

In recent decades, conflicts have evolved, placing increasing emphasis on the cognitive domain. In this new environment, conflict is no longer limited to degrading material or human capabilities, but seeks to influence the perception of reality, citizens' capacity or judgement and, consequently, their behavior. Within this framework, the concept of cognitive warfare emerges, in which the human mind becomes the primary battlefield to be conquered, with the aim of shaping decision-making and influencing the adversary's actions¹.

While efforts to influence have always existed, from what is traditionally known as propaganda to contemporary disinformation campaigns conducted through digital platforms, employed methods have evolved over time. Thus, the emergence of a hyperconnected cyber environment has enabled actors to better analyze and segment their audiences, while also allowing them to operate persistently within the information environment. As a result, the capacity to influence has become a key instrument of strategic competition.

For this reason, approaches focused solely on ensuring information accuracy are not enough. Contemporary ways of confrontation do not merely seek to alter what people think, but they also shape the frameworks through which reality is interpreted. This affects risk perception, institutional trust, and willingness to act. Consequently, strategic competition is no longer confined to narratives alone, but extends into the cognitive processes that interpret them.

However, institutional responses based on a purely reactive approach, focused on detecting and correcting pieces of false information (or "fake news"), while necessary, remain limited when compared to influence dynamics that operate anticipatorily. This is, rather than competing over how the present is interpreted, strategic actors increasingly seek to shape collective expectations about the future by defining what should be perceived as possible, probable or inevitable².

In this context, it is crucial to introduce the concept of Expectation Shaping Warfare, a form of strategic orientation focused on conditioning collective anticipation rather than

¹ Bernal, A., Carter, C., Singh, I., Cao, K., & Madreperla, O. (2020). *Cognitive Warfare. An attack on truth and thought*. NATO Innovation Hub.

² Rushing, B., Hersch, W., & Xu, S. (5 de marzo de 2026). *Cognitive Warfare: Definition, Framework and Case Study*. Obtenido de Cornell University: <https://arxiv.org/abs/2603.05222>

persuading audiences. Influence is then no longer exerted solely on current perceptions, but on the material horizons through which individuals interpret events. Understanding this dynamic is essential for adapting both the analysis of contemporary conflicts and the design of strategic responses.

The Paradigm Shift: Control of Expectations

In contemporary information analyses, influence is typically assessed through questions such as what is being said, who is saying it and how truthful the message is. However, actors do not merely seek to control information or narratives as they also aim to shape the contexts through which that information is interpreted. Therefore, influence extends beyond the present to the expectations that frame its interpretation.

This shift entails a transformation in the logic of cognitive conflict. Traditionally, influence operations have sought to shape perceptions through propaganda, disinformation, or deepfakes. Moreover, actors increasingly operate on collective anticipation by presenting and reinforcing the likelihood or impossibility of certain future scenarios before they occur. In doing so, they are able to shape what individuals believe may happen.

Expectation Shaping Warfare thus emerges as a strategic approach focused on conditioning expectations rather than influencing thought about present facts. The goal is not to control how reality is interpreted, but to delimit the range of futures that audiences could consider as possible, probable or inevitable. This approach is particularly relevant in high-uncertainty environments, where anticipation is key to decision-making processes.

In order to understand this concept correctly, it is necessary to differentiate perception of the present from expectations regarding the future. While present perceptions can be shaped through information, control over narratives and psychological operations (PSYOPS), future expectations go way beyond. Their construction is done through the deliberate use of language that introduces plausible scenarios or situations as inevitable³ and through words that evoke or have a direct effect on emotions⁴. Additionally,

³ "According to experts, the tendency is...", "it is most likely that... will happen", "everything points at...", among other expressions.

⁴ The use of certain words evokes emotions such as fear, anger or uncertainty. For instance, "crisis" generates uncertainty or fear, whereas "victim" or "murder" generates sadness, and "injustice" arouses indignation. Alonso Puig, M. (2022). *Las palabras pueden sanar y pueden hacerte enfermar*.

normalization of a given future scenario that has been achieved through media and social networks, along with the simulation of broad social consensus, plays a key role.

