de-escalate the situation and result in the initiator choosing ordinary competition as their next preferred option. When gray zone conflict is chosen because it's the most efficient means of achieving their objective, responding to gray zone conflict will escalate the situation because the initiator now has to resort to more costly high intensity conflict to achieve their objective.

Russian Cyber Operations in Georgia

In early 2008, an election was held in the nation of Georgia following accusations that the incumbent, President Mikheil Saakashvili, was suppressing political dissidents. Despite the accusations, he was re-elected in part due to his promise to uphold Georgian territorial integrity. At this same time, Georgia also declared their aspiration to join NATO which was welcomed by NATO at the Bucharest Summit Declaration. Soon after, suspicion arose within the Georgian government that Russia was responsible for a wave of cyberattacks against Mikheil Saakashvili that included DDoS attacks, ICMP floods, TCP SYN floods, and HTTP floods. The Shadowserver Foundation, a group that tracks cyber attacks, traced these attacks back to a Machbot controller that had over 15,000 bots issuing these attacks. These attacks continued for months and targeted internet connections that were connected to physical infrastructure like oil pipelines. This was the first time that known cyberattacks had coincided with a kinetic shooting war given the Russian invasion into Georgia. While no certain confirmation could be given that the cyberattacks could be attributed to the Russian

government, it was noted that botnets were prepared and activated just before a series of Russian airstrikes against Georgia.

The combination of cyber influence and disruption (propaganda, espionage, DDoS), active measures (covert military operations), as well as norms violations and sovereignty infringements (e.g. “passportisation”, airspace incursions) is characteristic of gray zone conflict calculated to achieve political and security objectives without triggering overt military conflict.

Deepening US and NATO interests in post-revolutionary Georgia likely led Russian leadership to pursue gray zone conflict as an optimal strategy for altering the status quo of frozen conflicts in Russia’s near abroad, despite enjoying escalation dominance over the defending state, Georgia. Congruence between the Kremlin’s irredentist policies and secessionist attitudes in Abkhazia and South Ossetia stoked pro-Russian sentiment in restive regions inside Georgian territory, producing negative synergies that intensified in the Summer of 2008 that rose above ordinary levels of interstate competition.

Recourse to conventional military and legal tools was foreclosed to Georgia and its allies, because the challenge of attribution for cyber operations provided the suspected perpetrators with plausible deniability given the difficulty of attributing the cyber attacks to the Russian government as opposed to simply being inspired by the Russian government. Other low intensity activities were calibrated to avoid thresholds justifying armed self-defence. Possible use of proxies helped cloud attribution, while the command-and-control networks responsible for DDoS appear to have simply been redirected from illicit activities toward crippling Georgian information infrastructure (dual-use), making operations low cost as well as ambiguous.

We argue here that Russian cyberattacks against Georgia in 2008 is an example of gray zone conflict motivated by deterrence success. One explanation for this could be that American investment in modernizing the Georgian military had raised the cost of engaging in conventional warfare. Conventional military deployment might have been the more efficient option for resolving conflict in Russia’s favor, particularly given the effectiveness of information interdiction and crippling of Georgian communication infrastructure prior to hostilities, but US and NATO support for the Georgian government may have been perceived to be strong enough that there was at least a chance that Georgian allies would be drawn into conflict. Alliance maintenance, issue slippage, and ideational affiliation were forces that bound allies to a weak state under threat.

4 Implications

The Need for Deterrence Adaptation

An important implication is thus that gray zone challenges are an inevitable consequence of establishing deterrence. If deterrence is to keep up with these challenges, it must continue to adapt as well. In a sense, deterrence is little more than a strategy to buy time against an adversary that is strongly committed to changing the status quo (George and Smoke 1989).

While not discussed in the context of gray zone conflict, George and Smoke did discuss the notion of “designing around” deterrence as an action taken by adversaries in response

to deterrence (George and Smoke 1974). Here, adversaries consider the options available for challenge deterrence and they identify the option that “offers an opportunity for gain while minimizing the risk of an unwanted response by the defender” (George and Smoke 1989). However, George and Smoke describe this as a deterrence failure, an argument that gained empirical traction in analysis of the 1973 war where Egypt “designed around” Israel’s deterrent capability (Stein 1989). Our perspective, by comparison, is that “designing around” deterrence through the initiation of gray zone conflict is a sign of deterrence success.

