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Strategic Stability in a Changing World: Challenges and Strategies

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Abstract

Strategic stability is one of the fundamental issues of the international system in a complex environment, which due to changes in systemic elements has encountered concepts, prerequisites, and different rules. Moreover, these systemic transformations have significantly influenced the strategies adopted by actors to achieve stability. Therefore, changes in systemic elements have affected both causes and effects. Accordingly, the research problem focuses on how environmental shifts impact the theoretical and conceptual foundations of strategic stability, and how these changes influence the strategies of actors in a complex and evolving world. In response to the research problem, this hypothesis is proposed that in a complex and changing world, actors' strategic systems, while focusing on the principle of change, are based on the principles of maintaining stability with low levels of conflict and tension, and to achieve this goal, a full spectrum from peaceful to coercive tools is utilized. The research findings, based on a cascading model using a descriptive-analytical approach and qualitative method, indicate the dynamic nature of stability, the increased likelihood of limited conventional conflicts, the prevalence of proxy wars, the low probability of unconventional conflicts, and the prevention of escalation in tensions under conditions of strategic stability among actors in a complex environment.

Keywords: Strategic, Stability, Complex Situation, Conventional Conflicts, Unconventional Conflicts, Proxy Wars

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Introduction

Basically, every global order includes a set of norms, a hierarchy of threats and opportunities, and a preference for specific tools to overcome challengers who create instability and crises. In the current unipolar structure of the international system, the United States, as the present hegemon, seeks to maintain hegemonic stability through institutions such as the UN Security Council and NATO. In the former bipolar system, strategic stability was defined as the absence of incentives to launch a first strike. Today, the geopolitical, technological, and psychological landscape that prevents major wars between nuclear-armed powers has changed significantly. The concepts and conditions of strategic stability have undergone fundamental transformation (Trenin, 2019: 1). Accordingly, the legal norms established after the Cold War, regarding the necessity of using force and the principle of non-intervention, which survived repeated violations by the two superpowers during the Cold War, have now given way to doctrines of preemption, humanitarian intervention, and selfdefense. Now this question is raised, "In a complex world, how have the theoretical and conceptual foundations of strategic stability transformed, and what requirements have these changes imposed on actors' strategies?" It is clear that this question relates to the assumptions underlying stability, human achievements, existing technologies, the systemic structure of power, and the dominance of the prevailing power over the current system. Strategic stability is based on some assumptions:

- The first assumption in strategic stability concerns the power of actors and the degree of parity between them in relation to stability. It reflects the theoretical premise that the greater and closer the power of the actors is to one another, the higher the likelihood of stability in their relations. This assumption is based on the anarchic nature of the international system and encompasses the notion that actors engaged in strategic stability must possess the most advanced and well-equipped military capabilities of their time (Rubin, L., & Stulberg, A.N, 2018).
- The second assumption of strategic stability is the continuity of the
 natural cycle of power among system actors. This assumption is
 based on the theoretical premise that the artificial cycle of power,
 given the support of a superpower (usually a hegemon) for its
 subordinate actors, cannot establish long-term stability. This issue
 arises for two reasons: the subordinate actor's bold behavior towards

- the dominant power and the denial of that power by the actor involved in the natural cycle of power.
- The third assumption is the dominance of a deterrence strategy in the relations among actors within the stability zone (Roberts, 2013; Colby, 2013). This assumption is based on the theoretical premise of mutual vulnerability between the parties.
- The fourth assumption of strategic stability is the dominance of the principle of rationality in the relations among actors. This assumption is rooted in the rationality of the actors involved in the stability region.
- The fifth assumption indicates the interdependence among actors and various issues. This assumption is based on the theory that the international system becomes more complex and that there is complexity in the relationships between actors, which leads to an increased level of sensitivity in the relations among regional actors (Qasemi, 2014).
- The sixth assumption refers to "smokeless war" (Chen, L. S., & Evers, M.M., 2023). This assumption is based on the theoretical principle emphasizing the importance of economic and geoeconomic parameters in the relationships between actors in the international system.
- The seventh assumption highlights the cascading nature of strategic stability. According to this assumption, a triple threat emerges that is an action against one rival leads to a threat against another actor outside the immediate equation, triggering broader environmental reactions (Koblentz, G. D., 2014).
- The eighth assumption of strategic stability is that the interconnected and complex world is characterized by an increase in local and proxy conflicts among actors aimed at maintaining overall systemic stability. Based on this assumption, the existence of limited and indirect conflicts among the involved actors in the region can be explained.

