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Nuclear Posture and Nuclear Posturing: A Conceptual Framework for Analyzing China's Nuclear Weapons Policy

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NATIONAL INSTITUTE FOR PUBLIC POLICY

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Executive Summary

The arrival of the People's Republic of China (PRC) on the world stage as a full-spectrum "near-peer" competitor to the United States is creating a situation in which the United States will, before long, face two major nuclear powers as strategic competitors and potential adversaries. This makes it imperative to understand how China thinks about nuclear weapons, the most destructive tools available to mankind. It is difficult to have confidence in assessments of Chinese nuclear thinking, however, for PRC officials offer little meaningful detail on such matters and Chinese Communist Party (CCP) propaganda posturing on the subject can sometimes be all but impenetrable. To help cut through some of the epistemological fog and contribute to U.S. competitive strategy development by offering a historically informed conceptual framework through which to consider the PRC's approach to nuclear weapons, this paper suggests organizing thinking about China's nuclear posture around three historical eras and four conceptual framings.

Through this lens, the "Three Eras" of Chinese nuclear policy correspond loosely to: (1) the early period of nuclear weaponization under Mao Zedong; (2) a so-called "minimum deterrence" period that stretches from Mao's late years until relatively recently; and then (3) a "national rejuvenation" period that began under Hu Jintao, thereafter accelerating under Xi Jinping, and in which China's nuclear posture now seems to be undergoing enormous expansion. In the "First Era," Chinese approaches were infused by Mao's quasi-messianic revolutionary ardor, his desire to encourage nuclear proliferation, and his almost glibly sanguine approach to the prospect of nuclear warfare. Over time, however, Beijing's approach to its nuclear arsenal shed Mao's reckless abandon and adopted more sober and non-provocative tones. The "Second Era" of China's nuclear weapons history thus reflected the much more

pragmatic and strategically cautious approach of Deng Xiaoping. It is also the era most associated with China's "no first use" (NFU) policy, which will be discussed in some detail herein. The "Third Era" of Chinese nuclear policy is the one in which we live today, in which China has begun to expand its nuclear arsenal at a furious pace and on a huge scale. It is the dynamics of this third period, of course, that are most important to our understanding.

To this end, this monograph offers "Four Framings" through which to evaluate PRC nuclear strategy and policy: (a) moralistic posturing, in which nuclear weapons policy is seen (or at least claimed) to demonstrate something about Beijing's supposed moral superiority to its antagonists and rivals in the global security environment; (b) game-theoretical positioning, in which Chinese strategists seek to match their nuclear force posture in some relatively clear and articulable way to some threat they claim to fear, or in order to achieve some objective they prioritize; (c) net power aggregation, in which Chinese officials seem to view nuclear weapons as a key part of their nation's overall national power and a key to its success both in geopolitical competition and (if necessary) in warfighting; and (d) great power status-seeking, in which nuclear weaponry is seen as one of the indicia of global power and status that it is intolerable for China not to possess. As we look back across the "Three Eras" under consideration - with a particular focus upon understanding what may be driving PRC nuclear policy today - each of these "Four Framings" can help explain at least some aspects of Beijing's nuclear weapons behavior, and the pages below walk through them in succession.

Given the epistemological challenges of drawing insight out of the shroud of secrecy and billowing fog of official propaganda surrounding China's nuclear weapons program, it is impossible to have utter confidence in any interpretation. Disturbingly, however, of the framings

described herein, only the first of them (moralistic posturing) would seem, even arguably, to point toward nuclear restraint. With the other three framings – game-theoretical calculation, net power aggregation, and global status-seeking – suggesting dynamics that point rather in the opposite direction, it seems likely that China will both continue to expand its nuclear arsenal rapidly and that leaders in Beijing will be ever more interested in using nuclear posture as a tool of self-aggrandizing coercive influence on the global stage.

Convinced of his messianic mission and seemingly perfectly comfortable with an almost eschatological nuclear catastrophe that could (he felt) usher in a Communist paradise, Mao Zedong may have represented the very worst in nuclear psychologies. By contrast, even though his strategic caution may still have been intended to serve ultimate geopolitical ambitions that would become profoundly destabilizing over time, Deng Xiaoping's (relative) restraint and China's "minimalist" approach to nuclear weapons seem almost reassuring. Today, however, with Xi Jinping now occupying the chair where once Deng sat, these interpretive framings, on the whole, seem to point – albeit to varying degrees and for quite different reasons – toward a future of continuing PRC nuclear weapons expansion. In this light, historically minded observers may see echoes of the status-obsessed, militaristic, and recklessly belligerent geopolitical revisionism of Kaiser Wilhelm II's "Second Reich" in Germany. That story, of course, did not end very well, and one should hope the world of today and tomorrow handles Chinese revisionist provocations more successfully than the world of the late 19th and early 20th Century handled Germany's.

Introduction

The United States is at a challenging time in its geopolitical history. Once, of course, it was all but a nonentity on the world stage – a weak, peripheral, and originally predominantly agricultural country uninteresting to the rest of the international community except perhaps for the novelty of its pathbreaking example in articulating a basis for government grounded in the consent of the governed and instituted through a system of constitutionally-protected civil and political rights for its citizenry.

With the Americans' geographic expansion across the North American continent and rapid development of an enormous and vibrant industrialized economy, however, the United States achieved a hugely powerful position in international politics, first as the leading member of the global coalition that defeated Nazi and ultranationalist Japanese imperialism in the Second World War, then as the leader of Western resistance to Communist expansionism during the Cold War. Indeed, the country ultimately ended up as the “hyperpower”¹ occupant of a historically unique position astride the international environment during the unipolarity of the immediate post-Cold War era after the collapse of the Soviet Union in 1991 – what U.S. Secretary of State Madeline Albright termed “the indispensable nation.”²

¹ See, e.g., “To Paris, U.S. Looks Like a ‘Hyperpower,’” *International Herald Tribune* (February 5, 1999), (quoting French Foreign Minister Hubert Vedrine, who explained that this term means “a country that is dominant or predominant in all categories” of power), available at <https://www.nytimes.com/1999/02/05/news/to-paris-us-looks-like-a-hyperpower.html>.

² U.S. Secretary of State Madeline Albright, interview on NBC-TV “The Today Show” with Matt Lauer (February 19, 1998), available at <https://1997-2001.state.gov/statements/1998/980219a.html>. She defended U.S. military interventions around the world by declaring that, “if we have to use force, it is because we are America; we are the indispensable nation. We stand tall and we see further than other countries into the future.”

Today, however, the geopolitical sands have been shifting once more, and U.S. leaders keenly perceive that they face profound challenges – most of all through the simultaneity of two unwelcome developments. The first of these developments is the revival of Russian military power under an aggressively *revanchist* government in the Kremlin determined to carve a new sphere of influence and new empire for itself out of the sovereign countries once part of the Soviet empire. The second is the arrival of the People’s Republic of China (PRC) on the world stage as a full-spectrum superpower and “near-peer” competitor to the United States, also under an increasingly revisionist autocratic regime, that of a Chinese Communist Party (CCP) now headed by the paranoid and bellicose one-man rule of chairman-for-life Xi Jinping.

As the Biden Administration’s 2022 *National Defense Strategy* (NDS) has noted, in this new context, Russia remains “an acute threat,” and China is now unquestionably “the pacing challenge” for the U.S. Department of Defense.³ As a result of these powers’ revisionist global ambitions – both of which are in key respects all but obsessed by narratives of grievance and national resurgence *against* the United States⁴ – the 2022 *Nuclear Posture Review* (NPR) notes, “[b]y the 2030s the United States will, for the first time in its history, face two major nuclear powers as strategic competitors and potential adversaries.”⁵

³ U.S. Department of Defense, *2022 National Defense Strategy* (October 2022), pp. 4-5, available at <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>. The NDS is the first of the three documents compiled at that website address.

⁴ See, e.g., Assistant Secretary of State Christopher Ford, “Ideological ‘Grievance States’ and Nonproliferation: China, Russia, and Iran,” remarks at the Institute for National Security Studies, Tel Aviv, Israel (November 11, 2019), available at <http://www.newparadigmsforum.com/NPFtestsite/?p=2442>.

⁵ U.S. Department of Defense, *2022 Nuclear Posture Review* (October 2022) [hereinafter “2022 NPR”], p. 4, available at <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022->

As the United States grapples with the implications of this evolving environment, and struggles with the challenges of developing and implementing an effective national strategy for competition therein, it is especially important for U.S. leaders – and the American foreign policy and national security community more broadly – to improve their understanding of the revisionist challenges presented by Russia and by China. One of the challenges we face in this regard stems from the unprecedented emergence of two powers antagonistic to the United States that *each* possess an arsenal of nuclear weapons comparable to our own – a situation that may well occur by 2035 as China builds a force posture that includes “a stockpile of about 1,500 warheads.”⁶

This paper seeks to contribute to U.S. competitive strategy development by offering a conceptual framework through which to consider the PRC’s approach to nuclear weapons. It does not purport to offer an inarguable “right answer” to key questions about how China’s leadership understands these issues – not least, as will be explained hereinafter, because even though the *facts* of the PRC’s enormous nuclear buildup are increasingly incontestable, the available evidence about how Beijing *thinks about* nuclear issues is inconclusive and subject to multiple interpretations. It does, however, seek to provide a historically informed framework through which we can help better explore these questions.

NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF. The NPR is the second of the three documents compiled at that website address.

⁶ Department of Defense, *Military and Security Developments Involving the People’s Republic of China 2022: Annual Report to Congress* (Washington, D.C.: Department of Defense, November 3, 2022) [hereinafter “DoD, *China Military Power 2022*”], pp. ix, 94, available at <https://media.defense.gov/2022/Nov/29/2003122279/-1/-1/1/2022-MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA.PDF>.

An Epistemological Challenge

In a sense, it is both difficult and easy to write about PRC attitudes towards nuclear weaponry. This task is *difficult* because so little is really known about PRC thinking on these topics. Chinese officials write or talk little about nuclear weapons issues – and certainly not in an official capacity – and the Chinese Communist Party’s propaganda posturing on such topics (and that of PRC diplomats) can sometimes be all but impenetrable.

That is certainly not true about U.S. nuclear policy, of course, where a rich ecosystem of diverse perspectives and competing views has bubbled for many decades, ever since the first years of the nuclear era.⁷ Accordingly, there exists a huge volume of work – and publicly-debated changes in U.S. policy – for scholars of *American* nuclear thinking to draw upon.⁸ The U.S. Government also customarily

⁷ See, e.g., Lawrence Freedman, *The Evolution of Nuclear Strategy* (3rd ed.) (New York: MacMillan, 2003); and, Francis Gavin, “Beyond Nuclear Deterrence: U.S. Nuclear Statecraft Since 1945,” in Linton Brooks et al., *Meeting the Challenges of the New Nuclear Age: U.S. and Russian Nuclear Concepts, Past and Present* (Cambridge, Massachusetts: American Academy of Arts & Sciences, 2018), pp. 6-20, available at <https://www.amacad.org/publication/us-and-russian-nuclear-concepts-past-and-present/section/3>.

⁸ This literature begins with seminal thinkers such as Bernard Brodie and extends through Cold War luminaries such as Thomas Schelling and Herman Kahn. See, e.g., Bernard Brodie, *Strategy in the Missile Age* (Princeton: Princeton University Press, 1959); Thomas Schelling, *Arms and Influence* (New Haven: Yale University Press, 1966); and, Herman Kahn, *On Thermonuclear War* (Princeton: Princeton University Press, 1961). Nor have these topics been ignored by contemporary American scholars. See, e.g., Lawrence Freedman, *Deterrence* (Cambridge: Polity Press, 2004); Keith B. Payne, *The Great American Gamble: Deterrence Theory and Practice from the Cold War to the Twenty-First Century* (Fairfax, Virginia: National Institute Press, 2008); Matthew Kroenig, *The Logic of American Nuclear Strategy* (Oxford: Oxford University Press, 2018); Scott D. Sagan, *The Limits of Safety: Organizations, Accidents, and Nuclear Weapons* (Princeton: Princeton University Press, 1993); Brad Roberts, *The Case for U.S. Nuclear Weapons in the Twenty-First Century* (Stanford: Stanford University Press, 2015); Elaine M. Bunn, “Can Deterrence Be Tailored?,” *National Defense University Strategic Forum*, No. 225 (January 2007), available at <https://www.files.ethz.ch/isn/31364/SF225%20new.pdf>; Bruce Blair, et al., *The End of Nuclear Warfighting: Moving to a Deterrence-Only Posture* (Washington, D.C.:

publishes “nuclear posture review” documents with every new presidential administration. Elsewhere, however, such transparency is hardly the case.⁹

One partial exception is the United Kingdom, whose nuclear planners – despite considerable differences in their country’s strategic role and available resources – have been quite closely associated with U.S. nuclear weapons thinking ever since the point in 1941 when London first provided the U.S. government with reports from the “MAUD Committee” of British scientists exploring the theoretical possibility of atomic weaponry.¹⁰ The two governments first reached a formal agreement on wartime nuclear weapons cooperation in 1943,¹¹ and in 1958 signed another

Global Zero, September 2018), available at <https://www.globalzero.org/wp-content/uploads/2018/09/ANPR-Final.pdf>; Elbridge Colby, “Restoring Deterrence,” *Orbis* (Summer 2007), p. 413; Michael May, “What are Nuclear Weapons for?” *Forum on Physics and Society of the American Physical Society*, Vol. 36, No. 4 (October 2007), available at https://higherlogicdownload.s3.amazonaws.com/APS/a05ec1cf-2e34-4fb3-816e-ea1497930d75/UploadedImages/Newsletter_PDF/october07.pdf; Christopher A. Ford, “Information Confrontation with Russia and Dynamics of ‘Positive’ and ‘Negative’ Deterrence,” remarks at Wilton Park, United Kingdom (July 21, 2023), available at <https://www.newparadigmsforum.com/information-confrontation-with-russia-and-dynamics-of-positive-and-negative-deterrence>; and, Assistant Secretary of State Christopher Ford, “Deterrence and the U.S. Nuclear Weapons Infrastructure,” U.S. Department of State, *Arms Control and International Security Papers*, Vol. I, No. 18 (September 9, 2020), available at <http://www.newparadigmsforum.com/NPFtestsite/?p=2761>.

⁹ See, e.g., 2022 NPR, op. cit.; U.S. Department of Defense, *Nuclear Posture Review 2018* (February 2018) [hereinafter “2018 NPR”], available at <https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF>; U.S. Department of Defense, *Nuclear Posture Review Report* (April 2010), available at https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf.

¹⁰ See, e.g., Dennis C. Fakley, “The British Mission,” *AtomicArchive.com* (undated) (reprinted from *Los Alamos/Science* [Winter/Spring 1983]), available at <https://www.atomicarchive.com/history/british-mission/index.html>.

¹¹ Referring to the British codename for uranium-related atomic weapons research – “Tube Alloys” – the two powers agreed in 1943 upon the need “to bring the Tube Alloys project to fruition at the earliest moment[],” and promised “full and effective collaboration between the two countries in bringing the

agreement regularizing the peacetime exchange of defense information relevant to nuclear weapons, naval nuclear propulsion, and nuclear threat reduction.¹²

This close Anglo-American relationship generally remains the case in the present day, with the two powers essentially *sharing* U.S.-produced submarine-launched Trident missiles.¹³ Though Washington and London have separate nuclear doctrines and operating procedures, it seems safe to assume that in broad terms they think very much alike, and His Majesty's Government makes available to the public quite a bit of information about UK nuclear thinking.¹⁴

Yet *other* nuclear weapons possessors do not talk nearly so much, nor so freely, about nuclear weapons policy.¹⁵

project to fruition." Quebec Agreement (August 19, 1943), available at <https://www.atomicarchive.com/resources/documents/manhattan-project/quebec-agreement.html>.

¹² United States and United Kingdom of Great Britain and Northern Ireland, "Agreement for co-operation on the uses of atomic energy for mutual defense purposes" (signed July 3, 1958), available at <https://treaties.un.org/doc/Publication/UNTS/Volume%20326/volume-326-I-4707-English.pdf>.

¹³ See, e.g., Jake Wallis Simons, "How Washington owns the UK's nukes," *Politico* (April 30, 2015), available at <https://www.politico.eu/article/uk-trident-nuclear-program/>.

¹⁴ See, e.g., UK Ministry of Defence, "The United Kingdom's future nuclear deterrent: the 2022 update to Parliament" (March 8, 2023), available at <https://www.gov.uk/government/publications/the-united-kingdoms-future-nuclear-deterrent-the-2022-update-to-parliament>; UK Ministry of Defence, "The United Kingdom's future nuclear deterrent: the 2021 update to Parliament" (December 16, 2021), available at <https://www.gov.uk/government/publications/the-united-kingdoms-future-nuclear-deterrent-the-2021-update-to-parliament>; and, Claire Mills, "Nuclear weapons at a glance: United Kingdom," House of Commons Library Research Briefing (May 3, 2013), available at <https://researchbriefings.files.parliament.uk/documents/CBP-9077/CBP-9077.pdf>.

