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THE "DECISIVE" FACTORS IN MODERN WAR

The Soviet theory that the next major war will be a prolonged struggle rather than a blitzkrieg which was expounded two years ago by Major General A.N. Lagovksy in his book Strategia i Ekonomika (Moscow, Military Publishing House of the Ministry of Defence of the USSR, 1957)¹ has since received further support from an article in Military Herald (June 1958)² by Colonel I.S. Baz. The argument is developed that even atomic and hydrogen weapons, IRBMs and ICBMs will not be able to destroy completely the armed forces of great powers and hence:

"While in the past major wars have been short or long, in our time all major wars inevitably assume a quite drawn-out character."

The acceptance of this thesis in the USSR makes it certain that the military-economic potential of the countries likely to be involved is still taken to be a decisive factor (see below pp.22-23). At the same time Khrushchev and the men in the Kremlin realize the great distances still to be travelled before they even approach the stage of "catching up with the U.S", as the slogans for the 7-year plan clearly show. It is this conception of real economic inferiority, for at least 12 years to come in Moscow's own judgement, which will provide an additional restraining influence on those Soviet strategists who since 1955 have been discussing the theoretical advantages of preemptive war.³

Moreover, as Dr. Garthoff has shown in the article below, while Soviet military thought regards strategic surprise as highly important to the outcome of a future war, it is not considered to be decisive, but only to confer a temporary and somewhat unreliable advantage on its user.

r.r.g.

¹ See Background Information, 14 March 1959, "Soviet Military Strategy" and Oleg Hoeffding World Politics, vol. XI, no. 2, Jan. 1959.

² See appendix below p. 1

³ Daily Telegraph, July 14, 1959.

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SOVIET DOCTRINE ON THE DECISIVE FACTORS IN MODERN WAR

By Dr. Raymond L. Garthoff
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The Soviet view of the factors which will decide a future war is of vital concern to the United States and to the nations of the free world. While there are many facets to this subject, a key one is the Soviet view of the essential nature of such a conflict, and particularly whether it will be long and dependent on basic power potentials, or can be concluded quickly.

It is evident that on such sensitive matters the Soviets are unlikely to disclose their full position frankly in published media, but we are greatly assisted in divining their thinking by what they tell their own senior officers. Moreover, these matters are, of course, a key and integral part of the over-all Soviet strategic conceptions in the nuclear era.

Before reviewing the development of current Soviet doctrine on the decisive factors in modern war, it may be useful to note as background one recent passage which presents well the Soviet conclusion on the crucial question of the duration of a future general war. It is taken from an article by Colonel I. S. Baz in the Soviet Army journal Military Herald (equivalent of the Military Review) in June 1958:

Technology of course quickens the pace of things, and generally speaking the appearance of new technical means creates now certain possibilities for achievement of victory in shorter times than before. Nonetheless, the armed forces of the two sides, and the scale of the arena of armed conflict under contemporary circumstances, are so great that one could scarcely conclude a war in a short period. Even the appearance of atomic and hydrogen weapons, and IRBM's and ICBM's cannot secure the swift destruction of such massive armed forces, and consequently not the conclusion of the war. Moreover, the use of these weapons by both sides will more likely lead to extending the duration of the war than to speeding it. Hence, while in the past major wars could be short or long, in our time all major wars inevitably assume a quite drawn-out character.

This is the Soviet image of future war. What, then, in the Soviet view are the key factors in determining its outcome?

Fundamental Factors

Soviet military doctrine emphasizes a number of elements which are termed the "decisive" or fundamental" factors (formerly termed "the permanently-operating factors") which, it

is said, "decide the course and outcome of wars." These factors represent the elements of national power which the Soviets believe in the final analysis play the decisive role in war.

It may be useful to begin by a review of the evolution of Soviet thinking on these basic elements. The "permanently-operating factors" were compiled originally by Stalin in Order Number 55 of 23 February 1942. This thesis served thereafter as an effective expression of Soviet military doctrine until 1956, and was widely repeated in Soviet military writings and by military leaders such as Marshals Zhukov, Malinovsky, Konev, Vasilevsky, and Sokolovsky.

The five "permanently-operating factors which decide the course and outcome (or fate) of wars," in the precise words of Stalin, were:

1. The stability of the rear.
2. The morale of the army.
3. The quantity and quality of divisions.
4. The armament of the army.
5. The organizing ability of the command personnel.