Considering these assumptions, in response to the main research question, and according to the principle that strategic stability does not mean maintaining the status quo, but rather that stability is based on the principle of the variability of phenomena, and that change is one of the defining features of stability in a complex, ever-changing world, the hypothesis is formed that "the strategic system of actors, while focusing on the principle of change, is fundamentally based on the principles of

maintaining stability with low levels of conflict and tension. To achieve these objectives, they may employ all possible peaceful to coercive tools." Of course, strategic stability is more dependent on threats than on punishment or action, with the level of threat being very high and intense. This high level of threat causes actors to engage in cost-benefit calculations before taking action, which ultimately leads to their avoidance of direct conflict and tension. In the end, strategic stability is established at levels that depend deeply on the actors' power and the nature of that power, forming a stability that exists within a spectrum influenced by these factors.

It is noteworthy that strategic stability is by no means synonymous with a lack of engagement within the international system; rather, conflict and confrontation are among the prominent features of the complex international system and are integral to stability, without which stability would have no meaning or significance. Therefore, stability means the absence of direct and strategic conflicts between the top actors within the system.

Another issue related to strategic stability in the modern context is the regionalization of stability, considering systemic complexities. Today, macro-strategic stability is influenced by the presence of regional powers, the importance of regions in the foreign policies of actors, the diversity of systemic issues, the variety of actors, and the high level of regional tensions impacting systemic stability and regional stability. Accordingly, a typical bipartite equation often characterizes the hegemonic structure of the international system within regions. Based on this equation, efforts are made to prevent a significant increase in the power of a particular actor (at least in military capability) within regions, with the hegemon focusing on maintaining a balance by having a clear advantage over the follower actor and preserving the status quo. In regions where this balance favors the opposing actor of the status quo, the hegemon attempts to form alliances with actors close to the opposing side and supports the status quo actor—either directly or indirectly—in potential conflicts.

Theoretical foundations and literature review

literature review

Numerous studies and articles have been written on strategic stability. Generally, the existing literature in this field can be categorized from different perspectives. In this research, based on the study's objectives, three categories of literature have been reviewed:

- 1. The first category of literature examines the historical evolution of strategic stability (Kent,G. A., & Thaler, D.E., 1989; Yost, D.S., 2011; Colby, 2013; and Scoville, H., 1974). These studies have focused on nuclear powers and addressed the strategies between nuclear-armed states. This literature, based on the assumption that eliminating the possibility of a first strike prevents potential conflicts, has explored strategies to deter the launch of a first strike.
- 2. The second category of literature has addressed the issue of polarity and stability in the international system (Wohlforth, W. C., 2014; Waltz, K.N., 1964; Haas, M., 1970; Kupchan, C., 2021; and Schelling, T. C., & Morton, H.H., 1961). This body of literature takes a historical perspective but seeks to explain stability in terms of the system's poles. Their assumption focuses on the degree of power parity among actors, holding the belief that the closer the power of the poles to one another, the greater the level of stability.
- 3. The third category of literature links stability to deterrence and balance (Harvey, F. P., 2003; Roberts, B., 2013; Acton, J. M., 2013; and Arbatov, A., 2021) and attempts to explain the issue of stability from a theoretical perspective. From their viewpoint, the failure of deterrence and balance equates to the failure of stability, and they adopt a theoretical approach to the subject.

The present research, drawing on the existing literature in this field and focusing on the assumptions of the hegemonic nature of the international structure and the complexity of international issues, seeks to explain the theoretical and conceptual foundations of strategic stability in a complex and changing world, as well as the influence of environmental changes on actors' strategies. Accordingly, this study addresses the issue both from a theoretical dimension and a strategic perspective.

Theoretical Foundations

The Cascading Model and Strategic Stability

One of the fundamental issues regarding strategic stability is the origin and source of systemic instabilities. Currently, political theorists do not have a definitive answer to this question. It appears that there is a reciprocal relationship between instability and political crises. Although crises in the international system are mostly the natural result of fundamental imbalances and structural disequilibrium (Corsetti et al., 1999), their occurrence also leads to structural instability. From a cascading perspective on strategic stability in a complex environment, actors are categorized into four groups:

- 1. Strong leader
- 2. Independent creator
- 3. Flexible adjuster
- 4. Obedient servant

The strategies of actors in strategic stability also vary and include strategies focused on the following:

- 1. Focused on costs
- 2. Focused on outcomes
- 3. Focused on time
- 4. Focused on the involved actors

These strategies are classified into four types:

- a. Offense
- b. Defense
- c. Futurism
- d. Analytics

"Offensive strategies" are suitable for turbulent environments, while "defensive strategies" are appropriate for calm environments. In the cascade model and from a strategic perspective, strategic alignment in stability becomes very important. To achieve strategic alignment, different viewpoints such as the rational view, the incremental view, and the holistic view exist. The rational view adopts a top-down approach. Stability at lower levels is based on stability at higher levels. Of course, in this case, any instability also propagates to lower levels (Arbabi, et al., 2019: 24-25).