Some, however, have viewed this as a deterrence success. Lieberman argues that “designing around” is a sign of successful deterrence because an adversary has limited their challenge as a result of the perceived response from the defender (Lieberman 2012). This demonstrates that there is nothing necessarily new about gray zone conflict, and scholars have long recognized it as a problem. The fact that it seems new now is a testament to ignorance of historical parallels, failure by scholars to address the problem, and possibly something interestingly different about recent challenges. Part of that difference could be an evolution in what type of deterrence gray zone conflict is “designing around.” While previous actions by adversaries were designed around immediate deterrence, gray zone conflict may represent cases of adversaries challenging general deterrence. The value of our model of conflict is identifying the types of moves available to an initiator given the constraints of successful general deterrence and explaining why that results in gray zone conflict as opposed to ordinary competition or traditional conflict as it did before.

One purpose of gray zone conflict is to dominate the OODA loop (observe, orient, decide, and act) by paralyzing your opponent because they don’t know how to react to a novel lower level of escalation in a space opened up by the causes of peace (more on that below) which is the argument made with the horns of the strategic dilemma (Maxwell 2016). One possible result of this is that if an actor like Russia feels even more threatened by NATO, it may be willing to deploy even grayer zones of conflict as a response to successful deterrence.

Role of Institutions and Interdependence

This begs the question of why gray zone conflict has emerged as an option for shifting the balance of power alongside ordinary competition and traditional conflict. Part of the explanation has to do with the role of institutions. Institutions have changed the definition of peace because they have regularize the interest of states. Issues that used to cause war no longer do because institutions have provided a forum for peaceful dispute resolution in lieu of war. An important side effect is that traditional conflict comes with a fear of losing out on the benefits of cooperation from ordinary competition. This occurs despite the fact that traditional conflict can often better achieve a nation’s objectives than ordinary competition given compromise is less necessary (if it is necessary at all). Since one factor that differentiates gray zone conflict from traditional conflict is the response by the defender, gray zone conflict has an added benefit over traditional conflict in being less likely to trigger a loss of cooperation between those actors. This results in the uncomfortable conclusion that the institutional causes of peace in the 21st century may be a cause of gray zone conflict since the fear of losing cooperation creates an incentive to use gray zone conflict over high intensity conflict because gray zone conflict can be initiated without fear of losing the benefits of cooperation.

Institutions are but one example of a host of factors in the 21st century that have resulted in an expanding role for gray zone conflict. More broadly, changes in the material basis of military and economic power have increased both the incentives and opportunities for ambiguous gray zone aggression in a few important ways. The cost of war has increased because better military technology has made conflict more consequential. Many have argued that deterrence has been a cause of peace but in reality it may be a cause of the absence of high intensity war meaning it leaves open the possibility of gray zone conflict. Peace has also become increasingly beneficial since improvements in communication technology and global trade rely on cooperation in ways that have increased interdependency. Arguably, overt military combat has declined and been replaced with an increase in covert and intelligence operations that have the added benefit of lower body counts.

These causes of 21st century peace, in particular increased interdependence, are being exploited by capable actors in ways that subvert deterrence. The benefits to peace provide new ways to hassle target states through gray zone conflict which explains why even though the concept of conflict short of war is not new, the motivations behind it are in ways that warrant updating theories of conflict.

Cross-Domain Dynamics

Notions of cross-domain deterrence expect gray zone conflict to occur. One important example of this is electronic weapon and cyber attacks that do not directly result in enemy casualties. Russia has the capability to cause deaths with these attacks yet it chooses not to do so. NATO does not quite know how to respond to this because kinetic operations may be too much of an escalation and it may not possess cyber and electronic capabilities that can respond in kind (see if there is a source for this) and because attribution may be difficult (Gartzke paper on this for cyber).

As a result, an actor may not realize that one of its actions is gray zone conflict. If a country does not have an appropriate, same-domain, and proportional response to a type of attack then its use may result in the horns of strategic dilemma even if the initiator does not realize it (some argue this is the case with US use of Prompt Global Strike (PGS)).

Gray Zone and Asymmetric Conflict

Our new definition's clarification about the distinction between gray zone conflict and asymmetric warfare by less capable actors also matters for US foreign policy strategy. Observationally, 'limited wars' often look similar. Limited actions by Russia in Crimea use similar forces and are of a similar scope to actions undertaken by non-state actors. But although the behavior looks the same, the motivations are different. In one case, an adversary's actions are limited by choice while in the other case an adversary's are limited by necessity. Failure to appreciate this distinction results in the ill-advised application of counter-terrorism or asymmetric warfare doctrine and strategy to cases of gray zone conflict with potentially disastrous implications.

5 Conclusion

This paper introduces the notion that there is a spectrum of conflict characterized by more than gradations of intensity. The gray zone of that spectrum is expanding because of new causes of peace in the 21st century. An actors motivation for choosing to operate in the gray zone area of that spectrum determines the outcome of the target's response.

