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Politically unthinkable? The missing dimension of nuclear use scenarios

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Abstract
Nuclear deterrence strategies are predicated on nuclear use scenarios. However, as nuclear weapons haven't been used since 1945, why does use occur in scenarios but not in practice? If scenarios incorporated the political challenges of crossing the nuclear threshold, how would this change the utility of the deterrence strategies they support? To address these questions, this article examines Cold War-era American debates about a Soviet 'first strike', discusses the limits of technical critiques of nuclear use scenarios, and argues for an alternative approach to scenario design and criticism that includes political factors observable in crises and wars involving nuclear states.

Keywords: deterrence; first strike; nuclear strategy; scenarios; wargames

Introduction

At a fundamental level, nuclear deterrence policies are based on nuclear use scenarios. War plans, military strategies, defence postures, and procurement justifications – in those instances where they involve nuclear weapons – are predicated on scenarios. War plans and military strategies that envisage the use of nuclear weapons normally outline the general context in which they will be used, including against what types of targets, how many nuclear weapons are to be employed, how they are to be delivered, at what point in the conflict they will be used, and how they relate to fighting at the non-nuclear level. Defence postures will be based on ideas about what sort of nuclear capabilities will be required to meet different contingencies and adversaries. Nuclear procurement justifications will often illustrate why certain nuclear capabilities are needed by showing how these capabilities perform, or fail to perform, in various situations. Scenarios are thus integral to the practice of nuclear deterrence, yet all too often, they are predicated on assumptions that are divorced from the realities of policy practice or simply ignore the relevance of political context.

Despite the centrality of nuclear use scenarios to nuclear deterrence, the fact remains nuclear weapons have not been used since 1945. Notably, this period has not exactly been free of conflict. Dozens of wars and international crises involving nuclear states have occurred, including many cases of nuclear coercion.[1] This simple observation begs the question: why is it that nuclear use occurs frequently in scenarios but not in real life? In this paper, it will be argued nuclear use scenarios are typically characterised by a deterrence logic based on assessments of nuclear capabilities

[1]For a list of nuclear coercion cases, see Todd S. Sechser and Matthew M. Fuhrmann, *Nuclear Weapons and Coercive Diplomacy* (Cambridge: Cambridge University Press, 2017), p. 128.

(i.e. this is what can be done if nuclear weapons are used) but avoid serious engagement with political realities (i.e. what political purpose is nuclear use intended to achieve). As noted in a 1983 report by a prominent group of experts:

> When strategists in Washington or Moscow study the possible origins of nuclear war, they discuss 'scenarios', imagined sequences of future events that could trigger the use of nuclear weaponry. They often leave out the political developments that might lead to the use of force in order to focus on military dangers.[2]

Although these scholars identified this problem, they did not pursue the matter to its logical conclusion. This article picks up where they left off and addresses the question: If 'political developments' *were* captured in nuclear use scenarios, might this undermine the plausibility of these scenarios, which, as noted above, play a central role in debates about nuclear deterrence?

Addressing this question presents many challenges. For one thing, it requires defining what is meant by 'political developments'. In this context, it will be defined as the dynamics related to the conscious or unconscious choice by the leadership of a nuclear state to employ or not employ nuclear weapons during a war or international crisis. It is also necessary to identify any significant anomalies between the nature of the wars and international crises that appear in the scenarios compared with actual wars and international crises, especially in terms of the nature of the political disagreements relative to the means employed to resolve them. Pointing out these differences should have the effect of undermining the credibility of these scenarios, or, at the very least, raising uncomfortable questions. In the present period, in which major debates on nuclear deterrence have re-emerged, particularly amidst the war in Ukraine, the growth of China's nuclear arsenal, and ongoing American contemplation of nuclear 'rearmament',[3] there is an urgent need for policymakers to base their decisions on credible rather than misleading scenarios.

This article argues that the plausibility of nuclear use scenarios requires their political dimension to be treated seriously. In practical terms, this means these scenarios must explain how the decision to use nuclear weapons was arrived at, including why nuclear use was no longer viewed as unattractive thereby allowing the nuclear taboo to finally be broken. To substantiate this argument, the article will begin by showcasing the centrality of scenarios to the practice of nuclear deterrence in different national contexts and across time. It will then briefly highlight the fundamental problem all nuclear use scenarios have in common, namely their lack of engagement with the historical record of wars and international crises involving at least one nuclear actor. Next, it will provide an explanation of what a political critique in this context consists of, how it differs from technical criticisms, and how it can be applied to individual scenarios. This will be followed by a single case study – the Soviet 'first strike' scenario – consisting of a description of the scenario, an examination of how the scenario was utilised in American nuclear deterrence debates during the Cold War, an analysis of how it was critiqued at the time, and the shortcomings of technical evaluations relative to the political approach proposed here.

Scenarios and nuclear deterrence

By its very nature, 'thinking about the unthinkable' is a speculative enquiry necessitating the use of scenarios. Hiroshima and Nagasaki aside, nuclear use, other than for tests, lacks historical reference points. On the surface, this would seem to allow for an endless vista of possible nuclear futures,

[2] Albert Carnesale, Paul Doty, Stanley Hoffmann, et al., *Living with Nuclear Weapons* (Cambridge, MA: Harvard University Press, 1983), p. 47. This group of experts was also referred to as the Harvard Study Group.

[3] See, for instance, 'America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States' (October 2023), available at: {https://www.ida.org/research-and-publications/publications/all/a/am/americas-strategic-posture} 'China's Emergence as a Second Nuclear Peer: Implications for US Nuclear Deterrence Strategy: A Report of a Study Group Convened by the Center for Global Security Research at the Lawrence Livermore National Laboratory' (Spring 2023), available at: {cgsr.llnl.gov/content/assets/docs/CGSR_Two_Peer_230314.pdf}.

as well as giving those who write nuclear war scenarios the benefit of the doubt. The civilian head of the Pentagon's Office of Systems Analysis in the 1960's, Alain Enthoven, could honestly reply to an Air Force officer skeptical of his advice on nuclear war planning by telling him, 'General, I have fought just as many nuclear wars as you have.'[4]

However, framing the problem as one of 'nuclear war' is fundamentally misleading. If one starts with the proposition that there is no relevant experience because there have been no nuclear wars, then the speculative exercise of trying to design nuclear war scenarios will automatically lack a firm foundation. On the contrary, there is a great deal of relevant experience and scholarship to draw upon, but to tap into this it is necessary to reframe the problem as one of a war or international crisis with a nuclear component, rather than as a nuclear war. As a practical matter, if the leadership of a nuclear state decided to use nuclear weapons it would not simply happen by chance. Rather, the nuclear option would only arise in a war or international crisis, and the leadership of the nuclear state would need to make a conscious decision to use nuclear weapons.

Amidst all the wars and international crises involving nuclear powers that have occurred since 1945, the nuclear use threshold has never been reached; no decision has been taken to use nuclear weapons, nor is there much evidence that using nuclear weapons was ever considered an attractive policy option by policymakers from any country. Why? This is the question nuclear use scenarios, to be credible, must address. Yet they don't. And they don't for a good reason. The purpose of nuclear use scenarios is to address the question of what to do once the decision to use nuclear weapons has already been taken. This means the nuclear use decision is assumed rather than contested.

Yet this decision *cannot* be taken for granted and therefore *ought* to be contested. It has never been taken since 1945, which would seem to indicate that taking the decision is extremely difficult. There have been many wars and international crises that had some nuclear dimension: the Berlin blockade, the Korean War, Dien Bien Phu, the Suez Crisis, the Taiwan Straits crises of the 1950s, the Berlin crises, the Cuban Missile Crisis, the Vietnam War, the Yom Kippur War, ABLE ARCHER in 1983, the First Gulf War, the Kargil War, and the war in Ukraine, amongst others. Of these, the one normally associated with being the closest to a nuclear use decision being taken was the Cuban Missile Crisis. It is noteworthy that President John F. Kennedy assessed the prospect of use as being 'between one in three and even'.[5] Others, such as ABLE ARCHER, often discussed in the exaggerated terms of a nuclear war scare, appear more as a myth upon a close examination of the evidence.[6]

In a review of these non-use cases, Bruno Tertrais has pointed out that apart from the elevation of nuclear alert levels and the issuing of nuclear threats, usually in a vague way, as well as nuclear contingency planning, there has been no evidence presented thus far of any intention to use nuclear weapons.[7] In the absence of other evidence to suggest the prospect was higher in the Missile Crisis than Kennedy suggests, or that it was higher in some other case that has yet to be identified, this indicates policymakers in nuclear states prefer, for one reason or another, to use non-nuclear tools

[4]Cited in Fred Kaplan, *The Wizards of Armageddon* (Stanford, CA: Stanford University Press, 1991), p. 254. Similarly, Herman Kahn responded to a military critic: 'How many thermonuclear wars have you fought recently?'.