Furthermore, in strategic stability, considering the cascade perspective, the theory of "strategic reference points" (Arbabi, et al., 2019: 26) is proposed.

Strategic reference points are points of alignment, and if all elements and systems within a region coordinate themselves with it, a comprehensive balance is created (A'rabi and Chavoshi, 2010). Based on this, the United States, as the international hegemon, from the late 1960s onwards, concluded that solely focusing on eliminating the incentive to use nuclear technology for strategic stability was insufficient. Instead, the United States needed to be able to maintain not only the capability but also determination to use nuclear weapons in a minimally rational manner initially (Kalbi, 2013: 51). These discussions did not end with the conclusion of the Cold War; rather, with the reduction of the U.S. conventional military power gap alongside the emerging China, the proliferation of nuclear and advanced conventional weapons has gained renewed importance. The fact that the likelihood of a major war between great powers remains plausible underscores the importance for major actors to pay attention to strategic stability, given this persistent possibility.

According to the cascading theory, the valuable concept of stability must encompass the fundamental foundations of the concept of first-strike stability. However, first-strike stability alone is not sufficient to establish true stability. There are two reasons why first-strike stability is inadequate:

First, the "complete elimination" of incentives to use military capabilities undermines the deterrence system and increases the risk of conventional wars.

Second, a more realistic issue is that such a strategy is dangerously deceptive in today's complex world and, in fact, it not only increases the likelihood of initiating a war, but also of its escalation and turning into a nuclear war (Kalbi, 2013: 52).

In other words, just because a nation believes in the marginalization of nuclear weapons does not mean that others do as well. This is rooted in the fact that, at different times, both Americans and Russians emphasized nuclear forces for deterrence against each other (Gatz, 2010). Therefore, as long as preemptive strategies and accidental wars are based on the assumption of preventing an attack in progress, strategic stability is not achieved by minimizing the incentives for the use and deployment of military capabilities. Such a framework not only encompasses methods of

preventing the use of nuclear weapons but also includes legitimate ways of their utilization (Kelbi, 2013: 54).



Fig. 1. Cascading model and strategic stability (author's findings)

In this context, strategic stability refers to a condition in which neither party has an incentive to use nuclear weapons, except to demonstrate their vital interests in extreme security situations. Therefore, in a state of strategic stability, a nation neither needs to utilize its destructive military capabilities nor has any motivation to do so other than deterrence against the opponent. By integrating the traditional concept of first-strike stability and based on the assessment that vulnerability depends to some extent on retaliatory measures, there is no fear of being disarmed and beheaded on the one side, nor any ambition to achieve military advantages through disarming attacks, on the other side.

Methodology

This research, utilizing existing works and adopting a realist approach with a focus on the concept of systemic order and complex systems, aims to explain the issue of strategic stability within complex international systems. Accordingly, part of the study employs a deductive method to elucidate the problem of stability in a complex situation, utilizing a cascading model to illustrate it. Another part, with an applied purpose, adopts a descriptive-analytical approach and qualitative methods to propose strategies for international system actors to achieve stability, considering the dominance of complex conditions.

Research findings and data analysis Research findings

Waves of Strategic Stability and Instability in the International System

The nature of international politics is such that some historical periods are characterized by high strategic stability, while others tend toward instability and are accompanied by intense tensions. Although each of these periods can be distinguished by their specific historical conditions, but generally, certain particular circumstances govern the international system, making it more susceptible to instability. At the same time, there are rules that govern the system, guiding it toward a minimal shift toward relative strategic stability (Foerster, 2018: 6).

In general, four significant periods in international politics over the past 500 years can be distinguished, each leading to the collapse of the systemic order. Each of these periods was characterized by systemic efforts to return to stability, with varying outcomes:

- a. During the 16th and 17th centuries, systemic instability culminated due to brutal and violent religious conflicts in Europe, exemplified by the Thirty Years' War. The Peace of Westphalia (1648) laid the foundation for the modern nation-state system and established a set of norms and principles that ultimately led to a period of stability in the international system. This stability persisted for over a century, resisting systemic challenges by major powers.
- b. The French Revolution (1789) and the rise of France to power with the advent if Napoleon led to a period of structural violence. After Napoleon's defeat, the Congress of Vienna in 1815 created a new political order that brought stability but also sowed the seeds of future instability within the system itself (Modleskim, G. 1978).
- c. The emergence of the German state in 1871 disrupted the balance of power in Europe, resulting in intense negative competition and mistrust among major powers. This period of instability eventually led to the outbreak of World War I. The collective power of the great nations led to the creation of the United Nations, restoring a new era of stability, however, the bipolar stalemate of the Cold War demonstrated that the international order remains challenged by both stability and instability simultaneously (Foerster, 2018: 6).