These permanently-operating factors were contrasted with transitory or temporary factors, which it was admitted might be significant at some stage of a war (especially at the beginning), and which might even affect importantly the course and outcome of the war, but which were not considered to be decisive in determining the ultimate outcome of a war. The most important of the transitory factors was surprise.

At the time the thesis of the permanently-operating factors was first-presented, it clearly served the purpose of bolstering popular and military morale by assurance that the German successes, based upon the exploitation of temporary factors such as surprise, were transitory and that the Soviets would ultimately win. And, in fact, the German expectations of the consequences of their surprise blow did turn out to have been exaggerated, and the Soviet (and Allied) basic strength did lead to victory. Again in the period from 1945 until Stalin's death in 1953, this thesis could be invoked for assurance that Soviet basic strength was not overwhelmed by the American monopoly, and later superiority, in nuclear weapons. These considerations doubtless contributed to the propagation and the ingraining of the explicit doctrine of the decisive role of the permanently-operating factors, although, in fact, the factors had been dominant in Soviet doctrine long before Stalin enunciated them in his "thesis."

During the Stalinist postwar ear, virtually all serious Soviet discussions of military science and Strategy, and most public and popular speeches and discussions of military affairs, invoked the permanently-operating factors. Since,

unlike most aspects of so-called "Stalinist" military science, this formulation was, in fact, apparently a contribution of Stalin himself, it was particularly moot whether the thesis of the permanently-operating factors would survive the modifications of military doctrine in the post-Stalin era. The evolution of Soviet views on this question since 1953 is of interest.

Post-Stalin Era

Marshal A. Vasilevsky delivered the first post-Stalin pronouncement on military science in an article in Pravda a few days after the dictator's death. It was, both in intent and in content, a memorial to Stalin. And in it Vasilevsky repeated the long-standard theme that:

The principle of the permanently-operating factors which decide the fate of modern wars, profoundly worked out by Comrade Stalin, is the key to a genuinely scientific materialistic understanding and use of the objective laws of war. This Stalinist thesis arms the Soviet people, its armed forces, with a clear and really scientific understanding of the necessary conditions which...in case of war, will secure victory over the enemy.

This statement may have been in part a reflex of the of the Stalinist period. But Vasilevsky -- then the senior professional officer (Bulganin having reassumed the Ministry of Defense, and Zhukov having become the second of three "First Deputy Ministers") -- repeated twice a year later in Red Star (February and May 1954) that Soviet (no longer "Stalinist") military science "is based upon the permanently-operating factors which determine the outcome of wars."

An article in September 1953, by Major General N. Talensky, which opened a debate on the nature and laws of military science, made explicit for the first time the view that the permanently-operating factors were not themselves the laws of military science. This modification was intended to strengthen the viability of the concept of the permanently-operating factors, and to facilitate its transition into the emerging post-Stalinist military science. General Talensky writing in Military Thought in September 1953 made quite clear that: "We are far from minimizing the great significance in principle for military science of the thesis of the permanently-operating factors." And in an italicized paragraph he emphasized that:

Victory in contemporary war is achieved by a decisive defeat of the enemy in the course of armed conflict...on the basis of superiority in the permanently-operating factors which determine the fate of wars...

The continued Soviet restatements of the decisive role of these factors has undergone several other modifications. In early 1954 it was usual for military writers to contrast

Soviet recognition of these factors with a nonawareness of them in Imperialist military doctrines. For example, Colonels S. Mazhorov and I. Tikhonov writing in Red Star stated that:

In contradistinction to bourgeois military theory, Soviet military science is based on the recognition of the decisive role in the conduct and outcome of contemporary wars of the permanently-operating factors...

Marshal Vasilevsky, in the statement cited earlier, and many other writers at that time, made the same point.

Shift in Doctrine

During the following year an interesting shift took place, reflecting the increasing awareness of the need to study foreign military thinking. A reprinting, with revisions, of an important article by a military professor, Major General N. Pukhovsky affords an excellent opportunity to judge this shift. General Pukhovsky's article, entitled "The Creative Character of Soviet Military Science," appeared first in the Military Herald, organ of the ground forces, in January 1954. It was republished in February 1955, in a collection of articles on various aspects of Marxism-Leninism in Soviet military science. A comparison of the relevant passage in the two printings is revealing. In early 1954 Pukhovsky had written:

It is well known that bourgeois military thought, because of class limitations, always regarded and regards the questions of conducting war only as questions of military art and in isolation from the economic and morale potentialities of the country. Only Soviet military science, with its thesis on the permanently-operating factors...placed these questions on a deeply scientific basis.