[5]According to Theodore Sorensen, 'The President said to me at one point that he thought the chances of nuclear war actually resulting from this crisis were somewhere between one in three, and even. Personally, I think it's impossible to put any kind of a qualification on that probability. Had you asked us on Saturday night of the first week we probably would have said that they are better than even, because the Soviets seemed intent on pressing their situation, and the hawks in our group seemed intent on responding with an air strike and invasion. Other times during the week, we, I would have said, considerably less than one third, because I was confident that the President, who had always said nuclear war would represent an utter failure of everything he stood for was in command of the situation, in control of the situation, and going to remain that way.' Interview with Theodore Sorensen, 1986, War and Peace in the Nuclear Age; Europe Goes Nuclear, 7 March 1986, available at: {https://openvault.wgbh.org/catalog/V_5E604A7924124D9EAFED090FA8FCA2AD}.

[6]Simon Miles, 'The mythical war scare of 1983', *War on the Rocks* (16 March 2021), available at: {https://warontherocks.com/2021/03/the-mythical-war-scare-of-1983/}.

[7]Bruno Tertrais, '"On the brink" – really? Revisiting nuclear close calls since 1945', *The Washington Quarterly*, 40:2 (2017), pp. 51–66.

to resolve major policy differences with their adversaries and competitors. In the ongoing war in Ukraine, there has been significant concern that Russia will use nuclear weapons, with many scenarios describing how they might do so.[8] Yet despite the Russian military incurring hundreds of thousands of casualties, and achieving limited gains in the process, they have avoided using nuclear weapons. Nor did the collapse of communism in Eastern Europe and the dissolution of the Soviet Union, events that might have been considered natural 'red lines' as they involved the 'existence' of not only a state but an empire, lead to any nuclear use, much less a large-scale use of military force. Indeed, apart from several isolated incidents in which force was used, the Warsaw Pact and Soviet Union collapsed peacefully. Therefore, a reasonable assumption constituting the basis of any credible nuclear use scenario should be that the circumstances are sufficiently worse than any of the previous cases, or some new transformational factor emerges that has not yet been accounted for in these earlier cases.

Three broad explanations can be offered as to the reasons for the reluctance to regard nuclear weapons as a 'weapon of choice'.[9] The first explanation is the fear of nuclear consequences. This can be broken down into two parts. One is nuclear deterrence, defined in terms of a nuclear state reluctant to use nuclear weapons fearing nuclear retaliation. The other is an abstract fear of opening the nuclear Pandora's Box. Put another way, once the nuclear taboo is broken, other nuclear states will *probably* follow suit, perhaps leading to nuclear use against the original nuclear user or using nuclear weapons in some other way that would jeopardise the interests of the original nuclear user.

The second explanation is fear of the non-nuclear consequences incurred by taking an action widely viewed as immoral, unethical, and possibly illegal. Amongst these consequences are the undermining of a country's international reputation, especially with allies and non-aligned countries, undermining the domestic reputation of the country's leaders, economic and diplomatic sanctions placed on the country by the international community, and conventional retaliation.[10]

The third explanation is one that has received very little academic attention: inappropriateness. Whist some scholars prefer the concept of 'practicality', they limit their analysis to practicality from a strictly military point of view (i.e. nuclear weapons are considered unnecessary or the wrong type of weapon to use to destroy a target), rather than examining it from a political perspective (i.e. nuclear weapons are viewed as an inappropriate tool to achieve certain types of political goals, including those in which military force is employed). Determining which political goals could conceivably be attained by using nuclear weapons is a difficult task in its own right. After all, most political goals can be attained by non-nuclear or non-military means and therefore the nuclear option simply does not arise in the discourse of decision-makers. Even in instances where important political goals might be deemed unattainable by non-nuclear military means, it will still be the case that using nuclear weapons would fare little better. This helps explain why in cases of wars and crises when a hypothetical nuclear use option might be mentioned by senior officials, or a contingency plan developed within the bureaucracy, these were never considered plausible, much less preferable, means of *resolving* the dispute.

[8]For a useful discussion of some of these options, especially the pros and cons of nuclear use, see Bryan Frederick, Mark Cozad, and Alexandra Stark, *Escalation in the War in Ukraine: Lessons Learned and Risks for the Future* (Santa Monica, CA: RAND Corporation, 2023).

[9]In his investigation of the behaviour of American nuclear wargame 'strategic elite' participants, as well as the reasons why nuclear escalation did not feature in many of these games, Reid B. C. Pauly explained non-use as resulting from deterrence logic, a prioritisation of conventional means, reputational concerns, and when there was a perception that the president opposed it. See Reid B. C. Pauly, 'Would US leaders push the button? Wargames and the sources of nuclear restraint', *International Security*, 43:2 (2018), pp. 151–92.

[10]In this category, I would also probably include moral, ethical, and legal considerations, since these are often related to the perceived consequences if they are violated (e.g. going to hell, going to jail, etc.). However, they can also conceivably be placed in the category of inappropriateness, as some actions are unconsciously dismissed on the basis of moral, ethical, legal, and cultural norms. Nina Tannenwald, *The Nuclear Taboo: The United States and the Normative Basis of Nuclear Non-Use* (Cambridge: Cambridge University Press, 2007); T. V. Paul, *The Tradition of Non-Use of Nuclear Weapons* (Stanford, CA: Stanford University Press, 2009).

Determining where to draw the line on appropriateness (i.e. in what circumstances nuclear use is a serious option), and especially to announce this in a formal policy statement, has always been controversial. To set the bar too high might encourage an adversary to engage in unwanted behaviour below that level. On the other hand, if set too low any nuclear threats will lack credibility. This was precisely the dilemma NATO faced having accepted the doctrine of 'massive retaliation' in the mid-1950s.[11] Faced with a 'general war', use of nuclear weapons was deemed an appropriate response. But assuming they succeeded in deterring a 'general war', this still left open the question of whether nuclear weapons were appropriate for dealing with lesser conflicts. The Alliance's 1957 Strategic Concept, MC 14/2, recognised this problem, stating: 'NATO must … be prepared to react instantly and in appropriate strength to … other aggressions against NATO territory, such as infiltrations, incursions or hostile local actions without necessarily having recourse to nuclear weapons.'[12] Later on, the NATO 'flexible response' debate of the 1960s raised the threshold so that countering a large-scale Soviet attack into Western Europe did not necessarily require nuclear escalation to counter it, assuming sufficient conventional forces were available.

More recently, this dilemma has been reflected in Pakistani thinking about nuclear use. For instance, in an attempt to explain Pakistan's development of a short-range nuclear capability, the former head of the country's Strategic Plans Division, General Khalid Kidwai, whose views on Pakistani nuclear strategy are widely viewed as authoritative, outlined his interpretation of the threat posed by India's Cold Start doctrine. In a 2015 talk, he provided a scenario in which India attacks Pakistan with eight to nine armoured brigades, and then argued that to counter this incursion Pakistan required a short-range nuclear capability.[13] What is curious about this scenario is that it involves nuclear use to counter a relatively modest conventional attack.[14] Indeed, as noted above, NATO had rejected immediate nuclear use when the size of a Soviet or Warsaw Pact incursion was so small that the Alliance's conventional forces would have been the more appropriate means to counter it.

Two points should be highlighted here to assess the realism of Kidwai's scenario. First, Pakistan maintains quite large conventional forces. It seems highly implausible that Pakistan's leadership would unnecessarily jump multiple levels on the escalation ladder and opt for nuclear use when it has conventional options to repulse, or at least grind down, an invading force, particularly a relatively small one. Secondly, and arguably more important, Indian planners have a much larger problem to deal with that for some reason is not mentioned at all in Pakistan's strategic discourse, namely, how to invade a country of 240 million people that would strongly resist an Indian occupation. Just as the United States found it enormously costly occupying Iraq and Afghanistan, both countries with populations roughly one-tenth the size of Pakistan's, and where the populations were not uniformly hostile to the US presence, attempting a large-scale invasion of Pakistan is an unattractive prospect for India, even if nuclear weapons were removed from the equation. Thus, India has good reason to be self-deterred from a large-scale invasion and does not need to be deterred by Pakistani threats of low-level nuclear use.

[11]The 'new' strategy was formalised in NATO, MC 48, 18 November 1954, available at: {https://www.nato.int/docu/stratdoc/eng/a541122a.pdf}. However, NATO strategy since 1949 had relied on nuclear use to repel a Soviet invasion. See discussion in Gregory Pedlow (ed.), *NATO Strategy Documents 1949–1969*, available at: {https://www.nato.int/docu/stratdoc/eng/intro.pdf}.

[12]NATO, MC 14/2(Revised)(Final Decision), 23 May 1957, available at: {https://www.nato.int/docu/stratdoc/eng/a570523a.pdf}.

[13]'Transcript: A Conversation with General Khalid Kidwai, Monitor 360 Carnegie International Nuclear Policy Conference', Carnegie Endowment for International Peace (23 March 2015), available at: {https://carnegie-production-assets.s3.amazonaws.com/static/files/03-230315carnegieKIDWAI.pdf}.

[14]A similar point about the lack of military-utility to explain Pakistan's non-use of nuclear weapons is discussed in Sannia Abdullah, 'Nuclear ethics? Why Pakistan has not used nuclear weapons … yet', *The Washington Quarterly*, 41:4 (2018), pp. 157–73.