¹⁵ In this respect, France comes in a distant third behind the United States and Britain. French nuclear weapons policy is traditionally addressed principally through a periodic formal speech on the subject by the French president. See, e.g., Speech of the President of the Republic Emmanuel Macron on the Defense and Deterrence Strategy (February 7, 2020), available at

With regard to the geopolitical revisionist regimes of China and Russia, moreover, there is also the tricky game of trying to figure out how much of what little they *do* say is true. Both Russia¹⁶ and China,¹⁷ after all, have a long enough history of propagandistic dishonesty even about pivotal events in their own history that one can have little inherent reason to trust their outward-facing declarations on nuclear weapons policy.

Nor do those two autocratic regimes have to worry about the government accountability and openness that tend to be associated with a free press, legislative oversight committees, public budget and policy debates, whistleblower protections, and the existence of independent political parties that compete for power by offering alternative policy agendas – including on nuclear weapons. Because of this, they *can* lie and dissemble in outward-facing nuclear weapons-related pronouncements, and because they regard the United States as their mortal enemy, they have some *reason* to do so – at least some of the time, and perhaps most of it.

The asymmetry between East and West in nuclear weapons transparency is quite striking, and sometimes starkly on display. At the Munich Security Conference in Germany in early 2018, for instance, U.S. Deputy Secretary of State John Sullivan found himself in a panel discussion on nuclear policy that included former Russian Ambassador to the United States Sergey Kislyak. The event occurred shortly after the publication of the U.S. 2018

<https://www.elysee.fr/en/emmanuel-macron/2020/02/07/speech-of-the-president-of-the-republic-on-the-defense-and-deterrence-strategy>.

¹⁶ See, e.g., Richard Cohen, “Vladimir Putin’s Rewriting of History Draws on a Long Tradition of Soviet Myth-Making,” *Smithsonian Magazine* (March 18, 2022), available at <https://www.smithsonianmag.com/history/vladimir-putins-rewriting-of-history-draws-on-a-long-tradition-of-soviet-myth-making-180979724/>.

¹⁷ See, e.g., Mary Gallagher, “China’s Rewritten Past,” *Foreign Affairs* (July/August 2023), available at <https://www.foreignaffairs.com/reviews/chinas-rewritten-past>.

Nuclear Posture Review, and Sullivan made rather a point of how the United States had gone to the trouble to draft “a 75-page, transparent statement of our policy,”¹⁸ in effect challenging the Russians – and the Chinese – to show such transparency themselves. Neither country did, of course, which highlights why it is difficult to talk with great confidence about their nuclear weapons policies.

With Russia, one can at least arguably draw some inferences today from the long continuity of Russian nuclear force posture and planning that stretches back into the Soviet era – and about which we have long thought we know at least *something*.¹⁹ The Russian Federation today has modernized and built upon its Soviet-era posture, but there is enough physical, institutional, and organizational continuity to give the observer something to work with. And the Russians *do* talk, every once in a while, about

¹⁸ See, e.g., “Panel Discussion on ‘Nuclear Security: Out of [Arms] Control?’” Munich Security Conference (February 17, 2018) (at 50:00 minutes), available at <https://securityconference.org/en/medialibrary/asset/panel-discussion-nuclear-security-out-of-arms-control-1445-17-02-2018/>. Sullivan clearly did not mind such arguing with Russians; he later went on to engage in it full time as U.S. Ambassador to Russia, a post which he occupied until well into the Biden Administration. Edward Wong, “John Sullivan, the U.S. ambassador to Russia, leaves Moscow to retire,” *New York Times* (September 4, 2022), available at <https://www.nytimes.com/2022/09/04/world/europe/john-sullivan-us-ambassador-russia-retire.html>.

¹⁹ See, e.g., Central Intelligence Agency, Directorate of Intelligence, Office of Strategic Research, “Soviet Nuclear Doctrine: Concepts of Intercontinental and Theater War,” (June 1973) [declassified], available at https://www.cia.gov/readingroom/docs/DOC_0000268107.pdf; John G. Hines et al., “Soviet Intentions, 1965-1985, Volume II: Soviet Post-Cold War Testimonial Evidence” (September 22, 1995), available at <https://russianforces.org/files/Soviet%20Intentions%201965-1985%20Vol.%202.pdf>; BDM Federal, Inc. “Evolution of Soviet Strategy” [excerpted], pp. 22-47, available at https://nsarchive2.gwu.edu/nukevault/ebb285/doc02_I_ch3.pdf; Federation of American Scientists, “Russian/Soviet Nuclear Doctrine” (September 4, 2000), available at <https://nuke.fas.org/guide/russia/doctrine/intro.htm>; and, Congressional Research Service, “Russia’s Nuclear Weapons: Doctrine, Forces, and Modernization,” No. R45861 (April 21, 2022), available at <https://sgp.fas.org/crs/nuke/R45861.pdf>.

nuclear weapons doctrine, with the Kremlin in recent years issuing at least some occasional doctrinal publications.²⁰

With China, however, the page is comparatively blank. This is why China is arguably the hardest intellectual target among the five longest-established nuclear weapons possessors. At the same time, however, China is also the *easiest* of the five to discuss, in at least one way, for on such terrain it is harder to be obviously *wrong*. With such little solid information about PRC nuclear thinking to work with, and with the landscape covered by such a thick haze of propagandistic explanatory narrative that today fits so imperfectly – as will be discussed below – with what the PRC actually seems to be doing, the thin clear facts on the ground sometimes permit multiple interpretations.

Absent some near-miraculous intelligence coup that somehow reveals the innermost thinking of the CCP leadership on these matters, we are therefore stuck with there being a great deal of ambiguity and must in some key respects rely upon no more than reasonable inference. Nevertheless, the following pages will offer a conceptual framework that may help the reader in his or her *own* effort to evaluate the available evidence – informed by a look back across the history of the PRC’s nuclear force posture – as well as providing some insights from this author about how we might be able to make interpretive sense of things.

²⁰ See, e.g., “Foundations of State Policy of the Russian Federation in the Area of Nuclear Deterrence,” CNA Information Memorandum (June 2020) [informal translation by the CNA Russia Studies Program], available at <https://www.cna.org/reports/2020/06/Foundations%20of%20State%20Policy%20of%20the%20Russian%20Federation%20in%20the%20Area%20of%20Nuclear%20Deterrence.pdf>; and, Nikolai Sokov, “Russia’s 2000 Military Doctrine,” Nuclear Threat Initiative (September 30, 1999 [sic]), available at <https://www.nti.org/analysis/articles/russias-2000-military-doctrine/>.

A Conceptual Framework: Three Eras and Four Framings

Before we look back over China's nuclear history, the following pages lay out an organizing framework for contemplating PRC nuclear weapons policy. In this respect – taking some oblique inspiration from the Chinese fondness for policy-numerical listings such as Beijing's "Three Noes Policy" on Taiwan,²¹ Foreign Minister Zhou Enlai's "Five Principles of Peaceful Coexistence,"²² and the "four supers" and "four uniques" with which the PRC's present-day cheerleaders describe China's virtues as a "civilization state"²³ – the reader may find it helpful to think about PRC nuclear weapons issues through the prism of three historical "eras" and four conceptual "framings."

Through this lens, the "Three Eras" of Chinese nuclear policy correspond loosely to: (1) the early period of nuclear weaponization under Mao Zedong; (2) a so-called "minimum deterrence" period that stretches from Mao's late years until relatively recently; and then (3) the "national rejuvenation" period that one could say began under Hu Jintao, thereafter accelerating under Xi Jinping, and in which China's nuclear posture seems to be undergoing enormous expansion.

²¹ See, e.g., Robert Sutter, "Taiwan: The 'Three No's,' Congressional-Administration Differences, and U.S. Policy Issues," Congressional Research Service, Report 98-837F (October 1, 1998), available at https://www.everycrsreport.com/files/19981001_98-837_7ea01b614b8b881d194dbd6cf6d070294cd44aae.pdf.

²² See, e.g., PRC Ministry of Foreign Affairs, "China's Initiation of the Five Principles of Peaceful Co-Existence" (undated), available at https://www.fmprc.gov.cn/eng/ziliao_665539/3602_665543/3604_665547/200011/t20001117_697812.html.

²³ See, e.g., Zhang Weiwei, *The China Wave* (WCPC: 2012), p. 43 (referring to China's "super-large population," "super-vast territory," "super-long traditions," "super-rich culture," and its "unique language," "unique politics," "unique society," and, "unique economy").

With regard to the aforementioned “Four Framings” through which to evaluate PRC nuclear strategy and policy, these should be seen not necessarily as alternative explanations, for they are not really mutually exclusive; and it might be that *each* of them reveals something noteworthy about Chinese policy to some extent, albeit perhaps to varying degrees at different times. These four framings are as follows:

1. A dynamic of *moralistic posturing*, in which nuclear weapons policy is depicted by Chinese officials as demonstrating something about Beijing’s supposed moral superiority to its antagonists and rivals in the global security environment. (This might, for example, be seen in Mao Zedong depicting China’s nuclear weapons as a tool of revolutionary Communist emancipation with which the oppressed can resist imperialism and break the monopoly of the Cold War superpowers. Or it could be seen in more modern Chinese leaders milking the supposedly “minimalist” character of their force posture and their so-called “no first use” policy for maximum diplomatic and political advantage with the Global South against the United States.)
2. A dynamic of *game-theoretical positioning*, in which Chinese strategists seek to match their nuclear force posture in some relatively clear and articulable way to some threat they claim to fear, or in order to achieve some objective they prioritize. (This might be seen, for instance, in articulating a countervalue-focused “minimal deterrence” strategy against possible Soviet or U.S. attack. Or it could be preparing to deploy what will be discussed below as an

“offensive nuclear umbrella,” in preparation for invading Taiwan.)

3. A dynamic of *net power aggregation*, in which Chinese officials seem to view nuclear weapons as a key part of their nation’s overall national power and a key to its success both in geopolitical competition and (if necessary) in warfighting. (Such thinking might, for instance, draw upon materialist analyses influenced by Marxist dialectics as well as more ancient Chinese sources, and may have been historically expressed in both Soviet-style “correlation of forces” thinking and more modern PRC-inflected “comprehensive national power” dynamics.)
4. A dynamic of *great power status-seeking* that sees nuclear weaponry as one of the indicia of global power and status that it is intolerable for China *not* to possess. (Such thinking might treat nuclear force posture almost on a kind of “scorecard” basis, as one key way of measuring China’s degree of success in “returning” to the position of geopolitical centrality of which its leaders feel it was robbed by European and Japanese imperialism in the 19th century.)

As noted, each of these four framings may say something useful about Chinese nuclear thinking at some point, and to some degree. The reader may thus wish to keep them in mind as the following pages look back across the “Three Eras” that describe more than six decades of PRC nuclear weapons policy.

Three Historical Eras

The First Era: Weaponization

The story of China's development of nuclear weaponry involved a good bit of drama along the way. It tested its first weapon in October 1964, but the road to weaponization was not smooth.

From the outset, foreign technology transfers were critical to the PRC's bomb program. The first and biggest contributor was the Soviet Union, beginning in the 1950s. In those days before the Sino-Soviet split, Moscow thought it made good sense to help its fellow – and subordinate – Communist dictatorship in Beijing acquire atomic weapons.

Soviet General Secretary Nikita Khrushchev visited Beijing in 1954, and in 1955 the two countries signed an agreement for “full [Soviet] assistance in the fields of nuclear physics and the peaceful uses of atomic energy.”²⁴ Under this agreement, Chinese nuclear scientists were sent to the USSR to train, and Moscow agreed to provide nuclear reactors and a cyclotron to help the PRC with its early development of nuclear technology.²⁵ In October 1957, Chinese Communist Party Chairman Mao Zedong and Khrushchev signed what was called the New Defense Technical Accord, under which the Soviets agreed to provide an early ballistic missile to China, as well as technical details on nuclear weaponry, and even – remarkably – an actual prototype atomic bomb.²⁶

²⁴ Atomic Heritage Foundation, “Chinese Nuclear Program” (July 19, 2018), available at <https://ahf.nuclearmuseum.org/ahf/history/chinese-nuclear-program/>.

²⁵ Ibid.

²⁶ See Lawrence S. Wittner, *A History of the World Nuclear Disarmament Movement, Volume Two: A History of the World Nuclear Disarmament Movement, 1954-1970* (Stanford: Stanford University Press, 1997), p. 161.

Mao Zedong was delighted by this deal. Significantly, it occurred just after the Soviets launched the first man-made satellite, the famous *Sputnik*, the showy technical achievement which startled the world – and, perhaps most importantly, the United States – with Moscow’s unexpected capabilities. Mao crowed that *Sputnik* showed Communism was on its way to triumph, and that the “East wind,” he said, “prevails over the West wind.”²⁷ Most importantly for Mao, the New Defense Technical Accord provided the way in which China could break the nuclear weapons monopoly hitherto enjoyed by the two Cold War superpowers.

Over the course of 1958, Chinese officials went to Moscow with what China scholar John Garver has called a “shopping list” of missiles, jet aircraft, and nuclear weapons, while the Soviets sent a delegation to China to provide the People’s Liberation Army (PLA) with design information on military submarines.²⁸ The Soviets also sent a team to Beijing specifically to tell China how to make nuclear weapons, and Soviet scientists helped build the Chinese nuclear weapons development facility in Haiyan – apparently constructing it as an exact replica of the Soviets’ own nuclear weapons development “closed city” of Arzamas-16 (now known as Sarov).²⁹ The Soviets even proposed the development of a joint Russo-Chinese submarine fleet, though Mao Zedong rejected that particular proposal, apparently fearing it would make China too dependent on the Russians.³⁰

China’s nuclear weapons program also benefited from scientists trained in the West, most prominently the physicist Qian Sanqiang, who had studied in France under

²⁷ Loc. cit.

²⁸ John W. Garver, *China’s Quest: The History of the Foreign Relations of the People’s Republic of China* (Oxford: Oxford University Press, 2016), p. 3.

²⁹ Atomic Heritage Foundation, “Chinese Nuclear Program,” op. cit.

³⁰ Garver, op. cit., pp. 134, 138.

Frédéric Joliot-Curie.³¹ This was an impressive pedigree, insofar as Joliot-Curie had been one of the leading scientists in the area of nuclear chain reactions, and had been one of the experts mentioned in Albert Einstein's famous 1939 letter to U.S. President Franklin Roosevelt warning that it might be possible to make a nuclear weapon.³²

Qian returned to China in 1948, and was employed by Mao's government procuring nuclear instruments in Europe, eventually working on China's A-bomb program and overseeing its first nuclear weapons test in 1964. Qian is remembered today as the "father of the Chinese nuclear program."³³ Another helpful returnee who had learned much abroad was another scientist – confusingly, also named Qian – Qian Xuesen, who had studied in America, and who is now remembered as the father of China's ballistic missile program.³⁴ (China may also have learned something about implosion-type nuclear weapons – e.g., the "Fat Man" plutonium weapon the United States tested at Alamogordo in 1945 – from the defection of the American physicist Joan Hinton in 1948.³⁵)

Not all of this, however, went smoothly for China. Most prominently, after having gotten Beijing's nuclear weapons

³¹ Atomic Heritage Foundation, "Qian Sanjiang: Physicist, China" (undated), available at [https://ahf.nuclearmuseum.org/ahf/profile/qian-sanjiang/#:~:text=Qian%20Sanjiang%20\(1913%2D1992\),French%20physicist%20Frédéric%20Joliot%2DCurie](https://ahf.nuclearmuseum.org/ahf/profile/qian-sanjiang/#:~:text=Qian%20Sanjiang%20(1913%2D1992),French%20physicist%20Frédéric%20Joliot%2DCurie).

³² Albert Einstein, letter to President Franklin D. Roosevelt (August 2, 1939) (referring to "the work of Joliot[-Curie] in France as well as [Enrico] Fermi and [Leo] Szilard in America"), available at <https://www.pbs.org/wgbh/americanexperience/features/truman-ein39/>. Joliet-Curie was apparently a Communist or at least a Communist sympathizer, for he later went on, after World War II, to run the Soviet-directed disarmament front organization known as the World Peace Council. See Wittner, *Volume Two*, op. cit., at 5. In retrospect, therefore, his student Qian helping Mao Zedong's Communists develop the atomic bomb was perhaps not terribly surprising.

³³ Atomic Heritage Foundation, "Qian Sanjiang," op. cit.

³⁴ Josh Chin and Liza Lin, *Surveillance State: Inside China's Quest to Launch a New Era of Social Control* (New York: St. Martin's Press, 2022), pp. 74-75.

³⁵ Atomic Heritage Foundation, "Chinese Nuclear Program," op. cit.

program off to a running start, the Soviets ended up backing out of an important part of their nuclear proliferation deal with the Chinese. Tensions had been rising between the two Communist powers in the late 1950s, fueled both by Mao's desire to claim *at least* co-equality (and, in some ways pride of place) in the world Communist movement and by Soviet unease with the CCP's reckless revolutionary zealotry and a growing worry in Moscow that Mao might be a little *too hot-headed* to be trusted with nuclear weapons.