The foundations of this concept can be observed both in propaganda studies and behavioral theories. For instance, the “firehose of falsehood” model explains how high-volume repetition, rapid broadcasting and multi-channel messaging are not necessarily intended to establish firm beliefs, but rather to create perceptions of plausibility based on how the human mind processes information⁵. Similarly, the prospect theory demonstrates that decision-making is not based on objective reality, but on expectations and perceptions of risk⁶, which reinforces the strategic importance of influencing anticipation.

Unlike traditional disinformation, this approach does not require inventing facts, as it can operate through the selection, amplification, or contextualization of truthful information, as long as it reinforces a specific expectation horizon. Its effectiveness lies in its ability to shape interpretive contexts, making it particularly difficult to detect and counter.

From a strategic standpoint, the implications are significant. Once a scenario is perceived as probable or inevitable, both individual and collective decisions tend to align with that expectation, shaping behavior before the event occurs and thus, reducing potential opposition. When a society internalizes a future as inevitable, resistance tends to diminish. Consequently, the ability to influence what a society expects about the future of a conflict becomes a powerful tool that redefines the boundaries of what is considered possible and, therefore, the conflict itself.

An illustrative example can be observed in a scenario involving rising tensions between State A and State B. If State B persistently promotes the idea that military escalation is inevitable, this expectation alone can shape State A’s behavior. Even in the absence of direct action, such anticipation may prompt defensive measures and accelerate political decisions, allowing State B to shape the strategic environment without resorting to force.

⁵ Paul, C., & Matthews, M. (11 de julio de 2016). RAND Corporation. (R. Corporation, Productor) Recuperado el 12 de marzo de 2026, de *The Russian "Firehose of Falsehood" Propaganda Model. Why It Might Work and Options to Counter It*: <https://www.rand.org/pubs/perspectives/PE198.html>

⁶ Kahneman, D., & Tversky, A. (marzo de 1979). *Prospect Theory: An Analysis of Decision Under Risk*. *Econometrica*, 47(2).

Mechanisms of Expectation Shaping

Expectation shaping does not operate through a single logic but through multiple dimensions that influence how individuals and institutions anticipate future scenarios and their outcomes. These mechanisms do not function independently; rather, they reinforce one another to create an environment in which certain futures are perceived as more plausible than others. Among these mechanisms are temporal framing, expectations of institutional effectiveness, perceptions of cost and sacrifice, and expectations of irreversibility.

Temporal framing directly influences the urgency of response. In this sense, when scenarios are framed as imminent, decision-making accelerates, tolerance for delay decreases, and priorities are reordered. Conversely, scenarios perceived as distant or uncertain tend to generate passivity. For this reason, the perceived timing of when the event is expected to occur within the collective imagination is shaped, thereby controlling the pace of decision-making, the type of response, and the margin of maneuver.

An example of this mechanism can be observed in an international context in which analyses are disseminated claiming that “the coming weeks will be decisive” or that “there are few opportunities left to avoid military escalation”. Even in the absence of objective changes in the situation itself, the perception of immediacy induced by such language prompts actors to mobilize resources and prioritize national security measures over other policy areas.

Regarding expectations about institutional effectiveness, general confidence or distrust in institutions’ ability to respond to a crisis shape both risk perception and the willingness to accept certain measures. When there is a widespread belief that the institutional response will be delayed or insufficient, perceived risk increases, prompting actors to accept restrictive measures. This is not due to the legitimacy of those who implement them, but as an adaptive response to the expectation of an adverse situation.

An example of this dynamic could arise in the context of a public health crisis in which the idea that authorities “are not reacting in time” or “are not prepared to handle the situation” takes hold. Without explicitly claiming an institutional collapse, this perception erodes trust in their management, leading citizens to anticipate the situation, for instance, by

stockpiling resources or accepting stricter restrictions in expectation that conditions will worsen.