It is critical for decision makers to know why the initiator chose limited gray zone conflict because that changes the implication of raising the cost of gray zone conflict. If we are in the first situation where the initiator chose gray zone because they are cost-averse, then raising the cost of gray zone conflict will likely result in peace. However, if we are in the second situation where the initiator chose gray zone conflict because they prefer limited war as a lower-cost means of achieving their objectives, then raising the cost of gray zone conflict could risk escalation.

The key insight here is that gray zone conflict helps inform a classic debate in security studies between the deterrence model and the spiral model. Whether the response to gray zone conflict inhibits conflict (deterrence model) or inflames conflict (spiral model) depends on whether the initiator's actions are influenced and motivated by previous rounds of deterrence success.

References

- Adams, Thomas K. 1990. "LIC (Low Intensity Clausewitz)." *Small Wars and Insurgencies* 1(3):266–275.
- Arkin, William M. 1996. "Calculated Ambiguity: Nuclear Weapons and the Gulf War." *The Washington Quarterly* 19(4):2–18.
- Carter, Ash. 2016. "Remarks on "The Future of the Rebalance: Enabling Security in the Vital & Dynamic Asia-Pacific"."
- Charap, Samuel. 2015. "The Ghost of Hybrid War." *Survival* 57(6):51–58.
- Downie, Richard D. 1992. "Low Intensity Conflict Doctrine and Policy: Old Wine in a New Bottle?" *Studies in Conflict & Terrorism* 15(1):53–67.
- Dunford, Joseph. 2016. "Gen. Dunford's Remarks and Q&A at the Center for Strategic and International Studies."
- Foust, Joshua. 2016. "Can Fancy Bear Be Stopped? The Clear and Present Danger of Russian Info Ops." <http://warontherocks.com/2016/09/can-fancy-bear-be-stopped-the-clear-and-present-danger-of-russian-info-ops/>.
- Freedman, Lawrence. 2014. "Ukraine and the Art of Limited War." *Survival* 56(6):7–38.
- Freier, Nathan, Charles Burnett, William Cain, Christopher Compton, Sean Hankard, Robert Hume, Gary Kramlich, Matthew Lissner, Tobin Magsig, Daniel Mouton, Michael

- Muztafago, James Schultze, John Troxell and Dennis Wille. 2016. Outplayed: Regaining Strategic Initiative in the Gray Zone. Technical report United States Army War College.
- Freysinger, Robert C. 1991. "US Military and Economic Intervention in an International Context of Low-Intensity Conflict." *Political Studies* 39(2):321–334.
- Gady, Franz-Stefan. 2015. "‘Little Blue Men’: Doing China’s Dirty Work in the South China Sea." <http://thediplomat.com/2015/11/little-blue-men-doing-chinas-dirty-work-in-the-south-china-sea/>.
- Galeotti, Mark. 2016. "Hybrid, Ambiguous, and Non-Linear? How New Is Russia’s ‘New Way of War’?" *Small Wars & Insurgencies* 27(2):282–301.
- Gartzke, Erik and Oliver Westerwinter. 2016. "The Complex Structure of Commercial Peace Contrasting Trade Interdependence, Asymmetry, and Multipolarity." *Journal of Peace Research* 53(3):325–343.
- Gartzke, Erik and Quan Li. 2003. "Measure for Measure: Concept Operationalization and the Trade Interdependence-Conflict Debate." *Journal of Peace Research* 40(5):553–571.
- George, Alexander L. and Richard Smoke. 1974. *Deterrence in American Foreign Policy: Theory and Practice*. Columbia University Press. Google-Books-ID: uFafGwYdungC.
- George, Alexander L. and Richard Smoke. 1989. "Deterrence and Foreign Policy." *World Politics* 41(2):170–182.
- Grant, Arthur V. 1991. "Strategic Decisions: The Mire of Low-intensity Conflict." *Comparative Strategy* 10(2):165–175.
- Hammond, Grant T. 1990. "Low Intensity Conflict: War by Another Name." *Small Wars & Insurgencies* 1(3):226–238.
- Hoffman, Bruce. 1992. "Current Research on Terrorism and Low Intensity Conflict." *Studies in Conflict & Terrorism* 15(1):25–37.
- Jackson, Van. 2016. "Preventing Nuclear War with North Korea." *Foreign Affairs* .
- Kapur, S. Paul. 2007. *Dangerous Deterrent: Nuclear Weapons Proliferation and Conflict in South Asia*. Stanford University Press.
- Kinross, Stuart. 2004. "Clausewitz and Low-Intensity Conflict." *Journal of Strategic Studies* 27(1):35–58.
- Kober, Avi. 2002. "Low-Intensity Conflicts: Why the Gap Between Theory and Practise?" *Defense & Security Analysis* 18(1):15–38.
- Kornbluh, Peter and Joy Hackel. 1986. "Low-Intensity Conflict Is It Live or Is It Memorex?" *NACLA Report on the Americas* 20(3):8–11.

