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# NUCLEAR ESCALATION IN A TAIWAN STRAIT CRISIS?



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**NUCLEAR ESCALATION IN A TAIWAN STRAIT CRISIS?**

**ROBERT AYSON**

**MAY 19, 2021**

## **I. INTRODUCTION**

In this essay, Robert Ayson notes that “Many of the ingredients are already in place for a Taiwan Strait crisis to precipitate a nuclear escalation between China and the United States.” He reviews background factors such as strategic factors and operational problems that could give rise to such a catastrophe as well as the reasons why nuclear escalation might be regarded as unlikely. He concludes: “The several steps in this process allow several opportunities for recommendations about measures the three main actors might adopt to reduce the chances of escalation, and in particular an escalation that could lead to the use of nuclear weapons.”

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## **II. NAPSNET SPECIAL REPORT BY ROBERT AYSON**

### **NUCLEAR ESCALATION IN A TAIWAN STRAIT CRISIS?**

**MAY 19 2021**

#### **Introduction**

Many of the ingredients are already in place for a Taiwan Strait crisis to precipitate a nuclear escalation between China and the United States. Some of the background factors that could give rise to such a catastrophe stem from *political* tensions between Beijing and Taipei over Taiwan's future against a wider context of growing great power competition and distrust between China (seen by Taiwan as the principal threat to its security) and the United States (seen by Taiwan as its main protector). Some of the *strategic* factors stem from the shifting asymmetries of military power between China and Taiwan and between China and the United States, which may create incentives for escalatory options as a crisis grows. And some of the problems are *operational*, including the difficulties that may face China and the United States in ensuring clear firebreaks between conventional military options and attacks which involve, or put at risk, nuclear capabilities. In general, there is a risk that military postures designed to demonstrate everyday resolve could stand in the way of heading off further escalation once the first shots are fired.

In addition to examining these various risks, and the connections that could occur between them, it is also important to consider the reasons why nuclear escalation might be regarded as unlikely. If we assume that nuclear use in the Taiwan Strait will not occur as a bolt-out-of-the blue attack, at least three major thresholds probably need to be crossed before nuclear war has arrived. First, there needs to be a serious crisis in the Taiwan Strait (for which there are precedents since the early 1950s) in which the use of military force is threatened and anticipated (ie a higher benchmark than the mere onset of a crisis). Second, for the first time in decades, one or more of the three key actors - Taiwan, China, and the United States - will need to decide to begin using armed violence to bend a Taiwan Strait crisis in their favour. And this decision needs to be reciprocated if a serious conventional military escalation is to occur.

Unless that conventional violence was carefully circumscribed, (and not reciprocated) we would at this point already be witnessing the most serious military exchange in East Asia for decades. But nuclear escalation requires something even more unusual than this. The third requirement is that the threshold between conventional and nuclear military operations is crossed either by China or the United States (and both if a nuclear *exchange* is to occur). Crossing this threshold would constitute the first violent use of nuclear weapons anywhere in the world since 1945.

The pressures that play on decision-makers in a serious, escalating crisis, and the possibilities of overreaction and misjudgement, bear little comparison to what seems rational in the cold light of a pre-crisis day. But to mount a convincing argument that nuclear escalation in the Taiwan Strait is a serious possibility we need to show how the situation can go from A (the current presence of tension in the absence of a precipitating crisis) to B (a serious and escalating Taiwan Strait crisis) to C (conventional war in the Taiwan Strait) and to D (the use of nuclear weapons). The several steps in this process allow several opportunities for recommendations about measures the three main actors might adopt to reduce the chances of escalation, and in particular an escalation that could lead to the use of nuclear weapons.

### **Political Conditions: The Context for a Crisis**

The strategic relationships that can fuel or dampen down a dangerous crisis in the Taiwan Strait are not nearly as good as we might want but not as bad as they have been. In the mid-1950s, for example, these relationships were much worse. Only a few years after the United States and China had been at war over Korea, in response to China's bombardment of offshore islands in the Taiwan Strait, the Eisenhower Administration contemplated using nuclear weapons in response.<sup>[1]</sup> And the first two decades of the 21<sup>st</sup> century have not produced an obvious parallel to the 1995-6 crisis where the visit of President Lee to the United States precipitated a dramatic few months in Taiwan-China and China-US relations.<sup>[2]</sup>

Peace in the Taiwan Strait depends on mutual restraint between the two great powers. At times it has been possible to detect an informal understanding where in exchange for Beijing's decision to avoid using force, Washington has signaled that its support for Taiwan is conditional on the latter avoiding the most provocative steps towards independence. While Beijing has been uncomfortable with any level of American assistance to Taiwan, Washington's deliberate ambiguity about the support it could or would provide in an actual conflict has suited China in comparison to more robust US policy alternatives. Given these tacit agreements between the two bigger players, the main source of China-US tensions over the Taiwan Strait often appeared to be Taiwan itself: a third-party catalyst to great power war.