It is noteworthy that although cycles of stability and instability are intertwined within the international system, the fundamental principle underlying the system, despite the variability of the system and the dominance of the principle of anarchy over it, is based on systemic order. Systemic order encompasses periods of both stability and instability (Szostak, R., 2017: 66). Therefore, considering this issue, systemic instabilities are not regarded as anomalies within the system but rather as a natural flow of events, and they constitute one of the principles for achieving systemic orders. Therefore, from the perspective of international theorists and strategists, whose approach is grounded in reality and tangible principles, external strategies that acknowledge natural instability can lead to the establishment of strategic stability. Conversely, efforts to eliminate natural instabilities unintentionally result in broader systemic instability. Accordingly, understanding the sources of instability is a fundamental issue; in a complex and ever-changing world, managing these natural sources—rather than artificially controlling them—is of great importance for actors seeking strategic stability in foreign policy.

New technologies, uncertainty, and strategic stability in a changing world

The impact of modern technologies on strategic stability is a fundamental enigma in international relations. Currently, the issue of existing uncertainty regarding strategic stability and the influence of actors' strategies on this uncertainty, as well as its outcomes on strategic stability, is considered a central matter in strategic discussions. Some scholars believe that technological uncertainty creates strategic instability. This group argues that new technologies lead to the following:

- 1. Doubt about regimes' intentions (Glase, C. L., 1997),
- 2. The capabilities of actors (Glase and Kaufmann, C., 1998),
- 3. The general balance of power (Mearsheimer, J., 2001).

The result of these issues ultimately leads to strategic instability and gives rise to the following problems:

- a. Security Dilemma (Quester, G.H., 2002),
- b. Arms Race (Glaser, 2000),
- c. Aggressive Thinking (Snyder, G., 1989),
- d. Asymmetric Information (Reiter, D., 2003).

Technological uncertainty leads to an increase in preemptive military strategies due to the fear of initial destruction. If an actor believes that they have the capability to destroy the opponent with the first strike and will not face a second response, they may have a very high incentive to undertake a preemptive action (Cunningham, F. S., & Fravel, M.T., 2015). Moreover, vulnerabilities in the military system of actors who are concerned about reliably controlling and

defending against an initial strike and maintaining the capacity to deliver a second strike are highly dangerous. Technology exacerbates this issue, and the emergence of new threats such as electronic warfare increases the motivation for preemptive attacks.

The second group of scholars believes that uncertainty in emerging technologies poses the most dangerous consequences for strategic stability. They argue that the symmetry of uncertainty in the complex international systems, combined with advancements in cyber and informational domains, leads to further incentives for destabilization and strategic instability. From their perspective, technological uncertainty encourages states to develop advanced weapons, thereby increasing the likelihood of unintentional or accidental escalation (Unal, B., & Lewis, P., 2018). Furthermore, uncertainty fosters fear and motivation among actors on the international stage (Levite, A. E., et al., 2021), resulting in ambiguity regarding the intended use of designed weapons—whether for offensive or defensive purposes—which can cause even cautious states to become involved in conflicts (Jervis, 1976). Additionally, uncertainty may lead to misplaced and excessive trust, which can, in turn, increase the chances of preemptive actions and escalate unintended measures (Mitzen, J., & Schweller, R. L., 2011).

Evidence from war games indicates that the onset of war is often driven by actors' overconfidence in each other and individuals' desire to achieve certainty and trust through preemptive strikes, stemming from fears and concerns about the opponent's actions (Johnson et al., 2006). Accordingly, emerging technologies, when they lead to uncertainty about victory, are not necessarily dangerous to systemic stability. Instead, it is when trust or confidence in victory is pursued through a first strike that such actions become tension-inducing. This uncertainty and conflict give rise to an important empirical dilemma regarding cyber actions and the escalation of measures. Despite the hypotheses related to cyber activities and their intensification, cyber actions are not inherently destabilizing; in many cases, they create incentives for actors to exercise restraint, thereby contributing to strategic stability (Gomez and White, 2021). This issue has

led to the emergence of a third group of scholars focused on the problem of uncertainty and strategic stability.