Moreover, expectations of cost and sacrifice influence social acceptance of certain policies, as the anticipation of losses, be them economic, human, or material, tends to shape decision-making⁷. In this sense, the perception of high future costs or sacrifices can facilitate the adoption of anticipatory measures, even in the absence of evidence that such a scenario will materialize.

To illustrate this mechanism, in the case of a potential economic crisis, negative impacts, such as rising unemployment or increasing prices of basic goods are repeatedly emphasized. The persistent framing of this scenario as highly probable, despite not having materialized facilitates the adoption of certain preventive measures, like austerity policies, which under other circumstances would face greater opposition and be considered radical.

Finally, the expectation of irreversibility generates a perception of inevitability. When a scenario is framed as difficult to reverse, its questioning diminishes, and decision-making shifts toward adaptation, leaving little room for opposition. In this context, information and media play a critical role, as the repeated amplification of potential futures contributes to consolidating the perception of irreversibility⁸.

A clear example of this dynamic can be observed in the context of an armed conflict in which there is a reigning idea that once one faction advances and captures part of the other state's territory, the international *status quo* will be fundamentally altered. As this perception becomes entrenched, the actors involved begin to assume that such a shift would constitute an almost irreversible turning point due to its strategic implications. Consequently, perceptions of power, the views of third-party states, and the dominant narrative would all be reshaped, while negotiations would proceed from this new reality. In turn, decision-making would become oriented toward adaptation to this altered scenario.

⁷ Kahneman, D., & Tversky, A. (27 de septiembre de 1974). *Judgement under Uncertainty: Heuristics and Biases*. *Science*, 185(4157), 1124-1131.

⁸ Benkler, Y., Faris, R., & Roberts, H. (2018). *Network Propaganda: Manipulation, Disinformation, and Radicalization in American Politics*. Oxford, Reino Unido: Oxford University Press.

In sum, these mechanisms do not act directly on the decision itself, but on the underlying framework that shapes its adoption, making certain options appear more reasonable or preferable. In this way, influence shifts away from the decision itself and instead operates on the conditions that determine which options are perceived as possible, probable, or inevitable.

Strategic and Operational Implications

From a strategic perspective, the concept of Expectation Shaping Warfare redefines the nature of confrontation between actors, as the objective is no longer simply to achieve capability superiority or control over the narrative, but to shape the cognitive contexts through which audiences or adversaries interpret how a scenario will evolve in the future. In this sense, confrontation is understood to occur before actors make decisions or formulate their strategies⁹.

One of the main strategic implications of this concept lies in its impact on deterrence. Traditionally, deterrence has been based on capability credibility and communication of the willingness to employ them. However, when collective expectations are sustained over time, deterrence can be strengthened or weakened without any change in actual capabilities. For instance, if an actor succeeds in establishing the perception that escalation in a conflict is inevitable or, conversely, that there is no likelihood of an attack, the adversary's strategic calculus may be altered, shaping its behavior without the need for an explicit demonstration of force¹⁰.

Moreover, this concept encourages forms of competition that unfold within the so-called "gray zone", where actions remain below the threshold of open conflict. Because expectation shaping produces cumulative effects over time, it becomes more difficult to identify decisive moments or implement proportionate responses. This allows actors to gain strategic advantage by gradually eroding perceptions of the adversary's stability and legitimacy.

⁹ Freedman, L. (2013). *Estrategia: Una historia*. La esfera de los libros, S.L.

¹⁰ Morgan, P. (2003). *Deterrence Now*. Nueva York: Cambridge University Press.

At the operational level, Expectation Shaping Warfare reshapes how intelligence, strategic communication, and decision making are integrated. It requires a predictive approach that not only identifies emerging trends, but also examines how different audiences are likely to perceive and interpret them. In this way, intelligence is used to analyze the cognitive and social dynamics that shape anticipation and collective expectations within the target audience¹¹.