This type of implausible prioritisation of nuclear responses to limited conflicts is hardly unique to the India–Pakistan case. Furthermore, there is an artificial quality to this prioritisation of nuclear responses, divorced as they are from the norm of policy behaviour. At the heart of the matter is that no nuclear state or nuclear alliance has ever viewed nuclear use as a panacea to all its security problems. A red line may be drawn at some point, above which nuclear use is seriously contemplated and below which it isn't.[15] In no instance has a nuclear state disbanded its regular armed forces, nor relegated them to the role of a nuclear protection force. For example, all the states that possess nuclear arsenals simultaneously maintain very powerful armed forces that, at least ostensibly, exist to defend their country's national borders from at least some level of external attack.

In this sense, a standard assumption prevails that the most likely case of nuclear use is if war moves from a 'limited' level to a 'total' level, in which the 'existence of the state' is seriously compromised.[16] As some scholars have observed, non-nuclear states going to war against nuclear states, such as Egypt and Syria attacking Israel in October 1973, could be fairly confident that a limited incursion into Israeli-held territory would *not* trigger nuclear use in retaliation, as the stakes were sufficiently small not to warrant a nuclear response.[17] Indeed, early in the war, Israeli Defence Minister Moshe Dayan's reported consideration of an Israeli nuclear demonstration was predicated on an assumption of a *complete* Israeli military collapse and *overrunning* of the country by the Egyptian and Syrian armies, rather than the more limited territorial objectives Egypt and Syria were seeking.[18]

Describing his involvement in nuclear wargaming during the 1961 Berlin crisis, Thomas Schelling admitted to the difficulties encountered devising plausible scenarios of nuclear escalation amidst an international crisis:

> … one of the reasons why in these games we used scenarios like an East German uprising or a lot of Polish sabotage against Soviet troops moving in to reinforce East Germany or something on the order of the invasion of Hungary that may be transposed to Yugoslavia … We tried to make these up, and it was extremely difficult to generate a plausible story, a believable story of how the Soviets or the Warsaw Pact and the NATO treaty powers could step by step, without doing foolish things on both sides, get to where nuclear war either was on or was inevitable.[19]

Another participant in the Berlin wargames, Carl Kaysen, likewise noted:

[15]Kidwai's 2015 scenario marked a significant lowering of the threshold from the type of scenario he had enunciated more than a decade earlier when Pakistan did not possess a short-range nuclear capability. At that time, Kidwai referred to four nuclear red lines: non-military Indian attempts to destabilise Pakistan; if India conquers a major portion of its territory; destruction of a large part of the Pakistani army or air force; and economic strangulation (e.g. a naval blockade or stopping the flow of the Indus River). One can argue how realistic threats of Pakistani nuclear use were in some of these cases, particularly political destabilisation, but all the red lines referred to in this earlier period represent more substantial interests than was the case with the 2015 scenario, with nuclear use not being viewed as an appropriate response to such a limited attack. See: 'Nuclear Safety, Nuclear Stability and Nuclear Strategy in Pakistan', A concise report of a visit by Landau Network-Centro Volta (14 January 2002), available at: {https://pugwash.org/2002/01/14/report-on-nuclear-safety-nuclear-stability-and-nuclear-strategy-in-pakistan/#footnote9}.

[16]For instance, Russia's nuclear deterrence policy refers to two conditions in which nuclear weapons could be used in response to a conventional attack. The first of these is if the conventional attack was aimed at Russia's nuclear forces. The second is using nuclear weapons if a conventional attack on Russia placed the 'very existence of the state' in jeopardy. See: 'Basic Principles of State Policy of the Russian Federation on Nuclear Deterrence' (8 June 2020), available at: {https://www.mid.ru/en/foreign_policy/international_safety/1434131/}.

[17]Paul C. Avey, 'Who's afraid of the bomb? The role of nuclear non-use norms in confrontations between nuclear and non-nuclear opponents', *Security Studies*, 24:4 (2015), pp. 563–96.

[18]Dayan reportedly used the phrase 'the end of the Third Temple' to describe this collapse. Elbridge Colby, Avner Cohen, William McCants, Bradley Morris, and William Rosenau, 'The Israeli "nuclear alert" of 1973: Deterrence and signaling in crisis', Center for Naval Analyses, DRM-2013-U-004480-Final (April 2013), p. 19.

[19]Interview with Thomas Schelling, 'War and Peace in the Nuclear Age; At the Brink'; WGBH Educational Foundation, 4 March 1986: available at: {https://openvault.wgbh.org/catalog/V_5293F77426B84C68A360BD6283ACF4FC}.

> … it was a game, the scenario for which was some kind of uprising in East Berlin, repeating some historical events with the West German police rushing to the help of the rebels in East Germany. And the question is, what would we do? Now the interesting part of the game is how it, was how it didn't escalate. … And .no matter what Schelling, who was the controller, the man who fed new information into the game, did, we damped it down.[20]

Schelling similarly observed: 'If you were to ask … what was the most impressive phenomenon of these games … we would say how extraordinarily difficult it was to make the crisis continue. The actions naturally seemed to "damp down"'.[21] In those instances where nuclear use in wargames occurred, this was often the result of the game designers stretching the realism of the scenario to meet the demands of their clients.[22]

During the Vietnam War, US officials did at times discuss the possibility of nuclear use, and there were times when it appeared on lists of policy options. However, according to Dean Rusk, US Secretary of State under presidents Kennedy and Johnson:

> Whenever we boxed the compass of all conceivable lines of action, the so-called nuclear option was occasionally on the list. Researchers coming across such documents delight in such lists and inevitably blow them out of proportion. … Despite the enormous costs and frustrations of Vietnam, the Kennedy, Johnson, and Nixon administrations chose to fight that war with conventional means, and eventually lost the war rather than 'win it' with nuclear weapons.[23]

The Soviets also shared the difficulty of getting to the point of a crisis where nuclear use would be seriously considered. As one former Soviet general noted:

> We never had a single thought of a first strike against the US. I mean in a practical, not theoretical sense. Theoretically there were mountains of plans and writing, and exercises. But in practice, to hold discussions at the political level to decide such questions, this was absolutely out of the question. The ministers of defense and the General Staff were very careful with respect to these issues because they understood the consequences. … Khrushchev also made threatening noises. But the question of a first strike was never considered at the political level. Even during the Caribbean Crisis, when nuclear war was a real possibility, the question of a preemptive strike was not considered.[24]

As these examples highlight, nuclear use in a war or international crisis was mainly viewed as a theoretical possibility rather than a practical one. Unlike military leaders who would utilise nuclear use scenarios in plans, exercises, and wargames, the practice of war since 1945 has not involved nuclear use, which suggests a strong political reluctance to use nuclear weapons even in those cases that involve a military defeat or a national loss of face. It is therefore incorrect to conceptualise the dilemma as one of 'suicide or surrender', as it is sometimes portrayed.[25] Clearly, suicide is pointless.

[20]Interview with Carl Kaysen, 'War and Peace in the Nuclear Age; At the Brink'; 20 March 1986. available at: {https://openvault.wgbh.org/catalog/V_926B527E1B30430D94B824360F9C6168}.

[21]Meeting transcript of Nuclear Crisis Project, Speakers: Thomas Schelling and Alan Ferguson, 22 November 1988, Harvard University, available at: {https://www.armscontrolwonk.com/files/2017/01/Schelling-on-Berlin-games.pdf}.

[22]Harvey A. DeWeerd, 'A Contextual Approach to Scenario Construction', RAND, P5084, September 1973. A similar point about prioritising clients' needs in wargame design is discussed in Jacquelyn Schneider, 'What war games really reveal: Outcomes matter less than who pays and who plays', *Foreign Affairs* (26 December 2023).

[23]Dean Rusk, *As I Saw It: A Secretary of State's Memoirs* (London: I.B. Tauris, 1991), p. 397.

[24]Interview of Gen.-Col. (Ret.) Adrian A. Danilevich, Special Advisor for military doctrine to the Chief of the General Staff, 'Soviet Intentions, 1965–1985 Volume II: Soviet Post-Cold War Testimonial Evidence', by John Hines, Ellis M. Mishulovich, and John F. Shulle, BDM Federal, Inc., 22 September 1995, 61, available at: {https://nsarchive2.gwu.edu/nukevault/ebb285/index.htm}.

[25]Henry A. Kissinger, 'Nuclear testing and the problem of peace', *Foreign Affairs*, 37:1 (1958), p. 1–18; Matthew Kroenig, 'A strategy for deterring Russian nuclear de-escalation strikes', *Atlantic Council* (April 2018), available at: {https://www.atlanticcouncil.org/wp-content/uploads/2018/04/Nuclear_Strategy_WEB.pdf}.

Surrender, on the other hand, is overly dramatic. States prefer to bend rather than break, and even in extreme cases where a country's military has been destroyed and the country occupied, resistance can still carry on.