The third group of scholars focuses on the concept of uncertainty and argues that emerging technologies create limitations and deterrence. This group believes that uncertainty in cyberspace is more likely to lead to restrictions on actors' actions rather than tensions. Conversely, overconfidence in cyber capabilities and neglecting the understanding of existing vulnerabilities in this domain can result in deliberate and direct attacks aimed at achieving military objectives rather than political-diplomatic ones (Carter et al., 1987: 7).

In general, technology, war, and uncertainty about outcomes lead to the emergence of three hypotheses regarding bold actions in complex situations.

- The first assumption is that the lack of confidence in reciprocal actions leads to war and instability. From this assumption, the theoretical premise is derived that cyber vulnerabilities generate fear and concern, which in turn lead to preventive measures aimed at minimizing the impact of a first strike vulnerability.
- The second assumption is that uncertainty results in deterrence and restrictions on actions. This premise indicates that uncertainty regarding the success of actors leads to a reduction in bold actions, thereby contributing to strategic stability.
- The third assumption is that false confidence and trust lead to instability and war. This premise encompasses the idea that overconfidence in military capabilities can provoke provocative and daring actions, and also cause neglect of vulnerabilities. This situation may result in attacks from rivals (Schneider, J., and Shaffer, 2023: 639).

Strategic Stability and Nuclear Weapons: The Paradox of Stability and Instability

In the current complex situation, three fundamental variables affect strategic stability, as illustrated in the following figure:

- A. Deterrence
- B. Crisis
- C. Arms Race



Fig. 2. Fundamental variables influencing strategic stability in a complex situation (Losquez et al., 2021: 11)

One of the strategic issues in complex situations relates to nuclear weapons and strategic stability. Nuclear weapons play an important role in strategic stability alongside politics, economy, security, geography, history, and culture. Successful nuclear deterrence can lead to unconventional strategic stability. One of the reasons for acquiring nuclear weapons is to compensate for or correct the military imbalance in conventional forces (Lusqoez et al., 2021: 12). However, this does not result from simple mechanical power relationships. Conventional forces, by helping to establish conventional deterrence, serve as a vital component of overall deterrence and strategic stability. Strong conventional forces prevent the rapid use of nuclear weapons, whether to end a war quickly or to influence the overall outcomes of a conflict (Lusqoez et al., 2021: 11).

The crisis stability problem arises when one of the rivals is pressured into taking military action. Crisis stability refers to the factors that influence the balance between two competitors and their ability to overcome a crisis and maintain the status quo. Minimizing risky and hazardous actions is one of the key features of crisis stability under the nuclear threshold. During the Cold War, this effort prevented a nuclear war between the superpowers. Arms race stability is another concept within strategic stability, which refers to the factors that determine how the accumulation of military capabilities contributes to stability or instability in the relations between actors.

Generally, strategic stability is neither a natural state nor an irreversible condition. The inevitable imbalances and uncertainties in any relationship, especially multilateral ones, mean that increased instability is more likely to occur (Luscoez et al., 2021: 12). Nuclear weapons lead to the erosion of stability by encouraging limited conventional conflicts and creating conditions for localized confrontations. Strategic designers and scholars

refer to this phenomenon as the stability-instability paradox. Evidence of this can be seen in the actions of India and Pakistan (Chipman, J., 2018).

The paradox of stability and instability is introduced to understand the relationship between conventional and nuclear levels of warfare. Snyder distinguishes between overall stability and sub-level stability. He acknowledges that hypotheses of stability and instability may dominate, but stability must be strongly confirmed by a second strike, as nations fear the escalation of tensions during a crisis and are also wary of using their full capabilities for a first strike (Snyder, 1965: 199). He states that although strategic-level stability can reduce lower-level stability, the threat of escalation can prevent violence at lower levels. Therefore, strategic-level stability has both effects: it increases the risk of instability at lower levels (due to the potential for escalation) and also enhances the likelihood of stability at those lower levels. Additionally, Snyder considers the impact of conventional balances on nuclear stability, viewing it as having both positive and negative aspects, within which stability and instability are embedded (Rajagopalan, 2006: 5).

Generally, the stability created by the deterrent effect of nuclear deterrence reduces interstate conflicts but strengthens support for organized sub-national groups. Since conventional conflicts are fraught with the risk of escalation, parties tend to exploit internal conflicts and disputes of their opponents (Ganguly, S., 1995: 326). For example, the availability of nuclear deterrence encouraged Pakistan to intervene in Kashmir through covert operations, increasing cross-border activities and proxy wars (Chari, 2001: 21). Pakistani leaders, arguing that the threat of nuclear escalation prevents a conventional attack by India on Pakistan, have adopted a strategy of limited conflicts against the Indian government in Kashmir and Jammu (Kapoor, 2005: 143).