Mao had authorized commencement of a Chinese nuclear weapons program in January 1955, in response to what he regarded as a nuclear threat from the United States. "We need the atom bomb," he is reported to have said. "If our nation does not want to be intimidated, we have to have this thing."³⁶ That, in itself, perhaps wasn't too problematic – or at least it didn't sound *unlike* what Joseph Stalin must have been thinking when his spies learned of the Manhattan Project during the war.³⁷

But Mao Zedong was an extraordinarily zealous, even fanatical, revolutionary, and he had an almost messianic attitude toward geopolitics. Fixated on his own ideological rectitude, he regarded himself as an intellectual giant of Communism right up there with Marx and Lenin – a luminary whose thoughts on peasant revolution were indispensable to bringing about a socialist victory in China,

³⁶ Ibid.

³⁷ See, Lawrence S. Wittner, *A History of the World Nuclear Disarmament Movement, Volume One: One World or None: A History of the World Disarmament Movement Through 1953* (Stanford: Stanford University Press, 1993), p. 17 (noting that in addition to having spies inside the Manhattan Project, Soviet scientists had been following Western publications on nuclear fission experiments and warned the Kremlin in 1941 about at least the possibility of atomic weaponry); See also, *ibid.*, p. 285 (recounting that upon his return from meeting with U.S. President Harry Truman at Potsdam in 1945 – where Truman had mentioned the U.S. bomb program – Stalin called a meeting of his own nuclear scientists and told them: "A single demand of you, comrades. Provide us with atomic weapons in the shortest possible time").

and perhaps indeed across the entire developing world.³⁸ Moreover, rather than being focused primarily upon traditional Marxist ideas of revolutionary change proceeding from the dialectical development of the material means of economic production, Mao's Marxism had an almost emotional, idealistic valence. He envisioned reconstructing society and building a Communist utopia almost as an act of will, through the moral rectification of the peasantry and the proletariat, catalyzed by his Communist Party's revolutionary leadership and ideological zeal, and spreading as a sort of emotional contagion around the world.³⁹

As early as 1946, Mao had dismissed the U.S. atomic bomb as:

a paper tiger which the U.S. reactionaries use to scare people. It looks terrible, but in fact it isn't. Of course, the atom bomb is a weapon of mass slaughter, but the outcome of a war is decided by the people, not by one or two new types of weapon. All reactionaries are paper tigers.⁴⁰

What mattered to him was not technical capability as much as will, moral energy, and revolutionary zealotry. And his

³⁸ See, e.g., Mao Zedong, "The Role of the Chinese Communist Party in the National War" (October 1938), in *Mao Zedong, Selected Readings from the Works of Mao Tsetung* (Peking: Foreign Languages Press, 1971) [hereinafter "*Mao, Selected Readings*"], pp. 138, 155-56 (arguing that "we can put Marxism into practice only when it is integrated with the specific characteristics of our country and acquires a definite national form. ... For the Chinese Communist Party, it is a matter of learning to apply the theory of Marxism-Leninism to the specific circumstances of China. For the Chinese Communists who are part of the great Chinese nation, flesh of its flesh and blood of its blood, any talk about Marxism in isolation from China's characteristics is merely Marxism in the abstract, Marxism in a vacuum."); see also, Garver, op. cit., p. 230 (on Maoist insistence upon "people's war" concepts over Soviet approaches).

³⁹ See, Christopher A. Ford, *China Looks at the West: Identity, Global Ambitions, and the Future of Sino-American Relations* (Lexington: University Press of Kentucky, 2015), p. 126.

⁴⁰ Mao Zedong, "Talk with the American Correspondent Anna Louise Strong" (August 1946), in *Mao, Selected Readings*, op. cit., pp. 345, 349.

relatively messianic approach to revolution helped color his approach to China's own nuclear weapons.

CCP officials in those years actually depicted Beijing's acquisition of atomic bombs as a noble *service* to mankind, for it would break the malign monopoly of the U.S. and Soviet superpowers and prevent the rest of the world from having "to kneel and obey orders meekly, as if they were nuclear slaves."⁴¹ Nuclear proliferation, therefore – at least proliferation to China, though perhaps also to others – was thus painted as a public service, a "great contribution to the cause of peace."⁴²

According to a document providing "Guidelines for Developing Nuclear Weapons" published by the CCP's Central Military Commission in 1958, it was necessary for China to have nuclear weapons in order "to defend peace, [and] save mankind from a nuclear holocaust." Incongruously, moreover, Beijing acquiring such weapons was in fact deemed essential in order to "reach agreement on nuclear disarmament and the complete abolition of nuclear weapons."⁴³

Upon conducting China's first test in 1964, Chinese officials declared that "[i]n developing nuclear weapons[,] China's aim is to break the nuclear monopoly of the nuclear powers and to eliminate nuclear weapons."⁴⁴ According to Foreign Minister Zhou Enlai,

⁴¹ Quoted in Christopher A. Ford, *The Mind of Empire: China's History and Modern Foreign Relations* (Lexington: University Press of Kentucky, 2015), pp. 209 & 346 n.120.

⁴² Ibid.

⁴³ Ibid.

⁴⁴ "Statement by Peking on Nuclear Test," *New York Times* [archive] (October 17, 1964), available at <https://www.nytimes.com/1964/10/17/archives/statement-by-peking-on-nuclear-test.html>. A U.S. study in 1968 emphasized the importance of this Chinese focus upon seeing nonproliferation as "a collaborative effort by the US and USSR to maintain a 'nuclear monopoly.'" *Communist China & Arms Control: A Contingency Study* (Stanford, CA: Hoover Institution on War, Revolution and Peace: 1968), p. 3.

China developed nuclear weapons in order to resist nuclear blackmail and counter nuclear threats. It is after all for the purpose of halting the hands at the trigger of the bombs that China must have its own nuclear bombs.⁴⁵

Mao himself declared that because Communists “love peace,” having more Communist countries acquire nuclear weapons would be a way “to *prevent* nuclear war.”⁴⁶ He thus opposed arms control measures such as a ban on atmospheric nuclear testing – which was being debated in the late 1950s and early 1960s – calling this idea a “dirty fraud” that would represent, if enacted, an “out-and-out capitulation” to “U.S. imperialist grand strategy.”⁴⁷

Despite this allegedly noble purpose – which amounted to nothing less than China saving mankind! – Mao seemed extraordinarily sanguine about the risks of nuclear war. In general, he regarded “early war, major war, and nuclear war” with capitalism as being quite likely – and perhaps inevitable.⁴⁸ At one point he predicted that such an atomic war might last three years, and though he said that “how many will be killed cannot be known,” he claimed that “[t]he best outcome may be that only half of the population is left, and the second best may be only one-third.”⁴⁹

⁴⁵ Maj. Gen. Pan Zhenqiang, “China’s Nuclear Strategy in a Changing World Strategic Situation,” *National Perspectives on Nuclear Disarmament: Unblocking the Road to Zero*, Henry L. Stimson Center (2010), pp. 13, 16, available at <http://stimson.org/wp-content/files/file-attachments/National%20Perspectives%20on%20Nuclear%20Disarmament.pdf>.

⁴⁶ Wittner, *Volume Two*, op. cit., p. 324 (emphasis added).

⁴⁷ *Ibid.*, p. 428.

⁴⁸ Eric Heginbotham, et al., *China’s Evolving Nuclear Deterrent: Major Drivers and Issues for the United States*, RAND Corporation, RR-1628-AF (2017), p. 51, available at https://www.rand.org/content/dam/rand/pubs/research_reports/RR1600/R1628/RAND_RR1628.pdf.

⁴⁹ John Wilson Lewis and Xue Litai, *China Builds the Bomb* (Stanford, California: Stanford University Press, 1988), p. 69.

Nevertheless, Mao believed a nuclear war would by no means be an entirely bad thing. It would ensure, for instance, the “total elimination of capitalism,” and thereby usher in an epoch of “permanent peace.”⁵⁰ He thus urged Chinese officials not to be afraid of war, for this was like being afraid of ghosts. According to Mao, “[i]f the worst came to the worst and half of mankind died [in nuclear war], the other half would remain while imperialism would be razed to the ground and the whole world would become socialist.”⁵¹

Even *before* the Cuban Missile Crisis of 1962 – which alarmed the Soviets and led them gradually to become interested in exploring real arms control discussions with Washington⁵² – this kind of nuclear rhetoric began to worry Moscow. Indeed, Nikita Khrushchev came to see Mao as basically being unhinged in this regard, concluding that Mao actually wanted a nuclear war so that both the United States *and* the USSR would be devastated.⁵³ (This would leave Mao not just at the head of the global Communist movement by default, but also, Khrushchev feared, leave China in a position of being able to retake Eastern Siberia – large portions of which had been seized from the Qing Dynasty by the Russian tsars – an issue about which Mao Zedong had himself complained to the Soviets.⁵⁴ According to Mao, “[t]here are too many places occupied by the Soviet

⁵⁰ Ibid.

⁵¹ Deborah Welch Larson and Alexei Shevchenko, *Quest for Status: Chinese and Russian Foreign Policy* (New Haven: Yale University Press, 2019), p. 112.

⁵² See, e.g., Christopher Ford, “Nuclear ‘Hedging,’ Arms Control, and Today’s Strategic Challenges,” remarks at the Nuclear Triad Symposium, Louisiana State University – Shreveport (July 20, 2023) (describing Cuba as a key catalyst for early U.S.-Soviet arms control), available at <https://www.newparadigmsforum.com/nuclear-hedging-arms-control-and-todays-strategic-challenges>.

⁵³ Garver, op. cit., p. 184.

⁵⁴ See, e.g., Garver, op. cit., pp. 38, 184; and, Christopher Andrew and Vasili Mitrokhin, *The World Was going Our Way: The KGB and the Battle for the Third World* (New York: Basic Books, 2005), p. 279.

Union,” and he once told a group of Japanese journalists that all the areas east of Lake Baikal were lands that China should reclaim.⁵⁵)

As Khrushchev put it later, “[e]verybody except Mao was thinking about how to avoid war.”⁵⁶ He apparently repeatedly told a Romanian delegation in 1964, in fact, that “Mao Zedong is sick, crazy,” and that “he should be taken to an asylum.”⁵⁷ The Soviets, in other words, came to see China as the original nuclear proliferation “rogue regime” threat.⁵⁸

So despite his earlier keenness to help Mao develop nuclear weapons, and the very considerable assistance the

⁵⁵ Angela E. Stent, *Putin's World: Russia Against the West and with the Rest* (New York: Hachette, 2019), pp. 209-10. Nor, apparently, was this desire for territorial expansion into Siberia merely an idiosyncratic Maoist enthusiasm. Many years later, in the late 1980s, CCP leader Deng Xiaoping showed Mikhail Gorbachev's Foreign Minister, Eduard Shevardnadze, a map with Outer Manchuria – the Russian province of Primorsky Krai – labeled as Chinese. Ibid, p. 216. To this day, Chinese nationalists, and a good many maps published in China, still delineate the territory China lost to tsarist Russia. William A. Callahan, *China; The Pessimist Nation* (Oxford: Oxford University Press, 2010), pp. 105, 111-13; perhaps not surprisingly, therefore, when the PRC first announced its “Belt and Road Initiative” for regional infrastructure development, one Russian official remarked to a scholar from the Carnegie Endowment that “[w]e understand this Chinese initiative as just another attempt to steal Central Asia from us.” Jonathan E. Hillman, *The Emperor's New Road: China and the Project of the Century* (New Haven: Yale University Press, 2020), p. 65.

⁵⁶ Wittner, *Volume Two*, op. cit., p. 170.

⁵⁷ Andrew and Mitrokhin, op. cit., p. 264.

⁵⁸ See, e.g., Christopher Ford, *The Mind of Empire: China's History and Modern Foreign Relations* (Lexington: University Press of Kentucky, 2015), pp. 207-08 (noting that the Soviets ended nuclear weapons assistance to China in part because they concluded that Mao was “a reckless nuclear sociopath”). Later, in fact, Soviet officials would contemplate – though never actually undertake – a preemptive nuclear attack on China. See, e.g., Garver, op. cit., p. 184 (recounting that in 1969, some Soviet leaders favored a nuclear first strike on China in order to reduce its population by several hundred million). (The Americans themselves, moreover, had flirted with the idea of a preemptive counterproliferation strike on China in the early 1960s, before the first China test. In fact, President Kennedy's national security advisor, McGeorge Bundy, twice raised the possibility with Soviet Ambassador Anatoly Dobrynin of a joint U.S.-Soviet first strike – and Kennedy himself once raised it with Nikita Khrushchev directly. Moscow, however, declined. Garver, op. cit., pp. 185-87.)

Soviets had already provided, Khrushchev got cold feet and held back from delivering the actual prototype bomb he had promised Mao. In his memoirs, Khrushchev said the weapon had been packed up and was all ready to be shipped when he decided not to complete the deal.⁵⁹ The Soviets abrogated the New Defense Technical Accord in June 1959, and Soviet scientists soon began to leave; by August 1960 they were all gone.⁶⁰

Nevertheless, a great deal of assistance had already been provided. Although the Chinese program hit some snags in the late 1950s in part thanks to the revolutionary madness of Mao's "Great Leap Forward" – which directly led to mass famine in the Chinese countryside, devastating the economy and killing between 23 and 55 million Chinese⁶¹ – Beijing thus still managed to join the nuclear "club" in 1964.⁶² China began deploying its first medium-range ballistic missile in 1966, and detonated its first thermonuclear weapon (aka "H-bomb") in 1967.⁶³

After China acquired nuclear weapons, Mao's nuclear-infused revolutionary messianism continued, and China adopted the position that *more* "oppressed countries"

⁵⁹ Garver, *op. cit.*, p. 183.

⁶⁰ Wittner, *Volume Two*, *op. cit.*, p. 399.

⁶¹ See, e.g., Clayton D. Brown, "China's Great Leap Forward," *Education About Asia*, Vol. 17, No. 3 (Winter 2012), p. 34, available at <https://www.asianstudies.org/publications/ea/archives/chinas-great-leap-forward/>.

⁶² On October 16, 1964, U.S. President Lyndon Johnson announced that U.S. scientists had "confirmed that a low yield test actually took place in Western China at about 3 a.m. Eastern daylight time" that day. "Statement by the President on the First Chinese Nuclear Device" (October 16, 1964), available at <https://www.presidency.ucsb.edu/documents/statement-the-president-the-first-chinese-nuclear-device>.

⁶³ See, e.g., "China Says it fires H-bomb," *United Press International* (June 17, 1967), available at <https://www.upi.com/Archives/1967/06/17/China-says-it-fires-H-bomb/5458453012585/>. Moreover, with what was surely a mixture of pride and spite, the PRC code-named its first nuclear device "596," in reference to the June 1959 date – that is, 1959's sixth month, or '59-6 – on which the Soviets told China they would not provide that prototype weapon. Larson and Shevchenko, *op. cit.*, p. 114.

needed to get nuclear weapons in order to break the “nuclear monopoly and nuclear blackmail” of the United States and the USSR.⁶⁴ For this reason, China suggested giving nuclear weapons assistance to Indonesia in 1965, and indeed the two countries soon began negotiating terms for such technology transfer, though the effort never came to fruition.⁶⁵

China also began quiet dealings with Pakistan in the 1960s that resulted in the provision of nuclear technology and aid to Islamabad’s nuclear weapons program. In the mid-1970s, the two countries apparently signed a secret cooperation agreement – one which Pakistani Prime Minister Zulfikar Ali Bhutto called his “single most important achievement” and “perhaps my greatest achievement and contribution to the survival of our people and nation.”⁶⁶ Thereafter, Chinese personnel reportedly helped Pakistan with a range of nuclear-related issues. In the 1980s, Chinese nuclear weapons assistance to Pakistan included the provision of uranium hexafluoride (UF₆) feedstock for Pakistan’s centrifuges. (Using this material, the Pakistanis reportedly began enriching weapons-grade uranium in mid-1982.)⁶⁷

At one point, China even reportedly gave Pakistan a “loan” of actual weapons-grade uranium with which to make several bombs. Some 50 kilograms of highly enriched

⁶⁴ Garver, *op. cit.*, p. 223; *see also* Wittner, *Volume II*, *op. cit.*, p. 384. As Foreign Minister Zhou Enlai put it, “[h]ad we not had nuclear weapons, the imperialists would have used them. China developed nuclear weapons in order to resist nuclear blackmail and counter nuclear threats. It is after all for the purpose of halting the hands at the trigger of the bombs that China must have its own nuclear bombs.” Pan, *op. cit.*, p. 16.

⁶⁵ The Chinese effort to supply atomic weaponry to Indonesia fell apart, as an ironic and presumably unintended side effect of Mao’s own revolutionary zeal. It was discovered that the Beijing-supported Indonesian Communist Party was involved in efforts to assassinate top Indonesian government officials and foment revolution there, and this soured Jakarta on cooperation with China for years. Garver, *op. cit.*, pp. 223-24.

⁶⁶ *Ibid.*, p. 334.