Second, it requires strong interagency coordination, meaning the alignment of messaging, policy decisions, and actions in order to avoid inconsistencies that could undermine credibility. When coherence is lacking, the result can be counterproductive, eroding trust and allowing alternative or opposing narratives to gain traction.

Third, in the realm of command and control, when expectations have been previously shaped, actors may face perceptions of timing or inevitability that do not reflect reality. This can lead to rushed decisions, overestimation of threats, or the pursuit of flawed courses of action. As a result, it becomes essential to adopt tools that help identify and mitigate these biases in the decision-making process.

Finally, this concept poses a challenge for response strategies. Approaches based solely on reacting to specific events or narratives are insufficient against dynamics that operate in a diffuse and cumulative manner. This calls for a doctrinal shift that incorporates expectation management as a core element of planning, supported by analysis within a long-term framework.

Therefore, the concept of Expectation Shaping Warfare not only expands the scope of cognitive warfare, but also compels a reassessment of the foundations upon which communication, influence, and decision-making strategies are designed within the framework of contemporary hybrid warfare.

¹¹ Heuer, R. (1999). *Psychology of Intelligence Analysis*. CIA Center for the Study of Intelligence.

Conclusions and Future Directions

In conclusion, the concept of Expectation Shaping Warfare helps explain a shift in the logic of contemporary cognitive warfare, in which strategy moves beyond the control of information or narratives and instead focuses on shaping the cognitive contexts that influence how the future is perceived. As a result, influence is no longer limited to the present or the short term, but extends to shaping the range of possibilities that guide individual and collective decision-making.

Throughout this analysis, expectation shaping has been shown to be an effective mechanism, particularly in environments of uncertainty where anticipation and foresight play a decisive role in shaping behavior. The ability to define which scenarios are perceived as possible, probable, or inevitable allows actors to influence the evolution of a conflict without resorting to the use of force or altering the use of their actual capabilities.

Moreover, this concept has implications for deterrence, competition in the gray zone, and operational planning, as it shifts the focus from which capabilities will be employed to the anticipated perception of how they will be used. In this way, shaping expectations can reinforce or undermine strategic conditions without producing any change in objective reality.

Consequently, Expectation Shaping Warfare is not merely an extension of traditional information operations within hybrid warfare, but a redefinition of cognitive influence itself. Strategic configuration moves ahead of events through anticipation, setting the boundaries of what is considered possible, probable, or inevitable before actors make decisions. Thus, ignoring this dimension means operating based on effects rather than addressing the underlying causes that produce them.

Future Directions.

Future lines of inquiry surrounding the concept of Expectation Shaping Warfare are diverse. These include its incorporation into security and defense strategies, its doctrinal and legal framing, its interaction with contemporary conflicts and hybrid warfare, its integration with other tools used in modern strategy, and the development of mechanisms

for early detection and anticipatory response.

Among these directions, particular attention should be given to how this concept fits within contemporary conflicts and hybrid warfare, its integration with those tools that are already in use, and the need to implement mechanisms for detection and response. The remaining lines of future are self-explanatory.

In this way, expectation shaping requires examining how it operates within contemporary conflicts, which are often protracted and unfold at a slower pace, with effects that emerge cumulatively rather than immediately. Understanding how expectation shaping works and how it interacts with other instruments of influence and power, helps explain how the conditions for conflict are shaped before it occurs.

Moreover, integrating this concept with tools that are already being used in contemporary strategy, such as intelligence and analytical frameworks, represents an evolution of these capabilities. In this case, predictive intelligence becomes essential for identifying emerging patterns of social anticipation. Consequently, the use of artificial intelligence and data analysis techniques can help explain how expectation horizons are built and why they evolve in particular ways.

Finally, effective expectation shaping requires robust capabilities for early detection and anticipatory response. Unlike other forms of influence, this approach does not rely on the dissemination of false or easily identifiable manipulated information, which makes it significantly more difficult to detect. As a consequence, it is essential to build capabilities that detect shifts in collective anticipation by tracking behavioral changes, alongside strategies to mitigate their effects without straying from the institutional communication line.

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