

## **Washington's Perceptions and Misperceptions of Beijing's Anti-access Area-denial (A2-AD) 'Strategy': Implications for Military Escalation Control and Strategic Stability**

**Abstract:** Washington has become increasingly concerned that Beijing's A2-AD capabilities will put at risk U.S. military assets and forward forces operating in the Western Pacific region, enabling China to deter, delay and deny U.S. intervention in future regional conflict and crisis. U.S. defence analysts in their assessments have frequently, and often erroneously, conflated a Chinese operational *capability* with an underlying strategic *intention* that conceptualises the U.S. as its primary (if not sole) target. The central argument this article proffers is that U.S. perceptions of A2-AD have been framed by specific analytical baselines that have overlooked the evolution of Chinese operational and doctrinal preferences, and over-reliant upon military material-based assessments to determine Beijing's strategic intentions, and formulate U.S. military countervails. The article concludes that the strategic ambiguities and opacity associated with Chinese A2-AD capabilities and its 'active defence' concept reinforced Washington's reliance upon capacity-based assessments that in turn, exacerbated misperceptions confounded by cognitive bias of Chinese strategic intentions. The critical framing assumptions of this article draw heavily upon the ideas and rationale associated with the International Relations (IR) 'Security Dilemma' concept.

**Key Words:** Anti-access Area-denial; US-China Relations; Asia Pacific; US Military Policy; Security Dilemma Theory

## **Introduction:**

This article builds on the current (albeit limited) literature that elucidates the driving forces behind Washington's perceptions and interpretations of the Chinese anti-access and access-denial (A2-AD) challenge in East Asia.<sup>1</sup> In particular, it focuses on the strategic ambiguities associated with A2-AD that have provided fertile ground for U.S. misperceptions of Chinese strategic intentions to grow. A central contribution of this article is to show how these perceptions of A2-AD operated and impacted U.S. decision-making and defence planning in the Asia Pacific region. The conclusions reached on Chinese strategic ambiguities, and U.S. misperceptions and cognitive biases related to A2-AD, are framed by the theoretical assumptions associated with the International Relations (IR) 'Security Dilemma' concept (Herz, 1950; Butterfield, 1951; Jervis, 1978),<sup>2</sup> and several closely related FPA (Foreign Policy Analysis) cognitive psychology traditions and sub-fields - which have been widely used by scholars to deepen their understanding of contemporary U.S.-China security relations (Friedberg, 2005; Godwin, 2010, p.266; Scobell and Nathan, 2012, pp.719-720; Johnston, 2013, pp.8-10; Mearsheimer, 2014, pp.7-8; Ikenberry and Liff, 2014, p.52-91).<sup>3</sup>

Since the 1990's China's military has been rapidly transformed into a more professional and capable fighting force. U.S. defence analysts have become increasingly concerned that the People's Liberation Army's (PLA) A2-AD capabilities will put at risk vital U.S. military assets and platforms (or the U.S. 'infrastructure of command') in the Asia-Pacific region, required by U.S. forward forces to bring its projection power to bear (DoD 2015; Cliff eds. 2007, pp.51-76; Montgomery, 2014, pp.115-149). Chinese multi-faced and increasingly integrated and sophisticated A2-AD capabilities have been interpreted by several defence analysts as a harbinger of a broader strategic challenge to Washington's power projection capacity, its military freedoms - or its 'command of the commons' - and the '*American way of war*' (Posen, 2003, pp.16-19). As IR scholars have opined, security dilemma dynamics between states are more intense when one side significantly increases its defence spending and capabilities, and simultaneously acquires enhanced force projection capabilities - both of which China has done since the late 1990's (Jervis, 1978, pp.167-214; Christensen, 1999, pp.49-80).

This article provides a rigorous assessment of the key driving forces behind U.S. perceptions of Chinese strategic intentions related to A2-AD. What is Beijing seeking to achieve through its military modernisation efforts, and moreover, why is it seeking to achieve it? What are the key assumptions, drivers, and strategic calculations underlying Beijing's military goals? Scholars, defence analysts and policy-makers alike have actively sought answers to these questions. To be sure, responses to these questions, and in particular, the critical assumptions underlying these responses will have significant implications for the future of U.S. strategic calculations and force postures in Asia, U.S.-China security relations, and for regional peace and stability.

Washington's military response to the perceived challenges and strategic ambiguities posed by A2-AD has been most closely associated with the Air-Sea Battle (ASB) operational concept (renamed JAM-GC in 2015) calibrated to: signal deterrence to Beijing; secure the regional status-quo; and hedge against the risk that Washington's worst-case scenario expectations could actually be realised. However, by prescribing an offensive-dominant battle-plan specifically designed to address the A2-AD 'military problem set',<sup>4</sup> the ASB authors *implicitly* cast China as a revisionist rising power harbouring 'malign' (i.e. expansionist or aggressive) intent. The action-reaction policy dynamics, arms-racing spirals and risks of deterrence failure (or security dilemma dynamics) attributed to ASB has perceptibly worsened U.S.-China security relations - and reducing the security for both.

This article elucidates the propensity of the U.S. defence community to conflate Chinese A2-AD capabilities with *explicit proof* of the existence of a coherent and homogeneous strategy and 'military doctrine' underwriting these weapons to fulfil the requirements of a particular missions - or even to realise a Chinese 'grand strategy' that conceptualises the U.S. as the primary (if not only) target.<sup>5</sup> It argues that U.S. defence analysts have by overlooking (or deemphasising) Chinese operational doctrinal preferences and plans, and relying too heavily on pure material capabilities have reinforced U.S. bureaucratic biases and 'mirror imaging' propensities. Extrapolations from Chinese A2-AD capabilities - grounded in a fundamentally non-Chinese framework of analysis - have constituted a critical analytical baseline in Washington's assessments of the trajectory of Beijing's strategic intentions. As a corollary, the critical assumptions underlying these assessments have resulted in misperceptions of the nature and evolution of Chinese military doctrine, and strategic

