

Caitlin Talmadge. "Would China Go Nuclear? Assessing the Risk of Chinese Nuclear Escalation in a Conventional War with the United States." *International Security* 41:4 (2017): 50-92. DOI:

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Caitlin Talmadge's recent article in *International Security* is a major intellectual contribution to a predominantly U.S.-centric debate on the likelihood of Chinese nuclear escalation in a conventional conflict with the United States. In particular, Talmadge's article is to be commended for providing one of the most rigorous accounts of the scope of a hypothetical U.S. military campaign against China over Taiwan, and relatedly, how this campaign might threaten Chinese nuclear assets, thereby creating operational conditions that might inadvertently push China to go nuclear. Yet this U.S. military-technical challenge is not, for the author, the key issue. Rather, in determining 'would China go nuclear?' the author offers another, slightly less developed, answer: it depends on what Chinese leaders believe or think.

The article comes in four main sections. In the first section, Talmadge focuses on the existing debate around nuclear escalation; in the second section, she devises a framework for tracing pathways to nuclear escalation in a conventional conflict; in the third, and main section, the framework is applied to the U.S.-China case involving Taiwan; the final section is a conclusion.

The Debate: Escalation Optimists' vs 'Escalation Pessimists

Early on, Talmadge helpfully sorts existing scholarship on nuclear escalation into two camps: what she labels 'escalation optimists' and 'escalation pessimists.' Talmadge argues that there is an impasse between these camps for two reasons: first, there is not enough 'military-technical' analysis of U.S. military operations that could threaten China; and second, the "failure to incorporate perceptual variables" (50). She promises to break this impasse in the article.

The article then outlines the basic positions of each camp. The pessimist argument rests on the dangers of comingling conventional and nuclear forces, and the accidental destruction of nuclear weapons platforms. In contrast, optimists within the U.S. policy community have high confidence in the accurate design of U.S. military campaigns. For Chinese views, Talmadge draws from an excellent *International Security* article by MIT's Fiona Cunningham and M. Taylor Fravel¹. Their article highlights a relaxed view in Beijing on escalation. Yet, as Talmadge notes, Cunningham and Fravel draw comfort from measures China has taken to reduce the likelihood of nuclear escalation, namely redundancies in command and control, and the separate collocation of forces. Essentially, this section shows that each camp makes valid arguments. That said, earlier pessimist literature could have been sampled;² and there was no direct engagement with Chinese literature on the optimist side.³

The Framework

The second section deeply engages with Barry Posen's work to develop a framework that explains pathways to nuclear use in a conventional conflict.⁴ Talmadge makes a crucial point that deserves re-quoting: "although the threat of nuclear weapons may inhibit escalation from peace to war, threats *to* nuclear weapons may provide reasons for intra-war escalation [emphasis original]" (59). According to Talmadge's framework, threats to nuclear weapons come from two drivers: military-technical factors, and "wartime perceptual dynamics" (59). Talmadge carefully lays out the former by suggesting four categories of nuclear-relevant targets: (a) nuclear weapons or components; (b) delivery platforms; (c) conventional forces that perform a support role for nuclear weapons; and (d) information assets such as command, control, communication and computer (C4) networks and Intelligence, Surveillance and Reconnaissance (ISR). In addition to the four categories, Talmadge argues that two other technical characteristics could lead to nuclear escalation: the *intermingling* of missiles; and informational interlinkages for command and control.

The author then adds a caveat in this section on military-technical drivers: not all nuclear weapons, and their targets, are considered equal. Different meanings can be taken by the target state. So, even if the U.S. views itself as possessing a counterforce capability this might not be shared by Chinese leaders. This is especially the case if the target state (i.e. China) has high confidence in the survivability of its nuclear assets or has different views of its own "requirements of deterrence" (61) as well as the nuclear doctrine of the attacker state. These are important perceptual variables yet they are not presented clearly as such. The remainder of the second section looks at what is sub-titled "additional perceptual sources of wartime pessimism" (62). Perceptual variables, one should recall, are billed early in the article as even more important than military-technical

¹ Fiona S. Cunningham and M. Taylor Fravel, "Assuring Assured Retaliation: China's Nuclear Posture and U.S.-China Strategic Stability." *International Security* 40:2 (2015): 7-50.

² Paul Dodge, "China's Naval Strategy and Nuclear Weapons: The Risks of Intentional and Inadvertent Nuclear Escalation." *Comparative Strategy* 24:5 (2005): 415-430.

³ Liu Chong, "The Relationship between Nuclear Weapons and Conventional Military Conflicts" in Li Bin and Tong Zhao, eds., *Understanding Chinese Nuclear Thinking* (Carnegie Endowment for International Peace, 2016), 149-170.