Taiwan's politics continue to be marked by the emergence of a democratic identity that bucks the trend away from liberal values apparent in so many parts of the world, including in parts of Asia. And popular support in Taiwan for independence from China continues to grow.<sup>[3]</sup> But nearly two

decades after President George W. Bush signaled Washington's opposition to a Taiwanese quest for independence,[4] Taipei's leaders (including in the Democratic Political Party) still tread a relatively careful line. Their focus has been on establishing for Taiwan an enhanced international status and promoting Taiwan's separate political identity without pushing too hard on formal independence per se.

Yet the *modus vivendi* of the recent past is at risk. Just five years ago, Scott Kastner referred to an "unprecedented period of détente in cross Strait relations" in making the argument that "the risk of armed conflict has been declining and is likely to decline in the years ahead." [5] But any such optimism has been complicated since that time by two less reassuring developments. First, China's willingness to tolerate Taiwan's autonomous political decision-making, never a strong suit, has been diminishing. In other words, Beijing's redlines may be getting more restrictive. The growing capabilities of the PLA, including vis-à-vis both Taiwan and the United States, give this problem a material edge. But many of the motivating factors are political and are closely related to China's domestic affairs. Appeals for the unification of Taiwan with the motherland have become more pressing as Xi Jinping consolidates his power around the revitalization of the Communist Party's authority, accompanied by significant doses of nationalism. Taipei's leaders will have watched with growing apprehension the recent developments in Hong Kong, where the new national security law passed by Beijing has turned the "one country two systems" logic into an historical artifact.[6]

Second, the Biden Administration has come to office at a time when US congressional support for democratic Taiwan and antipathy to nondemocratic China have both been increasing. Walter Lohman and Frank Jannuzi suggested immediately before the 2020 federal election that "there is more support for Taiwan in Congress now than at any time in at least 30 years." [7] America's strategic ambiguity, which may have been an off-ramp for past tensions,[8] no longer finds many suitors as China appears more willing to exploit its growing powers of intimidation across the Strait.[9] Members of the Senate's Armed Forces Committee were told in March 2021 by the Pentagon's Indo-Pacific Commander that China could translate its threats into action in as little as six years.[10] And there is very little sign that the Biden team has any intention of pleasing Beijing by winding back Washington's relationship with Taipei.[11]

Moreover, rising pressures in the China-Taiwan-US triangle of relationships are not an exception to an otherwise calm regional geopolitical situation in Asia. If they were, the Taiwan Strait might be regarded as a somewhat localized dispute whose wider consequences could be cushioned by wider currents of regional stability. A Taiwan crisis would have a better chance of being quarantined in these more favourable conditions. But in the coming years a serious Taiwan Strait crisis could be egged on by broader political tensions between Beijing and Washington in which Taipei is as much a passenger as a participant.

The broader relationship between China and the United States has been on a generally downward trajectory. Great power competition is in vogue. Washington has come to see China as the biggest threat to America's interests, and Xi Jinping's brand of authoritarianism, including abuses against Uighur Muslims in Xinjiang, as a central challenge to America's values. A much stronger PLA which is changing the East Asian maritime military balance, China's cyberattacks on private and public sector organisations in several countries, its expansionism in the South China Sea, and Beijing's Belt and Road Initiative plan are all being seen through a highly competitive lens in Washington.

A more competitive great power landscape puts the spotlight on Taiwan's place in the region's strategic geography. So long as it remains outside of Beijing's control, Taiwan remains an obstacle to China's quest to dominate its first island chain, project maritime military power further into the region, and intensify the costs to the United States of furnishing support for regional allies such as Japan. Hitherto cooperative parts of the great power relationship have been crowded out, including

by Trump era efforts to decouple important parts of the two economies, and Washington's determination to reduce the involvement in the US market by China's information technology companies. The arrival of the Biden Administration has breathed at least some life into hopes for US-China cooperation, including on climate change.[\[12\]](#) But the basis for that great power collaboration remains narrow.

Beijing's crackdown on Hong Kong's autonomy has made Taiwan's vibrant democracy only more valuable to American political leaders. Biden himself has made the commitment to democracy at home and abroad the cornerstone of his Presidency. But the bigger picture is the contest between the United States and China for military and economic supremacy in Asia. As one of the two great power participants in this contest, Beijing has taken umbrage at what it sees as American-led attempts to contain its growth and question the legitimacy of its return to great power status. Despite early signs that Trump regarded Xi as a partner on the North Korean nuclear issue, Beijing became the 45<sup>th</sup> President's most convenient international scapegoat, including on the covid-19 pandemic. As the 46<sup>th</sup> President, Joe Biden has taken issue with the Trump era inclination to apply trade pressure on America's traditional allies and partners, a famously counterproductive approach. But the pressure on Beijing will be hard to undo if Biden is to live up to his domestic promises of being tough on China.[\[13\]](#) Indeed one of the only current points of bipartisan concord is the China threat argument, which also has become a key justification for federal spending on defence and infrastructure.

A background of tension between Beijing and Washington could shape the narrative for a future Taiwan Strait crisis and its implications for great power stability in new ways. For many years the world occasionally worried about a fresh crisis between China and Taiwan dragging in the United States to perform a tenuous balancing act - reassuring Taiwan without provoking China to serious escalation. But today we might be more concerned that a relatively minor Taiwan Strait problem involving China and Taiwan will grow quickly into a grander crisis as a symptom of deep US-China tensions. The less that the two great powers trust each other, and the more they regard each other as adversaries in almost every dimension of policy, the greater the chance that tensions in the Taiwan Strait become a Sino-US contest for resolve.