intentions vis-à-vis the U.S. And in particular, how this operational framework will guide and inform Beijing in the use of military force in future wars in the Asia Pacific. Notwithstanding the fact that several Chinese A2-AD capabilities do *appear* (or have the ability) to directly target the U.S. in the region, *possession* of these capabilities does *not necessary* confer a strategic intent - malign or otherwise. It is important to note, that any military prognosis related to the ASB/A2-AD debate is concerned more with the future military balance and modern cross-domain warfare (Biddle and Oelrich, 2016, pp.7-48). Thus, determining for sure the accuracy the worse-case scenario assumptions underpinning ASB will be decided by the long-term potential and evolution of military technologies, doctrines, procurements and regional strategic competition and geo-political change. This article by removing the burden of proof associated with determining whether Beijing *intends* to exclude the U.S. from areas of the Western Pacific it has traditionally commanded, instead focusses on the critical U.S. framing assumptions (or analytical baselines) themselves, which have left ample scope for misperceptions confounded by institutional cognitive biases.

This article proceeds as follows. First, it elucidates the major driving forces underlying U.S. threat perceptions associated with Chinese A2-AD capabilities. Second, it unpacks some of the strategic ambiguities and uncertainties related to China's 'active defence' core strategic concept and a Chinese doctrinal preference for the use of early and pre-emptive strike tactics. Third, it considers the nature, extent and assumptions driving U.S. misperceptions of Chinese strategic intentions, to rigorously demonstrate how these cognitive biases - grounded in pre-existing frameworks of analysis - have impacted U.S. military and defence policies vis-à-vis China. Finally, it ties-in the articles' central themes to briefly reflect on implications for U.S.-China crisis stability, military escalation control for future conflict or crisis that pits Chinese A2-AD against U.S. ASB in the Asia Pacific.

### **Washington's Heightened Threat Perceptions & China's Existential A2-AD Challenge**

From a broad survey of U.S. empirical sources relating to Chinese A2-AD capabilities, several themes can be drawn out to illustrate how Washington has conceptualised the A2-AD challenge.<sup>6</sup> Although the A2-AD concept is not a Chinese strategic term per-

se - the term is seldom found in official Chinese military sources - several seminal features associated with the concept enables this article to establish a critical analytical baseline to compare Washington's A2-AD strategic construct with Beijing's military doctrinal preferences and broader strategic objectives. For the purposes of constructing this baseline eight overarching themes can be identified. These themes have been specifically highlighted (as opposed to other articulations in the existing literature) because of the outsized impact they have had upon U.S. defence analysts' assessments of Chinese strategic intentions. In short, this approach enables a more robust case to be made for the deterioration of U.S.-China military and defence relations in the Asia Pacific caused by U.S. misinterpretations of Chinese intentions, and compounded by cognitive bias, strategic ambiguity, and a lack of Chinese military transparency - all of which are closely associated an intense (or deep) security dilemma.

1. A central focus - if not the overriding one - of Chinese A2-AD is to restrict the access, and deny the freedom of movement to of U.S. forward forces operating in the theatre of operations. Or the creation of a 'contested zone' in and around China's periphery (Blumenthal, 2012, p.13; Dutton et al., 2014).
2. A2-AD strategy to keep U.S. forces at a distance primarily by deploying long-range precision cruise and ballistic missiles - that the U.S. DoD anticipates will soon be capable of reaching U.S. bases in Guam (DoD, 2016, p.60).
3. A2-AD capabilities are primarily directed at U.S. overseas military bases, weapons systems and platforms.
4. A2-AD capabilities are primarily designed for *wartime* application, though particular aspects also have *peacetime* applications - notably the cyber, space and electronic warfare (EW) domains.
5. A2-AD is institutionalised at a *strategic level*, and integrated into Beijing's broader national security and defence strategic calculus - and a key component of Chinese comprehensive national power (CNP).
6. A2-AD capabilities and guiding doctrines are *asymmetric* in nature. 'Asymmetry' in this sense is explicitly defined relative to U.S. military primacy in the Asia Pacific. During Beijing's 2015 *Victory Day Parade* its *Dongfeng* DF-21D anti-ship ballistic missile (ASBM) was described by Chinese state-media as an "*assassin's mace* for maritime *asymmetric warfare*" (Erickson, 2015).

7. A2-AD is increasingly focussed on advanced long-range missile strike capabilities. Specifically, the use of ‘asymmetric’ conventional weapons systems to achieve Beijing’s strategic deterrence (Christensen, 2001).
8. The geographical scope and focus of A2-AD is defined by those areas in-between and surrounding China’s first and second chain islands - or its ‘near-seas’.

### **‘Active Defence’ and Chinese Strategic Ambiguities**

The People’s Liberation Army’s (PLA) ‘authorised’ seminal doctrinal text *The Science of Military Strategy* (SMS) has described ‘active defence’ as a cornerstone strategic theory guiding the military modernisation efforts of successive generations of Chinese leaders (Peng and Yao, 2005, pp.454-459).<sup>7</sup> At the heart of this principle is the premise of ‘*striking only after the enemy has struck*’ and that when it does strike China will use offensive operations at all levels of war - or uses offensive actions to achieve defensive objectives. ‘Active defence’ has also been consistently referred to within China’s official ‘*National Defence White Papers*’ from 2002 to 2015. For example, the 2008 White Paper described the concept in the following way:

‘Active defence’ features “defensive operations, self-defence and striking and getting the better of the enemy *only after the enemy has started an attack*” (China’s National Defence White Paper, 2008 - emphasis added).