⁶⁷ *Ibid.*, pp. 335, 440.

uranium was flown in a Pakistani C-130 aircraft to Pakistan, along with the blueprints for a simple atomic bomb of a type already tested by China in 1966 – specifically, a 25-kiloton (Hiroshima-sized) atomic bomb.⁶⁸ (China also provided assistance to Iran’s early nuclear power program in the 1980s, after the Iranian revolution, though this may not have included nuclear weapons help.⁶⁹)

China, therefore, entered the nuclear era with a worryingly nuclear-messianic reputation and in a firmly “pro-proliferation” mode. Over time, however – though some Chinese nuclear proliferation-facilitating transfers to countries such as Algeria, Iran, Iraq, Pakistan, and Syria would continue at least into the 1990s⁷⁰ – Beijing’s approach to its *own* arsenal, at least, shed the alarming rhetorical recklessness of Mao Zedong and adopted much more sober and non-provocative tones.

The Second Era: Minimum Deterrence

The “Second Era” of China’s nuclear weapons history can be thought of as starting once Mao had passed from the scene in 1976. After Mao’s death, the man who remained China’s paramount leader throughout the 1980s, Deng Xiaoping, was far more pragmatic than his flamboyant revolutionary predecessor.

⁶⁸ Ibid., pp. 335, 441. Pakistan later passed some of its Chinese designs on to countries such as Muammar Qaddafi’s Libya, and perhaps Iran, through the infamous proliferation network of Pakistani scientist A.Q. Khan. See, e.g., Jo Warrick and Peter Slevin, “Libyan Arms Designs Traced Back to China,” *Washington Post* (February 15, 2004), available at <https://www.washingtonpost.com/archive/politics/2004/02/15/libyan-arms-designs-traced-back-to-china/2aacac24-4d49-4198-9aa0-7d68962fd8c2/#>.

⁶⁹ Ibid., pp. 449-50.

⁷⁰ See, e.g., Congressional Research Service, “Chinese Proliferation of Weapons of Mass Destruction: Background and Analysis” (September 13, 1996), pp. 25-34, available at https://www.everycrsreport.com/files/19960913_96-767_0aa3c5a209e281740552cd937e4dde4a54e78d28.pdf.

For one thing, Deng was less focused than Mao upon the imminence of warfare, revising Mao's prediction of "early war, major war, and nuclear war" to declare instead, in 1985, that "peace and development are the main trends of the times."⁷¹ Under this rubric, Deng emphasized not leading a fanatical global revolution but rather what China could learn and acquire from the rest of the world in order to grow stronger. Under his leadership, China devoted itself to economic and technological development in pursuit of what Deng's advisors came to call "comprehensive national power" (or CNP). CNP was viewed as an aggregation of all the myriad factors that could help make a country powerful – e.g., military capabilities, economic strength, technological sophistication, political influence, cultural strength and self-confidence – and it remains a key concept in PRC strategic planning to this day.⁷²

⁷¹ Heginbotham et al., op. cit., p. 51 (quoting Deng that "peace and development are the main trends of the times [*heping yu fazhan shi dangjin shidai de zhuti*]").

⁷² See, generally Christopher A. Ford, "China's Strategic Vision: Part One – The Communist Party's Strategic Framing," MITRE Center for Strategic Competition, *Occasional Papers*, Vol. 1, No. 1 (June 27, 2022), pp. 3-4; U.S.-China Economic and Security Review Commission, *2020 Report to Congress*, 116th Congress, 2nd Session (December 2020), p. 84, footnote (citing Ming Zhang, "China's Military Great Leap Forward?" *Georgetown Journal of International Affairs* 2:1 (2001): 97-104, 100; Deng Xiaoping, "Deng Xiaoping's Remarks on the Southern Tour (邓小平南巡讲话)," January 18-February 21, 1992; "Year of the Horse New Spring Conversation on National Power – Interviewing Chinese Comprehensive National Power Research Worker Huang Shuofeng (马年新春话国力 – 访我国综合国力研究工作者黄硕风)" (Lu Mu, trans.), *People's Daily* (February 26, 1990)), available at https://www.uscc.gov/sites/default/files/2020-12/2020_Annual_Report_to_Congress.pdf; Michael Pillsbury, *China Debates the Future Security Environment* (Washington, D.C.: National Defense University Press, 2000), pp. xxii, xxxvii, & 203-58; Ford, *China Looks at the West*, op. cit., pp. 143-44; Timothy R. Heath, Derek Grossman, & Asha Clark, "China's Quest for Primacy: An Analysis of Chinese International and Defense Strategies to Outcompete the United States" RAND Corporation (2021), pp. 19-20, 23-24, available at https://www.rand.org/content/dam/rand/pubs/research_reports/RRA400/RRA447-1/RAND_RRA447-1.pdf; Ma Gensheng, *Research on Military Soft Power (Junshi Ruan Shili Yanjiu)* (Beijing: PLA Press [*Jiefangjun Chubanshe*], 2010); Christopher A. Ford, "China's Strategic Vision: Part Two – Tools and Axes of

Taking lessons from the so-called “Asian Tigers” such as Singapore, Taiwan, South Korea, and Hong Kong – the rapid growth of which had astonished the world in the 1980s⁷³ – Deng spent that decade focusing the PRC on export-led growth. This meant careful years of acquiring technology and industrial know-how from the West, while maintaining a relatively un-provocative geopolitical posture lest Chinese behavior provoke the West to cut off such transfers.

This strategic pragmatism in no way meant any lessening of China’s strategic ambitions, for under Deng’s rubric of “bide your time and hide your capabilities”⁷⁴ Beijing was all but *explicitly* building up its CNP for some time in the future when it wouldn’t have to “hide” its capabilities anymore.⁷⁵ But for so long as this cautious Dengism lasted, China’s posture in the geopolitical arena was notably pragmatic, unthreatening, and focused upon

Competition,” MITRE Center for Strategic Competition, *Occasional Papers*, Vol. 1, No. 2 (June 27, 2022), pp. 8-10 (discussing military facets of CNP).

⁷³ See generally, e.g., Christopher A. Ford, “Competitive Strategy in Information Competition,” *Livermore Papers in Global Security*, No.11 (December 2022), pp. 40-41, <https://cgsr.llnl.gov/content/assets/docs/cgsr-livermore-paper-11-competitive-strategy-info-confrontation.pdf>.

⁷⁴ Deng’s “24-character” phrase in Chinese has been translated in various ways, but the basic point remains the same. See, e.g., Garver, *op. cit.*, p. 517 (“Observe the situation calmly; stand firm in our position; deal with matters calmly; hide our capabilities and bide our time to make a comeback; maintain a low profile; never seek leadership.”); U.S. Department of Defense, *Military and Security Developments Involving the People’s Republic of China 2023* (Washington, D.C.: October 2023) [hereinafter “DoD, *China Military Power 2023*”], p. 6 (“hide our capacities and bide our time, be good at maintaining a low profile; and never claim leadership”), available at <https://media.defense.gov/2023/Oct/19/2003323409/-1/-1/1/2023-MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA.PDF>.

⁷⁵ Under Hu Jintao and especially now under Xi Jinping, it would appear that China now feels this time has arrived. See, e.g., Ford, *China Looks at the West*, *op. cit.*, pp. 391-411; Fei-Ling Wang, “Beijing’s Incentive Structure: The Pursuit of Preservation, Prosperity, and Power,” in *China Rising: Power and Motivation in Chinese Foreign Policy* (Yong Deng and Fei-Ling Wang, eds.) (Lanham, Maryland: Rowman & Littlefield, 2005), pp. 19, 39; and, DoD, *China Military Power 2023*, *op. cit.*, pp. 3-4.

economic reform and generally market-based, export-driven economic development.

During this “Second Era” after Mao Zedong had passed from the scene, China’s approach to its own nuclear weapons posture largely seemed to reflect such Dengist pragmatism. It is commonly said that China historically adhered to:

a minimum deterrent strategy made credible by a small nuclear force. This deterrent strategy focused on a small number of nuclear weapons capable of executing a secure second-strike capability and touted both a sole purpose and no first use doctrine.⁷⁶

As we will see below, it is not at all clear that this is *still* an accurate description of China’s nuclear posture. Nevertheless, it is not hard to find writings by PRC-affiliated authors that provide indications of how China *wishes* its nuclear posture to be seen – and describing how, for the most part, it indeed may generally have been thus from the beginning of the “Second Era” at least until the last few years.

According to former People’s Liberation Army flag officer Pan Zhenqiang, for instance, “China’s nuclear forces are intended for only one purpose: to retaliate following a nuclear attack ... [and are] ‘purely defensive in nature.’”⁷⁷ In his telling,

China’s strategic objective is solely to deter a nuclear attack, the means to that end do not require a large nuclear arsenal. Maintaining a capability to destroy a few big cities in retaliation

⁷⁶ Jennifer Bradley, “China’s Strategic Ambitions: A Strategy to Address China’s Nuclear Breakout,” *Information Series* No. 531 (Fairfax, VA: National Institute Press, August 17, 2022), p. 1, available at <https://nipp.org/wp-content/uploads/2022/08/IS-531.pdf>.

⁷⁷ Pan, *op. cit.*, p. 13.

should be enough to frustrate any opponent considering a nuclear strike against China.⁷⁸

Thus, Pan says, China's focus is on "maintaining a small, but credible, retaliatory force." Moreover, "because Beijing's sole nuclear mission is to retaliate against cities, known as a 'counter-value mission,'" Pan claims, it is also "unnecessary to seek a nuclear war-fighting capability, or to develop nuclear weapons for non-strategic uses."⁷⁹ Pan wants his readers, moreover, to believe that China will not change this posture. "Against this backdrop," he writes, "it is extremely unlikely that China will fundamentally change its nuclear posture and nuclear strategy."⁸⁰

In broad terms - whether or not the intentions *behind* this posture in fact reflected the thinking Pan describes - China's nuclear posture arguably did for a long time take a form largely consistent with this theory. China did develop ballistic missiles of intercontinental reach, and a range of nuclear weaponry including some very high-yield warheads, and after a time even began to develop ballistic missile submarines. But its arsenal remained relatively small and not obviously structured for warfighting.

As Eric Heginbotham and his coauthors have recounted, as recently as 2012, one researcher at Harvard's Belfer Center estimated that China's total nuclear arsenal totaled only about 170 nuclear weapons - a figure that was said to have increased to "about 260" by 2017.⁸¹ As will be recounted below, that number has been growing very fast since then, but in a world in which the United States and the Russian Federation even then - after decades of post-Cold War reductions - still possessed thousands of warheads

⁷⁸ Ibid., p. 14.

⁷⁹ Ibid., pp. 14-15.

⁸⁰ Ibid., p. 27.

⁸¹ Heginbotham et al., *op. cit.*, p. 42.

each, for many years China's totals did not strike many observers as being all that threatening.

To the degree that China's nuclear forces *were* growing, moreover – as they obviously were, though for many years not rapidly – this was depicted, still within the alleged construct of “minimal deterrence,” as being merely a response to growing threats. Major General Pan, for instance, describes the development of U.S. missile defenses as “one of the crucial factors shaping China's efforts to upgrade its nuclear arsenal.”⁸² He claims that,

[t]o China, the main nuclear threat seems increasingly to come from the U.S. ambition to strengthen its nuclear eminence and the uncertain strategic intention towards Beijing's small nuclear retaliatory force suggested by its efforts to deploy missile defense forces.⁸³

The basic idea here – which seems to echo what Russian strategists think, or at least what they say in public and tell Western interlocutors⁸⁴ – is that the United States' combination of nuclear and conventional military power, coupled with some missile defense capabilities, presented China's nuclear force with grave threats. Missile defense is described as being a critical element of this threat, not so much because U.S. homeland missile defense capabilities could do much against a Chinese attack of any significant

⁸² Pan, *op. cit.*, p. 16.

⁸³ *Ibid.*, p. 25.

⁸⁴ See, e.g., Lawrence S. Wittner, *A History of the World Nuclear Disarmament Movement, Volume Three: A History of the World Nuclear Disarmament Movement, 1971 to the Present* (Stanford: Stanford University Press, 2003), p. 390 (recounting that Ronald Reagan's summit with Mikhail Gorbachev on nuclear weapons issues failed to produce agreement because of Soviet fears that U.S. missile defenses would facilitate a first strike); see also generally, e.g., Vladimir Putin, remarks in Munich (February 10, 2007) (decrying Western missile defenses and warning that with such developments it was possible that “the possible threat [to the United States] from our nuclear forces will be completely neutralised”), available at <http://en.kremlin.ru/events/president/transcripts/copy/24034>.

size, since even a very modest incoming PRC salvo would overwhelm the sharply limited defenses the United States has built against North Korean and potentially Iranian missiles.⁸⁵

Instead, the claim is that strategists in Beijing worry that the United States might *itself* choose to strike first, using both strategic nuclear weapons and Washington's presumed arsenal of long-range precision-guided *conventional* weaponry to destroy most of China's nuclear arsenal pre-emptively. U.S. missile defense, then – though quite limited in capacity – might thus be useful thereafter by providing a relatively good defense against what little remained of China's force.

And indeed, Heginbotham and his co-authors, at least, seem to credit *fear* of U.S. missile defense – whether justified or not – as a major element in PRC threat perceptions.⁸⁶ Over time, they recount – quoting Alastair Iain Johnston and others – Chinese nuclear thinking appears to have shifted somewhat, moving from a traditional “‘minimum deterrent’ strategy toward a limited deterrent one that would include limited warfighting capability.”⁸⁷

According to some Western analysts, China has been – at least until recently, perhaps – “pursuing a calculated ‘assured retaliation’ capability.” This may involve “a more calculated approach to effective retaliatory capability, one

⁸⁵ See, e.g., Francis G. Mahon, Punch Moulton, and John Shapland, “Comprehensive missile defense must be more than quality and quantity,” *Breaking Defense* (December 13, 2022) (“Today, our defenses total 44 Ground-Based Interceptors (GBIs) distributed between two operating sites – Fort Greeley, Alaska and Vandenberg Space Force Base, California. By 2030, those GBIs will be augmented with 20 Next Generation Interceptors (NGIs). Forty-four interceptors today, 64 interceptors in eight years – or so has been the plan.”), available at [https://breakingdefense.com/2022/12/comprehensive-missile-defense-must-be-more-than-quality-and-quantity/#:~:text=Today%2C%20our%20defenses%20total%2044,Next%20Generation%20Interceptors%20\(NGIs\).](https://breakingdefense.com/2022/12/comprehensive-missile-defense-must-be-more-than-quality-and-quantity/#:~:text=Today%2C%20our%20defenses%20total%2044,Next%20Generation%20Interceptors%20(NGIs).)

⁸⁶ Heginbotham et al., op. cit., p. 60.

⁸⁷ *Ibid.*, p. 8.

described here and elsewhere as ‘assured retaliation.’”⁸⁸ Nevertheless, it is still described as pursuing a “standard of sufficiency [that] is the ability to survive an enemy first strike and launch an effective counterattack” – a so-called “lean-and-effective concept” that seeks primarily to deter by ensuring the ability to inflict “unsustainable damage” upon a would-be adversary.⁸⁹

This understanding, even on its own terms, might entail some expansion of PRC nuclear capabilities from previous years. Nevertheless, it still purports to be a prudential and cautious approach. Certainly, PRC sources themselves have emphasized the claim that “China continues to modernize its nuclear force in order to maintain, and only to maintain, a reliable second-strike retaliatory capability,”⁹⁰ and that – as Beijing’s 2006 White Paper on Defense put it – “China exercises great restraint in developing its nuclear force. It has never entered into and will never enter into a nuclear arms race with any other country.”⁹¹

This paper has been describing the “Second Era” of Chinese nuclear policy as the years during which such claims were – on the whole – accurate. During that era, China’s nuclear weapons policy remained primarily prudent, cautious, reactive, and fundamentally defensive – in a word, Dengist.

To be sure, even in Deng’s time there were suggestions that China regarded nuclear weapons as more than just a defensive tool the possession of which needed to be keyed, in generally game-theoretical terms, to what was needed to

⁸⁸ Ibid., pp. 8, 15 (citing, inter alia, the work of Taylor Fravel, Evan Medeiros, and Fiona Cunningham).

⁸⁹ Ibid., p. 20.

⁹⁰ Hui Zhang, “China’s Perspective on a Nuclear-Free World,” *The Washington Quarterly* (April 2010), pp. 139, 142, available at https://www.belfercenter.org/sites/default/files/legacy/files/10apr_Zhang.pdf.

⁹¹ Hui, op. cit., p. 140.

deter specific foreign threats. Nuclear weapons were also, for Chinese leaders, a status symbol – and, more than that, a symbol of geopolitical *progress*. They were part of how China would be able to show that it had shaken off what CCP propagandists call their country’s “Century of Humiliation” at Western hands,⁹² and was regaining the “Middle Kingdom’s”⁹³ traditional place of importance in the world.

This focus upon what was felt to be the *symbolic* importance of nuclear weaponry as a sign of China’s first-rank status was by no means just the provenance of a few hawkish and exuberant Chinese nationalists on the fringes of the PRC’s political community. To the contrary, Deng Xiaoping himself – the arch prudential strategist, of “bide your time and hide your capabilities” fame – once declared that,

It has always been, and will always be, necessary for China to develop its own high technology so that it can take its place in this field. If it were not for the atomic bomb, the hydrogen bomb and the satellites we have launched since the 1960s, China would not have its present international standing

⁹² See generally, e.g., DoD, *China Military Power 2023*, op. cit., p. 4; Zheng Wang, *Never Forget National Humiliation: Historical Memory in Chinese Politics and Foreign Relations* (New York: Columbia University Press, 2014), pp. 47, 67; Ford, “The Communist Party’s Strategic Framing,” op. cit., p. 11; and Igor Denisov, “Aigun, Russia, and China’s ‘Century of Humiliation,’” Carnegie Endowment for International Peace (Moscow) (October 6, 2015), available at <https://carnegie-moscow.org/commentary/60357>.