Bringing in the political context

Applying the concept of nuclear deterrence to a specific case, such as the classic Cold War problem of NATO deterring a Soviet invasion of Western Europe, or more recently, deterring an Indian invasion of Pakistan, a Russian invasion of the Baltic states, or a Chinese invasion of Taiwan, requires a scenario illustrating what such a war might look like. To reiterate, a 'war with a nuclear component' is still a war and should be analysed as such. Unfortunately, most war scenarios focus on the strategies and tactics of warfighting – the pitting of Military A vs Military B, or Capability A vs Capability B – without providing any relevant or realistic political context. For example, what these scenarios almost always avoid is any appreciation of the wider dynamics of war that are identifiable in *actual* cases of war, e.g. the political limitations placed on the use of military force, including leaders' fears of breaking the nuclear taboo; nor do they adequately address the aggressor's war aims, the role of domestic and world opinion, international law, etc. They also avoid engaging with alternative concepts of war – e.g. the prospect of long-duration conventional wars and wars of resistance against foreign occupation instead of nuclear use in the short term.[26]

Can some scenarios be invalidated as inherently implausible? If so, what aspects of the scenarios make them particularly implausible? To briefly illustrate, one might consider the dominant scenario utilized by the Soviet Union/Warsaw Pact during the Cold War, in which NATO was the aggressor.[27] As Raymond Garthoff explained, Soviet leaders were 'suspicious and fearful that some internal political explosion in Central or Eastern Europe might be exploited militarily by the West and lead to an eruption of hostilities and possibly a major United States-led NATO attack to the East'.[28] For Western policymakers, the scenario of a NATO invasion into Eastern Europe would have been dismissed out of hand as absurd.[29] In the Western view, NATO existed as a defensive alliance, NATO forces were not designed or intended for offensive operations, or at least not on a major scale, and most obviously, gaining a political consensus of Alliance members to launch an attack would have been considered a non-starter.[30] In contrast, these types of practical

[26]NATO faced this problem throughout the Cold War due to the political need to reassure Alliance members that their territory would not be conquered only to be liberated later. See Jeffrey H. Michaels, 'Visions of the next war or reliving the last one? Early Alliance views of war with the Soviet bloc', *Journal of Strategic Studies*, 43:6–7 (2020), pp. 990–1013.

[27]See, for instance, discussion of this in 'Warsaw Pact Commentary on NATO Concepts for War in Central Europe', CIA/NFAC/OSR Intelligence Assessment, October 1977, available at: {https://www.cia.gov/readingroom/document/5196457b993294098d509498}.

[28]Raymond Garthoff, 'Conflict termination in Soviet military thought and strategy', in Stephen J. Cimbala (ed.), *Conflict Termination and Military Strategy: Coercion, Persuasion, and War* (London: Routledge, 1987), pp. 33–55 (p. 46).

[29]David Dilks, *Churchill and Company: Allies and Rivals in War and Peace* (London: I.B. Tauris, 2012), chapter 7; CIA Intelligence Information Special Report, Background Scenario for Exercise 'Zapad [West]-77' on 31 May 1977, 15 September 1977; CIA Intelligence Information Special Report, Exercise 'LATO-74' – A Nuclear War Scenario, 20 October 1978; CIA Intelligence Information Special Report, Warsaw Pact 'Shield-76', 23 December 1976; CIA Intelligence Information Special Report, Warsaw Pact Exercise 'CENTER' Far Eastern Theater of Operations, Installation 'ALBATROSS', 8 June 1979.

[30]NATO contingency plans for the defence of West Berlin included the option of up to a Corps-level advance into East Germany. They also included nuclear use options. See reference to BERCON CHARLIE FOUR in this 1962 document on SHAPE Berlin Contingency Planning: SGPO 29/62. Office of the Standing Group Representative. Memorandum by the Standing Group Representative Lieutenant General Guerin to the Secretary General on Berlin Contingency Planning SHAPE 70/62 (30 March 1962) ENG, available at: {https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_archives/19620330-DP-SGPO_29_62-ENG.pdf}. However, such were the political realities within NATO that these plans were never really seen as practicable due to the limited prospect of gaining Allied consensus. As one US strategist who was involved in high-level allied discussions of these options put it, the Allies wouldn't touch the nuclear option 'with a 40-foot pole', and when they participated in Schelling's Berlin crisis games involving Soviet interference on the Autobahn, 'nobody on the Allied side was ever willing to do anything'. Oral history interview with William Kaufmann by Maurice Matloff, OSD Historical Office, Washington DC,

arguments were irrelevant for the Soviet Union/Warsaw Pact. As Garthoff also noted, 'such a scenario, unlikely and unrealistic as it may seem to most Western observers, is taken seriously in Moscow'.[31] Nor did the lack of any NATO military intervention during the 1956 Hungarian, 1961 Berlin, or 1968 Czechoslovak crises lead the Soviets to fundamentally reconsider their scenarios of NATO aggression. Instead, what mattered was that NATO was the embodiment of Capitalism and Imperialism, which by its nature was aggressive, whereas the Communist side viewed itself as purely defensive. Indeed, the Soviet Union/Warsaw Pact insisted its own large conventional forces, which NATO viewed as being intended for offensive operations, were only intended to *counter-attack* into Western Europe following a NATO invasion.[32]

In this case, as with countless others, unless one understands the specifics of decision-making processes, the preferences of the decision-makers themselves, especially the limits they place on their actions, and the range of decisions that would need to be made before war could be initiated, relying on abstract theories, ideological predispositions, and reductionist attitudes about the inherently hostile nature of one's adversary and the inevitability of war is of little use to understanding the complicated context in which military aggression has historically been conceived and decided upon.[33]

This being the case, nuclear use scenarios, to pass the plausibility test, must not only make technical sense, which is often the main standard applied, but also withstand scrutiny from a political perspective. A political critique should be composed of four parts: (1) an identifiable ends–ways–means chain in which it can be plausibly shown that using nuclear weapons is the preferred way to achieve political objectives relative to non-nuclear options; (2) an explanation of the presumably extreme circumstances leading to a reversal of the long-standing policy not to use nuclear weapons; (3) an identifiable authoritative decision-maker or 'decision unit' able to order the use of nuclear weapons, as well as a clear moment of decision; and (4) an appreciation that policymakers who will decide to use nuclear weapons recognise that using them will significantly alter the international political context.

The reason why this two-part (political *and* technical) critique is necessary is that focusing only on the technical aspects, as has been the case to date, leaves open the possibility that the scenario may be adequately defended on technical grounds. In contrast, when the scenario must also be defended on political grounds, the chances of a successful defence are considerably reduced. To be clear, the approach taken here is only intended to undermine claims about the utility of nuclear deterrence, and particularly the need to acquire certain types of nuclear capabilities, that are based on *specious* scenarios. It is *not* intended to undermine *all* claims about the utility of nuclear deterrence. Such a bar is unrealistic because to do so would require *proving* nuclear fears are not a relevant restraining factor in wars and crises involving at least one nuclear state (i.e. that nuclear weapons don't deter at some level), whereas there is considerable evidence these fears *do* affect political behaviour.

A counter-argument to this approach is that the history of war is a history of implausible war scenarios that materialised. Herman Kahn, for instance, accepted that 'almost all analysts believe that the enormous prospective risks of a central nuclear war … would normally prevent decision makers from considering it a practicable option. They can hardly imagine even an irrational decisionmaker … starting a nuclear war.'[34] Despite this, Kahn mused that when he instructed his colleagues to write

23 July 1986: 2, available at: {https://history.defense.gov/Portals/70/Documents/oral_history/OH_Trans_KaufmannWilliam7-23-1986.pdf?ver=2014-05-28-131335-030}.

[31]Garthoff, *Conflict Termination*, p. 46.

[32]Vojtech Mastny and Malcolm Byrne, *A Cardboard Castle? An Inside History of the Warsaw Pact, 1955–1991* (New York: Central European University Press, 2005), pp. 21–3.

[33]For an elaboration of these points, see: Jeffrey H. Michaels, 'War with NATO: Essence of a Russian decision', Oxford Changing Character of War Centre, April 2019, pp. 1–49.

[34]Herman Kahn, *Thinking about the Unthinkable in the 1980s* (New York: Simon & Schuster, 1984), p. 124.

a scenario for the outbreak of the First World War, this was considered too implausible.[35] By this logic, critiquing scenarios on the basis that they are irrational is itself problematic because history has shown that policymakers often behave in ways which seem irrational, or on the basis of imperfect information, or holding a very different set of beliefs and standards than those who are judging them in retrospect. Consequently, Kahn argued it was necessary to accept that 'remote' scenarios were 'not implausible'.[36]

There are at least two objections to this rationale. First, international policy analysis is based on a set of reasonable assumptions about the behaviuor of international actors, and these assumptions derive from the history of that behaviour. The alternative would be to base policy analysis on assumptions about behaviour that are inconsistent with the historical record. One can argue about the rationality or irrationality of waging wars, but at least there is a historical record to draw upon. Whilst it is impossible to discount future nuclear use, it is nevertheless crucial to acknowledge that nuclear states have been reluctant to use these weapons, viewing them as inappropriate to achieve their desired ends in the wars they fight or the international crises they become embroiled in. It is therefore necessary to explain the departure from the historical record of nuclear non-use by introducing some new element, such as why nuclear use is now viewed as appropriate to achieve the desired ends whereas previously it wasn't. Second, for a nuclear use scenario to be credible requires a clear explanation of how nuclear use occurs, as well as a consistent internal logic regarding the means utilised to deter nuclear use. In other words, if it is argued in the scenario that an adversary's policymakers are irrational and eager to use nuclear weapons, then one must also explain why possessing a particular type of nuclear capability, or threatening to use it in some way, will deter the irrational actor from using nuclear weapons in that scenario.

