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by Benjamin Hautecouverture
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POLICY PERSPECTIVE

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The ongoing war in Ukraine has been marked by a new level of official references to nuclear weapons. Russian President Vladimir Putin, among others, has referred to his country's nuclear capabilities in several public comments. Western officials have responded to these comments with counterstatements and actions on the ground. A study published in early September 2022 by the German research centre SWP¹ listed at least 90 “nuclear interactions” on the public record between Russian officials and their counterparts in the U.S., NATO and European countries. By the end of the year, perhaps 30 more such interactions were on the public record. German researchers classify these events according to whether they are escalation, warning or de-escalation events by a state source. All of them are part of the deterrent dialectic in the context of what the experts call a “signalling” sent by a state to its adversary(ies).

What is nuclear signalling?

Nuclear signalling is a central part of nuclear deterrence, itself a complex mix of defence functions, diplomatic and military practices, a strategic reality, a technological and industrial issue and an art of language and communication. Learning the language of deterrence requires mastering a notion that the Anglo-Saxons call “nuclear signalling,” which the French usually translate as “signalement nucléaire.” In a famous 2002 text on the perception of signalling, the American academic Robert Jervis, who died in December 2021, stated: “Signals are like a language in that their meanings are established by agreement, implicit if not explicit.”² In their strategic interactions, states thus use a vocabulary, launch actions and adopt behaviours as signals designed to be understood by both the sender and the receiver. Signalling can be defined as the signal and the description that allows it to be identified in a common way. It is therefore any type of visible initiative resulting from a rational calculation intended to modify one or more strategic interactions between identified actors. This was, for example, the decision the United States took on March 2, 2022 to postpone the test of a Minuteman III intercontinental ballistic missile so as not to risk fuelling the Russian perception of a nuclear escalation of the conflict that was expanding in Ukraine.

The nuclear signals sent by Russia, the United States, France, the United Kingdom and NATO authorities, plus a wide range of official audiences within each of these entities within the last year exceed 100, so it is not easy to read the appropriate signalling. Most of the time, such signalling evokes first the understanding of the person receiving the signal. But there is no guarantee that everyone shares this understanding, including the signal's main recipient, i.e., the person for whom the signal is primarily intended. Nuclear-weapon states send signals about their capabilities and intentions to three distinct types of audiences: a civilian, domestic or foreign audience; allied and partner states; and competitor and adversary states. For example, when French Foreign Minister Jean-Yves Le Drian reminded a television station on February 24, 2022,

¹ Anna Clara Arndt and Liviu Horovitz, “Nuclear Rhetoric and Escalation Management in Russia's War Against Ukraine: A Chronology,” SWP working paper, September 3, 2022.

² Robert Jervis, “Signaling and Perception: Drawing Inferences and Projecting Images,” in Kristen Renwick Monroe, ed., *Political Psychology* (London: Lawrence Erlbaum Associates, Publishers, London 2002): 14.



that NATO is a nuclear alliance, it was a general signal, presumably to any audience. However, the French press repeated it, saying that Le Drian was addressing Putin, which would make little sense in this case.

As with all information, nuclear signalling can convey misleading ideas or images. This may be by design, or it may be due to perceptual bias. The way in which a signal is perceived is always a function of the recipient's perceptual disposition. Indeed, the novelty of a piece of information affects the belief system to which everyone is predisposed. Conversely, this system filters out what is new in a state of affairs and interprets it. Finally, a signal's author is not exempt from seeing a number of personal determinations affecting the information he wishes to share. For example, a leader wishing to show resolve may think that he or she is not threatening, without realizing that he or she appears to be doing so. Or another wishing to appear threatening may fail to be perceived as such. When, on February 27, 2022, Putin requested that the Russian military's deterrent forces be placed in a "special combat regime," his declaratory statement was generally understood as an increase in the threat but it was misleading, as subsequent events demonstrated.

A final nuance specific to the practice of nuclear deterrence is the dialectic of ambiguity and transparency. Most nuclear-weapon states maintain a varying degree of ambiguity, including in their signalling, because nuclear ambiguity is deemed to provide a margin of uncertainty that, in theory, strengthens deterrence. This is supposed to be especially the case to avoid so-called threshold effects in the adverse calculation of targets or situations that are or are not covered by nuclear deterrence. By indicating in a television interview on October 12, 2022, that France would not use nuclear weapons in response to an attack on Ukraine or other countries in "the region," French President Emmanuel Macron clearly signalled a threshold that his official nuclear speech of February 2020 had been careful to obscure. Whether the Kremlin interpreted it as a sign of weakness or as a useful sign of appeasement or de-escalation, there is no way of knowing. Moreover, French nuclear signalling would have to be part of the perception of the nuclear threat in the eyes of the Russian authorities, which has not been proven.

Ultimately, truly useful nuclear signals are probably rare, with the vast majority of signals issued constituting noise that does not require common interpretation. Nevertheless, they are useful when they coherently combine structural strategic components (long-term signals), reactive activity as needed (medium- to short-term signals) and crisis behaviour (short-term to very short-term signals).³ Nuclear signalling can guarantee strategic stability when it remains fairly stable in each temporality, thus maintaining its credibility and reducing the risk of misinterpretation in times of crisis. Conversely, the inconsistency of signals over a significant period is a source of instability.

