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**Reid B. C. Pauly. "Would U.S. Leaders Push the Button? Wargames and the Sources of Nuclear Restraint."** *International Security* 43:2 (Fall 2018): 151-192. DOI:

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“**W**ould U.S. leaders push the button?” Reid B. C. Pauly provocatively asks in the title of his recent *International Security* article. We know from history that the answer to that question has been an almost unqualified no. To date, President Harry S. Truman remains the only world leader to have ordered nuclear weapons to be used in war; since the atomic destruction of Hiroshima and Nagasaki no leader has pushed this symbolic nuclear button. This non-use of nuclear weapons has puzzled scholars for decades.

Pauly’s research sheds important fresh light on this nuclear non-use puzzle. Pauly asks what explains these seventy years of non-use (152) and answers the question with the help of declassified and unclassified archival records from the U.S. political-military wargames that were held from 1958 to 1972 (160). Altogether, he draws evidence from a rich set of twenty-six wargames, which included nuclear as well as non-nuclear opponents.

Pauly’s piece must be especially applauded for this innovative use of wargame data. Scholars interested in nuclear weapons issues have struggled with the limited empirical evidence. Data that the nuclear weapons scholars need often belong among state’s top guarded secrets and the bulk of information avoids the normal declassification processes.

To be clear, the existing scholarship on nuclear non-use is anything but unempirical. From historical case studies in Nina Tannenwald’s pathbreaking monograph, *The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons Since 1945*, to experimental surveys of recent contributions like Daryl Press, Scott Sagan, and Benjamin Valentino’s “Atomic Aversion: Experimental Evidence on Taboos, Traditions, and the Non-Use of Nuclear Weapons,” scholars have successfully explored various ways of bringing relevant

empirical data in to explain the nuclear non-use.<sup>1</sup> Of course, none of the existing empirical investigations has been without limits.

Pauly's use of wargames is an important complement to the existing empirical investigations, even though it is itself necessarily limited by the specific character of the war game data. While they resemble real crises, wargames are not real crises. They do not have real consequences and, of course, participants know that. Decision makers might behave differently in the 'unreal' world of wargames.

Pauly, however, presents satisfactory evidence to show that wargames are realistic enough (158-159) to suggest certain conclusions. Perhaps best illustrating the realistic nature of wargame is a quotation Pauly provides from the time of the Cuban Missile Crisis. John McNaughton, an aide in the office of Assistant Secretary of Defense for International Security Affairs, compared his experience in the ongoing crisis with his wargames involvement. Referring to wargames developed by Thomas Schelling at the request of the then Deputy National Security Advisor Walt W. Rostow only a few months before, he noted that "this crisis sure demonstrates how realistic Schelling's games are" (159).

The article convincingly and in detail explains the advantages of war game data (156-160). Having a major advantage over public opinion surveys, Pauly's political-military wargames involved senior political and military leaders. As he puts it, "these wargames validly simulated the reality of how leaders and advisers would debate the use of nuclear weapons in crisis" (157). Pauly does not mention the fact, but at least some among the wargame participants like McGeorge Bundy, the National Security Advisor to Presidents Kennedy and Johnson, participated in real-world crises where the use of nuclear weapons was a possibility.<sup>2</sup>

Extensive after-action deliberations where participants debated and explained the rationale for their previous wargame decisions had been recorded. The hypothetical nature of wargames then turns into a major advantage during the declassification processes. As Pauly describes in the online appendix to the article, real-world data like the capabilities of weapons systems are subjected to classification in wargame files rather than the decisions and deliberations of wargame participants.<sup>3</sup> These records provide scholars with insights, which are rarely available for real-world events.

Pauly's contribution deserves the highest credit for using innovative wargame data, but its findings are somewhat disappointing for the reader whose expectations have been pushed high by the innovative data. Drawing on the existing literature, Pauly tests five theoretical explanations of nuclear non-use: deterrence, practicality, precedent, reputation, and ethics. He notes that "none of the logics discussed above is mutually exclusive [;] each may operate in any given case, independently or in combination" (168-169). This implies that each of the five causes of non-use is sufficient, yet unnecessary, to prevent the use of nuclear weapons. As

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<sup>1</sup> Nina Tannenwald, *The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons Since 1945* (Cambridge: Cambridge University Press, 2007); Daryl G. Press, Scott D. Sagan, and Benjamin a. Valentino, "Atomic Aversion: Experimental Evidence on Taboos, Traditions, and the Non-Use of Nuclear Weapons," *American Political Science Review* 107:1 (2013): 188-206, <https://doi.org/10.1017/S0003055412000597>.