⁹³ The phrase “Middle Kingdom” is a translation of the Chinese *Zhongguo*, which is sometimes alternatively rendered as “Central Kingdom.” It should not be read, however, merely – or even primarily – in a geographic sense. Instead, the phrasing also conveys China’s traditional conception of itself as the *civilizational* and *political* center of the world. See generally, e.g., Jin Linbo, “China’s National Identity and Foreign Policy: Continuity amid Transformation,” in *East Asian National Identities: Common Roots and Chinese Exceptionalism* (Gilbert Rozman, ed.) (Washington, D.C.: Woodrow Wilson Center Press, 2012), pp. 239, 243; Martin Jacques, “A Civilization-State,” in *When China Rules the World* (New York: Penguin, 2009), pp. 240-43, 269-70; Larson and Shevchenko, op. cit., p. 1.

as a great, influential country. These achievements demonstrate a nation's abilities and are a sign of its level of prosperity and development.⁹⁴

Long after Deng's death, even Major General Pan – clearly trying to make the best case possible for China's nuclear weapons posture – cannot restrain himself from gushing about how Beijing's nuclear force demonstrates the country's return to first-rank geopolitical status.

Deng's view has been embraced by the succeeding leaders of China and, indeed, by the whole nation. Development of nuclear weapons has been held as the new, valuable spiritual wealth created by the Chinese people in the 20th century for the Chinese nation.⁹⁵

It is sometimes suggested, not altogether unfairly, that France clings to nuclear weapons in part out of a residual attachment to *la gloire française* in diminished times.⁹⁶ It could equally be said, however, that – at least in part, and according to none other than Deng himself – China today prizes nuclear weapons not as a last remnant of *past* status, but rather as a sign of China's *upward trajectory*. Indeed, as U.S. and Chinese officials prepared to meet in late 2023 to discuss ways they might reduce nuclear risks, PRC state

⁹⁴ Pan, op. cit., p. 33 (quoting “China Must Take Its Place in the Field of High Technology,” *People's Daily* (October 24, 1988) (recounting Deng Xiaoping's remarks when inspecting an electron-positron collider in Beijing), available at <http://web.peopledaily.com.cn/english/dengxp/vol3/text/c1920.htm>).

⁹⁵ Pan, op. cit., p. 33.

⁹⁶ See, e.g., Keith W. Baum, “Two's Company, Three's a Crowd: The Eisenhower Administration, France, and Nuclear Weapons,” *Presidential Studies Quarterly*, Vol. 20, No. 2 (Spring 1990), pp. 315, 318, 322 (recounting that by the end of 1956, as a declining former empire facing numerous problems and setbacks in the world, “France had initiated a program designed to attain membership in the nuclear weapons fraternity and hopefully to restore *la gloire*,” and that later, under President Charles DeGaulle from 1958, it was felt that “the restoration of *la gloire* required that France not assume a secondary role in the control of nuclear weapons”).

media published an editorial piece that both admitted and defended Beijing's nuclear weapons expansion. Notably, among the reasons given for this nuclear buildup was China's desire "to achieve a new security balance ... [and] be much more powerful than it was in the past."⁹⁷

The pages below discussing various interpretive "framings" through which to view Chinese nuclear policy will address further such status-seeking dynamics. For now, suffice it to say that while the "Second Era" of PRC policy may have been predominantly cautious and minimalist, various conceptual currents seem to have been in play. We shall return to this hereinafter.

No First Use

Before turning to the present day, however – and to whatever it is that China now sees itself rapidly expanding its nuclear posture *for* – it is worth saying a few words about the PRC's much-vaunted "no first use" (or NFU) policy.

For many years now, China has claimed that its policy is not to use nuclear weapons first in any conflict. This NFU policy, it is said, comports with the fundamentally defensive nature of nuclear weapons in PRC planning, for they would never be used unless an adversary has already *itself* used nuclear weaponry against China. Indeed, it has been claimed, "China has vowed not to use or threaten to use nuclear weapons against any non-nuclear weapon

⁹⁷ Andrew Stanton, "China Gives US Demands for Preventing Nuclear War," *Newsweek* (November 3, 2023) (quoting *Global Times* op-ed by Hu Xijin), available at <https://www.msn.com/en-us/news/world/china-gives-us-demands-for-preventing-nuclear-war/ar-AA1jhwZF?ocid=mailsignout&pc=U591&cvid=a79979bce7ef4a3abae7186fb04f32d8&ei=25>. The other reason given was to "hedge against rising security risks," suggesting – through the use of the term "hedge" – that China *doesn't* actually presently feel such risks to exist, merely that they *might* come to exist in the future. (For more on the concept of nuclear weapons "hedging," see Ford, "Nuclear 'Hedging,' Arms Control, and Today's Strategic Challenges," op. cit.)

states under any circumstance.”⁹⁸ No-first use proposals have also been central to Chinese multilateral diplomacy ever since Beijing signed the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)⁹⁹ in 1992.

It is hard to overstate how important this NFU posture is in Chinese diplomacy and engagement with the other nuclear powers, with the global disarmament community, and with diplomats and governments from across the Global South. For modern China, NFU is in some sense as central to Beijing’s narrative of itself – and the image it wishes to project – as professions of revolutionary Communist rectitude were to Maoist diplomacy. It is part of how, despite being one of the “Big Five” nuclear weapons possessors that the disarmament community and Non-Aligned Movement (NAM) countries generally love to hate,¹⁰⁰ China still attempts to posture itself as being uniquely benevolent and virtuous.¹⁰¹

In the context of nuclear diplomacy, NFU is central to how China tries to depict itself as a moral leader sincerely committed to disarmament, and as *the* country perfectly

⁹⁸ Pan, *op. cit.*, p. 14.

⁹⁹ Treaty on the Non-Proliferation of Nuclear Weapons (opened for signature July 1, 1968) (entered into force March 5, 1970), available at <https://disarmament.unoda.org/wmd/nuclear/npt/text/>.

¹⁰⁰ See, e.g., United Nations, “Non-Nuclear-Weapon States Urge New Global Order, while Nuclear-Armed Countries Defend Need for ‘Safe and Effective’ Arsenals, in First Committee Debate,” press release GA/DSI/3522 (October 12, 2015), available at <https://press.un.org/en/2015/gadis3522.doc.htm>.

¹⁰¹ See, e.g., PRC Mission to the United Nations, “Remarks by Ambassador Geng Shuang at the UN Security Council Briefing on Threats to International Peace and Security,” PRC Ministry of Foreign Affairs (March 31, 2023) (“Since its first day in possession of nuclear weapons, China has firmly committed to a defensive nuclear strategy, and honored the pledge to no first use of nuclear weapons at any time and under any circumstances. China has also clearly committed unconditionally not to use or threat[en] to use nuclear weapons against non-nuclear weapon states or nuclear weapon free zones. China is the only nuclear weapon state to have made these pledges.”), available at http://un.china-mission.gov.cn/eng/hyyfy/202304/t20230401_11052883.htm#:~:text=China%27s%20position%20on%20the%20issue,time%20and%20under%20any%20circumstances.

positioned as a bridge between the selfish world of the *other* nuclear weapons possessors and the states of the long-oppressed developing world – of which China still claims to be a part, as “the world’s largest developing country.”¹⁰²

Despite its centrality to PRC narratives of China, this NFU policy has come to be frequently questioned. American observers such as Heginbotham and his coauthors frequently point to the occasional comment by Chinese officials or military leaders suggesting that there are hidden caveats in the NFU policy, with the result that there are circumstances in which China *might* use nuclear weapons even though such devices had not been used against it. Major General Zhu Chenghu, for instance, suggested in 2005 that a sufficiently large U.S. conventional attack on Chinese territory might require a nuclear response.¹⁰³ An article in a Chinese military journal in 2004 by a Yu Jixun, moreover, suggested that China might abandon NFU if it faced “serious danger or impending disaster because it is losing a conventional military conflict in which the stakes are very high.”¹⁰⁴

¹⁰² Indeed, PRC officials get testy when it is suggested that at this point in its history – as the second largest economy in the world – China does *not* deserve whatever presumed politico-moral status is associated with being “a developing country,” even as Beijing seeks credit for being *the largest one*. See, e.g., PRC Embassy in the Republic of Afghanistan, “Foreign Ministry Spokesperson Wang Wenbin’s Regular Press Conference (June 9, 2023) (“The US is not labeling China a ‘developed country’ out of appreciation or recognition for China’s development success. The real motive behind ending China’s developing country status is to hold back China’s development. China’s status as the world’s largest developing country is rooted in facts and international law. It’s not something that can easily be wiped away by a U.S. Congressional bill. The rights that China is lawfully entitled to as a developing country will not be deprived just because a few politicians on the Hill say so.”), available at http://af.china-embassy.gov.cn/eng/fyrth/202306/t20230609_11094406.htm.

¹⁰³ Quoted in Heginbotham, et al., op. cit., p. 130.

¹⁰⁴ Yu Jixun, *Science of Second Artillery Campaigns* (2004), quoted in Heginbotham, et al., op. cit., p. 30. (The “Second Artillery” is the former name of the People’s Liberation Army’s strategic and tactical missile force, the PLA Rocket Force.)

The U.S. Defense Department's official assessment, as of late 2022, similarly concludes that despite the country's NFU claims,

China's nuclear strategy probably includes consideration of a nuclear strike in response to a nonnuclear attack threatening the viability of China's nuclear forces or [command and control systems], or that approximates the strategic effects of a nuclear strike. Beijing probably would also consider nuclear use to restore deterrence if a conventional military defeat gravely threatened PRC survival.¹⁰⁵

The Department's recently released 2023 report changes this assessment slightly. Now, it says that Beijing would consider nuclear use "if a conventional military defeat *in Taiwan* gravely threatened CCP *regime survival*."¹⁰⁶ If this is the case, it would represent still a further dilution of NFU, for now the concept would seem to permit nuclear weapons use - even if nuclear weapons had not been used against China - if *the Chinese Communist Party* felt its grip on power in China were jeopardized by a conventional military loss *in Taiwan*. This is a notably lower standard, and considerably different from the 2022 phrasing referring merely to possible nuclear weapons use in the event that conventional military defeat threatened the "survival" of the "PRC" *as a whole*.

The also-recently-released report of the latest U.S. Strategic Posture Review Commission also discusses these issues, and also makes clear its conclusion that China's NFU promise has major qualifications. According to the unanimous bipartisan conclusion of the Commissioners,

¹⁰⁵ DoD, *China Military Power 2022*, op. cit., p. 95.

¹⁰⁶ DoD, *China Military Power 2023*, op. cit., pp. 105-06 (emphasis added).

China's NFU policy likely includes contemplation of a nuclear strike in response to a non-nuclear attack threatening the viability of China's nuclear forces or command and control, or that approximates the strategic effects of a nuclear strike.¹⁰⁷

The attentive reader will notice that this assessment of China's policy now sounds not unlike the "significant non-nuclear strategic attack" concept first articulated in the 2018 U.S. *Nuclear Posture Review*.¹⁰⁸ It would appear, in other words, that China's NFU policy is getting harder and harder for observers to distinguish from *other* countries' declaratory policies.

Many such analyses questioning China's NFU policy try to ground themselves in some kind of express or implied qualifications identified in Chinese statements, such as the aforementioned comments from Major General Zhu Chenghu. Other analysts look at things such as the drift of the People's Liberation Army (PLA) toward launch-on-warning (LOW) postures, which the most recent Defense Department assessment says is now being implemented under the moniker of "early warning counterstrike."¹⁰⁹ If this is the case, this also might represent a dilution of NFU,

¹⁰⁷ Madelyn R. Creedon, Jon Kyl, et al., *America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States* (October 2023), p. 12, available at <https://armedservices.house.gov/sites/republicans.armedservices.house.gov/files/Strategic-Posture-Committee-Report-Final.pdf>.

¹⁰⁸ See 2018 NPR, op. cit., p. 21 ("The United States would only consider the employment of nuclear weapons in extreme circumstances to defend the vital interests of the United States, its allies, and partners. Extreme circumstances could include significant non-nuclear strategic attacks; these include, but are not limited to, attacks on the U.S., allied, or partner civilian population or infrastructure, and attacks on U.S. or allied nuclear forces, their command and control, or warning and attack assessment capabilities.").

¹⁰⁹ See DoD, *China Military Power 2023*, op. cit., p. 112 ("The PLA is implementing a LOW posture, called 'early warning counterstrike' (预警反击), where warning of a missile strike leads to a counterstrike before an enemy first strike can detonate.").

in that launch on mere *warning* of attack – that is, before one is actually sure that incoming weapons actually are nuclear warheads, as opposed to conventional munitions – is arguably not consistent with no-first-use.

Another ground for concern about China's NFU pledge is the degree to which apologists for China's nuclear policies – among them Major General Pan, whom we have seen earlier – have claimed that the reliability of China's NFU promises can be seen “in the slow and narrow evolution of Chinese nuclear forces and can be verified by observing the lack of rapid development in those forces.”¹¹⁰ Even if this was once the case, it seems a very ineffective basis upon which to defend the integrity of NFU today. If anything, at a time in which Xi Jinping is expanding PRC nuclear forces extremely rapidly, Pan's argument would seem to demonstrate that NFU has, in fact, been thrown entirely out the window.

Beyond this, moreover, as the present author has argued repeatedly for more than a decade,¹¹¹ the whole *idea* of NFU may in fact suffer from inherent structural defects. In part this is because NFU is merely a non-binding promise, a statement of policy that – by definition – could be changed on a whim anytime the CCP leadership wants. (China promises not to use nuclear weapons first, in other words, until it decides to use them first. It is not obvious why other countries should find this particularly reassuring.)

More fundamentally, however, NFU promises seem – to this author, at least – almost *inherently* non-credible. Is one really to believe that, in a war with its great geopolitical

¹¹⁰ Pan, *op. cit.*, p. 89.

¹¹¹ See, e.g., Christopher Ford, “The Catch-22 of NFU,” *NewParadigmsForum* website (January 4, 2011), available at <https://www.newparadigmsforum.com/p562>; Assistant Secretary of State Christopher Ford, “Law, Morality, and the Bomb,” *Arms Control and International Security Papers*, Vol. 1, No. 22 (November 13, 2020), p. 10, available at <https://irp-cdn.multiscreensite.com/ce29b4c3/files/uploaded/ACIS%20Paper%2022%20-%20Law%2C%20Morality%2C%20and%20The%20Bomb.pdf>.

rival that was going badly, a country with nuclear weapons could be relied upon to refrain from using such weapons rather than suffer a catastrophic defeat? To be sure, one might trust an NFU pledge from a country one liked and trusted. (U.S. officials, for instance, might credit an NFU policy issued by a country such as the United Kingdom.) Who, however, would really bet their national security on a nuclear-armed geopolitical *adversary* accepting defeat rather than breaking a non-binding NFU promise that had been given by its diplomats years earlier, and in peacetime?

From this perspective, one could thus say about NFU promises that when you can *really* rely upon them, you probably don't need them, because you're likely dealing with a trustworthy friend whose nuclear forces should concern you little anyway. On the other hand, where you most *need* to rely on NFU – that is, in dealing with *adversaries* – you probably *cannot* rely upon them. Through this lens, NFU policies may be important in propaganda and messaging, but they have neither meaning nor relevance from the perspective of strategic policy, and may even represent a problematic distraction from real challenges.

The Third Era: National Rejuvenation (Today)

The “Second Era” of Chinese nuclear weapons policy has been described above. More recently, however, we seem to have entered a “Third Era.” In this one, China is now engaged in a massive nuclear expansion quite unlike anything that has come before.

China is engaged in this buildup, moreover, at a time in which U.S. nuclear forces stand at an all-time low since the Eisenhower Administration,¹¹² having been drawn down hugely from their Cold War totals – and at a time at which,

¹¹² See, e.g., Christopher A. Ford, “Law and Its Limits “Left of Launch,” Vol. 229, No. 4 (2021), text accompanying note 62, available at https://tjaglcs.army.mil/mlr/law-and-its-limits-left-of-launch-#_ednref62.

thanks to a huge Chinese build-up in sophisticated *conventional* capabilities,¹¹³ the *net* conventional threat to China is also far less than at any other time in living memory.¹¹⁴ This Chinese build-up is occurring across the spectrum of nuclear force, and also in the integration of nuclear forces with People's Liberation Army (PLA) conventional, cyberspace, and outer space warfighting capabilities.¹¹⁵ Its specifically nuclear aspects are particularly noteworthy, however, and will be described below.

