The Possibilities for Mutual Deterrence: A Russian View

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Military-political changes after the end of the Cold War have forced a rethinking of certain fundamentals for safeguarding international security and stability. One of the most dramatic changes was that the world's geopolitical system was no longer bipolar. The structure is now mono-polar with the United States clearly in a leadership position. The United States has taken on the moral and political responsibility for the democratic development of the world community. Putting such a new world model in place could take a considerable amount of time and may require a serious and practical confirmation of the United States' capability to cope with its new historic responsibility.

This concept of a new world model is not as simple as it might seem, even for such a powerful country as the United States, and probably will turn out to be impractical. It is doubtful that the United States alone can withstand the colossal burden of responsibility (including the financial costs) for the world's fate. Therefore, any significant results in the area of international security and stability will require the involvement of other members of the world community and other centers of power that are rapidly gaining strength. These centers have separate significance and certain specific interests and approaches which differ from those of the United States. Countries in this group include Japan, Western Europe, and China. Their dynamic development makes it possible to say that at the beginning of the 21st century, rather than a mono-polar world structure, we can expect a multipolar structure in which international security relations will be quite diversified.

The new Russia, which has undertaken a radical restructuring of the fundamentals of its existence, now finds itself in an especially vulnerable position and needs to create the minimum conditions necessary for the successful implementation of the reforms that were begun a few years ago. It is precisely for this reason that safeguarding security becomes an especially important national goal for Russia. Weakened by the loss of its former power, which had been artificially created through gigantic sacrifices and the labor of several generations, and not yet having found its new place in the world, Russia has become an attractive objective for external forces that seek to exploit a convenient moment to strengthen their geopolitical positions.

The troubles that Russia is experiencing have noticeably weakened the country, a situation that should not increase US confidence in its own security. For example, immediately after Russia's 1993 State Duma elections when, to the surprise of many, the country's militarily inclined national patriotic forces scored an impressive victory, some people in the United States became seriously concerned about the prospects for the development of Russian-American relations and the military-political situation in the world.[1]

The foregoing considerations prompt a new look at the correlation of forces in the world, and a reassessment of various national methodological approaches and differences in capabilities. This will require the development of an appropriate strategy for a strong world security system. One such strategy calls for greater reliance on mutual interdependence, a possibility offered by the growing automation and networking of many aspects of life in society and the state. The goal of such a strategy is to create a balance of interests. Conversely, however, the military forces that would assure a balance of interests are themselves out of balance. This conclusion can be demonstrated through an objective assessment of deterrence capabilities: nuclear forces, general purpose forces and associated conventional weapons, reconnaissance and information management capabilities, special research assets, and geopolitical strength.

Global interdependence and the integration of states make the problem of security an international one. Transition from a mono-polar world to a scheme in which there is a balance among several strong states will not be easy or swift. This is especially so when there exists a more or less deep imbalance in bilateral relations between an indisputable
leader--the United States--and any alternate center of power, including those which have just started on the path to
democratic development. The prospect for a future multipolar world means that there can be no equal, paired
opposites, such as the USSR and the United States in the past. Therefore, stability can be supported only through a
"balance of interests" of governments within the framework of this evolving geopolitical model of the world. In such a
framework, deterrence can be achieved synergistically only through the systematic interaction of all interested states.

A preliminary conclusion for Russia is that it cannot strive for parity to create the preferred balance of force with its
competitors. It must evaluate realistically its own force potential and determine how to develop an asymmetric
configuration to support its deterrence mission. Russia must transform its international relations from a balance of
force to a balance of interests.

Geopolitical Factors of Deterrence

New possibilities for measuring the balance of power among nations are closely linked to other approaches which can
be used to assess the role geopolitics plays in the development of an international security system. Today, rather than
assessing geopolitical factors in the traditional way by looking just at territorial divisions, we should now start thinking
of geopolitics as both the theory and practice of a "space-time" organization of all the different types of development
resources a given geopolitical entity has at its disposal vis-à-vis other geopolitical entities.

As with any reexamination of the principles on which national strategy rests, change creates a series of new
challenges:

- An optimal geopolitical evolution for any state is possible only through a balance among all types of resources,
  including information, nuclear, and conventional forces, along with the traditional social, political, and economic
  elements of national power.
- If there is an imbalance in the totality of all such resources, then it is especially important to identify your own
  and your prospective opponent's so-called "centers of gravity," which are construed as those elements of each
  national system upon which the system's overall stability depends. A threat of action against those elements then
  serves as the strongest possible deterrent in a crisis; designation as a center of gravity increases correspondingly
  the importance of defending that element.
- The geopolitical behavior of any subject is determined not by a reactive model--which is simply a stimulus-
  response interaction with the external environment--but rather by a proactive model: an initial predisposition on
  the part of the subject for proactivity of a specific type, force, and direction.
- Proactive models--stereotypes--of geopolitical behavior may be "extensive" (for some countries and certain
  historical conditions), or they may be "intensive."[2]
- Today, the "intensive" method of organizing developmental resources is increasingly becoming the method of
  choice. The transition to such a model takes a long time, however; thus, conscious management of this process,
  based on sophisticated geopolitical reflection, is particularly desirable.
- One may speak of a combination of the two stereotypes both for a single geopolitical subject, and for the
  relations between various geopolitical subjects.[3]