Data analysis

Strategic Stability and Challenges for Actors in a Changing World

Strategic stability is a fragile (Colby, E. A, and Gerson, M.S., 2013) concept in a changing world that can be achieved through various methods. The essence of strategic stability lies in reducing actors' incentives to launch a first strike while simultaneously increasing their confidence that they are capable of executing a second strike. Under such conditions, actors responding to a crisis face very low pressure, reacting quickly to incomplete information or deploying their own forces in a way that may

unintentionally provoke the opponent. In fact, strategic stability refers to the likelihood of deliberate, accidental, or unauthorized use of highly destructive weapons. Therefore, based on the logic of strategic stability, there exists a range of behaviors and objective conditions that threaten strategic stability in complex situations, which are described as follows:

- 1. Strategic weapons that are highly vulnerable during the first strike;
- 2. Weapons that are prone to accidents and incidents;
- 3. Early warning systems with a high rate of false alarms;
- 4. Unreliable and untrustworthy command and control systems;
- 5.Strategic weapons that have lost value due to technological and technical advancements;
- 6. Rapid decision-making systems;
- 7. Delegation of launch authority, which complicates weapon control during crises or war;
- 8. Weapons that rely on surprise for effectiveness (Koblentz, 2014: 19).

Overall, three processes in the current complex situation lead to disruptions in strategic stability:

- A. The emergence of a security triad among nuclear-armed actors,
- B. The expansion of non-nuclear technologies with potentially strategic effects,
- C. The destabilizing balances between nuclear-armed actors such as India and Pakistan in South Asia.

Each of these dynamics is concerning, but their combination is destabilizing. These three trends not only pose immediate risks to strategic stability but also, in the long term, are highly dangerous and hinder multilateral arms control in the future (Koblentz, 2014: 19).

Security triad and strategic security

The second nuclear age led to the emergence of a new paradigm of deterrence. In the classical context, a rival state's retaliatory action in response to perceived threatening efforts by another actor to increase its security would only result in the other state's perception of insecurity. In the second nuclear age, most nuclear countries perceive threats to their security from more than one source and reference. This transformation is what is called the security trilemma, which reflects the third state's sense of insecurity regarding the defensive actions of one actor against another rival (Brooks, L., and Rapp-Hooper, M., 2013).

Accordingly, the overlap of mutual deterrence relationships among nuclear states has the potential to induce changes in a state's capabilities or intentions, as well as cascading effects on other nuclear countries. Therefore, the security trilemma functions as a transmission belt through which technological advancements can lead to significantly broader strategic consequences (Koblentz, 2014: 20).

For example, the United States claims that the development of its missile defense system and long-range strike capabilities is motivated by threats from Iran and North Korea. However, China and Russia perceive these systems as potential threats to the survival of their strategic nuclear forces. China's responses to these developments include modernizing its nuclear forces and developing missile defense and anti-satellite capabilities, which in turn have prompted India to react, leading to serious concerns in Pakistan (Koblentz, 2014: 21).

Technological developments and strategic stability

Although nuclear weapons were the ultimate armament during the Cold War, in today's complex world, other emerging technologies are capable of replicating, compensating for, or reducing the strategic effects of these weapons (Kristensen & Korda, 2019: 252).

Today, a range of non-nuclear technologies have appeared, including missile defense systems, anti-satellite weapons, long-range precision strike systems, and cyber weapons, which have the potential to undermine strategic stability. The technologies mentioned pose challenges to strategic stability at different times:

- 1. Short-term (missile defense),
- 2.Medium-term (anti-conventional force and anti-satellite weapons),
- 3. Long-term (cyber weapons).

Although some of these capabilities are years away from deployment and others are used only in limited ways, it is natural for military planners to make the worst-case assessments by predicting future technological advancements or widespread deployments. This dynamic of action-reaction cycles and the zero-sum collective mindset reinforces a security triad (Koblentz, 2014: 21).

Missile defense

"Missile defense" can lead to a reduction in strategic stability for two reasons: limiting a country's ability to inflict unacceptable damage on an attacker after enduring a first strike, or providing a platform for strategic rivals to engage in an arms race. The Anti-Ballistic Missile Treaty of 1972 was established for this purpose, aiming to reduce the threat to strategic stability between superpowers and focusing on prohibiting the deployment of missile defense systems (Platt, 1991: 229).