Beginning in 1999, the PRC started deploying road-mobile missiles capable of targeting the United States, beginning with the DF-31.¹¹⁶ This tradition continued with the longer-ranged DF-31 and -31A, and today with the new DF-41 – which can also be silo-based.¹¹⁷

With shorter-ranged forces, China likes to maintain both nuclear-armed and conventionally-armed versions of its missiles, such as with the DF-26 – which allows operators to swap between these payloads in the field.¹¹⁸ In 2020, China also began fielding a DF-17 missile equipped with a maneuvering hypersonic glide vehicle (HGV). That missile is also dual-capable.¹¹⁹

¹¹³ See, e.g., DoD, *China Military Power 2023*, op. cit., p. v (noting that China now “has numerically the largest navy in the world with an overall battle force of over 370 ships and submarines”).

¹¹⁴ Not only is China's military far more powerful and sophisticated than it used to be, but the forces actually arrayed against it have diminished. During much of the Cold War, for instance, about a third of the Soviet Union's military power was deployed along the Sino-Russian border. See, Andrew and Mitrokhin, op. cit., p. 279.

¹¹⁵ See, e.g., Heginbotham et al., op. cit., p. 22.

¹¹⁶ The “DF” designator on Chinese missiles stands for *dongfeng*, or “Long March” – a phrase evoking the epic and reputedly heroic military retreat from Jiangxi to Yan'an carried out in 1934-35 by CCP cadres during their war against the Chinese Nationalist government of Chiang Kai-Shek (Jiang Jieshi).

¹¹⁷ Bradley, op. cit., pp. 3-4.

¹¹⁸ Ibid.

¹¹⁹ DoD, *China Military Power 2022*, op. cit., pp. viii, 65, 83.

More exotic still is the Fractional Orbit Bombardment System (FOBS) that China tested in 2021, which lofted an HGV that flew over 40,000 kilometers¹²⁰ – thus demonstrating the ability to orbit warheads around the earth and then return them to targets at will over essentially any distance. A new strategic bomber is also in the works, complementing the older H-6 aircraft, which can carry an air-launched ballistic missile,¹²¹ with the result that – in conjunction also with China’s ballistic missile submarines – China already has a true nuclear “Triad.” China is also increasing the proportion of its forces on “high-alert duty,” a status said to be “conceptually comparable to the claimed high alert posture kept by portions of U.S. and Russian nuclear force.”¹²²

In fact, China is developing its missile forces at a truly ferocious pace, with its test launch program for missile development being more active than all the other test launch programs in the world – *combined*.¹²³ One of the most dramatic recent wrinkles in China’s huge nuclear buildup, for instance, was the discovery in 2021 that it was building hundreds of new silos for Intercontinental Ballistic Missiles (ICBMs) – silos capable of fielding both the DF-31 and DF-41 missiles.¹²⁴

In terms of the land-based force, China is also building more silos for its older, DF-5 ballistic missiles,¹²⁵ as well as fielding a new DF-5C model of that missile with a new “multi-megaton” yield.¹²⁶ It is also developing a new “long-

¹²⁰ *Ibid.*, p. 65.

¹²¹ Bradley, *op. cit.*, p. 5.

¹²² DoD, *China Military Power 2022*, *op. cit.*, p. 95.

¹²³ *Ibid.*, pp. vii, 64.

¹²⁴ *Ibid.*, pp. 94, 100.

¹²⁵ DoD, *China Military Power 2023*, *op. cit.*, p. 107.

¹²⁶ *Ibid.*, p. viii; see also *Ibid.*, p. 104.

range” version of its DF-27 ballistic missile, which could perhaps reach intercontinental ranges.¹²⁷

China is also expanding its Submarine-Launched Ballistic Missile (SLBM) force, developing new longer-ranged JL-3 missiles for a new class of nuclear-powered ballistic missile submarine (SSBN), the Type 096.¹²⁸ This will for the first time, allow China to deploy its missile submarines in Soviet-style “bastions” such as the South China Sea and the Bohai Gulf¹²⁹ – that is, to protect them from anti-submarine attack by basing them within easy reach of land-based surface and air assets and within rings of anti-access/area denial (A2/AD) capabilities.¹³⁰

All in all, as the U.S. Department of Defense summarizes, the PRC is moving quickly to build a far more diverse nuclear force than ever before, “comprised of systems ranging from lower-yield precision strike missiles to ICBMs with multi-megaton yields.”¹³¹ (It is presently, for instance, seeking to expand its arsenal of lower-yield systems, which the Department’s most recent report says would “provide response options that [China’s] high-yield warheads cannot deliver.”¹³²) And, Beijing is doing this

¹²⁷ Ibid., p. 67.

¹²⁸ Ibid., p. viii, 55, 104, 108.

¹²⁹ DoD, *China Military Power 2022*, op. cit., p. 96.

¹³⁰ This “bastion” concept was pioneered by the Soviet Union during the Cold War. See, e.g., Christopher Ford & David Rosenberg, *The Admirals’ Advantage: U.S. Navy Operational Intelligence in World War II and the Cold War* (Annapolis: U.S. Naval Institute Press, 2005), pp. 79, 82-84; and, James Lacey, “Battle of the Bastions,” *War on the Rocks* (January 9, 2020), available at <https://warontherocks.com/2020/01/battle-of-the-bastions/#:~:text=During%20the%20Cold%20War%2C%20the,in%20the%20Sea%20of%20Okhotsk>. For an exploration of how the concept has in many respects survived, see, CDR Geir Arne Hestvik, “CONFLICT 2020 and Beyond: A Look at the Russian Bastion Defence Strategy,” Combined Joint Operations from the Sea Centre of Excellence (undated), available at http://www.cjoscoe.org/infosite/wp-content/uploads/2020/08/Conflict-2020-and-Beyond_A-Look-at-the-Russian-Bastion-Defence-Strategy.pdf.

¹³¹ DoD, *China Military Power 2022*, op. cit., p. 96.

¹³² Ibid., p. 98.

with remarkable scope and scale – not just modernizing “legacy” systems, but building new ones and greatly increasing the number of Chinese nuclear weapons and delivery systems.

Indeed, the speed of Beijing’s nuclear build-up seems to be accelerating. In 2020, U.S. analysts assessed that China’s number of nuclear weapons was only in “the low-200s and expected to at least double by 2030.”¹³³ Writing in 2017, Heginbotham and his coauthors claimed that China did not have enough fissile material “to ‘break out’ and challenge U.S. or Russian warhead numbers,” and that as a result, by 2030, China was still only likely to have “close to 100 ICBMs capable of reaching the United States.”¹³⁴

Unfortunately, such predictions are already proving to have been remarkable underestimates. The 2023 U.S. Defense Department report on Chinese military power emphasizes that China is expanding its fissile material production capabilities and,

probably will use its new fast breeder reactors and reprocessing facilities to produce plutonium for its nuclear weapons program, despite publicly maintaining these technologies are intended for peaceful purposes.¹³⁵

And there will be lots of opportunities to deploy such fissile material in new nuclear weapons. Construction of China’s three new missile fields, for instance, is now believed to have been completed, and China “has loaded at least some” ICBMs into them already.¹³⁶ This huge expansion could lead to a great many new re-entry vehicles being aimed at U.S. targets, especially because China is

¹³³ DoD, *China Military Power 2023*, op. cit., p. 111.

¹³⁴ Heginbotham, et al., op. cit., pp. 125-27, 148-52.

¹³⁵ DoD, *China Military Power 2023*, op. cit., pp. viii, 104.

¹³⁶ *Ibid.*, pp. viii, 66, 104.

stepping up the introduction of multiple, independently-targetable warheads (MIRVs).

U.S. predictions of China's rate of warhead production and accumulated stocks have had to be continually revised. In 2020, the U.S. Defense Department estimated that Beijing's stockpile was only in the "low-200s," and it was then said that this arsenal would likely "at least double by 2030."¹³⁷ By 2022, however, China's warhead numbers were already said to exceed 400. It was also said in 2022 that "[b]y 2030, ... the PRC will have about 1,000 operational nuclear warheads, most of which will be fielded on systems capable of ranging the continental United States."¹³⁸

In its 2023 report, the Department estimate is grimmer still. There, it is stated that "the PRC possessed more than 500 operational nuclear warheads as of May 2023" alone.¹³⁹ In comparison to the abovementioned 2022 assessment that China would have "about 1,000" warheads by 2030, moreover, the 2023 report changes this phrasing from "about 1,000" to "over 1,000."¹⁴⁰

Nor is it at all clear where this buildup will stop. Already, in 2022, it was said by the U.S. Defense Department that the PRC was on track to field "a stockpile of about 1,500 warheads" by 2035.¹⁴¹ In 2023, the report shied away from repeating that figure, but it nonetheless made clear that nothing has changed for the better, taking pains to point out that after 2030 China's warhead expansion is likely to continue "in line with previous estimates."¹⁴²

It is not clear why, given that its 2023 conclusions were "in line with previous estimates," the Department was

¹³⁷ DoD, *China Military Power 2022* op. cit., p. 97.

¹³⁸ Ibid.

¹³⁹ DoD, *China Military Power 2023*, op. cit., pp. viii, 104.

¹⁴⁰ Ibid. (Emphasis added.)

¹⁴¹ DoD, *China Military Power 2022*, op. cit., pp. ix, 94.

¹⁴² DoD, *China Military Power 2023*, op. cit., p. 111.

unwilling explicitly to repeat its earlier “about 1,500” figure. That number, however, has considerable symbolic importance. Under the New START Agreement of 1991, the United States and Russia are both limited to a total of 1,550 operationally deployed strategic warheads.¹⁴³ That treaty will expire long before 2035, but it seems *highly* significant – both in concrete operational and in political and symbolic terms – that Beijing seems to be sprinting toward what is likely to be *at least* nuclear parity with both Washington and Moscow. China apparently wishes, in other words, to become a nuclear weapons superpower second to none.

Nor is there any sign, much less any guarantee, that China will *stop* at 1,500 warheads – that is, at parity. As noted, China has been “constructing the infrastructure necessary to support this force expansion, including increasing its capacity to produce and separate plutonium by constructing fast breeder reactors and reprocessing facilities.”¹⁴⁴ It may also be preparing to operate its nuclear weapons testing facility at Lop Nur “year-round.”¹⁴⁵

With a vast new weapon production infrastructure being developed, and a wide range of new delivery systems coming on line in which to put such weapons, China seems perfectly positioned not just to achieve parity but also – should it wish to do so – to achieve both qualitative and numerical superiority. As the Defense Department summarizes, the PRC seems to be trying “to develop a military by mid-century that is equal to – or in some cases superior to – the U.S. military, and that of any other great

¹⁴³ Treaty Between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (signed April 8, 2010) (entered into force February 5, 2011), at Art. II(1) (“Each Party shall reduce and limit its ... ICBM warheads, SLBM warheads, and heavy bomber nuclear armaments, so that ... the aggregate numbers ... do not exceed ... 1550, for warheads on deployed ICBMs, warheads on deployed SLBMs, and nuclear warheads counted for deployed heavy bombers.”), available at <https://2009-2017.state.gov/documents/organization/140035.pdf>.

¹⁴⁴ DoD, *China Military Power 2022*, op. cit., p. 97.

¹⁴⁵ DoD, *China Military Power 2023*, op. cit., p. 110.

power.”¹⁴⁶ If it is indeed China’s general objective “to surpass the United States” in the military realm,¹⁴⁷ why would the arena of nuclear weaponry be any exception?

The “Four Framings”

The previous pages have surveyed China’s nuclear weapons history, from Mao’s initial weaponization through Deng’s pragmatism, and then to Xi’s expansionary extravagance. Merely to recount those developments, however, is not necessarily to explain them. To help provide an interpretive framework through which to think about what might lie behind these dynamics, the final portions of this paper offer “Four Framings,” each of which may help explain at least some aspects of Chinese nuclear weapons behavior at some point.

Moralistic Posturing

The first of these framings is that of *moralistic posturing*, in which nuclear weapons policy may be used by Chinese officials to help say something about Beijing’s supposed moral superiority to its antagonists and rivals in the global security environment. This does not necessarily mean that such desires for posturing provide an *explanation* for China’s force posture at any given point. It may yet be, however, that propagandistic priorities might well sometimes at least *influence* nuclear weapons policy choices,

¹⁴⁶ DoD, *China Military Power 2022*, op. cit., pp. 28-29; DoD, *China Military Power 2023*, op. cit., p. 40. Beijing is also increasingly integrating its nuclear force planning with all other aspects of military power – including more novel ones such as counterspace capabilities, including kinetic-kill missiles, ground-based lasers, orbiting space robots, and expanding space surveillance. DoD, *China Military Power 2022*, op. cit., p. ix; see also pp. 72, 87-89, 92-94. It may even also be developing intercontinental-range precision strike *conventionally-armed* ballistic missiles. DoD, *China Military Power 2023*, op. cit., pp. vi, 66, 67.

¹⁴⁷ DoD, *China Military Power 2023*, op. cit., p. 164.

and in any event they would certainly be reflected in diplomatic initiatives, declaratory policy, speeches, and “official” documents published for the world to see. Certainly in the past, moralistic posturing seems to have been important in how China portrayed its nuclear weapons policies. To the degree that the PRC became at various points politically invested in such narratives, moreover, this might have given China incentives to adopt postures that remained colorably consistent with such storylines, and certainly to work hard to conceal what was not.

As we’ve seen, Mao Zedong was certainly profoundly moralistic in his approach to nuclear weapons, portraying China’s effort to arm itself with the world’s most destructive weaponry as a noble mission, and he certainly acted in ways broadly consistent with such professed beliefs. In his own eyes, Mao was almost doing a *favor* to the oppressed nations of the world by breaking the superpowers’ nuclear monopoly, in supporting nuclear proliferation and, indeed even in risking nuclear war itself, for such a conflict would at least bring the benefit of ensuring the destruction of capitalism and ushering in a Communist utopia.

There is also a pronounced element of moralistic posturing in China’s longstanding emphasis upon “no-first-use” as the centerpiece of its declaratory policy. Even today, though more awkwardly as Beijing engages in a massive nuclear build-up, Chinese officials still talk endlessly about NFU and use it as the centerpiece of their claim to be the most respectable and responsible nuclear weapons state. NFU is a major part of their narrative of how the CCP is on the side of the Global South against the other nuclear weapons possessors, and in favor of nuclear disarmament.

It is certainly possible that the importance of NFU messaging in China’s global diplomacy at least somewhat retarded the country’s willingness to do things that – when observed – might be taken as signals that such posturing is

merely empty rhetoric. Perhaps it is even conceivable that the obvious *inconsistency* between NFU moralism and a huge nuclear buildup helped *delay* China's decision to embark upon such a path. (It is also perhaps significant that despite the ongoing buildup, CCP mouthpieces generally refuse to admit China is engaged in it.¹⁴⁸) Maintaining a moralistic pretense of nuclear virtue seems still to be very important in Chinese foreign policy.

But it may also be that the importance of such posturing – at least in nuclear terms – is lessening. As we have seen, apologists for China's nuclear weapons policies used to argue that the small size of Beijing's arsenal "proved" that the integrity of China's NFU pledge "is reflected in the slow and narrow evolution of Chinese nuclear forces and can be verified by observing the lack of rapid development in those forces."¹⁴⁹ With Xi Jinping's massive buildup now in full swing, it is of course increasingly difficult to make such claims with a straight face – especially since this nuclear expansion comes at a point in history, as described earlier, in which U.S. and Russian nuclear numbers are *vastly* lower than at any time since the 1950s, and in which a China with much *more* relative power in conventional terms thus faces *vastly less* of a net military threat than ever. It will be interesting to see how long anyone will still be willing to give Beijing any credit for the kind of special nuclear virtue that its leaders like to claim for themselves.

Game-Theoretical Positioning

The second framing this paper suggests for thinking about what may lie behind Chinese nuclear weapons policy is that

¹⁴⁸ One exception – and, at the time of writing, perhaps the only one – is the recent editorial piece in the CCP paper *Global Times* by that publication's former editor in chief, Xu Xijin, in which he predicated his defense of China's buildup upon at least an implied concession that this buildup was in fact actually occurring. See, Stanton, op. cit.

¹⁴⁹ Pan, op. cit., p. 16.

of *game-theoretical positioning*. Through this lens, Chinese strategists arguably seek to tailor their nuclear force posture in some kind of deliberate and clearly articulable way to deter a particular threat they claim to fear or achieve some objective they prioritize. This is perhaps the framing that will be most familiar to many Western strategists, for it tends to be the one through which we ourselves most often approach nuclear strategy.

Even if (or to the degree that) such a game-theoretical framing does apply, however, it can be difficult to assess exactly *what* dynamics – within this construct – Chinese decision-makers find the most compelling. In fact, there may be multiple different, ostensibly game-theoretical “explanations” that on their face would seem to explain observable PRC behavior.

American Power as a Reason?

As mentioned, Chinese officials seldom, if ever, acknowledge that they are engaged in any kind of a nuclear weapons buildup at all. When one tries to engage with them on the matter, however, they *are* sometimes willing to say that *if* there were any expansion it would be the *United States'* fault – particularly as a result of the Americans' development of limited missile defenses and improved precision conventional strike capabilities.