The intentions of the two great powers at this point would be divergent. Could China get away freely with greater intimidation of Taiwan despite Washington's obligations under Section 2 of the 1979 Taiwan Relations Act to "consider any effort to determine the future of Taiwan by other than peaceful means, including by boycotts or embargoes, a threat to the peace and security of the Western Pacific area and of grave concern to the United States" and "to maintain the capacity of the United States to resist any resort to force or other forms of coercion that would jeopardize the security, or the social or economic system, of the people on Taiwan?"[\[14\]](#) In other words, might Beijing achieve two things: a big step towards reunification and an even bigger step towards regional supremacy? Or would America offer decisive support to Taiwan in a crisis at a time when Beijing's commitment to reunification (by force if necessary) has been growing? And in doing so, could the Pentagon demonstrate that American military superiority in Asia has not been matched by the PLA's growing capabilities?

These competitive quests might combine in combustible fashion. Brittle political communications between Washington and Beijing, coupled with problems in securing military-military dialogue[\[15\]](#), including the planned Military Maritime Consultative Agreement meeting in 2020[\[16\]](#), increases the chances of Sino-American political misjudgments on Taiwan. For its part, Taipei needs to read the signals accurately. Will its leaders conclude that under China's increasing pressure the time for expanding Taiwan's place in international diplomacy is running out? Will Taiwan be looking even more desperately for extra US support as soon as it needs it in the early stages of a crisis? And is the



US going to be in a position – domestically as well as internationally – to refuse that request? At the same time, will Xi see a Taiwan Strait crisis as an ideal opportunity to test the resolve of Biden’s Presidency in its early stages? What happens if, in an echo of Khrushchev’s misreading of Kennedy during the Cuban Missile Crisis, the Biden Administration pushes back harder than China expects? The wider backdrop does not appear promising.

### **From Crisis to War: The Trouble with Asymmetries**

Beijing’s estimation of Washington’s resolve becomes even more significant when we factor in the relationship between political objectives and military action. Inaction may sometimes appear to be the better word here. In 2012 Washington did little to come to the immediate assistance of the Philippines, a formal treaty ally, when China placed pressure on Manila in a standoff at the Scarborough Shoal. This is not quite the whole picture. Four years later the Obama Administration appears to have signaled behind the scenes to China that the United States would not tolerate attempts by China to begin reclamation activities at Scarborough.<sup>[17]</sup> And more generally in the South China Sea, the United States has continued to conduct freedom of navigation operations<sup>[18]</sup> to demonstrate the ability of its forces to move unimpeded on, under and above international waters. But the US has shown little sign of trying to roll back China’s island building efforts, let alone Beijing’s militarization of these features.

Taiwan sits in the northern portion of the South China Sea, much closer to the concentration of PLA firepower than most of the other claimants involved in maritime territorial disagreements with Beijing. If China was to conduct a sustained campaign of military intimidation of Taiwan as part of a growing crisis – steps short of the actual violent use of force, including obvious mobilization, provocative exercises, intercepting Taiwanese aircraft, and explicit threats of military action – and the United States did little but monitor the situation, would Xi Jinping have achieved an historical victory? There are multiple precedents for such a campaign of intimidation: from China’s firing of missiles in the 1995-6 crisis which prompted the United States to deploy two aircraft carrier battle groups in the seas around Taiwan to the more recent intensification of aircraft flying across the half-way point in the Strait,<sup>[19]</sup> and Beijing’s ongoing campaign of cyber pressure. There is also China’s clear record of military coercion (short of war) in relations with nearby Japan in the East China Sea.

China’s coercive position is strengthening in regards to the Taiwan Strait military balance. Kastner refers to a “dramatic improvement in the PRC’s relative military capabilities in the Taiwan Strait”<sup>[20]</sup> since 2000. A more recent IISS note suggests that while China’s quantitative advantage has remained relatively unchanged over the last ten years, the PLA’s qualitative advances have driven the asymmetry further in Beijing’s advantage.<sup>[21]</sup> Given China’s ability to bombard Taiwan with conventional ballistic missiles, Beijing does not need the capacity to invade Taiwan to make life intolerable on the other side of the Strait. China also knows that, to adapt Thomas Schelling, “the power to hurt” Taiwan economically “is bargaining power.”<sup>[22]</sup> Beijing has reasons to believe that its growing military capabilities (in the air and on and under the sea) also give it a greater ability to impose a blockade on trade dependent Taiwan: the interdependence of the two economies means this would harm Beijing as well as Taipei, but the latter much more than the former.

China could exploit this power to hurt without its armed forces firing a single shot, even if, as Brendan Taylor suggests, the blockade would involve PLA forces seeking to control the airspace above Taiwan and the entry points to Taiwan’s seaports.<sup>[23]</sup> If time permitted the United States might rally its closest allies around a retaliatory ban on PRC-flagged commercial vessels, seeking to put pressure on Beijing while keeping the crisis in an economic frame. But the onus could also be on Taiwan to take the next step, by testing China’s willingness to enforce the blockade, and China’s calculus of what might happen next if it attacked a Taiwanese vessel or aircraft, including the possibility that the United States would see this as an unacceptable resort to violence which

demanding a response.