It is precisely in the last instance that understanding the capabilities for mutual deterrence becomes especially
important.

Studying the problem of mutual deterrence is especially important right now for all members of the world community.
This type of work gains special significance if it is carried out through the joint efforts of US and Russian scientists,
and if it addresses the vitally important topic of safeguarding national and international security by implementing a
plan for deterrence under new conditions, given emerging changes in the world and the risks inherent in a prolonged
imbalance of power. These conditions will determine, for the foreseeable future, a transitional stage in human life.
How they are addressed will shape its future character.

Growing Importance of the Information Component of Nuclear Weapons

In the Russian view, the counterforce assault variant for the use of nuclear weapons is based entirely upon the
correlation of forces between the sides. This correlation considers not only the quantity of vehicles or nuclear
warheads but also the number of warheads with individual guidance systems; the payload criteria, which currently is
not widely used in theory or practice; and the "counterforce assault megatonnage" (KMT), which includes both the
power of the charge (explosion) and the precision of its delivery on target. The last component--precision--is greatly
improved today due to perfections in the information component of the weapon.

Analysis of counterforce assault megatonnage shows that the effectiveness of modern weaponry is determined, in
considerable measure, by its information component, which is reflected in the precision of guidance. The power of its
charge, while important, has a less significant influence on a weapon's effectiveness. Thus an increase in precision by
a factor of two is the equivalent of an eight-fold increase in the power of the charge. In addition, measurement of KMT
does not reflect the current direction of the development of armed conflict nor the elements needed to attain a military-
strategic balance. KMT is relevant only when a warhead reaches a target by a time that does not exceed that which is
critical for the given type of target, and when the weapon's guidance and internal intelligence gathering systems work
together in a reliable manner. Hence the quality of counterforce assault is a direct function of the weapons' information
component.[4]

It follows that within the character of modern nuclear warfare the most important factor becomes attaining an
advantage in the information struggle. Therefore, we can emphasize that the traditional analysis of the problem of
strategic balance, using only the quantitative/qualitative characteristics of forces, is clearly inadequate. It can give
completely different, even incorrect, results compared to those that would come from more realistic calculations which
include the effects of guidance systems, communications and intelligence, and the effectiveness of one's own methods
for neutralizing an opponent's systems for commanding his forces and controlling his weapon systems.

The foregoing suggests the importance of the information component of nuclear weapons. The concept can also be
applied to measure the effectiveness of conventional weapons.

The Information Component of Conventional Weapons

The selection of criteria for correlating strategic forces usually comes from calculations of strategic offensive (nuclear)
forces sufficient to inflict unacceptable damage upon the aggressor. There is an analogous way to correlate strategic
forces when conventionally armed general purpose deterrent forces are to be used. It uses a slightly different
methodology to calculate the threshold of deterrence. The proliferation of highly accurate weapons--the so-called
"smart weapons," whose destructive capability nears that of nuclear weapons--makes this analogy even more relevant
to the issue of deterring information assaults on sovereign states.

In order to exploit the basic qualities of strategic smart weapons with conventional munitions, one must study very
thoroughly each possible opponent with a goal of exploiting force vulnerabilities. Destruction or the disabling of such
force components would cause serious consequences for both the armed forces and the economy of an adversary,
thereby undermining the government itself. The careful selection of targets is especially important when the goal is
conserving the bulk of one's own air-space offensive capabilities.[5]

A problem of course exists, a very complicated one. First, this determination (targeting) is significantly complicated by
dynamic conditions, to include specialized capabilities of information conflict. Second, one needs a definite empathy
with the culture of the opposing state in order to determine which of the adversary's assets have the greatest value to
that state. Only then can one understand the real possibility of an adversary "sustaining a strike" from another state
whose own priorities in targeting differ from the valuations of national assets made by the adversary.

Such states should define precisely the axiological concept of deterrence. The question is not only the level of
unacceptable destruction, because the obvious tendency is to lower that level. Rather one must evaluate the level of
lost resources, beyond which neither side can afford to use force to attain strategic goals without the risk of
overextending their respective capabilities, with all the irreversible consequences that can follow.