For the reasons described above – namely, that in any objective sense, the *net* conventional threats facing China, as well as both the *net and* absolute nuclear ones, are lower today than at any time since at least the 1960s – such arguments are far from compelling. Nevertheless, if one imagines the CCP leadership to be sufficiently paranoid, it is at least theoretically possible to imagine a game-theoretical argument for at least *some* Chinese nuclear expansion. As described earlier, this worst-case concept involves an out-of-the-blue strike by the United States that

uses the American nuclear arsenal and conventional precision strike capabilities to destroy most of China's forces, allowing U.S. missile defenses a chance to ward off whatever scattered remnants of China's strategic arsenal survive the initial onslaught.¹⁵⁰

Even if one subscribed to such fears, however, it is hard to see how they would justify a Chinese nuclear buildup of *this size, in these ways, and now*. The United States, after all, began to deploy its homeland missile defense interceptors in 2004, nearly 20 years before China's massive recent nuclear expansion. Moreover, despite much American talk of hoping to do more since at least 2002,¹⁵¹ Washington has still not yet expanded its long-range precision conventional strike capabilities.¹⁵² Meanwhile, the U.S. strategic bomber

¹⁵⁰ This theory, for example, has been outlined by Chinese think tank scholar Tong Zhao. See, e.g., Tong Zhao, "Conventional long-range strike weapons of US allies and China's concerns of strategic instability," *Nonproliferation Review*, Vol. 27, No. 2-3 (September 14, 2020), pp. 109-22, available at <https://www.tandfonline.com/doi/abs/10.1080/10736700.2020.1795368>.

¹⁵¹ In the 2002 *Nuclear Posture Review*, for instance, it was announced that the United States intended to develop a "New Triad" that would prominently include augmented conventional-strike capabilities. See e.g., Excerpts from U.S. *Nuclear Posture Review* (January 8, 2002), available at <https://uploads.fas.org/media/Excerpts-of-Classified-Nuclear-Posture-Review.pdf>.

¹⁵² At the time of writing, the United States is developing long-range precision strike missiles, but they are still in development and have not been fielded. See, e.g., Robert Dougherty, "US Army launches PrSM in latest round of final flights testing," *Defence Connect* (November 22, 2023), available at <https://www.defenceconnect.com.au/land/13181-us-army-launches-prsm-missile-in-latest-round-of-final-flight-testing>. If there is an action-reaction cycle involved in the development of such systems, therefore, it is one in which *American* capabilities are being built in response to *Chinese* ones – not the other way around. Compare, e.g., Congressional Research Service, "The U.S. Army's Mid-Range Capability (MRC) Weapon System" (December 6, 2022), p. 1 ("Reported improvements to Russian and Chinese artillery systems present a challenge to the U.S. Army. These improved, longer-ranged artillery systems, new employment techniques leveraging unmanned aerial vehicles (UAVs) for target acquisition, and the proliferation of special munitions (such as precision, thermobaric, loitering, and top-attack munitions) have renewed concerns about the potential impact of Russian and Chinese artillery on U.S. combat operations and ground combat systems. In response, the U.S. Army is seeking to improve its ability to deliver what it refers to as long-range precision fires (LRPF) by

fleet – which can deliver conventional weapons as well as nuclear ones, and which still provides the lion’s share of America’s capability to deliver conventional weapons over long ranges – has remained treaty-constrained, and the size of the U.S. nuclear arsenal has been reduced by 83 percent since the Berlin Wall fell in 1989.¹⁵³ While Chinese leaders might still fear potential *future* developments, of course, it remains the case that they have been building furiously at a time when the PRC does *not* face escalating threats, even through the paranoid lens of such a first-strike theory.

Indeed, if China really believed the “minimum deterrence” claims made by its apologists, one might imagine that a secure, second-strike retaliatory force in the

upgrading current artillery and missile systems, developing new longer-ranged cannons and hypersonic weapons, and modifying existing air- and sea-launched missiles for ground launch. Army leadership has stated LRPF is its number one modernization priority.”), available at [https://crsreports.congress.gov/product/pdf/IF/IF12135/5#:~:text=The%20RC%20Weapon%20System%20is,about%201%2C725%20miles%20maximum%20range](https://crsreports.congress.gov/product/pdf/IF/IF12135/5#:~:text=The%20RC%20Weapon%20System%20is,about%201%2C725%20miles%20maximum%20range.). Despite their names, moreover, even these systems – the Precision-Strike Missile (PrSM) with about 300 miles maximum range, the Long-Range Hypersonic Weapon (LRHW) with about 1,725 miles maximum range, and the Strategic Mid-Range Fires (SMRF) or “Typhon” missile system with a range in between those two figures – do not actually have strategic range and should be considered, at most, theater capabilities. See, e.g., Congressional Research Service, “The U.S. Army’s Strategic Mid-Range Fires (SMRF) System (Formerly Mid-Range Capabilities [MRC] System)” (November 28, 2023), available at <https://crsreports.congress.gov/product/pdf/IF/IF12135#:~:text=Program%20Status,than%20the%20fourth%20quarter%20FY2023>. The United States has considered multiple concepts over the years for much longer-ranged conventionally-armed systems – including an HGV to be launched on a modified Peacekeeper ICBM and the deployment of conventional warheads on Trident II submarine-launched ballistic missiles – but these programs have all been canceled due to test failures or Congressional opposition. See, Amy F. Woolf, “Conventional Prompt Global Strike and Long-Range Ballistic Missiles: Background and Issues,” Congressional Research Service, Report R41464 (August 14, 2019), pp. 11-22, available at https://www.everycrsreport.com/files/20190814_R41464_a7291597d196c9ada853a4b7a5e682ff86d568a8.pdf.

¹⁵³ See, e.g., U.S. Department of State, “Transparency in the U.S. Nuclear Weapon Stockpile,” fact sheet (October 5, 2021), available at https://www.pepfar.gov/wp-content/uploads/2021/10/Fact-Sheet_Unclass_2021_final-v2-002.pdf.

form of ballistic missile submarines protected within strategic “bastions” in the South China Sea and the Bohai Gulf would nicely meet the need. In that sense, putting new JL-3 SLBMs on the PLA Navy’s *Jin*-class and new Type 096 SSBNs might be all China would need. Why, then, the large and expanding new arsenal of dual-capable shorter-range nuclear capabilities, the air-launched ballistic missile, the Hypersonic Glide Vehicle (HGV), and the Fractional Orbital Bombardment System (FOBS) – all of which the Americans lack? And why the 300 or more new DF-41 silos being constructed in the deserts of Xinjiang, and the new DF-5s with “multi-megaton warheads”?

While it is at least *conceivable* that present day events are indeed somehow being driven by no more than the “defensive” dynamics Chinese sources allege, this seems difficult to maintain. Could there be some alternative game-theoretical driver?

The “Offensive Umbrella”?

One possibility is that the Chinese buildup is not strictly *defensive* at all. It may be that China is pursuing what this author has long termed an “offensive nuclear umbrella.”¹⁵⁴

What does this mean? Western strategists usually conceptualize nuclear deterrence in defensive terms, largely as a result of several decades of using nuclear posture to deter a Red Army invasion of West Germany in the Cold War during years in which Soviet and Warsaw Pact forces outnumbered those available to NATO.¹⁵⁵

¹⁵⁴ See, e.g., Christopher Ford, “Offensive Nuclear Umbrellas and the Modern Challenge of Strategic Thinking,” remarks to a Nuclear Security Working Group Congressional Seminar (February 10, 2016), available at <https://www.newparadigmsforum.com/p2007>.

¹⁵⁵ See, e.g., Wittner, *Volume Two*, op. cit., pp. 6, 126 (quoting U.S. Secretary of Defense Charles Wilson in 1954 that “NATO forces in Europe can provide a successful forward defense only through the integrated use of atomic weapons from the outset of hostilities,” and NATO military commander Gen. Lauris

It is possible, however, that a would-be aggressor might wish to use nuclear deterrence *offensively*, to facilitate its plans for war. This might happen, for instance, if a nuclear weapons possessor wishing to invade one country with conventional forces threatened the use of nuclear weapons against another country in order to deter that third party from intervening to stop its aggression. What one's nuclear posture would "deter," in other words, is not aggression, but actually *other* states' intervention *against* that aggression. The idea would be basically that "you risk nuclear war if you try to prevent *me* from conquering this country, so you should let me devour it unmolested."

Nor is this, alas, merely a hypothetical problem, for such an "offensive umbrella" strategy seems to be *exactly* what Russian President Vladimir Putin has been trying to pull off in Ukraine, attempting to scare NATO out of providing support for President Zelensky's beleaguered government there.¹⁵⁶ It would be in no way surprising if, as Xi Jinping's PRC steps up its threats of military action against the thriving independent democracy of Taiwan,¹⁵⁷ Beijing has precisely this kind of Putin-esque "offensive umbrella" in mind.

And, in game-theoretical terms, such ambition might indeed provide a powerful reason to expand the PRC's nuclear capabilities. China chose to reveal its nuclear ambitions in 2021 with the construction of those hundreds of new ICBM silos, which it has never admitted but that all

Norstad in 1957 that "if we want to defend ourselves in the event of a general war, then we must do it with atomic weapons").

¹⁵⁶ See, e.g., Christopher Ford, "Countervailing Posture, the 'Offensive Nuclear Umbrella,' and the Future of Arms Control," remarks at DACOR Bacon House, Washington, D.C. (October 6, 2023), <https://www.newparadigmsforum.com/countervailing-posture-the-offensive-nuclear-umbrella-and-the-future-of-arms-control>.

¹⁵⁷ See, e.g., "China's foreign minister steps up threats against Taiwan," *Associated Press* (April 21, 2023), available at <https://www.nbcnews.com/news/world/china-foreign-minister-threats-taiwan-rcna80790>.

the world can easily see. Perhaps not coincidentally, this was a point highly likely to unsettle Western planners worried about strategic escalation should China attempt to invade Taiwan, perhaps as soon as 2027,¹⁵⁸ or conceivably even earlier.¹⁵⁸ The PLA might indeed consider it a viable option to seize as much of Taiwan as quickly as it can, and then “try to rely upon escalation risks and nuclear deterrence to dissuade the United States from trying to fight its way back into the area to help surviving Taiwanese forces liberate the occupied zones.”¹⁵⁹

Nor would such thinking be at all inconsistent with well-established PRC strategic concepts. As Eric Heginbotham and his co-authors have noted, the Chinese term *weishe* is usually translated in English as “deterrence,” but it actually

has a broader meaning that also encompasses what political science theorists typically refer to as *compellence*. Accordingly, it is perhaps more appropriate to think of *weishe* as roughly equivalent to Thomas Schelling’s broader concept of *coercion*, which includes deterrence and compellence.¹⁶⁰

And “compellence,” of course, is by no means an exclusively defensive concept.¹⁶¹

Nor, despite China’s many years of NFU posturing, would there be anything novel about the idea of using the

¹⁵⁸ See, e.g., “US Navy chief warns Beijing could attack Taipei by 2024, not 2027,” *Asia News* (October 21, 2022).

¹⁵⁹ Christopher Ford, “Defending Taiwan: Defense and Deterrence,” National Institute for Public Policy *Occasional Papers*, Vol. 2, No. 2 (February 2022), p. 12, available at <https://nipp.org/wp-content/uploads/2022/02/Vol.-2-No.-2-Ford.pdf>.

¹⁶⁰ Heginbotham et al., op. cit., p. 24.

¹⁶¹ For more on compellence, see Tami Davis Biddle, “Coercion Theory: A Basic Introduction for Practitioners,” *Texas National Security Review*, Vol. 3, No. 2 (Spring 2020), available at <https://tnsr.org/2020/02/coercion-theory-a-basic-introduction-for-practitioners/>.

threat of nuclear escalation to deter an adversary's use of conventional force. After all, Heginbotham notes, citing a 2004 article in the PLA journal *Science of Second Artillery Campaigns*, it is already the case that in Chinese usage, "[t]he main emphasis of nuclear deterrence is to impose psychological fear on the enemy to deter conventional strikes."¹⁶² As Jennifer Bradley has observed, citing the work of the Lawrence Livermore National Laboratory's Brad Roberts, "China is integrating its nuclear capabilities with its conventional forces, creating a holistic strategy where nuclear weapons serve as 'a backstop to support conventional operations.'"¹⁶³ It would take no special creativity to imagine CCP leaders hoping that China's nuclear posture – especially in connection with a massive expansion of nuclear weapons capabilities – would be very helpful in deterring American military intervention to save Taiwan from Communist subjugation.

Third Parties?

Another potential game-theoretical factor that could have bearing upon PRC nuclear weapons decision-making is that China may feel that it needs a larger nuclear force, at least in part because of the expansion of the nuclear capabilities of "third-party" countries unfriendly to China – specifically India. It is no secret, after all, that officials in New Delhi regard their own nuclear force posture as being in large part directed at China.

India, after all, suffered a Chinese invasion in 1962,¹⁶⁴ and even today faces periodic Chinese provocations and low-level skirmishing in Himalayan territory disputed

¹⁶² Heginbotham et al., op. cit., p. 30.

¹⁶³ Bradley, op. cit., p. 7 (quoting Brad Roberts, *The Case for Nuclear Weapons in the 21st Century* (Redwood City, California: Stanford University Press, 2016), p. 168.

¹⁶⁴ See generally, e.g., Shiv Kunal Verma, *1962: The War that Wasn't* (New Delhi: Aleph, 2016).

between the two nations.¹⁶⁵ On the second day of the three nuclear weapons tests India carried out in 1998, in fact, Prime Minister Atal Bihari Vajpayee wrote a letter to world leaders explicitly invoking – as a justification for the tests – the “unresolved border problem” with China and Beijing’s work to help Pakistan become a “nuclear weapons state.”¹⁶⁶

As Eric Heginbotham and his coauthors observe,

[t]he development of Indian nuclear forces has recently garnered increased attention from Chinese strategists, who previously discounted Indian military potential. ... Chinese interlocutors acknowledge that, for cultural and historical reasons, Beijing might be unwilling to accept Indian nuclear parity with China. ... China may wish to maintain a degree of superiority against India.¹⁶⁷

It is thus at least possible that *some* of the incentive for *some* of China’s buildup might come from the perceived need to keep well ahead of India’s growing nuclear capabilities, *in addition* to maintaining whatever it deems necessary for the PRC to possess for deterrence vis-à-vis the United States.

One might also ask whether posturing against *Russia* could also factor into Chinese nuclear decision-making, especially now that the Putin regime in Moscow seems to be building new types of nuclear delivery systems,¹⁶⁸ appears

¹⁶⁵ See, e.g., Jeffrey Gettleman, Hari Kumar, and Sameer Yasir, “Worst Clash in Decades on Disputed Sino-Indian Border Kills 20 Indian Troops,” *New York Times* (September 8, 2020), available at <https://www.nytimes.com/2020/06/16/world/asia/indian-china-border-clash.html>.

¹⁶⁶ Quoted in, Garver, *op. cit.*, p. 749.

¹⁶⁷ Heginbotham, et al., *op. cit.*, pp. xii, 13.

¹⁶⁸ See, e.g., Tony Wesolowsky, “‘Listen To Us Now’: Putin Unveils Weapons, Vows To Raise Living Standards In Fiery Annual Address,” *Radio Free Europe / Radio Liberty* (April 1, 2018), available at <https://www.rferl.org/a/putin-set-give-annual-address-amid-presidential-election-campaign/29069948.html>.

more invested than ever in its nuclear posture (especially short-range weapons of regional intimidation¹⁶⁹), engages in routine nuclear saber-rattling,¹⁷⁰ and has demonstrated a taste for territorial aggression against its neighbors. Especially given China's challenging history vis-à-vis Moscow's own imperial ambitions since at least the 17th Century,¹⁷¹ it may well be that, despite the supposedly "no-limits" partnership between Xi Jinping and Vladimir Putin,¹⁷² PRC nuclear planners have potential Russian bellicosity on their mind as well.

Or perhaps, less defensively, China anticipates that the day may eventually come when the various expansive Siberian territories the tsars took from the Qing Dynasty need to be reunited with the Chinese motherland.¹⁷³ After all, since the early 20th Century, at the least, Chinese nationalists *have* fixated upon the historical high water mark of the Qing's frontiers as the key to their sense of national "self,"¹⁷⁴ and they have not forgotten that it was Russia, too – and not just the Europeans and Japan – who carved out privileged positions in China during the so-called "Century

¹⁶⁹ See, e.g., Creedon et al., op. cit., p. 9 ("Russian strategy and doctrine as written envisions limited first use of theater nuclear weapons to, inter alia, coerce war termination on terms acceptable to Russia, and larger scale use of theater nuclear forces to defeat NATO conventional forces if Russia is decisively losing a war with NATO. Russian strategy and doctrine rely on strategic nuclear forces to deter a large-scale U.S. nuclear response against the Russian homeland while Russia can escalate to limited nuclear war in theater if it chooses.")

¹⁷⁰ See, e.g., Ford, "Information Confrontation with Russia and Dynamics of 'Positive' and 'Negative' Deterrence," op. cit.

¹⁷¹ See, e.g., Treaty of Nibuchu [Nerchinsk] (September 7, 1689), available at https://moodle2.units.it/pluginfile.php/259339/mod_resource/content/1/Treaty%20of%20Nerchinsk%201689.pdf.