<sup>2</sup> See Lawrence Freedman, *Kennedy's Wars* (Oxford: Oxford University Press, 2001).

<sup>3</sup> See the online appendix at DOI: <https://doi.org/10.7910/DVN/CXXSTK>.

this assumption is only implied, the reader cannot be sure if it was Pauly's intention to test the five explanations as sufficient yet unnecessary causes of non-use. Such testing would have been enormously valuable but the article stops just short of being able to test the five explanations as independent causes of non-use fully.

Inspired by Tannenwald's concept of 'taboo talk,' Pauly looks for 'deterrence talk,' 'practicality talk,' 'precedent talk,' 'reputation talk,' and 'ethics talk' in his wargames' records. He finds that 'players' aversion to nuclear non-use, in their own words, comport most strongly with the logics of deterrence, practicality, and reputation' (168). Pauly finds that references to deterrence appear in twelve wargames, to practicality in nine, and to reputation in eight. In contrast, only one wargame record contains 'precedent talk' and only three records contain 'ethics talk' (170-171). This is suggestive evidence, but unfortunately it cannot prove that any of the logics apart from deterrence (and to limited degree practicality) are independently sufficient to cause nuclear non-use.

Pauly's analytical tables at pages 170 and 171 show that apart from deterrence and practicality, all logics have been invoked in wargames where participants also invoked other logics. Deterrence was invoked as the sole explanation in five scenarios. In one wargame, SIGMA I 64, practicality is the only logic invoked. That means deterrence and practicality can be considered an independent explanation of non-use. Reputation, ethics, and precedent might be independent as well. Based on the presented evidence, however, it cannot be ruled out that they only operate in conjunction with other logics as necessary but insufficient conditions. Of course, the aforementioned findings are relevant and important. However, these findings stop short at transforming our knowledge about nuclear non-use.

How important the findings are is not easy to ascertain. There, the devil is in the details, or, more accurately, in the online appendix, which contains important information about wargame scenarios and coding. It is a bit unfortunate that more information about wargames' scenarios is not included in the article itself. This is especially important since deterrence and practicality, two explanations which Pauly finds the most prominent, depend heavily on the military situation in the scenario. Under what conditions wargame participants refused to use nuclear weapons needs to be known in order to assess what non-use means in any particular scenario.

It would have been helpful to have included descriptions of the wargame scenarios in the article itself. Regrettably, even the appendix helps only a little on this score. Only a few words describe most of the scenarios. For instance, POLEX I, the first scenario in the set, is only characterized as the 'Poland crisis.' Is the non-use outcome puzzling in this Poland crisis? It is entirely possible that some Poland crisis could have triggered a major Warsaw Pact—NATO shooting war and escalate to a nuclear level. It is, however, equally possible that hypothetical Polish crisis in POLEX I resembled the Soviet invasions of Hungary in 1956 and Czechoslovakia in 1968. In both Cold War crises in the Eastern bloc, NATO forces observed from the other side of Iron curtain how Soviet troops pacified disobedient clients. Non-use of nuclear weapons in Hungarian and Czechoslovak crises does not seem to be very puzzling. Why should it be puzzling in the Polish crisis? Unfortunately, the reader can only find the answer by exploring the original records of the POLEX I wargame.

One can also question the not-insignificant part of the author's coding decisions; this of course, applies only when readers consult the online appendix. As mentioned, Pauly looks for deterrence, practicality, precedent, reputation, and ethics talks in his records, but the description of what constitutes evidence of these talks is

relatively meager. For instance, the deterrence talk should correspond with participant explanation of the fear of retaliation and the practicality talk should correspond with participant explanation of no tactical necessity. Not all coding decisions, however, can be clearly understood in the light of coding rules specified in the article.