The Chinese cult of the ‘defence’ and its active defence is well known to external analysts (Scobell, 2013). An area of on-going debate and controversy however, relates to the strategic ambiguity caused by the issue of how the ‘*self-defence*’ principle embraced by active defence, can be reconciled with the seemingly contradictory doctrinal emphasis on early and pre-emptive strike tactics? The SMS authors’ use of this ‘*self-defence*’ principle has in part been attributed to Beijing’s desire to be able to claim the legal and moral high ground in the event that *defensive* military force is required. It is noteworthy that the implementation of active defence operations, “does *not require* China to actually suffer a physical blow...‘active defence’ *provides the basis for pre-emptive action*” (Blasko, 2014, pp.102-103 - emphasis added). For example, the SMS authors stated:

“Under high-tech conditions, for the defensive side, the strategy to gain mastery by *striking only after the enemy has struck* does not mean waiting for enemy’s strike passively...the first

*shot* [early or pre-emptive strike] on the plane of *politics and strategy* must be differentiated from the first shot on the plane of tactics...if any country or organisation *violates the other country's sovereignty or territorial integrity*, the other side will have the *right to 'fire the first shot' ...military counterattacks may be taken*" (Peng and Yao, 2005, pp.135-136 - emphasis added).

This passage implies that a significant amount of strategic ambiguity exists in what Beijing might consider as *sine qua non* (or 'red lines') for violating its 'sovereignty or territorial integrity'. That is, if any perceived 'red lines' were breached, what operational doctrine (and precise escalation ladders) would guide and inform Beijing in prescribing the timing and scope of 'first shot(s)' or pre-emptive strikes? Moreover, although the SMS authors stressed that the use of pre-emptive or early strikes should not be "expansive and *extrovert offensive*...but *strategically defensive*" they did not however (aside from detailing several generic potential targets) elaborate on *how* at an *operational level* these kinds of military campaigns would be managed or controlled. These ambiguities have been compounded by the doctrinal contextualisation of early and pre-emptive strikes with Chinese strategic-cultural traditions emphasising the element of surprise, and in particular, choosing "the unexpected time, place, and pattern of war which the *enemy finds most reluctant and difficult* to deal with" (Pang and Yao et al., 2005, pp.459-546 - emphasis added). Strategic ambiguities of this kind has indubitably complicated the challenge for U.S. defence analysts in fathoming how active defence could be interpreted by Beijing, to guide and inform the trajectory of its military strategy, operational doctrine, force postures, procurements and training requirements - and faced with these ambiguities, how best to calibrate countervails these perceived challenges?

### **Washington's Capacity-Based Assessments & Projecting Strategy**

U.S. interpretations of China's A2-AD 'strategy' have been heavily dependent upon identifying particular military capabilities that would *be required* to accomplish A2-AD missions. That is, in the formulation of their assessments U.S. defence analysts have tended to identify specific military capabilities which corroborate the operational prerequisites considered necessary for an A2-AD 'strategy'. Subsequently, these capabilities have often been taken as *explicit proof* of the existence of a coherent

operational doctrine and homogenous strategy guiding them. Or in other words, the PLA's *capabilities* have served as the starting point (or analytical base-line) for U.S. assessments and interpretations of Chinese strategic *intentions* - with the use of Chinese empirical sources used to *fills in the gaps* where expedient. As defence analyst Anton Lee Wishik (2011, p.39) opined "extrapolations from Chinese capabilities make up a vital component of the U.S. A2-AD *assessment of China's military strategy*". To be sure, this kind of reverse engineering does not necessarily invalidate the conclusions reached by U.S. defence analysts - many of which appear reasonable and accurate (*Ibid*, p.44-45). Rather, the problem lies with the underlying assumptions extrapolated from Chinese A2-AD military capabilities to determine the trajectory of Beijing's strategic intentions vis-à-vis Washington.

Whilst China has acquired - and is actively in the process of developing - military capabilities that *could* accomplish A2-AD missions, for now at least, the PLA lacks a sufficiently mature operational doctrine to effectively integrate and guide an A2-AD 'strategy'. If a coherent operational doctrine did exist one would expect to see evidence of such a doctrine shaping the PLA's procurements and training requirements, and the reporting of these activities in authoritative PLA press publications - if only for the purposes of publically defending the fiscal rationale for such acquisitions. Moreover, existence of a mature operating doctrine would also likely inform the use of A2-AD capabilities for deterrence-based tactical signalling, which does not appear to be the case. For example, PLA Navy's (PLAN) submarine fleet, a core component of A2-AD, has so far not been widely used for deterrence signalling purposes - with the possible exception of the 2006 surfacing of a *Song* attack submarine near to the U.S. *Kitty Hawk* carrier (McVadan, 2012, p.387; Twomey, 2014, pp.130-154).

In 2015 the DoD reported that PLAN commenced its first nuclear-armed submarine (SSBMs) deterrence patrols, and signalling to potential adversaries (including the U.S.) its ability to use SSBMs for 'continuous at sea deterrence' (CASD) missions, improving its chances of penetrating U.S. missile defences, and giving it its first credible second strike capacity - especially within the first island chain, including the South China Sea (DoD, 2015, p.58-59). The use of submarines for deterrence signalling purposes by China is however at its very early stages, and uncertainties relating to nuclear doctrine, operating procedures, and command and control (C2)



systems remain unresolved (Thomas-Noone and Medcalf, 2015; Goldstein, 2013). To be sure, evaluating the use of military force (explicitly and implicitly) to send signals about states' capabilities and intentions in times of conflict and peace can be very challenging (Jervis, 1970; Fearon, 1995).

Stephen Biddle (2005) argued that states' military capabilities say very little about its underlying strategic intentions or its 'military power', unless these capabilities are effectively integrated into an operational doctrine, which harnesses its strengths and minimises its weaknesses. To be sure, scholars have long recognised that differences in military doctrines, operating frameworks and strategic cultures can lead to misperceptions and misunderstandings between states - or the inability of actors to perceive events from the perspective of their adversaries (George, 1980, pp.66-67; Payne, 2001; Twomey, 2010). Thus, by placing an undue emphasis upon material measures (i.e. numbers and technologies) of Chinese A2-AD military capabilities U.S. defence analysts have overlooked Chinese military operational preferences and doctrine - that will crucially influence the trajectory of Chinese strategy, and indicate (implicitly or explicitly) how and under what conditions future conflicts and wars may be fought in the Asia Pacific.