How Taipei reads the military intentions of the great powers would be crucial as the threats of violent action grew. Taiwan is developing its ability to raise the costs of PLA operations *after* China has begun to use force, which puts a premium on force preservation.[\[24\]](#) But Taipei might still be faced with “use it or lose it” choices in regard to its still limited arsenal of missiles that can reach China’s coastline and which would among the early targets in PLA strikes on Taiwan.[\[25\]](#) These pressures would be even higher if Taiwan had doubts about the prospect of an early and decisive American military response. Some analysts seem increasingly concerned just how fast the United States could respond in practice with some force elements[\[26\]](#).

Moreover, even if US retaliation against China was more or less guaranteed, this would not necessarily preclude Taiwan from being extensively disarmed (and for extensive harm to be caused to people and cities) before the US response kicked in. It would be in Taiwan’s interests for China to know very early in a crisis that PLA forces were *already* at a real and present risk of a devastating American attack. In such a case Taiwan would have incentives to bring the United States into the crisis as quickly as possible. Risk-taking would make sense for Taiwan if that is what it took to get the United States into the action.

China’s interests in such a situation would be markedly different (and more emphatic than America’s given the greater political importance of Taiwan to China and of the Taiwan Strait to China’s security[\[27\]](#)). Beijing would want to show (a) that Taiwan is certain to bend to its demands in the crisis, (b) that the United States is not able to prevent that from happening, and (c) that the United States is a spent force in Asia. All three of these interests have a common thread: China must make it clear to the United States that the costs of military involvement in a local dispute are too high for Washington to bear and for US forces to operate effectively (deterrence by punishment and denial).

In the two and a half decades since the last serious Taiwan Strait crisis China has substantially raised the costs for US military operations close to mainland China and the first island chain. Washington’s freedom to repeat its approach a generation later – including by deploying aircraft carriers to the waters near Taiwan – is increasingly complicated by extra risks, not least because of advances in China’s growing ballistic missile, submarine warfare and anti-ship missile capabilities. With enhanced intelligence, surveillance and reconnaissance systems (including satellites), the PLA has more accurate systems that provide it with real options for precision strikes.[\[28\]](#) China’s ability to put US forces at risk is not a question of if. It is a question of how much.

Beijing would want America to know that the risks of intervention are high even before the US Commander in Chief decides to deploy forces closer to the Strait (assuming they were not there already for some reason). In a growing crisis, there would be strong incentives for China to intensify cyber activities aimed at US communications, radar and command and control systems, including space-based systems, and to shadow US naval and air forces in the wider region to remind Washington that Beijing is watching every move. China will know that, in turn, its own C4I systems would be very early targets for an American attack. It will be aware that Washington’s strategy depends not just on China knowing that the response to its military action in the Taiwan Strait would be prohibitively costly to Beijing (once again deterrence by punishment) but also on making China question its ability to achieve the military effects it wishes to in the Taiwan Strait (deterrence by denial).

This equation might also encourage China to conduct very early strikes against Taiwanese targets in the hope that these could occur *before* the United States can make it especially difficult for Beijing to do so. And the longer it takes for that American response to be delivered, the more terrible the situation could be for Taiwan. To reduce Beijing’s freedom to dictate terms to Taipei, might there be

circumstances where Washington would be inclined to remove military options in the Strait from China's hand before they were used? A deepening crisis involving the exchange of threats, including of military action and economic actions (including sanctions) might well be stopped before violent action begins. But the chances of avoiding violence decrease as soon as any one of the actors believes that violence is imminent.

Moreover, the threshold between non-violent and violent action (peace and war) may not be as clear in all circumstances as one might wish. For example, as the crisis builds, should the United States treat intensified PLA cyber activities directed at US (and Taiwanese) command and control systems as something close to a hostile act, or an act of war? How does Beijing read the same type of attempts coming from the other side? If China issues a bellicose statement on enforcing its East China Sea Air Defence Identification Zone - and announces a new zone in the South China Sea - what are the implications for "routine" movements of American maritime vessels and aircraft?[29] How does the Pentagon know what the risks actually are? As Chinese and Taiwanese and Chinese and American maritime force elements come into close proximity with each other, how does each actor know how the other side will respond to an accidental collision? And would the ramming of an American vessel by a Chinese ship,[30] apparently on purpose but quickly blamed by Beijing on American risk-taking, signal a commitment to hostilities or something short of that?

China and the United States have not fought each other for nearly 70 years. That beneficial situation means we can have some confidence that they can avoid war breaking out in a crisis. During the Vietnam War, for example, China and the United States quietly sought to avoid a confrontation between the two of them.[31] But the extended period of China-US peace means there is no recent precedent for how the two great powers might control escalation once the threshold of conventional military action between them has been *crossed*. China's recent high altitude dispute with India (another great power), where the use of force bore little resemblance to advanced maritime combat,[32] is no preparation for escalation control and intra-war deterrence with the United States. Meanwhile almost all of America's recent wartime experiences have been against decidedly inferior adversaries where achieving US escalation dominance has been an achievable option for Washington rather than an untested possibility. And Taiwan has minimal experience of managing violent armed conflict involving modern military systems.