Since February 2022, nuclear signalling has provided three lessons. The first is that these signals are not linear or progressive but fluctuate from escalation to de-escalation, with the rhetoric of escalation occurring in a short timeframe (a few days) and that of de-escalation in a longer timeframe (weeks and months). Lesson two: most of the signalling recorded so far has been aimed

³ John Gower, "Nuclear Signalling between NATO and Russia," Euro-Atlantic Security Report, European Leadership Network, October 2018.



at de-escalating a given situation rather than escalating it, on both sides. Lesson three: despite ambiguities in the Russian deterrence posture, the conditions for the use of nuclear weapons in a conflict have not been changed in the Russian doctrine before the launch of military operations, nor have they changed over the past 11 months in the sense of lowering the threshold for use.

Both the profession and the art of warfare consist in formulating scenarios to anticipate the response that will have to be made if necessary. These scenarios can take the form of war games, the same exercises that represented the conduct of the Cold War until the end of the 1980s (John Badham's 1983 film "War Games"). The aim is to plan the response to the use of nuclear weapons in a conflict in accordance with the agreed-upon scenarios. This case is no exception and the question of how to respond to a limited use of nuclear weapons by Russia has been addressed by U.S. staffs at least since Barack Obama's second term, after Russia's annexation of Crimea. This practice does not indicate that the threat of the use of a nuclear weapon in the current conflict has increased or is increasing. It indicates a political willingness to consider that the usually theoretical risk is increasing and that it is appropriate to re-agree on response patterns that need to be constantly checked and possibly refreshed.

In strategic terms, the issue of deterrence in wartime is thus narrowed down to the challenge of managing any kind of military escalation through the preventive consideration of questions beginning with "what if?" What if a state of alert is ostentatiously raised? What if the Russian military command specifies its nuclear signal in operational terms (e.g., stockpile movements)? What if a particular unit indicates it can engage a particular force? What if a device with a nuclear warhead capable of releasing a few kilotonnes of trinitrotoluene (TNT) equivalent energy is engaged?

The media relay of escalation management in liberal democracies is such that it can usefully form an integral part of deterrence strategies in an international system that is much more open today than it was during the Cuban missile crisis 60 years ago (October 1962). Thus, to the dramatization of the risk suggested by a small phrase of Putin taken out of context, such as the speech of September 21, 2022 for example, the White House responds with a dramatization which calls the world to witness what would be Russia's breaking of the nuclear taboo. Which of the two parties would be the more dissuasive?

According to the pattern dissected by the German researchers of the SWP, the time for nuclear de-escalation opened at the end of last September, despite an escalation of violence on the various battlefields, still operated by conventional weapons systems. There was an increase in Russian but also Ukrainian bombardments and persistence of military setbacks for the Russian army despite the official attachment of the four regions of Zaporizhia, Kherson, Lugansk and Donetsk to the Russian Federation by Putin's decree of September 30, 2022. For the record, such attachments were supposed to make these new territories safe, at the risk, according to so many commentators over the past months, of increasing the threat of the use of nuclear weapons against Ukrainian forces because of Russia's inviolable "territorial integrity." Putin's manoeuvre was in fact a deterrent, seeking particularly to influence the choice and behaviour of Ukraine's allies



through the phantasm of their public opinions. It has not worked so far because his opponent's resolve is, at least to date, stronger.

The coercive nature of Russia's nuclear deterrent, which is otherwise deplorable, has been useful in that it has been stable at least since the start of the war against Ukraine in 2014. For the rest, the first 11 months of the war in Ukraine aptly illustrate that when it comes to deterrence, silence counts at least as much as noise.

To date, almost all of the official responses of the P3 states (the U.S., France and the U.K.) to Russian nuclear threats have been remarkably restrained. Nevertheless, Russian nuclear coercion in the war on Ukraine will have a lasting impact on the global strategic scene. This form of use of nuclear weapons seems to surprise many people, including experts. On the other hand, it can be argued that the historical role of nuclear weapons is to provide strategic cover for the state that possesses them, regardless of the use made of this cover. The possibility of aggressive sanctuarisation, of which the Russian practice in Ukraine is only one modality, has been conceived for decades. French thinker Raymond Aron, for example, had clearly formulated it: "*Theoretically, one could (...) use the nuclear threat offensively, to change the status quo*"⁴, he wrote almost fifty years ago. The coercive function has been thought of in Japan and the Republic of Korea with regard to North Korea for more than twenty years. It was violently perceived in France with regard to the United States and the USSR during the Suez humiliation of 1956, which was a form of coercion. And perhaps South Africa's nuclear forces in the 1990s if the apartheid regime had not collapsed? In the end, talk of a "new nuclear age" marked by a so-called disinhibition of emerging actors characterised by a propensity for blackmail and piracy is neither accurate nor convincing. It is more of a coherent historical inflection than a rupture evoking the entry into a new age.

That being said, it is certain that the whole current aggressive sequence reinforces the idea that this type of behaviour will try to be deterred in the future. Therefore, the war in Ukraine offers to be a plea for the adaptation of the rules of deterrence to the contemporary conditions of its exercise. This opens up a significant challenge for all states for which deterrence is an identified strategic function. But even beyond these states, in the face of such behaviour by a nuclear-weapon state under the Nuclear Non-Proliferation Treaty (NPT), deterring nuclear blackmail and other forms of strategic piracy in the decades to come is a compelling challenge for all the major states that are the guardians of the global nuclear non-proliferation and disarmament norm. The new five-year NPT review cycle that began last summer should prioritize this issue between now and the next NPT review conference.

⁴ Raymond Aron, « Stratégie et dissuasion: pour une libre discussion », *Revue Défense nationale* n° 340, janvier 1975

► **About the Author**

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