Capacity-based analytical approaches to assess threats have constituted a long-standing methodology applied by the Pentagon, which has been consistently applied in the DoD's annual reports to Congress on the PLA since 2000.<sup>8</sup> That is, a series of inferences and deductions have been extrapolated from A2-AD capabilities to determine the nature and trajectory of Chinese strategic objectives. Furthermore, these inferences and deductions have been grounded in a U.S.-centric analytical framework informed by: U.S. military doctrines, organisational and bureaucratic traditions, operating practices and strategic cultures (Finkelstein, 2007, p.76 - emphasis added).

For example, in its 2016 report to the DoD stated:

“China's is investing in military programs and weapons *designed* to improve extended-range power projection, anti-access/area denial....[that will] also *enable* the PLA to conduct a range of military operations in Asia beyond China's traditional territorial claims” (DoD, 2016, p.57 - emphasis added).

Similarly, the former head of the U.S. Pacific Command, Admiral Willard (2010 - emphasis added) stated that “elements of China's military modernisation *appear*

*designed* to challenge our [U.S.] freedom of action”. Finally, in a widely cited and ‘semi-authorised’ report published by the Center for Strategic and Budgetary Assessments (CSBA) the authors drew a similar conclusion, albeit in more strident terms:

“Many of the capabilities the Chinese military is acquiring reflect deliberate A2-AD operational approach that is *specifically designed* to keep [U.S. forces]...from approaching close to China. The PRC *appears purposefully developing and fielding offensive capabilities that challenge U.S. freedom of action in all domains*” (Van Tol, et al., 2010, pp.3-4 - emphasis added).

To be sure, although the language used in these statements (i.e. ‘appears’ and ‘designed’) have been carefully selected by the respective authors to soften the diplomatic impact of opening criticising China, these reports - and the policy prescriptions that have emanated from them - have nonetheless tacitly signalled to Beijing that the new options afforded them as a result of its expanding A2-AD is perceived by the U.S. as an offensive-dominant challenge, which it will respond to at a strategic level. As Robert Jervis (1978, pp.167-214) opined, in cases where the offence is dominant, and especially when the offensive-defensive balance is not clearly distinguishable, the security dilemma between states will become more intense.

Several issues have complicated the challenge for U.S. defence analysts in their assessments of Chinese A2-AD, which have reinforced the (over)reliance upon capacity-based (worse-case scenario) assessments, exacerbated strategic ambiguities, and given misperceptions and cognitive biases space to grow. First, the lead-times associated with the development of new and technologically advanced capabilities are long, and programmes (e.g. warships and stealth bomber replacements) can often take decades to mature (Biddle and Oelrich, 2016, p.10-11). Thus, the major concern for the U.S. defence planners is how Chinese A2-AD will develop in the *future* - except for contingencies in close proximity to China’s coastline, most analysts expect U.S. air and sea dominance in the Asia Pacific to remain unchallenged in the near-term (Dobbins et al., 2011; Gompert et al., 2016). The cognitive impact of actors’ expectations of another’s *future* strategic intentions upon their *present* perceptions viewed through the security dilemma conceptual lens, can be described as follows:

The expectations and perceptual mind-set of an actor broadly reflects: “estimates of what the

world is like [presently] and therefore of what the person is *likely to be confronted with*”, and that these expectations “*create predispositions* that lead actors to notice certain things, *neglect others...*[and consequently actors] find it *difficult to consider alternatives*” (Jervis, 1976, pp.141-146 - emphasis added).

Second, the lack of Chinese military transparency and limited access to information on several seminal areas of Chinese military affairs including: the PLA’s command and control (C2) structures, its stove-piped decision-making processes, and dual-use assets. The DoD in its 2014 report to Congress explicitly underscored these concerns:

“China’s lack of transparency surrounding its military capabilities and strategic decision-making has led to increased concerns in the region of China’s intentions”. The report added that such concerns would likely “intensify” in the absence of transparency specifically related to the PLA’s A2-AD modernisation programs (DoD, 2014 i).

IR scholars have posited the extent to which the level of military transparency reveals the strategic intentions states - and ameliorate or mitigate the security dilemma - depends on the degree to which *offensive* and *defensive* weapons capabilities are *distinguishable*. If they are not easily distinguishable, and especially where ‘dual-use’ technologies are prevalent a state’s intentions will likely remain uncertain, even if transparency is improved (Jervis, 1978; Glaser, 1997, p.174).

In addition to Chinese military opacity, Washington’s policies vis-à-vis China have also limited defence analysts access to potentially highly valuable information - and reinforcing the propensity to place an undue focus on Chinese material capabilities over operational doctrine and preferences. For example, U.S. restrictions on both NASA and the White House Office of Science and Technology Policy (OSTP) in collaborating, coordinating or participating bilaterally with China on space policy has significantly reduced the possibility for U.S.-China cooperation in the space domain (Johnson-Freese, 2015). Importantly, these restrictions denied Washington access to vital military-related information on China’s dual-use space-industry including: the PLA’s standard operating procedures; decision-making processes; and organisational structures. To be sure, improved access to this kind of valuable information could help to address some of Washington’s knowledge gaps in the development of Chinese space technologies, and in turn, enable a more robust understanding of Beijing’s strategic intentions in this increasingly contested domain. According to Jervis (1976, pp.58-117 - emphasis added) the failure of actors to actively seek new empirical

evidence where such information is *available and relevant*, constitutes an “irrational way” of processing information, which will likely worsen the security dilemma between states. Moreover, the uncertainty created by the lack of information about adversary’s military capacities can exacerbate misperceptions between states, and increase the likelihood of conflict, akin to a form of ‘information asymmetry’ - that is, the lack of a shared understanding of each other’s capabilities and interests (Morrow, 1989, pp.941-972; Fearon, 1995, pp.379-414).