China has no recent experience of managing the domestic political pressures for escalation that are likely to arise once violence in the Taiwan Strait is in play, especially because Beijing would almost undoubtedly blame the expanding war on Taiwan and its American supporters. It is hard to avoid assuming that social media pages in China will be full of demands that Taiwan be crushed. Congressional and public pressure for decisive action to come to Taiwan's aide may well also grow in the United States once the fighting has begun.

A great deal will depend on how much the United States wants to restrict China's escalatory options. This may sound counterintuitive - surely the more those options are restricted the less we might be worried about more serious levels of violence. But here asymmetry raises its destabilizing head once again. China's leaders will know that many of the PLA's crucial systems for attacking Taiwanese targets can be held hostage by the threat of an American conventional attack, and they will know American military strategy often exploits precision strikes to reduce an adversary's ability to use its available forces. Caitlin Talmadge envisions that the United States effort would not only be focused on "the weapons systems that China could use to strike Taiwan or U.S. military based or forces in the region" but also "the Chinese C4ISR that would underlie China's campaign." [33]

Many of China's newer missile systems are more mobile and survivable than earlier variants. And Beijing knows its increasingly advanced forces[34] will pose extra costs and risks to United States forces entering any sort of Taiwan conflict. But it would be naive for Beijing to conclude that its



rocket forces, aircraft, anti-ship missiles and the platforms they are launched from, and the command and control systems which manage these capabilities, were therefore invulnerable to American action. And what happens to Washington's thinking if it believes that China plans to use these capabilities against Taiwanese and US targets early, recognizing also that several thousand American citizens live in Taiwan? Timescales could be squeezed, and quick decisions are not always the most stabilizing.

We should also guard against the assumption that any military action will be restricted to the Taiwan Strait. Previous crises may encourage the view that the United States and China have been able to fashion tacit agreements which limit the spread of their conflict. But in the twenty first century, the two great powers will need to find extra reserves of political commitment to avoid the escalatory temptations that material factors bring into play. For example, while almost all of the forces that Taiwan might use are confined to that geography (by definition), the same does not apply to the forces that China and the United States might rely on. The wider spread of relevant American forces opens up the possibility that they might be targeted by China *beyond* the immediate conflict area. And the growth in PLA power projection capabilities gives Beijing options for targeting US forces which it lacked in earlier Taiwan Strait crises.

China faces the difficult question of how far out from the Taiwan Strait (and the first island chain more generally) it needs to put US forces at real risk (and perhaps subject them to attack) in order to reduce America's ability to intervene decisively. Depending on how responsive it believes America's closest regional allies (Australia and Japan) are going to be to American expectations of assistance in a Taiwan Strait armed conflict, Beijing may need to extend that question beyond considerations about targeting just US military elements. Beijing will be well aware of American expectations that Australia would come to its ally's assistance in a Taiwan Strait war.[\[35\]](#) But it is the Japan factor that is more complex.

Several factors make a Japan connection possible. For reasons of geographical proximity Tokyo would see a militarized crisis in the Strait directly affecting its own security. The United States and Japan are giving increased attention to Taiwan Strait issues in their own relationship,[\[36\]](#) and Japan's capabilities (including its naval forces) are an important part of East Asia's military balance. There is also the simple fact that America's plans for military contingencies in the Taiwan Strait are likely to involve American forces normally based in Japan. This makes attacking targets on and near Japan's territory an obvious consideration for Beijing even if it appears as though Tokyo wishes to stay out of the fight.[\[37\]](#) And if those targets are hit, the chances of a normally (and constitutionally) very cautious Japan getting involved (as an act of self-defence and also in conjunction with its larger ally) might well increase.

As if this is not challenging enough, there is no cast iron guarantee that North Korea will sit back and quietly watch the United States use force in Northeast Asia against Pyongyang's main guarantor. If Washington was getting fully distracted by an escalating and increasingly violent Taiwan Strait crisis, would Pyongyang decide to add to America's challenges by disruptive action on or across the parallel? This would be an extremely risky time for North Korea to be doing this. And it might not be to China's advantage. But the regional implications of a Taiwan Strait war involving the United States and China would be more demanding than a non-violent Taiwan Strait crisis.

China will also need to deal with the temptation of extending its attacks into another domain entirely, by targeting the space-based communications systems[\[38\]](#) which are crucial for America's military command and control capabilities. In turn the United States will also face perverse incentives of its own which could also encourage escalation. For example, Washington's national security policymakers will need to consider how far into China US forces will need to target PLA forces to restrain Beijing's useable options. Of the many bases for PLA rocket forces that the US

would target in a conventional conflict, not all would necessarily be in coastal locations adjacent to Taiwan. Deeper strikes may well be envisaged. Which brings us to the biggest threshold of all.