The Soviet first strike scenario

Two nuclear scenarios dominated US strategic thought during the Cold War: (1) nuclear escalation resulting from a Soviet/Warsaw Pact attack on the NATO area, and (2) a surprise Soviet nuclear attack against the United States. At various times, many other nuclear scenarios featured in US strategic thinking, but none were as dominant, and consistently so, across this period. In this paper, only the Soviet first strike scenario is covered. It was selected because of the two scenarios it was the more important one used to justify the vast growth in the American arsenal of strategic nuclear weapons as well as to argue against various arms control measures. In contrast to European war scenarios that *might* have escalated to nuclear attacks against the United States, the surprise nuclear attack scenario was *predicated* on a Soviet nuclear attack against the United States. It was also more important in the sense that US strategists regarded the ability to deter Soviet attacks against American territory – referred to by Kahn as 'Type 1' deterrence – as a prerequisite for maintaining a credible extended deterrent in Europe.

The remainder of this section will (1) provide an overview of the Soviet first strike scenario and its relation to nuclear policy advocacy, (2) discuss the technical criticisms voiced by participants in the debate at the time about its plausibility, and (3) apply an alternative political critique.

Scenario overview

In essence, the 'first strike' scenario described a Soviet 'counter-force' nuclear attack on US intercontinental ballistic missiles(ICBMs) in their silos, strategic bombers on the ground, and strategic submarines located in ports. Following this attack, the Soviet Union would then threaten to destroy

[35]Testimony of Herman Kahn, "Civil Preparedness and Limited Nuclear War Hearings before the Joint Committee on Defense Production, Congress of the United States, Ninety-Fourth Congress, second session, 28 April 1976 (Washington, DC: US Government Printing Office, 1976), p. 13.

[36]Kahn, *Thinking about the Unthinkable in the 1980s*, p. 129.

American cities if the United States did not agree to an immediate ceasefire.[37] Whilst earlier iterations of a 'bolt from the blue' nuclear attack on the US can be traced back to the 1950s, they gained renewed attention early in the Nixon administration when Secretary of Defense Melvin Laird used the scenario as a rationale for pursuing the Safeguard antiballistic missile system intended to protect American ICBMs from a Soviet first strike.[38]

In the following years, the 'first strike' scenario played a notable role in arms control debates. It also featured prominently in arguments to procure a 'survivable' MX missile, as well as some alternatives to the MX, such as adopting a launch on warning policy for the existing Minuteman missile.[39] Amongst its chief proponents were Laird and Paul Nitze, though many other policy 'entrepreneurs', such as Edward Teller, employed the scenario too when making the case that a 'window of vulnerability' existed. Despite considerable technical criticism, the scenario continued to gain adherents through the 1970s, particularly as the Soviet Union acquired a multiple independently targetable reentry vehicle (MIRV) capability. As William Van Cleave put it: 'It's the only prudent scenario upon which one should base strategic force planning and one's evaluation of the sufficiency of your strategic deterrent forces.'[40]

Typically embedded in this scenario were assumptions about the amount of damage that could be inflicted on the United States, and the ability of the Soviet Union to limit damage to themselves, especially by undertaking extensive civil defence preparations. Curiously, the reasons *why* the Soviet Union would conduct such an attack, especially what ceasefire or surrender terms they would demand, were not addressed in any detail, much less critiqued. For instance, as George Rathjens observed of the scenario, 'the events leading up to the attack on ICBMs are rarely specified'.[41] Glenn Snyder similarly noted: 'Why would the Soviets want to attack the United States, anyway? Curiously enough, this question, which seems so basic, is often ignored in our preoccupation with technology and military capabilities.'[42]

Only in a handful of cases can any mention of Soviet political objectives be identified. For example, Albert Carnesale noted: 'the scenario that Paul Nitze described and which concerned him at the time, was one in which the surgical nuclear strike against the United States land-based missiles, the ICBMs. And then essentially say to us, all right, United States, either get out of Europe or we're going to destroy your cities.'[43] A similar scenario developed by Edward Teller in 1975 was somewhat more ambitious. In his 'Alternative' National Intelligence Estimate, he described several Soviet objectives in a first strike: the elimination of 'American influence from the world scene'; eliminating 'US influence anywhere outside the western hemisphere'; restricting 'US influence to the English speaking part of North America'; and a demand that the US 'agree to a Russian version of the Monroe Doctrine' (with the eastern hemisphere a Russian sphere of influence and the United

[37]For example, Paul H. Nitze, 'Deterring our deterrent', *Foreign Policy*, 25 (1976–7), pp. 195–210.

[38]William Van Cleave characterised it as 'a commonplace scenario. It's one that's been recognized by the Department of Defense, going way back to the '60s.' Interview with William Van Cleave, War and Peace in the Nuclear Age; Missile Experimental; WGBH Educational Foundation, 9 December 1987, available at: {https://openvault.wgbh.org/catalog/V_FFE4733DB5AA48438805C7709093E7F0}; Jack H. Nunn, *The Soviet First Strike Threat: The U.S. Perspective* (New York: Praeger Publishers, 1982); Interview with Richard Garwin, War and Peace in the Nuclear Age; Reagan's Shield, 12/28/1987, available at: {https://openvault.wgbh.org/catalog/V_A6ACE8C21A494433B629D460150A18ED}.

[39]Nunn, *The Soviet First Strike Threat*. See also, Carl H. Builder, 'Toward a Calculus of Scenarios', RAND, N-1855-DNA, January1983.

[40]Interview with William Van Cleave, WGBH, 1987.

[41]George Rathjens, 'Nuclear war between the superpowers', in Franklyn Griffiths and John C. Polanyi (eds), *The Dangers of Nuclear War: A Pugwash Symposium* (Toronto: University of Toronto Press, 1979), pp. 135–46 (p. 137).

[42]Glenn H. Snyder, *Deterrence and Defense: Toward a Theory of National Security* (Princeton, NJ: Princeton University Press, 1961), p. 57.

[43]Interview with Albert Carnesale, War and Peace in the Nuclear Age; Reagan's Shield; WGBH (12 December 1987), available at: {https://openvault.wgbh.org/catalog/V_5D757C411E9B4E119342873BFE553765}.

States restricting its influence to the Americas). Teller insisted the Russians would not 'make an attempt at blackmail for any smaller objective'.[44]

In 1983, the Harvard Study Group, composed of prominent experts, published a study that examined the prospect of a Soviet 'first strike', amongst other scenarios. In their description of this scenario, the Soviets launch a first strike after becoming frustrated with their peaceful efforts to resolve the political status of Berlin. However, the study provides no further details of why the Soviets would escalate this rather minor issue and decide to launch a major nuclear attack. Relatedly, in a general appreciation of the 'first strike' discourse, Rathjens highlighted that Soviet objectives were discussed in quite vague terms: 'It is argued that by executing such an attack the Soviet Union would greatly improve its strategic posture vis-a-vis the US … the US would be seen as a much weaker guarantor of the security of its allies.'[45] In this sense, rather than gaining a specific objective, the aim of a Soviet nuclear attack on the United States would be to create a more conducive environment to advance Soviet foreign policy goals. Indeed, in many scenarios, the only Soviet objective identified is a vague reference to obtaining a 'coercive advantage'.[46]

The 'first strike' scenario was also internalised within the US government, albeit with little serious contemplation about Soviet motives. For instance, a draft Top Secret briefing from February 1982 intended to acquaint President Ronald Reagan with the Soviet nuclear threat provides additional insights into official thinking about a Soviet first strike. According to the document:

> There is no way of predicting how such an attack might come to pass. The Soviets could strike out of the blue, having decided that time was running against them and hoping that a forceful attack on our nerve centers would disable our ability to respond at all. They might attack only strategic nuclear forces (Minuteman sites and bomber bases) while holding our cities hostage to a second strike. Such eventualities might follow an armed conflict in Poland, Cuba, or at sea. Alternatively, a Soviet first use of strategic nuclear weapons might follow an escalatory conventional war.[47]

These types of possible Soviet motives for initiating a massive nuclear strike against the United States that were discussed during the strategic debates of the 1970s and continued into the 1980s had a longer lineage. For example, in his classic article 'The delicate balance of terror', Albert Wohlstetter wrote:

> … the risks of not striking might at some juncture appear very great to the Soviets, involving, for example, disastrous defeat in peripheral war, loss of key satellites with danger of revolt spreading, possibly to Russia itself, or fear of an attack by ourselves. Then, striking first, by surprise, would be the sensible choice for them, and from their point of view, the smaller risk.[48]

Of the three motives Wohlstetter identifies – 'loss of peripheral war', loss of key satellites possibly leading to a revolt in Russia, and fear of a US attack – the first two essentially deal with political consequences whereas the third is based on a military logic of damage limitation. In none of these cases, however, does Wohlstetter provide any further explanation. Why, for instance, would loss

[44]Edward Teller, 'An Alternative NIE', 18 June 1975. In a covering note to Henry Kissinger, State Department Counselor Helmut Sonnenfeldt cautioned that Teller's 'consistent suggestion that every proposition will unfold in a worst-case situation for the US undermines the overall credibility of his "alternative" NIE'. See Memo from Helmut Sonnenfeldt to Henry Kissinger, 'Edward Teller's "Alternative" NIE', 22 July 1975. Accessed via Declassified Documents Reference System.