To illustrate, in one excerpt from EPSILON 72 wargame participants explain: “None of our members, military and civilian alike, projected any real role for nuclear weapons in the limited action with which we were confronted...Beyond that, the discussion demonstrated some grave uncertainty about the willingness of political leadership to use nuclear weapons even in a larger military engagement, giving question, first, about escalation and, secondly, about ultimate utility. We waltzed around this question. ...We could not get anybody to stand up and tell us if you apply nuclear weapons: (1) the conflict will not escalate; and, (2) if it did escalate to higher levels that we would end up with any political objectives which were worth a dam” (appendix).

This excerpt is coded as deterrence, which is certainly possible as the participants refer to the threat of escalation. Yet, the first part of the excerpt also suggests that no tactical necessity of nuclear weapons arose in the scenario. Coding the excerpt both as deterrence and practicality talk might have been more appropriate.

Similarly, in an excerpt from the DETEX wargame participant explain that: “at no point did the U.S. "policy makers" see how nuclear bombing could effectively deter further attack, despite the fact that the game had been designed to maximize the attractiveness and minimize the risk of employing small tactical weapons.” (appendix).

One might plausibly argue that since the participants explained that nuclear weapons could not effectively deter further attack, practicality explains why they had not been used. The excerpt is, however, coded as ambiguous.

Altogether, roughly a quarter of the coding decision appears debatable. This is not to say that the coding of the debatable cases is necessarily incorrect, but that a more detailed explanation as to why something is coded as deterrence, practicality, precedent, reputation, or ethics would have clarified the coding decisions.

Two important findings in the article, however, remain solid despite its aforementioned limits. First, Pauly’s analysis of wargames shows a notable lack of support for nuclear taboo. It is reasonable to expect that wargame data would have featured clear references to Tannenwald’s ‘taboo talk’ if the normative nuclear taboo entrenched in the minds of decision makers. That Pauly finds only two references to ethical explanations of non-use suggest that if there was nuclear taboo, it was hardly shared by most policymakers. This adds to the growing evidence which questions the strength of the normative inhibition against the use of nuclear weapons.<sup>4</sup>

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<sup>4</sup> T.V. Paul, *The Tradition of Non-Use of Nuclear Weapons* (Stanford: Stanford University Press, 2009); Press, Sagan, and Valentino, “Atomic Aversion: Experimental Evidence on Taboos, Traditions, and the Non-Use of Nuclear Weapons”; Scott D. Sagan and Benjamin A. Valentino, “Revisiting Hiroshima in Iran: What Americans Really Think about Using Nuclear Weapons and Killing Noncombatants,” *International Security* 42:1 (July 2017): 41-79, [https://doi.org/10.1162/ISEC\\_a\\_00284](https://doi.org/10.1162/ISEC_a_00284).

Second, Pauly's research puts a question mark on recent research which uses experimental evidence from public surveys to explain the non-use.<sup>5</sup> As Pauly shows, the strategic elite participants in wargames were much more cautious than non-elite players like undergraduate students who participated in similar wargames in the 1960s at Stanford University. While studying public opinion about the use of nuclear weapons remains valuable, it should not be assumed that such surveys are representative reflections of opinions among those who make the real decisions.

All in all, "Would U.S. Leaders Push the Button" is a laudable contribution to the nuclear scholarship. Pauly's article adds valuable support to the consequentialist explanations of non-use. Admittedly, the article's findings do not revolutionize what we know about the non-use of nuclear weapons. Most nuclear weapons' experts would probably not be surprised that most non-use decisions are explained by the logics of deterrence, practicality, and reputation. Pauly, however, deserves the highest credit for bringing unique evidence from political-military wargames into the debate about the causes of nuclear non-use. He must also be applauded for his yet unfinished effort to make his wargame records available online to other scholars, who can and should explore the wargame data as more wargame records become available.

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<sup>5</sup> c.f. Press, Sagan, and Valentino, "Atomic Aversion: Experimental Evidence on Taboos, Traditions, and the Non-Use of Nuclear Weapons"; Sagan and Valentino, "Revisiting Hiroshima in Iran: What Americans Really Think about Using Nuclear Weapons and Killing Noncombatants."