## **The Nuclear Dimension**

A military conflict in the Taiwan Strait will have a nuclear dimension regardless of whether the United States is directly involved. Both Taiwan and China know that the latter is nuclear armed and could, at least in theory – but in violation of its No First Use policy – use nuclear weapons against Taiwan.<sup>[39]</sup> The nuclear dimension is intensified if the United States is factored in, because it means that two nuclear-armed great powers are on opposing sides of an armed conflict. It is intensified further if we make the plausible assumption that one of the reasons that Taiwan is interested in protection from the United States is that the latter has nuclear weapons. America's arsenal constitutes one of the main appeals of extended deterrence. But it also means that the United States needs to factor in China's nuclear prowess when it considers the assistance it offers to Taiwan in an armed conflict and the actions it is willing to take against China's forces.<sup>[40]</sup>

There are more deliberate and less deliberate ways in which the threshold could be crossed from a Taiwan Strait conventional armed conflict to one involving nuclear weapons. In terms of the deliberate side of the equation, it cannot be exaggerated how big such a decision – by China, by the United States, and/or by both – would be for course of the war and the course of history. Why then might either of them be willing to violate the nuclear taboo that has been in place since 1945? Under what circumstances would such a step make any sense at all as a deliberate policy choice?

We can take some solace that there is no obvious answer to these questions. But there are still some more detailed issues that need to be considered. For example, even if China has been emboldened by its dominant cross-Strait military position to intensify its conventional attacks on Taiwan as the crisis moves into war, it would end up encountering a different balance of military power to the extent that the United States becomes involved. Of course the latter comes with much greater immediate risks than it once did. American analysts may be increasingly aware of the costs and risks of intervening militarily in a Taiwan Strait crisis. They may wonder how quickly the US could reposition its forces for a more protracted conflict with China. Hence Washington probably has less scope to repeat its 1996 playbook. It is arguably harder for the United States to *deter* a PLA attack on Taiwan today than it was a quarter of a century ago. And it is certainly much harder for the United States to deter China from coercing Taiwan.

Yet if Taiwanese and American deterrence of China has failed, and China is at war with Taiwan, Washington may very well decide to commit to a limited conventional war against China. (Strategic ambiguity raises questions about the time, place, nature and probability of an American response. But these questions don't allow us to conclude that if China attacks Taiwan, the US *won't* get involved in a fighting war). Notwithstanding China's ability to put American forces at risk, American attacks on PLA force elements could have a devastating effect on China's military options as the crisis escalates. Some of these measures could be undertaken from a distance: the United States could hold PLA mainland targets at risk even if China had a momentary advantage around Taiwan. And if China initially held the upper hand, Washington might have extra reasons to put mainland PLA targets at risk.

If the United States pursued some of the conventional military steps implied earlier and degraded China's military by attacking PLA forces situated on the mainland, (including through attacks on missile bases and command systems), then China would face a deteriorating correlation of forces. China's sense of vulnerability will be much greater than America's. There is more than a passing possibility that Beijing would feel its time for making choices that mattered was closing in. Perhaps in anticipation of these American measures, the Communist Party leadership may have already

decided that it is time to use “all options are on the table” language, hinting at nuclear possibilities. Hinting is about as far as things *might* go. Writing over a decade ago, admittedly when the distribution of military power was more strongly in America’s favour, Baohui Zhang suggested that “the possibility of China threatening first use of nuclear weapons should not be ruled out when a real crisis in the Taiwan Strait makes U.S. military intervention seemingly unavoidable,”<sup>[41]</sup> which also reminds us that there is a difference between issuing a threat and carrying it out.

But once those American precision attacks have begun (and China’s conventional and nuclear deterrence has failed to prevent such an intervention) the situation changes. If China’s options to manage and escalate the conventional conflict seem to be getting scarcer because of the effects of American strikes – actual as well as anticipated – what remaining choices will Beijing have aside from crossing the nuclear threshold and putting an end once and for all to its no first use declaratory policy? This runs against the assessment that “there is no evidence that China envisages using nuclear weapons first to gain a military advantage by destroying U.S. conventional forces or to gain a coercive advantage by demonstrating its greater resolve in a conflict with the United States.”<sup>[42]</sup> But this envisaging has not been occurring when China is losing a conventional war against the United States. And surely the possible targets for a nuclear attack by China would not be confined to the Strait, unraveling any remaining sense of a tacit agreement to limit the geographical confines of the conflict. Would Beijing consider nuclear attacks on US territories in the wider region – including Guam – if it really wanted to exercise some measure of intra-war deterrence (to make the costs of continuing too great for Washington to handle?) Would it want to hold hostage cities and other targets in the Pacific coast of the US mainland?

The hostage-taking scenario may seem farfetched. But if China judged that America’s conventional attacks were sufficiently damaging to warrant the use of nuclear weapons, it would then be obliged to think ahead to what sort of American retaliation would ensue. Any such thinking would be bound to focus minds on the very significant asymmetry between China’s and America’s nuclear forces, and the absence of nuclear options on Beijing’s part that might communicate intentions of fighting a limited nuclear war<sup>[43]</sup> (however preposterous that notion sounds). But should escalation dominance in such a situation be judged by capability and doctrine (which would favour the United States) or by desperation (which might favour China)?