The historical record has shown that - including previous cases in U.S.-China relations - actors tend to make assessments of an adversary’s military capabilities and strategic intentions through an analytical prism (or ‘military lens’), which is often shaped by their own military doctrines; organisational and bureaucratic-political traditions; customs and strategic cultures (Marshall, 1966, 1972; Wu, 2008; Twomey, 2010; Mahnken et al., 2012, pp.3-10). To be sure, accurate assessments of states’ military capabilities and intentions can be influenced by many complex factors, and determinations are in large part conditioned by actors’ perceptions of the ‘relative’ military balance - that has ramifications for the effectiveness of deterrence policies. Moreover, opacity within the international system, and in the inherent ambiguity of weapons (i.e. the offence-defence balance and ‘dual-use’ technologies), further complicates this challenge, exacerbates strategic ambiguities, and reinforces pre-existing cognitive biases (Betts, 1985; Lieber, 2000). These perceptions are rooted in an actors’ pre-existing beliefs and experiences that often results in predispositions, and mistaken beliefs of another’s strategic intentions - or in the terminology of cognitive FPA theory ‘premature cognitive closure’ (Jervis, 1976, pp.117-202). As a result of these dynamics, even if analysts are able to obtain relevant or new evidence, there is still a possibility that this (new) information will be simply assimilated into the pre-existing beliefs of the recipient. Thus, new information - in all but the most unambiguous of sources - will most likely be interpreted as merely confirming these pre-existing and familiar frameworks of analysis and methods - and lead to ‘mirror-imaging’ (Jervis, 1976, pp.172-203).

A good empirical illustration of the tendency of U.S. defence analysts for ‘mirror-imaging’ (or projecting U.S. strategy) were extrapolations from U.S. DoD estimates of the various strike ranges of Chinese missile strike systems (especially its anti-ship

ballistic missiles) to benchmark against the geographical distances that delineate China's first and second island chains (Erickson, 2016, pp.3-4). These estimates were subsequently used to *infer* (or project) the existence of a Chinese A2-AD 'strategy', specifically calibrated to prevent or deter U.S. forces from operating inside of China's first island chain (McDevitt, 2011, p.22; Willard, 2011, p.10-11; Cliff, 2011, p.8; DoD, 2015, pp.46-60). That is, Chinese capabilities that met the (U.S. defined) operational requirements of A2-AD were interpreted as *explicit* proof of a strategy underwriting these weapons - U.S. analysts rarely used Chinese empirical sources to corroborate or validate these inferences (McDevitt, 2011, p.22; Willard, 2011, p.10-11; Cliff, 2011, p.8; DoD, 2015, pp.46-60).

Related, several U.S. analysts (including those at the DoD) have expressed concern that Chinese AD-A2 capacity (especially its long-range precision strike capacity) could be expanded out to China's 'second island chain' - or circa 3,000 kilometres from China in a line that connects Guam, Japan and Papua New Guinea (DoD, 2006, p.21-25; 2015, p.46; 2016, p.72; Erickson, 2013; Montgomery, 2014, pp.115-149). Following a similar approach, DoD analysts have extrapolated this potential capability as proof of a strategic shift in Chinese strategy: "*seeking the capacity to hold [U.S.] surface ships at risk through a layered capability reaching out to [China's] 'second island chain'*", and providing China with "*pre-emptive and coercive options in a regional crisis*" (DoD, 2012, p.8, emphasis added). These inferences were premised on the assumption that the possession (or development) of a *capacity* to implement 'pre-emptive and coercive' operations against U.S. forward forces, evinced a shift in the trajectory of Chinese strategy i.e. offensive-dominant at both a tactical and strategic level.

A central argument this article makes is that irrespective of the logic or accuracy of U.S. A2-AD assessments, inferences made by defence analysts were decided prior to the point of gaining a reasonable amount of equivalence. Or put another way, defence analysts have selectively interpreted Chinese doctrine and core strategic concepts to support their pre-existing net assessments, rather than using them to establish baselines to frame their assumptions. In short, a greater utilisation of relevant and available Chinese military doctrinal sources would enable analysts to more rigorously apply A2-AD approximations to represent Chinese operational preferences and plans - and in turn shift the focus away from pure military 'material' considerations.

## **ASB vs. A2-AD: Implications for Future Military Escalation Control, Deterrence and Strategic Stability in the Asia Pacific**

The potential implications for future regional crisis stability and escalation control as a result of Washington's Air-Sea Battle (ASB) pitted against Chinese A2-AD could be exacerbated by several strategic, tactical and operational features associated with these competing concepts including: the deployment of offensive-dominant capabilities guided by pre-emptive and early-use operational doctrines; an increasing dependence upon (and a tactical preference in the use of) technologically advanced military capabilities and systems (combining with dual-use technologies); the development of 'dual payload' missile systems that blur the traditional conventional-nuclear thresholds; a Chinese military doctrinal propensity to *exaggerate* the effectiveness and utility of tactical military signalling, and *underestimate* the potential escalation risks associated with these signals; and finally, a penchant (on both sides) for secrecy and (often deliberate) strategic ambiguity in the development of its respective offensive-dominant capabilities. In aggregate, these features have increased that risk that misunderstandings caused by misperceptions and misinterpretations could further weaken regional escalation control management and increase U.S.-China strategic competition - that in turn reduces the incentives for co-operation. As IR theorists have opined, in cases where incentives (or disincentives) exist for each side *not to cooperate* both sides will likely pursue their own narrow self-interests, and become predisposed to view the other as an adversary (or at least a potential one) that leaves both sides worse off (Jervis, 1976, pp.58-117).

Given the high escalatory risks associated with launching a conventional attack on a nuclear-armed state, the 'deep-strike' and early strike tactics on China envisaged by ASB have proven especially controversial. Tactics of this kind by rendering Chinese forces highly vulnerable to U.S. attacks risk producing and escalatory dangerous 'use them or lose them' pressures in Beijing (Goldstein, 2013, p.70). Notwithstanding China's long-standing 'no first use' (NFU) nuclear commitment, "it would be imprudent to take the policy at face value, given [China's] changing strategic circumstances" (Blumenthal, 2012, p.335). That is, Beijing's fear of losing its C2 structures as a result of U.S. cyber, counter-space or EW attacks (especially if a conflict or crisis is considered imminent) could propel incentives for the use of pre-emptive and early strikes - calculated to exploit U.S. military dependencies on its

military space and cyberspace assets (Gompert and Kelly, 2013). In short, the strategic ambiguities associated with ASB/A2-AD offense-dominant capabilities mean they are effective or “perhaps *only* effective” if used to attack early on in a conflict, *before* the other side has attacked or deployed its countermeasures (Goldstein, 2013, p.67 - emphasis added).