[45]Rathjens, 'Nuclear war between the superpowers', p. 137.

[46]For instance, Albert Carnesale and Charles Glaser Source, 'ICBM vulnerability: The cures are worse than the disease', *International Security*, 7:1 (1982), pp. 70–85.

[47]William P. Clark to Secretary of Defense Weinberger and JCS Chairman David Jones, 'National Defense/Security Briefings', 23 February 1982, enclosing detailed outline of 'Presidential Briefing' on 'Nuclear Operations', Top Secret. Document is available at: {https://nsarchive.gwu.edu/document/16655-document-12}.

[48]Albert Wohlstetter, 'The delicate balance of terror', *Foreign Affairs*, 37:2 (1959), pp. 211–34 (p. 224).

in a 'peripheral war', or dissolution of the Soviet bloc, lead Soviet policymakers to initiate a thermonuclear war against the West? What sort of advantage would that give them, especially given the risks of nuclear retaliation? Although preventing or pre-empting (Wohlstetter does not clarify) a US attack, thereby limiting damage on the Soviet Union, seems to make more sense as a motive, at least in theory, there is no discussion of the wider context or circumstances. Instead, Wohlstetter takes these reasons for granted or treats them as an afterthought, rather than exploring them in any detail.

In his 1961 book *Deterrence and Defense*, Glenn Snyder identified four possible Soviet motives for a 'first strike': 'expansion of the Communist orbit in Europe and Asia; pre-emption of an expected United States first strike; elimination of the United States as a future competitor and threat to the security of the Soviet Union; and conquest of the United States'.[49] Several points here are noteworthy. First, of the four motives, three deal with premeditated war aims. Second, in none of the three cases of premeditated war aims does Snyder offer any explanation of how the goals themselves will be achieved. Instead, it is merely assumed that a greatly weakened United States will facilitate these gains. Most importantly, the war aims are described in exceptionally vague terms. For example, there is no explanation of what precisely is meant by 'expansion of the Communist orbit in Europe and Asia', or what 'elimination of the United States as a future competitor' entails. Furthermore, Snyder provides no discussion about how the Soviet Union would physically 'conquer' the United States, except to suggest that after a major nuclear attack American society and its residual military forces would be too disorganised to offer meaningful resistance.[50] Interestingly, this last goal was probably considered so unrealistic by the 1970s that it was not even mentioned by proponents of the 'first strike' scenario.

Technical critiques

In the Harvard Study Group report, the 'bolt from the blue' scenario is presented in the form of an imaginary situation in which a Soviet general proposes a 'first strike' to his Politburo superiors. The report notes it is a most unlikely scenario 'as long as no Russian military leader could ever report to the Politburo that a Soviet victory in nuclear war was probable or that the damage from American nuclear retaliation could be reduced to acceptable levels'.[51] They then pose the question, 'What military, political, and economic conditions would have to exist before Soviet leaders would seriously listen to the imagined general's proposal?'[52] However, they only provide a partial answer to the question. Instead of addressing military, political, *and* economic conditions, they effectively only discuss military factors. There is no mention of economic conditions, and the only reference to political conditions is an extremely vague reference to 'a major deterioration of Soviet–American relations'.[53] The study group then provide a similar scenario in which the Soviet Union attacks US Minuteman silos and kills 15 million Americans, with the reason for this attack being 'a deep crisis over the status of Berlin'.[54] What is noteworthy is that the study group's critique of the scenario was purely technical, with no analysis of how a crisis over the status of Berlin then leads to a Soviet nuclear attack.

The Harvard Study Group was scarcely alone in critiquing the 'first strike' scenario in this way. In the years leading up to their report, many similar 'technical' arguments were employed by critics of the scenario to cast doubt on it. Amongst these, five stand out. First, it was noted that less than 20 per cent of US nuclear weapons capable of reaching the Soviet Union were located on ICBMs. Moreover, a Soviet first strike would have no effect on US nuclear submarines at sea, nor

[49] Snyder, *Deterrence and Defense*, p. 58.
[50] Ibid., pp. 58–61.
[51] The Harvard Study Group, *Living with Nuclear Weapons*, p. 50.
[52] Ibid.
[53] Ibid., p. 51.
[54] Ibid., p. 52.

bombers on alert. As such, the United States would still have thousands of nuclear weapons available to retaliate. Second, because a Soviet counter-force attack would kill between 2 and 20 million Americans immediately, with millions more dying later, the scale of deaths was such that it would be considered too large for a limited attack and too small for a full-scale attack. This being so, an attack of this size seemed implausible relative to the others. Third, given this enormous number of expected fatalities, Soviet leaders would not have sufficient confidence an American president would not strike back. Fourth, if US leaders wanted to avoid destruction of the country's ICBMs, they could simply launch them on warning of attack. Fifth, Soviet civil defences would always be insufficient to significantly reduce Soviet casualties or physical damage to the USSR.

As US Defense Secretary James Schlesinger testified to the Senate Foreign Relations Committee in 1974: 'There is just no possibility that a high confidence disarming first strike is attainable for either side, even against the ICBM components of the strategic forces of both sides and certainly not against both sets of forces, SLBMs and ICBMs.'[55] Kenneth Waltz offered the following critique:

> Nitze's scenario is based on faulty assumptions, unfounded distinctions, and preposterous notions about how governments behave. Soviet leaders, according to him, may have concluded from the trend in the balance of nuclear forces in the middle 1970s that our relatively small warheads and their civil defense would enable the Soviet Union to limit the casualties resulting from our retaliation to 3% or 4% of their population. Their hope for such a 'happy' outcome would presumably rest on the confidence that their first strike would be well timed and accurate and that their intelligence agencies would have revealed the exact location of almost all of their intended targets. In short, their leaders would have to believe that all would go well in a huge, unrehearsed missile barrage, that the United States would fail to launch on warning, and that if by chance they had failed to 'deter our deterrent', they would still be able to limit casualties to only ten million people or so. But how could they entertain such a hope when by Nitze's own estimate their first strike would have left us with two thousand warheads in our submarine force in addition to warheads carried by surviving bombers?[56]

Carnesale later characterised the scenario as:

> faulty … not because it would be impossible, but because it was extraordinarily unrealistic. First of all it may have been impossible. The Soviets did not then have the capability to destroy our ICBMs and do not really have even now with any degree of confidence the ability to destroy our ICBMs. So it's questionable technically. Secondly, if they destroyed all of our ICBMs, we still have about 10,000 nuclear weapons on our submarines and in our bombers and cruise missiles with which we could retaliate against the Soviet Union. So why the Soviet Union would feel this great urge to destroy a small fraction of our nuclear weapons always mystified me … I just never thought the scenario made sense.[57]

Former US Defense Secretary Harold Brown stated he was not so much concerned with a 'bolt-out-of-the-blue' situation but rather that 'in a situation of great tension' the Soviet leadership might miscalculate American intentions or the balance of forces and strike first. But he noted:

> I always found this scenario difficult to believe or to imagine; but it was something that had to be considered … I never felt that we would let the imbalance become such that it would

[55]Schlesinger testimony in March 1974 is cited in George Rathjens, 'Nuclear war between the superpowers', in Franklyn Griffiths and John C. Polanyi (eds), *The Dangers of Nuclear War: A Pugwash Symposium* (Toronto: University of Toronto Press, 1979), pp. 135–46 (p. 139).

[56]Kenneth Waltz, 'Nuclear myths and political realities', *The American Political Science Review*, 84:3 (1990), pp. 731–45 (p. 735).

[57]Interview with Albert Carnesale, WGBH, 1987.

> become plausible, but it was the kind of calculation of weapons balance that the US military had to make. That was part of their professional responsibility.[58]

Another criticism was that such a Soviet attack made little sense because it was too large for a limited nuclear attack and too small for a large-scale attack.[59] According to Ashton Carter:

> … the Nitze scenario is, to my mind, in the Never Never Land between truly limited nuclear wars and all out nuclear wars. And there are few analysts and a few theoretically minded civilians that live there, but no one else lives there and in particular the military organizations don't live there … They might believe in the limited, truly limited nuclear wars, and they certainly believe in the all-out nuclear wars. But these esoteric analysts' constructs in between I think have very few adherents apart from theorists.