At this point there is also an obligation to consider whether the United States might be the first of the two nuclear-armed states in this crisis to use nuclear weapons. There is the decades-old precedent of US nuclear threats against China in a Taiwan Strait crisis (which occurred several years before China itself had a nuclear arsenal). But the mid-1950s were the era of massive retaliation strategies, and America’s nuclear weapons were not used. And more than half a century later, United States decision-makers would also have some confidence that many of their military objectives – including knocking out PLA systems on the mainland – could be achieved by using advanced conventional systems (eg conventionally armed cruise missiles launched from offshore). Moreover, while some US attacking options would be vulnerable to China’s pressure (including forces based in regional bases) the United States would retain long-range options (including bombers) that would be very hard for the PLA to reach.

But we need to ask whether the United States would use nuclear weapons first in a Taiwan Strait conflict if the conventional phase of that war was heading strongly in China’s favour? In other words, if it looked like China had a good prospect of turning military outcomes in the Strait into a political victory: unification by force. Taiwan’s future could head in almost any direction, including forceful absorption into China, without any obvious direct threat to America’s own survival. Yet Taiwan’s absorption would imply that Washington had been defeated by China in East Asia. America’s reputation amongst regional allies which depend on it (eg Japan and Korea) would have been

seriously affected. Japan's own security, including against fears of being trapped alongside a triumphant China, would be imperiled by the PLA's ongoing presence in a Beijing-controlled Taiwan. The temptation for nuclear proliferation in East Asia after America's failure to protect the interests of its allies would be strong. America's national security policymakers might argue that despite the enormous costs of using nuclear weapons, (and the moral opprobrium that would follow) at stake in choosing not to use them was the future of the East Asian equilibrium on which many United States vital interests depend.

What then of the less deliberate side of the nuclear ledger? Here I do not have in mind an entirely accidental nuclear war – one in which no obvious decision to proceed with hostile acts was involved. Instead there are risks in any close military-technical and doctrinal interdependence between the conventional and nuclear forces of participants in what begins as a limited war in the Taiwan Strait. The question here is a simple one about a complex situation: can either of the two sides (and especially the United States) put at risk the conventional forces of the other side (and especially China's) without also endangering the target country's nuclear forces? Endangering nuclear forces is not necessarily restricted to attacks on delivery systems and warheads – eg the nuclear armed variants of the PLA rocket forces. Also crucial are the command and control, intelligence, surveillance and reconnaissance systems for these nuclear forces, without which their delivery to target may be compromised or prevented. At stake here is China's confidence that it retains nuclear options in the event of a significant American conventional attack and America's confidence that it can attack China's conventional capabilities without unintentionally putting at risk China's nuclear forces, creating more use them or lose them choices for the adversary.

This problem is not confined to considerations of a crisis in the Taiwan Strait. The late Desmond Ball and I argued a few years ago that any colocation of the PLA's conventional and nuclear systems could create significant escalatory hazards in a conventional war between China and Japan which brought in the United States as Japan's security guarantor.<sup>[44]</sup> Similar risks would be in play should some of the same mainland missile bases that China would use in conducting attacks against Taiwan allow for nuclear as well as conventional options. David Logan argues that while some of these comingling problems have been overstated and others remedied by China's military reforms, still more may be emerging.<sup>[45]</sup> P.W. Singer and Ma Xiu have noted that while it was assumed that "the PLA was at least separating its nuclear and conventional forces into distinct and geographically discrete brigades" the deployment of the intermediate range DF26 missile with both conventional and nuclear payloads portends a new and worrying point of instability.<sup>[46]</sup> If the very same missile offers nuclear as well as conventional options to China, the inadvertent escalation problem raises its dangerous head.

In a thoughtful exploration, Talmadge suggests that in the event the United States attacked the capabilities that China was most likely to use in a missile bombardment across the Strait, China's leaders would still retain some of their most significant nuclear options (and the command and control systems that would permit their use).<sup>[47]</sup> What matters less, she argues, are the technical interconnections. What matters more is whether China's leaders believe (wrongly or rightly) that the United States had decided on a counterforce mission, (conventional or nuclear) designed to disarm China. And this version of the nuclear temptation will grow for China's leaders, "as more and more of their conventional and nuclear or nuclear-relevant assets come under threat during a conventional war."<sup>[48]</sup> It needs hardly to be said that putting assets under threat is part of the modern American military philosophy. This would extend to targeting China's intelligence, surveillance and reconnaissance systems, vital to PLA missile systems (and so reducing the threat to US forces) but also crucial to China's ability to know what was going on.

Given the analysis presented in the earlier portions of the current chapter, some early signs of this

problem may appear before any violence occurs in the Strait, if the United States and China are probing, testing, and putting on notice their respective command, control, communication and *computer* systems. China will already be scurrying to perceive America's intentions in the murky twilight zone between an escalating crisis short of fighting and the firing of the first (kinetic) shots. For example, what if China assesses that US cyber pressure on its military C4I systems puts at risk some of its nuclear options as well as some of its conventional systems? In an extreme case, might China conclude that it stands to lose access to some of its nuclear options in a crisis before any actual and physically obvious fighting begins? Escalatory pressures might then be building more quickly than the American side realizes well before any (conventional) shots are fired.