In 2002, the United States withdrew from the ABM Treaty and began deploying a national missile defense system to protect against long-range missile threats on a global scale (Carter and Schwartz, 2010: 2).

Currently, the United States has adopted a combination of land-based and sea-based missile defense systems to counter short, medium, and intermediate-range missiles. However, the U.S. emphasizes that the development and deployment of its missile defense are primarily designed to counter regional actors' threats, such as North Korea, and are not intended to threaten or pose a threat to nuclear forces of Russia or China (Karako, T., 2019: 5).

Anti-satellite weapons

Anti-satellite weapons can lead to the weakening of strategic stability in two ways:

- First, they have the capability to destroy the opponent's warning satellites, which are used to detect initial ballistic missile attacks.
- Second, these weapons can threaten space-based command and control systems for nuclear forces.

In other words, these weapons are capable of increasing concerns about the prospects of an initial unknown attack on nuclear forces and also complicating a government's ability to control, limit, or end the conflict after it has begun. Currently, only Russia and the United States utilize satellites for these purposes, although China and India are developing more advanced military satellite capabilities that may eventually include early warning and command and control functions (Koblentz, 2014: 23).

Anti-conventional Weapons and Strategic Stability

In the first nuclear era, uncertainty about the precise location of targets, limited accuracy of alternative systems, and the low effectiveness of

substitute weapons meant that nuclear weapons had a significant impact on the opponent's resolve and the outcomes of conflicts. The revolution in military affairs led to anti-conventional forces: the ability to use precise conventional weapons to destroy targets that previously required nuclear weapons for elimination. Essentially, anti-conventional weapons pose four risks to strategic stability:

First, a conventionally armed intercontinental ballistic missile (ICBM) has the same characteristics as nuclear weapons (Koblentz, 2014: 24). Since both nuclear and non-nuclear weapons can be mounted on the same platform, the ambiguity of warhead status complicates the situation further. Ballistic and cruise missiles equipped with conventional weapons can be mistaken for nuclear-armed missiles, potentially leading to nuclear retaliation (Trenin, 2019: 4).

The second danger is the weakening of deterrence stability. These missiles enable an attacker to launch a first strike against enemy nuclear forces without resorting to nuclear weapons (Koblentz, 2014: 25). In such a scenario, even if the attacker possesses a highly effective missile defense system with advanced interception capabilities, this would be destabilizing.

The third issue is that using conventional missiles against the forces of a country with nuclear weapons could be interpreted by that country as an attack on its nuclear forces, thereby escalating tensions.

Fourth, the development of this new type of capability might trigger an arms race driven by the appeal of new military technologies, imitation of the world's greatest military powers, or the need for a deterrent factor (Koblentz, 2014: 25).

Strategic stability and strategies of actors in a changing world

As previously discussed in earlier sections, in a complex and everchanging world, stability does not mean the absence of change. Instead, it involves deliberate, thoughtful, evolutionary, predictable, and manageable changes (Forster, 1989: 5-6). Therefore, strategic stability does not imply the belief in a static condition. Rather, it refers to a relatively minimal, dynamic, and interactive state within an environment characterized by constant threats surrounding its elements. This definition also encompasses three additional characteristics (Forster, 2018: 3).

- First; Stability does not necessarily entail the absence of threats; rather, in a state of strategic stability, threats do not rapidly change their form or nature.
- Second; An increase in security threats does not inevitably pose a threat to the stability of relations between actors; security threats can escalate, but in an evolutionary manner, and actors targeted by these threats are capable of responding in an adaptive and appropriate way.
- Third; Evolutionary changes in a stable relationship can accelerate and take on an revolutionary characteristic, and then, with reduced reaction time, transform a stable relationship into an unstable one. Therefore, taking action without an appropriate reciprocal response can turn a stable security relationship into an unstable one.

For nearly four centuries, strategic stability was based on the Westphalian principles of non-interference in the internal affairs of other sovereign states and the balance of power. These two principles historically contributed to stability when great powers believed that the existing order served their interests and refrained from imposing their values on others. Additionally, they tended to avoid going to war unless their balance was challenged by other actors. These principles operated differently during the Cold War and afterward: superpowers balanced each other, but they did not consider the existing order legitimate. Their primary concern was maintaining the current system solely out of fear of destruction due to nuclear technologies.