Similarly, when the scenario was reversed, with an American first strike on the Soviet Union, it was pointed out that any American president faced with the decision to order such a strike would reject it on the grounds there was no guarantee surviving Soviet nuclear weapons would not be used on major American cities.[60]

To bolster the plausibility of the Soviet 'first strike' scenario, its advocates often linked this to the acceleration of Soviet civil defence preparations that occurred after Moscow signed the SALT I and ABM treaties in 1972. It was argued that due to an elaborate Soviet civil defence programme, a US retaliatory strike would only cause minimal industrial damage and population losses, and that the Soviets would be able to recover within a few years. But for Soviet civil defences to have a meaningful possibility of saving large numbers of lives, this required time to evacuate the urban population, a reality that was inconsistent with the scenario. According to a 1977 US inter-agency study of Soviet civil defence, 'in three days the Soviets could evacuate the bulk of their urban population and reduce their fatalities in a nuclear exchange to less than 20,000,000 and their total casualties to less than 50,000,000; in 7 days, the Soviets could fully evacuate the major cities and reduce their fatalities to less than 10,000,000 and their total casualties to less than 20,000,000'.[61] Assuming the Soviets could manage this level of evacuation, the difference in the level of damage suffered in a full-scale nuclear war would only be a fraction relative to the United States, though clearly by any standard the losses would be horrific. Here the analogy of the Great Patriotic War was invoked. It was argued that because the Soviet Union had lost 20,000,000 citizens during that war, and then recovered within a relatively short period, Soviet leaders would consider risking the same number of deaths to achieve some form of global hegemony.

Upon closer investigation, the Soviet ability to limit damage was much less impressive than was often portrayed. For instance, it was claimed that the evacuation of Soviet cities would have been effectively impossible in winter. It was also expensive. During the Cuban Missile Crisis, no major civil defence measures were undertaken by the Soviets.[62] The CIA later assessed that 'the Soviets would not attempt to implement pre-attack measures such as evacuation or relocation unless convinced of a high probability of nuclear attack; they probably wish to avoid economic disruption

[58]Svetlana Savranskaya and David A. Welch, 'SALT II and the Growth of Mistrust Transcript of the Proceedings of the Musgrove Conference of the Carter–Brezhnev Project Musgrove Plantation St. Simon's Island, GA May 7–9, 1994', available at: {https://nsarchive2.gwu.edu/carterbrezhnev/C-B%20-%20SALT%20II%20-%20Musgrove%20master%20transcript.pdf}.

[59]Interview with Ashton Carter, War and Peace in the Nuclear Age; Visions of War and Peace; WGBH Educational Foundation, 9 December 1987, available at: {https://openvault.wgbh.org/catalog/V_19CDC7C452FE459AA0591052B2F9900B}.

[60]See for instance, Interview with Stansfield Turner, War and Peace in the Nuclear Age; Reagan's Shield, 1 December 1987, available at: {https://openvault.wgbh.org/catalog/V_DF6B3D7813E841FEA6428E096EEE2370}.

[61]Memo from Samuel Huntington to Zbigniew Brzezinski, Subject: Principal Findings and Political Implications of Interagency Study of Soviet Civil Defense, 20 October 1977.

[62]*A Handbook of Warning Intelligence, Vol. II* (1972), p. 23–1, available at: {https://www.cia.gov/readingroom/docs/CIA-RDP80B00829A000800050001-5.pdf}.

as well as the possibility of triggering a US pre-emptive strike.[63] As such, pursuing civil defence measures and conducting surprise attacks were incompatible. Pursuing civil defence measures in a crisis meant providing early warning, and with the loss of surprise, the United States would be alerted and therefore able to inflict significantly more damage. Conversely, conducting a surprise attack meant risking retaliation on a society unprepared to withstand it. Either way, Soviet civil defence would be effectively meaningless in the context of the 'first strike' scenario.

What is notable about the technical criticisms discussed in this section is that in each case technical arguments begat technical counter-arguments, with the result being a highly technical debate in which the question of *why* the Soviets would launch a first strike was ignored, whereas the focus was limited to questions about *how* they would do it. Although the technical criticisms were quite strong, the ability to win the debate would have been significantly augmented by incorporating a political critique as well.

The 'first strike' scenario from a political plausibility perspective

As mentioned earlier, examining the Soviet 'first strike' scenario from the perspective of political plausibility means that for the scenario to be taken seriously, its designers would be obliged to provide convincing answers to the following questions: (1) What are the Soviet political objectives, and why would using nuclear weapons against the United States offer a realistic means of achieving these objectives relative to non-nuclear alternatives? (2) What change of circumstances could credibly (at least by historical standards of wars and international crises involving the Soviet Union) explain the decision to employ nuclear weapons (in this case, on a massive scale)? (3) Who in the Soviet Union has the authority to order a nuclear attack, and what sort of deliberative process would precede this order? (4) What new international political context does the Soviet leadership anticipate will emerge after a nuclear attack on the United States? Once these questions have been addressed, the scenario can then also be critiqued on technical grounds, such as whether the Soviet Union is able to carry out their military tasks (i.e. the destruction of some designated portion of the US nuclear arsenal) in such a way that the risks of significant nuclear retaliation would be minimised.

Going through the scenario to find answers to these questions is not an easy task for the simple reason that there aren't very many good answers to be found, as the scenarios do not meaningfully address these issues. This becomes immediately apparent when trying to answer the first question about Soviet political objectives, which is a rather fundamental issue since the Soviets would presumably be attempting to achieve something tangible given the unprecedented level of destruction they would be causing and the risks to their own society they would be taking. Only a handful of objectives, all extremely vague, could be identified (e.g. 'get out of Berlin', 'leave Europe', 'reduce the US sphere of influence to the Western Hemisphere or to North America', and 'create a conducive environment for Soviet foreign policy gains'). No explanation is provided about the dynamics of how achieving these objectives would result from using nuclear weapons. Instead, it is merely assumed that after destroying a fraction of the US strategic arsenal, killing millions of Americans in the process, and presumably avoiding massive retaliation on the Soviet Union, Moscow could simply make these types of demands and Washington would accept them. This assumption borders on the fantastic.[64] Among other things, there is no historical precedent, no

[63]'Soviet Planning and Capability for Protracted Nuclear War', CIA, Interagency Intelligence Memorandum, February 1986.

[64]It was recognised that the circumstances leading to a Soviet-initiated nuclear war would have to be incredibly dire to fundamentally alter Soviet cost–benefit calculations so that an attack would be preferable to doing nothing. Amongst the circumstances discussed were: 'an uprising in East Germany, an uprising in Poland, sort of flaring across Eastern Europe, looking as though it would go to the Soviet Union'. As Kahn noted: 'We decided it would be very hard to write such a scenario.' Proceedings of the National Security Affairs Conference, July 18–20, 1977: Toward Cooperation, Stability and Balance. Cosponsored by the National Defense University and the Office of the Assistant Secretary of Defense (International Security Affairs), Ft. McNair, National Defense University, Washington DC. Further elaboration is provided in: Kahn, *Thinking about the Unthinkable in the 1980s*, pp. 73–9. Kahn describes how in one scenario he presented to a group of experts in 1977, the

explanation of what this would practically entail, and no discussion of what the post–nuclear use environment would be like.

Incidentally, this lack of critical attention to Soviet political objectives in a nuclear 'first strike' is also observable in the more plausible scenario of Soviet conventional aggression in Europe. Throughout the Cold War, analysts struggled with this problem, and no consensus emerged.[65] Early NATO strategy documents referred to the 'overrunning of Europe' as the Soviet aim in launching an aggressive war against the Alliance.[66] Decades later, some analysts still claimed that the Warsaw Pact would initiate a war 'with the goal of seizing the European peninsula', to include a seizure of the French channel ports and bombarding the United Kingdom.[67] From the 1960s onwards, scenarios for only attacking the NATO 'flanks' to achieve some local objective or to humiliate NATO were increasingly discussed, albeit these were always considered less likely than an attack on the 'central front' along the inner-German border. Regardless, the ultimate goal of major aggression on the 'central front' was never clear.