### **Reducing Escalatory Hazards: Some Policy Priorities**

An essay such as this is necessarily speculative and it is easy to let those speculations run wild. But it seems sensible to believe that China and the United States will do what they can to live up to the view that nuclear weapons are only weapons of the very last resort, if they are to be used at all. Nuclear war in the Taiwan Strait is not impossible. But it probably means first climbing the levels from tense calm to escalating crisis and coercive pressure, and then to escalating conventional armed conflict, before the fateful last threshold is crossed. This means, for example, that if Taiwan, China and the United States can stop the escalation at any one of those earlier stages, nuclear use is especially improbable. There are plenty of moments when the agency of decision-makers can intervene. We don't have to let panic set in about the inevitability of panic setting in. By the same token, escalation is not bound to stop through some sort of automatic process. Neither should we assume that China and the United States can fight a conventional war "safely" in the Taiwan Strait because the fear of nuclear escalation puts a natural limit on how awful things can get. More importantly, China and the United States can't assume this either!

A lack of clarity around many of these firebreaks is bad news for those who have confidence in the operation of the stability-instability paradox. We don't know enough about what dynamics will play out in a really serious Taiwan Strait crisis to be confident that central deterrence (whatever that means today) will make a local war a guaranteed non-nuclear affair. It would be unwise for decision-makers in Washington to assume that China's No First Use declaratory policy creates a safe zone in practice for America's behaviour *below* the nuclear threshold. Beyond that threshold, there is also the fascinating but unsettling disconnect between China's lack of confidence that war can be controlled once any nuclear weapons are used and American thinking which still finds a place for limited nuclear options.[\[49\]](#) The latter makes little sense if the other side believes full escalation is almost inevitable.

But there is some good news for those who think that political agency can outweigh strategic hazards. What may seem like a relentless pathway across multiple thresholds can be halted in its tracks by decision-makers who get their calls right. Of course, the best way for Taiwan, the United States and China to avoid a Taiwan Strait crisis escalating to nuclear use is to avoid a crisis in the Taiwan Strait. However, that is more a hope than a policy recommendation at a time when China-Taiwan political differences are intersecting with greater China-US competition. At the other end of the scale, it might seem an excellent idea to engage China in a discussion about reducing the dangers of inadvertent escalation that stem from the conventional-nuclear connections in its newest missiles. But would Beijing welcome such a conversation if the outcome risked making it easier for a strong adversary to attack the PLA's conventional missile forces without running the risk of engendering a nuclear response? Does China really want to remove this ambiguity in its entirety?[\[50\]](#)

In between these very broad geopolitical settings and concrete military-technological realities, there are some middle ground escalatory dangers that may be subject to moderation. In particular this



means that the two nuclear-armed participants in any future Taiwan Strait dramas have common interests which they *ought* to be considering.

- China and the United States need an honest conversation about what incentives can be brought to bear which encourage serious dialogue, including on arms control, in which Beijing becomes a more willing and fulsome participant.
- China and the United States need to be involved in discussions on bilateral nuclear arms control (even if an expanded START process does not appeal to Beijing, and even if a formal agreement is not achieved). This is one way of keeping the two great powers aware that they have a joint responsibility to reduce the chances of a crisis between them developing a nuclear dimension.
- Crisis stability - and the dangers of crisis instability - needs to be a recurring subject in a renewed process of US-China strategic dialogue and involve military, diplomatic and political leaders.
- Both China and the United States need to recognise the risks of the murky zone between escalating pressure and actual fighting in a regional contingency. They should be aiming for formal or informal rules of the game on what differentiates unthreatening information seeking from activities that put their forces at risk, including through cyber operations and other measures short of physical conflict.
- China and the United States need to have tacit understandings about shared no-go areas in a Taiwan Strait crisis including assets that if attacked would be likely to generate disproportionate retaliation. These tacit understandings (through convergent unilateral restraint) will become even more important if formal dialogue remains stifled.
- Taiwan and the United States need to identify what factors intensify the chances that an early and dangerous resort to force (by Taiwan or China) will occur in a Taiwan Strait crisis, and what this means for their understanding of America's role. This is arguably more important than a focus on the level of America's security commitment to Taiwan.
- Taiwan, the United States and China have a common interest in all three actors ensuring that they have redundant C4I systems that allow them to maintain control during an escalating crisis and conventional conflict, reducing pre-emptive pressures. They should all signal their reluctance to put these systems at risk in an escalating crisis.

To move forward on most, if not all, of these priorities, there is a deeper requirement. It is unwise to expect China and the United States to leave their competition to one side. But it is responsible to expect them to recognize that they do have common interests in spite of that competition, and that some basic level of cooperation is required *to allow their competition to continue*.<sup>[51]</sup> The US and China do not need to see themselves as friends or close partners. But they might wish to think of themselves as adversarial partners, a concept used by Coral Bell in depicting the limits to competition in US-Soviet relations.<sup>[52]</sup> Because even if their competition leads them into a fight over the Taiwan Strait, China and the United States will retain a common interest (shared with Taiwan) in controlling the escalation that could come next. Moreover if they can push back together on the continuing deterioration in their great power relationship, they might also reduce the prospects of an especially hazardous Taiwan Strait crisis developing in the first place. The problem is that this may rely on the reverse taking place. Do the two great powers need to find themselves in a very dangerous Taiwan Strait crisis before they both recognize the urgency of enhanced communication, cooperation and restraint?

### III. ENDNOTES

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