ASB critics have also argued that this concept prescribes an *operational approach* to what is fundamentally a *strategic challenge* in Asia. In particular, the authors of the ASB have provided very few indications of what Washington’s strategic objectives might be (and how they might alter) in the event of a U.S.-China conflict or crisis - which U.S. defence planners must consider (Blumenthal, 2012, pp.309-340; Bitzinger and Raska, 2013, p.4). Dan Blumenthal (2012, pp.335 - emphasis added) argued that the U.S. “put the *operational cart before the strategic horse*...before contemplating an attack on a nuclear-armed country [i.e. China] in depth, it would be wise to know for what purpose the U.S. would take such risks”. Thus, insufficient calibration of ASB with Washington’s ‘rebalance’ to Asia policy and more broadly U.S. ‘grand strategy’, has caused a fair amount of confusion and concern within the U.S. defence community, amongst Washington’s Asian-based allies, and above all in Beijing.

The uncertainties and strategic ambiguities associated with ASB has increased the danger that Beijing’s mistrust of U.S. strategic intentions - already heightened by Washington’s ‘rebalance’ to Asia - could be further exacerbated. Recent expansions in the range and scope of Chinese A2-AD capabilities can in large part be attributed to these perceived strategic ambiguities. According to a senior PLA officer Gaoyue Fan, “if the U.S. military develops Air-Sea Battle...the *PLA will be forced to develop anti-Air-Sea Battle doctrine and capabilities*” (Sayers and Gaoyue Fan, 2010, pp.1-2 - emphasis added). Similarly, China’s official-state newspaper *People’s Daily* (2011- emphasis added) stated: “if the U.S. takes the ASB system seriously, *China has to upgrade its anti-access capabilities...to deter any external interference*”. Finally, the following passage from the latest version of the doctrinal SMS implies that Beijing’s response to ASB could risk triggering a conventional weapons arms race:

“China needs to [in response to the ASB concept] continue to innovate a series of tactics to attack unmanned aerial vehicles, stealth technology, cruise missiles, carrier strike groups, and space platforms, and to *defend against* ISR, precision strike, cyber-attacks, space attacks” and

“develop its special asymmetrical...style of warfare” (Shou Xiaosong, et al., 2013 - quoted in Fravel, and Cunningham, 2015, p.42).

Therefore, an insufficient appreciation by Washington of how Beijing perceives U.S. military policies and postures in Asia (or demonstrating ‘security dilemma sensibility’) could increase the risks of producing self-fulfilling and self-reinforcing security dilemma dynamics - that worsens regional strategic stability, and weakens military escalation management (Glaser, 2015, pp.49-90). As security dilemma theorists have observed, the difficulty states face in putting themselves into the *minds of others* often causes actors to erroneously assume that its intentions (signalled by words and deeds) are *necessarily* interpreted by the recipient as they were originally intended (Jervis, 1976, pp.58-110).

The implications for the future regional crisis stability and escalation control from ASB/A2-AD could be compounded by two additional factors. First, it does not appear that ASB operations would include a U.S. demonstration of its nuclear retaliatory capacity. Several analysts have argued that such a demonstration would be crucial to effectively deter a Chinese nuclear counter-strike (Blumenthal, 2012, pp.330-335). However, any U.S. nuclear signalling would be complicated by the apparent Chinese doctrinal embrace of the Cold War era ‘stability-instability paradox’ nuclear-strategic rational (Snyder, 1965, pp.184-201). According to this logic, Beijing would likely assume that in the event of a crisis or conflict its nuclear deterrent would be sufficient to restrain the U.S. in the use of nuclear weapons, and in turn, providing China with operational flexibility during a *conventional* conflict. Chinese over-confidence in the ‘stability-instability paradox’ logic could however, encourage it to *underestimate* the inherent escalation risks during a conventional conflict (Swaine, et al., 2006, pp.18-30; Morgan et. al., 2008, pp.58-71; Twomey, 2010, pp.244-246; Christensen, 2012, pp.447-487; Goldstein, 2013b, pp.65-66). Nuclear escalation risks could be increased further by the opacity surrounding Chinese nuclear doctrine and force structure, together with strategic ambiguities surrounding its NFU pledge - several Chinese analysts have recently implied that NFU is more of a guideline than an unwavering commitment (Christensen, 2012, pp.447-487, DoD, 2015, p.31-32).

Second, Chinese analysts and strategist have demonstrated a tendency to *overestimate* the use of military operations for the purposes of signalling intent and deterrence, and



simultaneously *underestimate* the potentially escalatory risks inherent in the use of these tactics.<sup>9</sup> Moreover, Chinese military doctrine also emphasises that during a crisis or conflict China would prioritise seizing and maintaining the initiative (or gain the upper-hand) to *coerce* or *deter* an adversary, but with little apparent regard for the escalatory risks inherent in the use of such tactics (Morgan, et al., 2008, pp.47-83). Further increasing the escalatory risks and deterrence failure is that the development of Chinese crisis-management theory, decision-making mechanisms and operational procedures remain relatively under-developed, poorly coordinated, stymied by stove-piping and incomplete (Erickson and Liff, 2015, pp.197-215; Johnston, 2016, pp.29-30). These issues under crisis conditions will generate further strategic ambiguities, and compound Washington's already large knowledge gaps in its understanding of Chinese decision-making processes, civil-military relations and above all its military operational methods and preferences (Chase et al., 2015, p.11; Saunders and Scobell, 2015, pp.1-33). Theoretical studies on military signalling have noted that these tactics tend to be highly subjective in nature, and their efficacy is determined by a combination of technical, administrative, and perceptual processes. A breakdown in either of these interconnected processes may result in misinterpretations, miscalculations, and ultimately risk inadvertent or accidental war (Schelling, 1966; Jervis, 1970).