¹⁷² See, e.g., "Joint Statement of the Russian Federation and the People's Republic of China on the International Relations Entering a New Era and the Global Sustainable Development" (February 4, 2022) ("Friendship between the two States has no limits, there are no "forbidden" areas of cooperation"), available at <http://en.kremlin.ru/supplement/5770>.

¹⁷³ This issue was mentioned earlier. See Stent, op. cit., pp. 209-10, 216; Callahan, op. cit., pp. 105, 111-13; Hillman, op. cit., p. 65.

¹⁷⁴ See generally, e.g., Ford, *The Mind of Empire*, op. cit., pp. 239-41, 267.

of Humiliation.” If that is within the realm of contemplation, it would thus provide yet another game-theoretical “reason” for nuclear expansion, with a future China potentially pointing its “offensive nuclear umbrella” more to the North than to the East.

Net Power Aggregation

The third conceptual framing suggested in this paper might be called *net power aggregation*. This framing suggests that Chinese officials may view nuclear weapons as an integral part of their nation’s overall power and a key to China’s success both in overall geopolitical competition and (if necessary) in warfighting.

This interpretive prism differs from the game-theoretical framing discussed earlier; that framing viewed nuclear weapons capabilities as being in some sense tailored to achieving one or more specific security objectives. Net power aggregation, however, does not necessarily view nuclear posture as having any particular logic of its own. Rather, nuclear capabilities are simply one element of a broader aggregation of relative power vis-à-vis other players that, as a whole, somehow tends to decide geopolitical outcomes. (Net power aggregation also differs from the status-seeking framing for understanding nuclear weapons decisions – see below – in that for a power-aggregator, status is merely one *element* of total national power, and status is not itself the ultimate objective anyway.)

This framing is closely related to the concept of “comprehensive national power” discussed earlier, and which first came into vogue in Chinese strategic writing under Deng Xiaoping. Comprehensive National Power (CNP) theory is based in part upon Soviet-era thinking

about the existence of an overall “correlation of forces”¹⁷⁵ that would ensure victory in conflict and geopolitical competition. (In Soviet thinking, for instance, there existed a “nuclear correlation of forces” between would-be adversaries that would – almost as a law of nature – tend to determine the outcome even of *non-nuclear* conflicts between them.¹⁷⁶) It may also be influenced by ancient Confucian ideas of power and political authority¹⁷⁷ – though, in fairness to the ancient Confucians, they also regarded power as being derived *from* moral authority, rather than moral authority merely being one *type of* and *contributor to* overall national power.

In any event, the CNP concept, as we have seen, envisions power as an aggregation of many facets, such as military, economic, technological, political, and cultural power. Notably, it assumes that the possessor of the *most* CNP is essentially destined to prevail in the international arena, at least eventually. It also tends to assume that countries can be essentially *rank-ordered* in their amount of CNP, so that the world at any given time can be sorted into a fairly clear status-hierarchy from weakest to strongest. With superlative CNP, one thus sits at the top of the world-system, and acquires the role of lead norm-setter for that system. (Xi Jinping said in 2013, for instance, that as China achieves its national rejuvenation, ideas from China “will become the shared beliefs and norms of conduct for the whole region.”¹⁷⁸)

This top-dog position is the role Chinese thinkers assume Britain to have played in the 19th Century, and

¹⁷⁵ See e.g., Ford, *China Looks at the West*, op. cit., pp. 141-42.

¹⁷⁶ Ford and Rosenberg, op. cit., p. 83.

¹⁷⁷ See generally Ford, *The Mind of Empire*, op. cit., p. 251; Ford, *China Looks at the West*, op. cit., pp. 86-88.

¹⁷⁸ Quoted by Rush Doshi, *The Long Game: China's Grand Strategy to Displace American Order* (Oxford: Oxford University Press, 2021), p. 182.

America for most of the 20th.¹⁷⁹ It is also the status they crave for China in the 21st, which would redress China's "Century of Humiliation" by "returning" Beijing to a dominant role in world politics – ideally by the 2049 deadline the CCP has set for itself as the hundredth anniversary of its own seizure to power.¹⁸⁰ In effect, CNP augmentation is viewed as the vehicle through which this will come to pass.

Chinese writers may use the term "comprehensive national power" less than they used to in Deng Xiaoping's time, but it remains a central concept in CCP strategy. As Xi Jinping told the CCP Central Committee in 2013, China needs to be "continually broadening our comprehensive national power" in order to be "laying the foundation for a future where we will win the initiative and have the dominant position."¹⁸¹

Hence the "net power aggregation" framing for interpreting PRC nuclear posture. If one believes CNP theory, and if one regards the possession of nuclear weapons as one of the (many) facets of national power, it is presumably all but inevitable to assume that in order to achieve the CNP-maximization required for the "China

¹⁷⁹ See generally, e.g., Christopher Ford, "Running Faster for the 'Commanding Heights' of the Next Industrial Revolution?" remarks to Metron's 2023 corporate strategy retreat (September 12, 2023), available at <https://www.newparadigmsforum.com/running-faster-for-the-commanding-heights-of-the-next-industrial-revolution>.

¹⁸⁰ See, e.g., State Council of the PRC, *Made in China 2025* (July 7, 2015), § 2.3, p. 8 ("By 2049, the centennial of the founding of New China, China's manufacturing sector status will become more consolidated and China will become the leader among the world's manufacturing powers. We will have the capability to lead innovation and possess competitive advantages in major manufacturing areas, and will develop advanced technology and industrial systems."), available at <http://www.cittadellascienza.it/cina/wp-content/uploads/2017/02/IoT-ONE-Made-in-China-2025.pdf>; see also, e.g., DoD, *China Military Power 2022*, op. cit., pp. 4, 37 (describing PRC objective of obtaining the "leading position" in a "community of common destiny" or "community with a shared future for mankind" and "fully transform[ing] the people's armed forces into world-class forces" by 2049).

¹⁸¹ Quoted in DoD, *China Military Power 2023*, op. cit., p. 7.

Dream,” Beijing needs a large nuclear arsenal – one that is at *least* equal to that of any rival.

Interestingly, the 2023 U.S. Defense Department report on Chinese military power seems to hint at just such an interpretation. It notes that Chinese thinking about nuclear deterrence envisions that China’s deterrence *needs* will grow as the country “transitions from a ‘large country’ to a ‘powerful country’” and that the “minimum number of military forces – to include nuclear – needed to defend those greater interests are likely to grow.”¹⁸² In this conceptual context, if it is indeed the CCP’s ambition “to ‘restore’ China to a preeminent place in the world,”¹⁸³ it is hard to imagine how this could *not* include nuclear preeminence.

Great Power Status-Seeking

The final conceptual framing to consider in thinking about Chinese nuclear power is perhaps *related* to CNP thinking, but it focuses directly upon *status*, not merely as one component of overall power but as a core objective in itself. In *great power status-seeking*, nuclear weaponry is seen as a key indicator of global power and prestige, and one that would be intolerable for China *not* to possess. Without nuclear weapons, such thinking might run, China simply could not claim for itself the true great power status it deserves in the modern world – which since 1945 has been, after all, the nuclear age – much less claim to have “rejuvenated” itself back into the central global role of which it feels it was robbed by European and Japanese imperialism in the 19th Century.

¹⁸² DoD, *China Military Power 2023*, op. cit., p. 110. Beyond whatever incentive CCP strategists may feel to pursue CNP for its own sake, there may also be a self-reinforcing dynamic in such logic: a country’s expanding military power boosts its CNP, which gives it a more important global role, which gives it more interests that need to be protected abroad, which requires more military power.

¹⁸³ *Ibid.*, p. 4.

A full discussion of the importance of global status and relative geopolitical status rank in Chinese strategic culture and modern nationalist thinking is beyond the scope of this paper, but such issues are traditionally extremely important. Chinese nationalist thinking – and also official CCP propaganda narratives, at least since the early 1990s, when the Party turned to whipping up nationalist enthusiasm as a way to buttress its legitimacy after massacring workers and students on Tiananmen Square in June 1989¹⁸⁴ – has long fixated upon narratives of how centuries of Chinese historical and civilizational glory were followed by debasement and humiliation at malevolent foreign hands.¹⁸⁵ These storylines have created a powerful, grievance-focused identity-political need, as those narratives view things, to recover China's natural first-rank status in the world.

From the perspective of understanding the potential place of nuclear weaponry in Chinese nationalist thinking, it is also relevant that China is felt to have been victimized ever since the beginning of the Opium War in 1839 by foreign powers employing superior military technology.¹⁸⁶ And, indeed, Chinese leaders have been focused for generations on trying to acquire such military capabilities

¹⁸⁴ See generally Callahan, *op. cit.*, pp. 40, 105, 111-15. Callahan calls this patriotic education campaign “the CCP’s most successful mass movement.” *Ibid.*, p. 79.

¹⁸⁵ See generally, e.g., Ford, *China Looks at the West*, *op. cit.*, p. 421; Gilbert Rozman, “Introduction,” in *East Asian National Identities: Common Roots and Chinese Exceptionalism* (Gilbert Rozman, ed.) (Washington, D.C.: Woodrow Wilson Center Press, 2012), pp. 1, 6; Gilbert Rozman, “Chinese National Identity: A Six-Dimensional Analysis,” *Ibid.*, pp. 73, 83-95; Gilbert Rozman, “The East Asian National Identity Syndrome,” *Ibid.*, pp. 101, 107; Jin Linbo, “China’s National Identity and Foreign Policy: Continuity amid Transformation,” *Ibid.*, pp. 239, 253; Jacques, *op. cit.*, p. 210; and, Nadège Rolland, “China’s Vision of a New World Order,” National Bureau of Asian Research Special Report, No. 83 (January 2020), pp. 5, 17-20.

¹⁸⁶ See, e.g., Zheng Wang, *Never Forget National Humiliation: Historical Memory in Chinese Politics and Foreign Relations* (New York: Columbia University Press, 2014), p. 47.

for themselves.¹⁸⁷ In this context, it would be surprising if nuclear weaponry did *not* today occupy a potent place in this narrative symbology – even to the point of creating a desire for nuclear weapons supremacy. After all, after so many years of humiliation by foreign military powers, the logic would run, could China *really* describe itself as having achieved “national rejuvenation” if it were still “Number Two” to *anyone* in the deeply symbolic arena of nuclear power?

And indeed, some observers of Chinese nuclear affairs do seem to see indications of status-based thinking. In the Heginbotham article, for instance, it is noted that:

... many Chinese statements convey the idea that nuclear weapons also underpin great-power status. For example, according to the 2013 *Science of Military Strategy*, China’s nuclear forces play an important role in ‘guaranteeing that [China’s] status as a powerful country does not waver’ In announcing the creation of the Rocket Force in December 2015, Xi Jinping [also] echoed the point, emphasizing, “the Rocket Force is ... the strategic support for our country’s major power status”¹⁸⁸

¹⁸⁷ This quest for foreign military technology goes back at least as far as the mid-19th Century, when the easy victories of European forces in conflicts such as the Opium War profoundly embarrassed the once-proud Qing Dynasty. As Li Hongzhang – an official later appointed by the Qing court to negotiate with the foreign powers at the conclusion of the Boxer Rebellion – put it in a letter to his patron in 1863, “I feel deeply ashamed that the Chinese weapons are far inferior to those of foreign countries.” Quoted by Larson and Shevchenko, *op. cit.*, p. 56. Both in dealing with the Europeans and with Japan, and in trying to suppress internal rebels such as the Taipings, Chinese officials felt an urgent need to acquire foreign military technology. Stephen R. Platt, *Autumn in the Heavenly Kingdom: China, the West, and the Epic Story of the Taiping Civil War* (New York: Vintage, 2012), pp. 173, 296-97.

¹⁸⁸ Heginbotham et al., *op. cit.*, p. 18 (citing 2013 article in the PLA journal, *Science of Military Strategy*).

Jennifer Bradley has also quoted *Science of Military Strategy* to this effect, observing that it identified nuclear weapons

as a key aspect of China's international status, stating, "Nuclear weapons have always played the role of a pillar for China's great-power status, and hereafter will remain important marks and symbols clearly displaying China's international position."¹⁸⁹

According to none other than Xi Jinping, in fact, the People's Liberation Army Rocket Forces are, among other things, "a strategic buttress for China's position as a major power."¹⁹⁰

It is thus perhaps telling that China's huge nuclear buildup began *not* at a time in which the PRC seemed weak and threatened by outside forces, but rather at one – in the wake, especially, of the 2008 financial crisis and America's debilitating wars in Iraq and Afghanistan¹⁹¹ – in which Beijing seemed self confidently on the rise in the world, and well on its way to full-scope superpower status. The buildup is arguably not a manifestation of weakness and insecurity, therefore – or at least not insecurity vis-à-vis *external* forces, anyway, for the CCP may yet feel insecure in its authoritarian grip on the Chinese people – but rather a phenomenon of arrogance and ambition.

Decades after Deng Xiaoping urged his countrymen to "bide your time and hide your capabilities," his successors may now be done with "hiding and biding" and are ready to seize for themselves the global status and role they feel

¹⁸⁹ Bradley, op. cit., p. 3 (quoting Project Everest, *The Science of Military Strategy* 2013, translated by China Aerospace Studies Institute, US Air University (February 2, 2021), p. 218).

¹⁹⁰ Bradley, op. cit., p. 4 (citing Michael S. Chase, "PLA Rocket Force Modernization and China's Military Reforms," Testimony before the U.S.- China Economic and Security Review Commission (February 15, 2018), p. 1).

¹⁹¹ See, e.g., Ford, *China Looks at the West*, op. cit., pp. 391-411 (describing financial crisis as a tipping point in Beijing's willingness to act more assertively); Doshi, op. cit., pp. 159-68, 176, 180 (same).

their country deserves. According to Xi Jinping himself, as China completes its “national rejuvenation,” it will become a “global leader in terms of comprehensive national strength and international influence,” with a “world-class” military, and it will ultimately occupy the leading role in a “community of common destiny” that will encompass the entire international system: a “community with a shared future for mankind.”¹⁹²

This is a profoundly “Sinocentric” vision of the global future, one in which “all countries” adopt China’s diplomatic initiatives in order to “actively control the new direction of China and the world.”¹⁹³ With such visions in their heads, and with the Chinese armed forces explicitly expected to “make new and greater contributions to the building of [this] shared future for mankind,”¹⁹⁴ it might be almost surprising if a nuclear weapons buildup was *not* occurring.

Conclusion

So where does all this leave us? Disturbingly, of the “Four Framings” described herein – moralistic posturing, game-theoretical calculation, net power aggregation, and global status-seeking – only the first of them would seem, even arguably, to point toward nuclear restraint.

Convinced of his messianic mission and seemingly perfectly comfortable with an almost eschatological nuclear

¹⁹² Xi Jinping, “Secure a Decisive Victory in Building a Moderately Prosperous Society in All Respects and Strive for the Great Success of Socialism with Chinese Characteristics for a New Era, remarks to the 19th Party Congress of the Chinese Communist Party” (October 18, 2017), *Xinhua News Agency* (November 4, 2017), available at https://www.chinadaily.com.cn/china/19thpcnationalcongress/2017-11/04/content_34115212.htm.

¹⁹³ DoD, *China Military Power 2023*, op. cit., p. 11 (quoting PRC officials).

¹⁹⁴ DoD, *China Military Power 2022*, op. cit., pp. 34-35 (quoting PRC 2019 Defense White Paper).

catastrophe that would at last usher in a Communist paradise, Mao Zedong may have represented the very *worst* in nuclear psychologies. By contrast, even though his strategic caution may still have been intended to serve ultimate geopolitical ambitions that would become profoundly destabilizing, Deng Xiaoping's (relative) restraint seems almost commendable.

Today, however, with Xi Jinping now occupying the chair where once Deng sat, these interpretive framings, on the whole, seem to point – albeit to varying degrees and for quite different reasons – toward a future of continuing PRC nuclear weapons expansion. And in this regard, historically minded observers might be forgiven for seeing echoes of the status-obsessed, militaristic, recklessly belligerent, and geopolitically revisionist Kaiser Wilhelm II of Imperial Germany (the “Second Reich”) after Otto von Bismarck had faded from the scene in Berlin.¹⁹⁵ *That* story, of course, did not end very well, and we should certainly hope that the world of today and tomorrow handles Chinese revisionist provocations more successfully than the world of the late 19th and early 20th Centuries handled Germany's.

¹⁹⁵ See generally, e.g., Henry Kissinger, *Diplomacy* (New York: Touchstone, 1994), pp. 178-79, 185 (“The new German empire, deprived of its master strategist [Bismarck], did not know what to do with its opportunity. ... When rebuffed in [their] all-or-nothing overtures, German leaders would withdraw into sulkiness, which quickly changed to truculence. ... For all the noise post-Bismarck Germany made, its foreign policy was overwhelmingly amateurish, short-sighted, and even timid when faced with the confrontations it had itself generated. ... Each of these considerations demonstrated the lack of geopolitical understanding by which the Germany of Wilhelm II progressively isolated itself. ... Germany's shortsightedness and insensitivity accelerated this trend. ... Thus began a vicious cycle which culminated in confrontation [with the First World War].”).

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