⁴ Barry Posen, *Inadvertent Escalation: Conventional War and Nuclear Risks* (Ithaca: Cornell University Press, 1991).

factors in leading to nuclear escalation. Yet, no useful categories on perceptual sources of pessimism are provided (or indeed of the opposite, wartime optimism). Instead, these additional perceptual sources boil down to whether a target state loses confidence in the self-restraint of the attacker state, as well as the distorting effects of limited and faulty intelligence.

Much more could be said here about how the process of losing confidence might work. In particular, it would be useful to learn how Chinese leaders form their beliefs and interpret U.S. government statements around intentionality during wartime. In philosophy, there is a useful distinction between beliefs that might be justified or unjustified.⁵ Delving into how perceptual sources of wartime pessimism might evolve, and whether they are justified or not, might shed light on the break-points in a crisis when losing confidence is most likely to happen, and whether confidence in the enemy's self-restraint might ever be regained. Similarly, there seems to be no room for third parties or the role of institutions like the United Nations Security Council (since both the U.S. and China are permanent members). This is surprising. No war occurs in a two-way bubble. In a U.S.-China-Taiwan context, the perceptions of Chinese leaders might be shaped by more than intelligence from Taipei and Washington, and might include information from neighbouring countries like Japan and Russia.

The U.S.-China-Taiwan case

In the third section, the framework is applied to U.S.-China conflict over Taiwan. This section focuses on four areas: the scope of the U.S. military campaign against China over Taiwan; the threat this campaign might inadvertently pose to Chinese nuclear assets; the survivability of China's nuclear forces; and perceptual variables. Before reviewing these areas a few comments about the Taiwan case are in order.

Selecting Taiwan as a case study makes sense as it remains one of the likeliest scenarios for U.S.-China conflict. Yet the case is presented with no historical context. Specifically, there is no discussion of real past tensions (such as the 1995/96 missile dispute or older crises over Quemoy and Matsu in the 1950s) and their potential, if any, for nuclear escalation. True, in the 1950s China was not yet a nuclear armed state, but it believed itself to be under the protection of one, the Soviet Union. Beyond the lack of history, there is a question of agency. No mention is made of Taiwanese forces and how they might interact with the U.S. military campaign.

Returning to the third section, Talmadge starts with a superbly detailed account of a potential U.S. military campaign, and the types of Chinese military assets that would be attacked. With the scope of a U.S. campaign laid out, the article then turns to the threat the U.S. campaign might pose to Chinese nuclear-relevant targets. The potential for nuclear escalation is made clear: from inadvertent confusion in U.S. targeting as a result of the co-mingling of Chinese missiles, to the deliberate disruption of Chinese communications in coastal areas, where ports are destroyed rendering Chinese nuclear armed submarines adrift and unprotected.

The article then moves to a more optimistic account of the survivability of China's nuclear forces. China, it is argued, cares less about sea-based nuclear forces and more about protecting its land-based intercontinental ballistic missiles (ICBM). Therefore, "the most intense and aggressive U.S. conventional operations are

⁵ My thanks for Dr Alex Leveringhaus for this point. See also Peter Audi, *Epistemology: Contemporary Introduction to the Theory of Knowledge*, 3rd ed. (New York: Routledge, 2010).

unlikely to pose a direct physical threat to China's ICBM force [emphasis original]" (82). China should have "reasonable confidence" (82) that entering into conventional conflict with the U.S. would not automatically lead to nuclear escalation. Talmadge points to additional aspects of China's forces that make for comforting reading: first, there is a physical separation of Chinese launch brigades from the conventional zone of conflict in a Taiwan scenario; second, China could launch attacks from further inland if coastal areas were heavily damaged; and third, there are redundancies in Chinese command and control arrangements. So, concludes Talmadge, "even if interlinkages exist, redundancies could mean that conventional fighting would not necessarily create sudden, catastrophic escalatory pressures" (83). Yet, she cautions against heady optimism, since the real question is how Chinese leaders might interpret the conventional situation.

This leads nicely on to the last part of section three titled 'likely views.' It starts out with three long-standing views of China. First, China has ambiguous feelings over No First Use (NFU). Second, China has long voiced concern over U.S. missile defences in Asia. Thirdly, China relies on an uncertain number of land based missiles for its nuclear deterrence. None of these views is developed much further beyond a reference to recent work by Keir Lieber and Daryl Press which posits that the U.S. might have the conventional means to locate and destroy road-mobile missiles as well as hardened silo-based Chinese missiles.⁶ The implication is that China's third view might not hold for much longer. Talmadge does not offer a definitive position on this. Instead, the article re-state and earlier point: "less important than whether this analysis is objectively correct is whether Chinese leaders might believe it could be correct" (87). Further down the page, Talmadge restates this point: "the contest will come down to whether China believes it can hide a couple of dozen mobile missiles from the U.S. – or more precisely, whether China believes that the U.S. believes that China can hide these missiles" (87).