## **Conclusion:**

A central argument this article makes is that irrespective of the rationale, accuracy or apparent reasonableness of U.S. A2-AD assessments (i.e. whether Beijing actually *intends* to exclude the U.S. from areas of the Western Pacific), inferences made by U.S. defence analysts have often been decided prior to the point of gaining a reasonable amount of equivalence with the evolution of Chinese military doctrine, and operational preferences and planning. That is, defence analysts have selectively interpreted Chinese empirical sources to support and their pre-existing net assessments, rather than using them to establish, and where necessary, revise their baselines to frame their assumptions. This well established analytical approach has overlooked key aspects of Chinese operational doctrinal preferences and planning and overemphasised capacity-based (worse-case scenario) assessments of A2-AD;

reinforcing U.S. bureaucratic cognitive biases and ‘mirror imaging’ propensities. As a corollary, defence analysts (including those at the DoD) have often identified specific military capabilities as collaborating *explicit proof* of a coherent and homogenous underlying strategic canon. Or put another way, analysts have conflated A2-AD capabilities with the operational prerequisites considered (by the U.S.) necessary to construct and effectively integrate a military strategy.

The problem therefore lies with the underlying critical assumptions - extrapolated from Chinese A2-AD military capabilities - to determine the trajectory of Beijing’s strategic intentions vis-à-vis Washington, which increased the scope for misperceptions confounded by institutional cognitive biases. Thus, a greater utilisation of relevant and increasingly accessible Chinese military doctrinal sources would indubitably help analysts to more rigorously apply U.S. A2-AD approximations as baselines to assess Chinese operational preferences and plans, and reduce analysts’ reliance upon pure material military capabilities. As this article found, capabilities say very little about states’ underlying strategic intentions unless they are effectively integrated into a coherent strategic framework and operational doctrine. To be sure, many of Chinese A2-AD capabilities do *appear* (or have the ability) to directly target the U.S., but possession of these capabilities does *not necessary* confer a strategic intention - malign or otherwise.

This article identified two key factors that have complicated the challenge for defence analysts in their assessments of Chinese A2-AD, reinforcing the propensity for capacity-based methodologies, exacerbating strategic ambiguities, and given misperceptions and cognitive biases space to grow. First, the long lead-times associated with the development of new and technologically advanced capabilities has meant that most pressing strategic concern for U.S. defence planners is how Chinese A2-AD will develop in the *future* - or the problem of ‘getting into the minds of others’. The cognitive impact of U.S. analysts’ expectations of Chinese *future* strategic intentions upon their *present* perceptions - and the critical assumptions underlying them - created predispositions that often interpreted information as merely confirming pre-existing and familiar frameworks of analysis - or ‘mirror-imaging. Second, the lack of Chinese military transparency and limited access to information on several seminal areas of Chinese military affairs (especially dual-use technologies and the offence-defence balance); which reinforced the U.S. penchant to place an

undue emphasis on Chinese material capabilities, over its operational doctrine and preferences.

Another key finding is that by prescribing ASB as an offensive-dominant countervail designed to address the A2-AD ‘military problem set’, Washington implicitly cast China as a revisionist rising power that led to a deterioration in U.S.-China security dilemma dynamics i.e. the genesis of action-reaction policies and arms-racing spirals. Finally, the implications for future regional crisis stability and escalation management of ASB pitted against A2-AD will likely be exacerbated by several strategic, tactical and operational features associated with these competing off-setting concepts. Moreover, under crisis conditions these features will increase existing Chinese strategic ambiguities, and compound Washington’s knowledge gaps in its understanding of Chinese decision-making processes, and above all, its military operational methods and preferences. These dynamics will reduce the incentives for U.S.-China cooperation and military-to-military understanding, and under the presence of the security dilemma, increase the dangers of misperceptions and military miscalculation.

## Notes:

<sup>1</sup> Analysts and scholars have written extensively on issues related the potential challenges and threats posed to the U.S. from A2-AD including, (Christensen, 2001; Cliff, 2007; Van Tol et al., 2010; Montgomery, 2014; Cote, 2011; McDevitt, 2011; Biddle and Oelrich, 2016). Anti-access and area-denial (A2-AD) are U.S. strategic concepts that were first used by the U.S. DoD in their 2001 Quadrennial Defense Review (QDR). In recent years a number of countries have increased their investments in A2-AD capabilities (especially anti-ship cruise and ballistic missiles, submarines and aircraft carriers) including; China, Russia and Iran (Sayler, 2016, pp.1-16). In addition to the A2-AD potential threats posed by China, the DoD's in its Quadrennial Defense Review (QDR) report (2010b, pp.31-33) stated that Iran has also deployed a variety of A2-AD capabilities that could overwhelm U.S. layered naval defences operating in the Persian Gulf.

<sup>2</sup> From their pioneering work during the 1950s, John Hetz and Herbert Butterfield have been generally ascribed as the founder fathers of the 'security dilemma' concept. The concept was subsequently modified by Robert Jervis (1978, pp.167-214) who emphasised several 'non-structural', psychological and cognitive approaches to the original conceptualisation including ideas and concepts relating to: perceptual biases, inferences, signalling intent (or credible signalling), and other cognitive approaches to world affairs. More recently, a number have scholars have adapted these theoretical approaches to increase their relevance and intellectual rigour in a modern IR context see (Tang, 2009; Glaser 1992, pp.497-538, 1997, pp.171-201; Taliaferro, 2000, pp.128-161; Schweller, 1996, pp. 90-121). Recent debates have also emerged on the utility and applicability of the Security Dilemma concept with reference to the U.S.-China relationship see, (Godwin, 2010, p.266; Scobell, 2012, pp.719-720; Johnston, 2013, pp.8-10; Mearsheimer, 2014, pp.7-8). For a comprehensive discussion on the applicability of the Security Dilemma in an East Asian context, see (Ikenberry and Liff, 2014, pp.52-91).