Currently, strategic stability is deeply connected to the flexibility and resilience of the actors involved. Furthermore, due to the importance of self-restraint towards the opponent, even during conflicts confrontations, the ability to maintain communication with the adversary during times of tension is a crucial and vital principle for achieving strategic stability. Accordingly, establishing communication with the opponent is considered a very important element in attaining strategic stability (Trenin, 2019: 8). Actors initiating limited attacks must be able to clearly define the scope of their limitations to the enemy. A key issue in strategic stability is minimizing destabilizing factors, which aligns with deterrence requirements. Additionally, missile defense at tactical levels such as defending military bases—plays a significant role in maintaining strategic stability between countries, and its prerequisites include possessing a high level of military power (Manken and Maiolo, 2008: 141). This concept of strategic stability has specific and distinct implications for the strategies of actors on the international stage.

The core principle of this concept of strategic stability is that the fundamental capability of strategic actors as a whole to withstand a first strike and to respond decisively and destructively is guaranteed. This capability provides the ultimate foundation for deterrence, as it ensures that any gains achieved through aggression can be countered. The diagram below illustrates the conceptual and fundamental developments in strategic stability and their implications for the strategies of the actors.

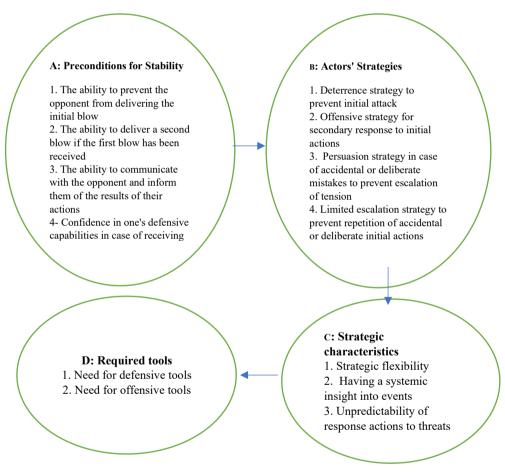


Fig. 3. A general schematic of strategic stability and actors' strategies in a complex and changing world (author's findings)

It can be noted here that the greater the power of the actors, the higher the likelihood of stability. High power has two main effects on strategic stability:

- 1. It leads to rational behavior of the actors in critical situations.
- 2. High destructive and destructive power prevents long-term and prolonged conflicts between actors, and if such conflicts occur, they tend to end quickly.

Conclusion and recommendations

The current world is in the midst of the second nuclear age, which combines the dangers of the first era with a new set of challenges. In this period, emerging powers, actors opposing the existing order, and regional rivals alongside nuclear actors are all striving to expand and strengthen their military forces. Accordingly, unlike the first nuclear era, which was characterized by global strategic stability, the second era has more diverse roots and greater local consequences. Today, the shift in perspective regarding the implications of strategic wars, the concepts of strategic parity, and strategic balance—policies that were pursued by the traditional nuclear strategies of the Soviet Union and the United States during the Cold War—has become meaningless. Numerical parameters of the past have lost their significance, and emphasis has shifted from the ability to deter a first strike and retaliate to a brutal parity among power poles. Moreover, one of the most urgent and concerning challenges to strategic stability in this context is the diminishing distinction between conventional and nuclear weapons, as well as the barriers to the use of nuclear weapons; especially for countries like Russia and Pakistan, which not only place significant emphasis on their nuclear arsenals as tools of security policy but also seem to believe that, in some cases, they can carry out limited nuclear attacks without provoking nuclear retaliation.

In general, in the current complex situation, considering the high level of sensitivity and vulnerability of system elements, actors are capable of maintaining strategic stability during a crisis by refraining from responding to provocative actions by the opponent. The ability to delay response is reinforced by the actor's confidence and trust in the ability to inflict retaliatory strikes. Conversely, instability can stem from the perception or lack of certainty that one side is gaining advantages by seizing the initiative.

It appears that, given the concepts of stability and the challenges surrounding it, there is no simple solution to how to establish stability in the existing complex environment, especially considering the perspectives of superpowers. Therefore, to achieve stability, the foreign policy strategies of actors should consider the following points:

- 1. This is not a Western or American issue; it is a systemic issue that also encompasses international regimes.
- 2. Maintaining a stable systemic strategic environment requires a comprehensive political, economic, social, diplomatic, and military strategy designed to achieve this goal.
- 3. Since global trends significantly influence systemic stability, stability strategies must quickly adapt to changing geopolitical, economic, and demographic realities.
- 4. A balance should be struck between defending through military power and seeking a more stable political environment. Accordingly, military security and détente are not contradictory but complementary. Such strategies can include a wide range of arms control and joint security measures designed to strengthen stability in nuclear and conventional military domains. They can also encompass broader issues such as managing destabilizing arms technologies, managing ongoing conflicts (such as in Georgia and Ukraine), non-interference in internal affairs, human rights, and energy security.

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