- Lebow, Richard Ned. 2010. "The Past and Future of War." *International Relations* 24(3):243–270.
- Lepgold, Joseph and Brent L. Sterling. 2000. "When Do States Fight Limited Wars?: Political Risk, Policy Risk, and Policy Choice." *Security Studies* 9(4):127–166.
- Lieberman, Elli. 2012. *Reconceptualizing Deterrence: Nudging Toward Rationality in Middle Eastern Rivalries*. Routledge. Google-Books-ID: JwjuH4nsvHUC.
- Maxwell, David. 2016. "Gray Zone Subject Matter Expert Interview."
- Mazarr, Michael. 2015. "Struggle in the Gray Zone and World Order." <http://warontherocks.com/2015/12/struggle-in-the-gray-zone-and-world-order/>.
- Metz, Steven. 1989. "Foundation for a Low-intensity Conflict Strategy." *Comparative Strategy* 8(2):265–273.
- Paul, Christopher and Miriam Matthews. 2016. The Russian "Firehose of Falsehood" Propaganda Model: Why It Might Work and Options to Counter It. Technical report Rand Corporation Santa Monica, CA: .
- Powell, Robert. 2015. "Nuclear Brinkmanship, Limited War, and Military Power." *International Organization* 69(03):589–626.
- Rosen, Stephen Peter. 1982. "Vietnam and the American Theory of Limited War." *International Security* 7(2):83–113.
- Russell, Richard L. 2003. "The Nuclear Peace Fallacy: How Deterrence Can Fail." *Journal of Strategic Studies* 26(1):136–155.
- Sagan, Scott D. 2000. "The Commitment Trap: Why the United States Should Not Use Nuclear Threats to Deter Biological and Chemical Weapons Attacks." *International Security* 24(4):85–115.
- Sagan, Scott D. 2009. "The Case for No First Use." *Survival* 51(3):163–182.
- Sagan, Scott Douglas and Kenneth Neal Waltz. 2003. *The Spread of Nuclear Weapons: A Debate Renewed*. Norton. Google-Books-ID: XOExQwAACAAJ.
- Santoro, David and Brad Blosserman. 2016. "Healey's Wrong: It's Deterrence, Stupid." <http://warontherocks.com/2016/10/healeys-wrong-its-deterrence-stupid/>.
- Schelling, Thomas C. 1957. "Bargaining, Communication, and Limited War." *Conflict Resolution* 1(1):19–36.
- Schelling, Thomas C. 1966. *Arms and Influence*. Yale University Press. Google-Books-ID: nVPsJxRmkagC.
- Schram, Peter. 2017. "Hassling."

- Schultz, George. 1986. "Low-Intensity Warfare: The Challenge of Ambiguity."
- Shultz, Richard H. 1991. "The Low-Intensity Conflict Environment of the 1990s." *The ANNALS of the American Academy of Political and Social Science* 517(1):120–134.
- Snyder, Glenn. 1967. The Balance of Power and the Balance of Terror. In *World in Crisis: Readings in International Relations*, ed. Frederick Hartmann. New York: The Macmillan Company pp. 180–191.
- Stein, Janice Gross. 1989. Calculation, Miscalculation, and Conventional Deterrence. In *Psychology and Deterrence*. JHU Press.
- Stephens, Alan. 1994. "The Transformation of 'Low Intensity' Conflict." *Small Wars & Insurgencies* 5(2):143–161.
- Sullivan, Patricia L. 2007. "War Aims and War Outcomes Why Powerful States Lose Limited Wars." *Journal of Conflict Resolution* 51(3):496–524.
- Turbiville, Graham H. 2002. "Preface: Future Trends in Low Intensity Conflict." *Low Intensity Conflict & Law Enforcement* 11(2-3):155–163.
- Votel, Joseph, Charles Cleveland, Charles Connett and Will Irwin. 2016. Unconventional Warfare in the Gray Zone. Technical report National Defense University Press.
- Woodman, Dr Stewart. 1991. "Defining Limited Conflict: A Case of Mistaken Identity." *Small Wars & Insurgencies* 2(3):24–43.