Therefore, a sharp increase in the capabilities of intelligence- informational components of general purpose forces, or
the armed forces in general, allows for timely detection of direct preparation of an enemy for aggression. Recognizing
this fact has a serious deterrent effect on the potential aggressor, and objectively strengthens stability and the general
state of security in the world. The effects of the foregoing considerations, as they relate to the capabilities of deterrence
through nuclear weapons and conventional forces, have not limited the addition of information confrontation to the new system of international security in the post-Cold War era.

Whether in regard to nuclear or conventional weapons, there is a vast amount of special, information-based planning and coordination necessary for offensive and defensive force groupings. There is also a requirement to synchronize the complex activities of combat forces with the equipment of intelligence, warning, direction, communication, deception, radio-electronic warfare, special mathematical programming activity, and psyops against an adversary in order to guarantee success of specific operations or a general conflict.

**Information and the Deterrence Concept**

The role played by command and control, communications, intelligence and warning, electronic warfare, and special mathematical programming actions[6] in reducing the destabilizing effect of the developing imbalance in conventional weapons (as well as the general imbalance as a whole) has been mentioned above. However, considering the special significance of information-systems resources as a possible object of forceful action, they should be looked at separately.

In looking at the possibilities for deterrence in the area of information warfare, intelligence-information systems acquire particular significance. One may speak of the stabilizing effect exerted by the activity of armed forces intelligence information systems, providing conditions necessary for effective cooperation among states in order to reduce the level of nuclear confrontation and dangerous military activity, and for organizing effective monitoring of compliance with various treaties. The range of variables to be examined expands due to the more complete use of the geopolitical characteristics of states and the prospects for improvement in their information systems potential. At the same time a new factor is taking shape in the confrontation system of the new geopolitical groupings--the threat that an unacceptable level of harm could be inflicted on a state (or coalition of states) by means of a strike on information systems. The future direction of the development and refinement of ways and means to control strikes on information systems will come only through cooperation and through an expansion of the concept of interdependence, with primary emphasis on the concept of deterring information assaults.

**NOTES**

This article was translated from the Russian language for *Parameters* by Timothy L. Thomas, who notes that any errors in content may be the result of the translation, and not attributable to Colonel Modestov.

1. On the other hand, contemporary conditions open up a broad range of means and methods for providing security. The possibilities for combining these means and methods, the flexibility in these combinations, and a dynamic state of change in which means and methods replace one another offer fertile ground for interdependence among states and consequently a special environment for creative advances in Russian-American relations.

2. Intensive refers to a state focused on a single geostrategic direction and mounting an operation with all the means of national power toward a chosen target. Extensive refers to a state dealing with numerous interconnected or disassociated challenges where more than one geostrategic direction is involved. The author's subsequent emphasis on the first choice as becoming more popular reflects the current Russian shift from a global to a continental geostrategic posture.

3. The expression "geopolitical subject" refers to the ability of a state to shape the geopolitical environment without being acted upon, that is, becoming the object of another state's initiatives.

4. To measure the level of development of strategic forces and capabilities against different criteria, as reflected within the parameters of KMT, one must measure the functional quality of guidance systems, communications, and intelligence (KC3I), and also the effectiveness of measures to counteract the systems of combat control over the forces and weapons of the enemy (PCM). These parameters could be termed the "Counter Force Assault Potential" (KCP), and can be formulated (for strategic forces) by the following equation:
KCP = Nbb MT KBO KC3I PCM

Where: Nbb = the number of warheads
MT = megatonnage of the warheads
KBO = probable hit radius (accuracy radius) of the nuclear vehicle

5. It is hardly possible to agree with the position of S. Grigorov, who writes in his article "The New Strategic Course of Russia" (in the independent newspaper "The Independent Military Supplement," 13 January 1996, p. 4):

The very understanding of unacceptable destruction applies, in reality, only to situations concerning global powers capable of the mutual destruction of each other's governments or alliances. In truth, the question is about an extraordinarily complicated (but in principal solvable) mathematical computation of the number of targets which must be destroyed. . . . In conflicts of smaller dimension, calculation of unacceptable, for the enemy, destruction is not possible unless an absolute quantity of losses intended is converted into a value of results attainable by the use of force. Such a level of importance of targets is difficult to determine even for ourselves, not to mention for the other side.

6. Also deserving of scrutiny are the capabilities for influencing the human mind (manipulating the mass consciousness) with the help of information technology. According to reports in both the Russian and American press, a broad range of such methods already exists. The methods are being developed at a practical level--from exploiting the capabilities of ESP and the guided formation of a virtual world view, to neurolinguistic programming. However, the Central Intelligence Agency recently said it was suspending its funding of several such programs.

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