Several examples highlight the competing views. In a scenario developed by Samuel Huntington, Soviet conventional aggression was limited to the capture of a small amount of West German territory. As Huntington put it, the Soviets 'may or may not occupy Frankfurt, Hamburg, or Munich. Inevitably they will, however, score some gains.'[68] They would then issue an appeal to the West Germans to accept demilitarisation or neutralisation in exchange for a Soviet withdrawal and to avoid further destruction on their territory. Others, such as John Mearsheimer, argued that 'such a limited victory is hardly an attractive option'.[69] One of the leading British experts on the Soviet Union, Peter Vigor, agreed, arguing that the Soviet leadership would only go to war against NATO for 'important military objectives. … This nonsense of tiny nibbles in western Germany. You don't start major wars for tiny nibbles.'[70] Another Soviet expert, Chris Donnelly, referred to the Soviet aim as the 'collapse of the NATO political structure within a matter of days' and claimed that with this goal in mind, an 'invasion can stop at nothing less than the occupation of West Germany, the Low Countries and the Baltic Littoral' but would avoid an invasion of France or the UK.[71]

Given how nebulous these presumed Soviet war objectives were in relation to *conventional* aggression, a prospect always considered more likely than a direct Soviet nuclear attack against the United States, the nuclear 'silver bullet' solution to achieve vague objectives should have received a great deal more critical analysis before being considered sufficiently plausible to base major nuclear policy decisions on. However, even if considered plausible based on the answers to the first question, the scenario would still need to address the remaining three questions. For example, the change of circumstances leading to a nuclear first strike is not addressed in any meaningful way in

Soviet leadership was contemplating a first strike on US nuclear forces because they were concerned about an American first strike intended to preserve the capitalist world. However, despite the opportunity of conducting a largely successful attack, the panellists concluded the Soviets would not take the risk because they could not be sure of the damage, even from a 'limited, disorganized retaliatory strike' (p. 74) by the United States, nor would they be able to justify such an attack either domestically or internationally. Kahn observed that 'even hawkish American analysts believe that Soviet leaders are essentially cautious' (p. 76).

[65]These points are discussed in Michaels, 'War with NATO'.

[66]See, for instance, NATO Strategic Guidance (MC 14/1), 1952, available at: {https://www.nato.int/docu/stratdoc/eng/a521209a.pdf}.

[67]Col. Graham D. Vernon, 'Soviet options for war in Europe: Nuclear or conventional?' *Strategic Review*, 79:1 (1979), pp. 56–66 (p. 57).

[68]Samuel P. Huntington, 'Conventional deterrence and conventional retaliation in Europe', *International Security*, 8:3 (1983–4), pp. 38–40.

[69]John J. Mearsheimer, 'Why the Soviets can't win quickly in Central Europe', *International Security*, 7:1 (1982), pp. 3–39 (p. 5).

[70]'The Northern Flank in a Central European War', FOA Symposium, The Swedish National Defence Research Institute, Stockholm, 4–5 November 1980, pp. 83–4.

[71]Chris Donnelly, 'The Soviet threat to Europe in the 1980s', copy available at the Russia Military Studies Archive, UK Defence Academy, Shrivenham.

the scenario. At best, it can be inferred that a 'preventive' strike would be motivated by Soviet leaders who feared the prospect of an unfavourable global 'correlation of forces' and for some reason viewed a 'first strike' as a realistic option to improve the Soviet position in the international system. Richard Ned Lebow observed that some American leaders were convinced the Soviet Union might start a war because the 'correlation of forces' happened to be in their favour at a given point in time. In contrast, he pointed out Soviet leaders 'seem inclined to do whatever is in their power to avoid ever having to confront a decision to use nuclear weapons' and would only do so if convinced the United States was about to attack them first. As such, Soviet leaders, similar to their American counterparts, viewed nuclear use in terms of 'last resort' rather than 'first strike'.[72]

The question about Soviet decision-making authority receives hardly any attention in these scenarios. Normally, it is assumed the Soviet leadership takes a 'rational' (as opposed to 'irrational') collective decision to kill millions of people and risk their own society's destruction in pursuit of ill-defined political objectives. On the other hand, according to former US Defense Secretary Robert S. McNamara: 'Those who accept the first-strike scenario view the Soviet ICBMs and the men who command them as objects in a universe decoupled from the real world. … Only madmen would contemplate such a gamble. Whatever else they may be, the leaders of the Soviet Union are not madmen.'[73] Former National Security Adviser McGeorge Bundy was also quite critical:

> There is an enormous gulf between what political leaders really think about nuclear weapons and what is assumed in complex calculations of relative 'advantage' in simulated strategic warfare. Think-tank analysts can set levels of 'acceptable' damage well up in the tens of millions of lives. They can assume the loss of dozens of great cities is somehow a real choice for sane men. They are in an unreal world. In the real world of real political leaders, whether here or in the Soviet Union, a decision that would bring even one hydrogen bomb on one city of one's own country would be recognized in advance as a catastrophic blunder; ten bombs on ten cities would be a disaster beyond history; and a hundred bombs on a hundred cities are unthinkable.[74]

Related to this is the final question dealing with the post–nuclear use international political context that from the Soviet perspective would presumably be an improvement over the pre–nuclear use context. At a minimum, the scenario should make some reference to the ceasefire/surrender terms the Soviet Union would be insisting on after conducting a 'first strike'. Oddly, the scenarios make no reference to American nuclear disarmament as being a Soviet objective, nor do they propose a timeline for a US military exit from Europe, and so forth. The scenario implies that, assuming a best case in which the US suffered significant damage and the Soviet Union suffered comparatively less damage, the Soviets would be in a geopolitically advantageous position compared to beforehand, with the international system transitioning from a bipolar 'superpower' system to some degree of Soviet hegemony. However, the dynamics of this Soviet victory and subsequent period of hegemonic consolidation are never analysed.

To briefly sum up, the 'first strike' scenario fails to offer plausible answers to any of the four questions. At best, the answers are vague, implied, and highly unlikely to withstand expert scrutiny. In contrast, to be taken seriously, the answers would need to be specific, stated explicitly, and bear some resemblance to the historic practice of international relations, and specifically reflect the way in which decisions to wage major wars are taken.

[72]Richard Ned Lebow, 'Windows of opportunity: Do states jump through them?', *International Security*, 9:1 (1984), pp. 147–86 (p. 179). Lebow's view was also echoed in John Erickson, 'The Soviet view of deterrence: A general survey', *Survival*, 24:6 (1982), pp. 242–51; Benjamin S. Lambeth, 'Risk and uncertainty in Soviet deliberations about war', RAND, October 1981.

[73]Robert McNamara, *Blundering into Disaster* (London: Bloomsbury, 1987), p. 49.

[74]McGeorge Bundy, 'To cap the volcano', *Foreign Affairs*, 48:1 (1969), pp. 1–20 (p. 10).

Conclusion

When speaking about nuclear deterrence it is difficult not to talk about nuclear use scenarios, so embedded are they in the nature of the subject. Nuclear deterrence theorists and practitioners constantly utilise these scenarios but rarely subject the political assumptions underpinning them to a thorough critique. At best, they limit their critiques to technical issues whilst ignoring political factors. Ironically, many of the same scenarios used as the basis for 'maximum' nuclear deterrence strategies, including the Soviet first strike scenario, have also been used by the anti-nuclear activist community. These activists typically limit themselves to moral, ethical, or environmental critiques of the technical aspects of nuclear use scenarios and avoid engaging in political critiques of the sort discussed in this article. One of the most notable examples of this was the utilisation of the Soviet first strike scenario by Carl Sagan and other scientists to promote the 'nuclear winter' thesis.[75] In recent iterations of the scenario, scientific studies addressing the prospect of 'nuclear winter' in a major nuclear exchange between India and Pakistan also avoid a discussion of political factors.[76] As the scientific activists' imperative is to design scenarios that reach the required megatonnage threshold to produce 'nuclear winter', introducing political issues might not have been viewed as a priority relative to the scientific factors, or were seen as weakening the scenario's plausibility.

As this article argues, giving due attention to the political dynamics of nuclear use should be central to assessing the realism of scenarios depicting wars involving nuclear weapons, regardless of how plausible or not their technical dimensions appear. Unlike scenarios depicting conventional wars that can draw on a long history of decisions to go to war and an understanding of how states wage them, the same is not the case for nuclear use. Therefore, when depicting nuclear use in a crisis or war scenario, it is all the more essential to incorporate political factors that might otherwise be ignored in depictions of conventional wars (not that this is excusable either). In this regard, the critique described in this article constitutes a novel method to review the plausibility of nuclear deterrence policies and strategies by stressing the need to address basic political issues that have been marginalised relative to technical considerations. Given that one cannot escape reference to scenarios when thinking about and discussing the possibility of nuclear use, as well as the means to deter it, utilising a political critique can offer a relatively simple means to discredit the types of misleading scenarios that permeate the nuclear deterrence discourse.

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[75] 'Such a first strike scenario, in which the danger to the aggressor nation depends upon the unpredictable response of the attacked nation, seems risky enough. … But the decision to launch a first strike that is tantamount to national suicide for the aggressor even if the attacked nation does not lift a finger to retaliate is a different circumstance altogether. If a first strike gains no more than a pyrrhic victory of ten days' duration before the prevailing winds carry the nuclear winter to the aggressor nation, the "attractiveness" of the first strike would seem to be diminished significantly.' Carl Sagan, 'Nuclear war and climatic catastrophe: Some policy implications', *Foreign Affairs*, 62:2 (1983), pp. 257–92 (pp. 276–7).

[76] Alan Robock, Owen B. Toon, Charles G. Bardeen, et al., 'How an India–Pakistan nuclear war could start – and have global consequences', *Bulletin of the Atomic Scientists*, 75:6 (2019), pp. 273–9.

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