It is easy to agree with Talmadge on this. The views of Chinese leaders are likely to be fundamental in determining whether China would go nuclear in a conventional conflict. Ultimately, the decision to go nuclear remains a human, not technical, one. Yet it is not easy, from a methodological perspective, to determine the extent to which Chinese leaders might believe that their nuclear arsenal remains credible in the eyes of the enemy state during a conventional conflict. This is arguably even harder in the era of current leader Xi Jinping, Chairman of the Chinese Communist Party and Central Military Commission since 2012. The three 'likely views' presented here are not quite up to this task. Specifically, these views, at least a decade-old, are drawn from the U.S. and Chinese strategic community, not the current Chinese leadership. For example, the NFU debate certainly exists among scholars and former military figures, but does it go higher up? If the key factor for nuclear escalation in a conventional conflict is perceptual, then insight is needed into present-day Chinese leaders who would make the decision to go nuclear. Yet there is no discussion in the article of how nuclear decisions might be made or the how ideas about U.S. intentionality are formed among the Chinese leadership. This insight is likely not to be found in the writings of academics or even those who once operated China's nuclear forces (the People's Liberation Army Rocket Forces do not write strategy, they carry it out). Others have also cautioned against reading too much into Chinese military textbooks and the musings of retired officers.⁷ Gaining insight into what current, as opposed to past, Chinese leaders think is no

⁶ Keir A. Lieber and Daryl G. Press, "The New Era of Counterforce: Technological Change and the Future of Nuclear Deterrence." *International Security* 41: 4 (2017): 9-49.

⁷ See Wu Riqiang, 'Issues in Sino-US Nuclear Relations: Survivability, Coercion and Escalation', online publication for the UK Foreign and Commonwealth Office Research and Analysis, 21 June 2013,

easy research task.⁸ That said, Talmadge is to be applauded for emphasising the importance of leadership thinking in the context of possible Chinese nuclear use.

If there are serious research limitations in looking into the present, one could look backwards, to history, for insight into what Chinese leaders might think during a conventional crisis with a nuclear armed foe. Here, I return to my earlier point—the lack of history in the Taiwanese scenario is a missed opportunity. There have been several periods of tension in U.S.-China relations over Taiwan. Each of these periods could have been explored for deeper insight into what Chinese leaders thought at those particular times. Near its end, the article explores a historical case, but that case is neither related to Taiwan nor the U.S. It relates instead to the 1969 Sino-Soviet border conflict. This is a controversial example, not least because archival sources on both sides have not yet been fully explored. Yet the article suggests, with some confidence, that China test fired a nuclear weapon and placed nuclear weapons on alert in direct response to a perception by Chinese leaders at that time that the USSR was engineering an imminent nuclear attack or an attack on Chinese nuclear facilities (89-90). If future research substantiates this claim then the story painted here is rightly a pessimistic one, where China was too quick to escalate. Yet, as the author admits, this case is old. This qualification deserves further substantiation. At the time of the conflict, China was emerging from the fiercest wave of the Cultural Revolution, during which the then Chinese leader, Mao Zedong, had run a paranoia-fuelled campaign against political opponents and attempted to rein-in the chaotic Red Guards. In addition, China had only recently become a nuclear-armed state in 1964 and was thus engaged in testing a large number of nuclear weapons. Finally, relations between China and the Soviet Union had completely broken down following the so-called ‘Sino-Soviet split’ in the late 1950s and early 1960s. If U.S.-China relations seem bad today, they are no way near as tense as they were with the Soviet Union in 1969.

Conclusion

This article is a major intellectual contribution to the U.S.-driven nuclear escalation debate. Talmadge develops a new and important framework for analysing inadvertent nuclear escalation based around military-technical factors and perceptual variables. This framework has clear applications beyond the Taiwanese case and is likely to be useful for U.S. policy planning purposes. Throughout, Talmadge’s analysis is balanced: skilfully weaving together the views of pessimists and optimists alike. In particular, what stands-out is the systematic military-technical analysis of U.S. military operations that could threaten China in a hypothetical conventional crisis over Taiwan. Where the article does not quite deliver is precisely where Talmadge repeatedly says the real question lies: in perceptual matters, specifically how Chinese leaders might interpret the unfolding conventional situation and their reading of the enemy.

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<https://www.gov.uk/government/publications/issues-in-sino-us-nuclear-relations-survivability-coercion-and-escalation/issues-in-sino-us-nuclear-relations-survivability-coercion-and-escalation>.

⁸On past Chinese leadership thinking in the nuclear context see John W. Lewis and Xue Litai, “Making China’s Nuclear War Plan.” *Bulletin of the Atomic Scientists* 68:5 (2012):45-65.

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