<sup>3</sup> Cognitive and psychology and IR is a sub-field that is associated with Foreign Policy Analysis (FPA), and has also been applied by scholars to add intellectual depth to the Security Dilemma concept i.e. 'non-structural' psychological and cognitive inputs could influence the intensity of the security dilemma see, (Jervis, 1976, 1978). These ideas also relate closely to other concepts in this sub-field including: cognitive bias (or perceptual bias); cognitive dissonance theory; attribution bias; and theoretical studies on national images and 'self-images' in IR see, (Boulding, 1959, pp.120-131; Garthoff, 1994; Jervis, 1976).

<sup>4</sup> The U.S. also faced an advanced A2-AD threat during the Cold War threat from the Soviet Union. This experience has made it easier for U.S. analysts to use similar (and familiar) strategic frames of reference to assess China's military capabilities. In contrast to the contemporary U.S-China security relationship however, both the U.S. and Soviet Union broadly agreed that they were engaged in a competitive bi-lateral relationship - even if disagreement existed as to the nature and outcome of this rivalry. Much debate and contention however surrounds the nature and extent of contemporary U.S.-China strategic 'competition' (Rosen, 2002, pp.27-70; Mahnken et al., 2012:3, p.12). The ASB concept is part one component of the overarching 2012 Joint Operational Access Concept (JOAC), and was renamed as part of a 'major rethink' by the DoD as the Joint Concept for Access and Maneuver in the Global Commons (JAM-GC) in 2015 (Goldfein, 2015; McLeary, 2015). This paper will refer to the programme as ASB. The U.S. Secretary of Defence Chuck Hagel originally articulated the Pentagon's 'Third' Offset Strategy in late 2014 and in speech in January 2015, more details were offered by Dep. Secretary of Defence Robert Work (Work, 2015). Although this new concept appears to have been formulated to replace the often-criticised ASB to date this has not been the officially promulgated. Rather, the 'Third' Offset Strategy together with the Defense Innovation Initiative (DII) can be best viewed as strategies to enable the technologies that underpin ASB - leveraging U.S. advantages in new and emerging military technologies to counter the perception of weakening U.S. dominance in several more 'traditional' conventional military domains.

<sup>5</sup> This paper refers to the U.S. 'defence community' to include analysts at the U.S. Dept. of Defence, as well as U.S. defence-related think tanks and military and defence experts and scholars. The main U.S. empirical sources used for this assessment include: The U.S. DoD, *Annual Report to Congress Military Power of the People's Republic of China*, 2007-2016; the DoD's *Quadrennial Defense*

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*Review Report* (QDR), 2001, 2006, 2010, 2014; the U.S. Office of Naval Intelligence (ONI) reports 2009, 2015; and other 'semi-authorised U.S. publications including O'Rourke, 2013; Krepinevich et al., 2003; Cliff, 2007, 2011; Van O'Tol, et al., 2010; McDevitt, 2011.

<sup>6</sup> Analysts and scholars have written extensively on issues related the potential challenges and threats posed to the U.S. from A2-AD including, (Christensen, 2001; Cliff, 2007; Van Tol et al., 2010; Montgomery, 2014; Cote, 2011; McDevitt, 2011; Biddle and Oelrich, 2016). For a recent technical study on the anticipated long-term effectiveness of Chinese A2-AD, and the ranges at which this capability may threaten or deny U.S. military access in East Asia see, (Van Tol et al., 2010; Cote, 2011; Biddle and Oelrich, 2016, p.7-48).

<sup>7</sup> This article has primarily used officially 'authorised' Chinese materials from the following sources listed in order of their authoritativeness: China's official 'National Defence' White Papers (published since 1998, and renamed China's 'Military Strategy' in 215); officially sanctioned military doctrinal texts (especially the '*Science of Military Strategy*'); articles from China's official military PLA press; and commentary and opinions from Chinese analysts and strategists affiliated with China's premier military teaching and research institutes (Fravel, 2006, pp.79-101; Godwin and Miller, 2013, pp.45-50). For a recent comparative study on the relative 'authoritativeness' of Chinese military empirical sources see, (McReynolds et.al, 2016, chap.2). China does not have a concept of 'military doctrine' that is directly comparable to U.S. military equivalents. Rather, the PLA's 'doctrine' i.e. documents containing details relating to specific campaigns and current operational procedure, are generally classified see, (Finkelstein, 2007, pp.69-140; Fravel, 2016, p.4-5).

<sup>8</sup> For a classic study published on the inherent conceptual problems in estimating another states' military power, and the analytical challenges associated with estimating the trajectory of a state's military capabilities - and especially the analytical dangers associated with the false assumption that a states are 'rational-decision' makers, which produce consistent and well-defined strategic objectives see (Marshall, 1966). For discussion on the challenges inherent in linking assessments of the military balance to predictions of the use of force for coercion see (Betts, 1985, pp. 153-170). For discussion on the board literature that cover the role of strategic-culture, civil-military culture, organisational structure, intelligence bureaucracies and implications of military technological change in international security relations see, (Cohen, 1988; Johnston, 1995; Lantis, 2002; Mahnken et al., 2012).

<sup>9</sup> On the use of military capabilities for signaling it is important to note that even in the absence of a codified and coherent operational doctrine, the mere *existence* of weapons can signal intentions - both offensive and defensive (Christensen, 2001). For example, Beijing's 2015 *Victory Day Parade* was a very public vehicle for showcasing several of China's advanced strategic (conventional and nuclear) missile systems. Such displays of military strength during peacetime serve to bolster strategic deterrent, and signal to the U.S. (and to its regional neighbours) Beijing's ambitions and coercive capacity see, (Chan and Chase, 2016). On IR literature related to offence-defence theory and military signalling see, (Lynn-Jones, 1995, pp.660-691; Lieber, 2000, pp.74-104).

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