In early 1955 the passage was amended to read:

It is well known that contemporary bourgeois military science, in studying military, economic and moral-political questions, cannot give a scientific explanation of the laws governing war because it is based on an anti-scientific, idealistic world-view, and therefore its conclusions often are erroneous, adventuristic. Only Soviet military science, guided by Marxist-Leninist theory and studying the experience of the past and contemporary wars, generalized the question of the permanently-operating factors, which decide the fate of wars, and scientifically formulated them.

Thus it would appear that the Capitalists ignored the questions of the economic and morale potentialities of the country in 1954, "as is well known," but in studying them in 1955, "as is well known," failed to explain the basic laws underlying them. Moreover, the distinction credited to Soviet military thought is reduced to having "scientifically formulated" them. Nonetheless, this is not an idle or insignificant distinction in the Soviet view.

The statements cited here (except for the one by General Talensky) were not made in the course of the debate on the nature of military science. In that discussion the idea of the universality of the laws of war had been debated and finally accepted. One important point developed in the debate was the conclusion stated by Colonel G. Sapozhkov in Military Thought that the thesis on the permanently-operating factors also "applies and has equal force for both contending sides. It is another question by whom and how this law is understood, and how it can be utilized for victory."

Other Factors Necessary

Another aspect of the thesis on the permanently-operating factors arose in the debate. Some of the participants, still wedded to the old Stalinist clichés, cited the thesis on these factors as the end-all of any question of basic laws of military science (and usually these persons were the ones who ascribed an innate and unique Soviet cognizance of these factors). In the final editorial commenting on the debate, Military Thought decisively disposed of such a view: "It is easy to see that this is at least an avoidance of the question and not its solution, and at worst a voluntary or involuntary retreat from positions of Marxist materialism." But the thesis on the permanently-operating factors was not, itself, rejected by any means. To note one general restatement, the article on the factors in the Great Soviet Encyclopedia (in the volume which appeared in June 1955) fully reiterated their continuing validity.

The editorial in Military Thought in March 1955 also examined this question. It noted that the thesis on the permanently-operating factors was "often approached one-sidedly and in some cases even incorrectly," but it characterized the thesis itself as one which "retains its scientific value also at the present." Thus:

The thesis on the permanently-operating factors, expressing the dependence of the fate of wars on the fundamental social-economic causes and conditions does not, of course, lose its definitive significance in contemporary wars. But it would be incorrect to ignore also other factors which play an important role in the achievement of victory in contemporary war.

Slavish and unthinking mere repetition of the thesis on the permanently-operating factors was criticized; the importance of the factors themselves was not.

One change which occurred during the debate in 1954, and which was reflected in the revision of Pukhovsky's article was publicly expressed in March 1955 in Red Star by Marshal of the Tank Troops P. Rotmistrov. Referring to some specified typical Soviet statements made in 1954, Rotmistrov commented that:

...from their discussions one can reach the conclusion that the permanently-operating factors are divined only Soviet military science, and that the idea had not occurred to bourgeois military science. If that were the case we could rest assured; we, silent, would would calculate the permanently-operating factors....One cannot, of course, agree with this (view)....We must calculate on the basis that the bourgeois military figures, bourgeois military science, does not deny the significance of the permanently-operating factors. Can it really be only on the basis that bourgeois military science perhaps gives these things different names? The fact of the matter is not in names, but in the essence of the question. It should incidentally be said that the permanently-operating factors which decide the fate of wars have, to one or another degree, been considered also in the past by strategists seeking victory.

The thesis on the decisiveness of the permanently-operating factors thus survived the partial "de-Sovietization" involved in admitting objective laws and partial bourgeois cognizance of the importance of these factors.

Importance of Surprise

Another challenge arose in the reassessment of the role of surprise. The permanently-operating factors also continued through the revision of the importance of surprise to enjoy their position of being regarded as decisive in determining the ultimate outcome of wars, except under particular conditions. Those military theoreticians and publicizers who most prominently advanced the upgrading of the role of surprise, such as Marshal of the Tank Troops Rotmistrov and Lieutenant General S. Shatilov, made quite clear that despite the attribution of much greater significance to surprise in the thermonuclear era, the "permanently-operating" factors remain fundamental and decisive. Thus Rotmistrov stated (in March 1955):

However, surprise cannot yield a decisive result, cannot bring victory in a war with a serious and strong enemy.... Consequently, the permanently-operating factors, in the final analysis, have always decided and will always decide the course and outcome of wars.

And General Shatilov reiterated (in May 1955):

Soviet military science, while taking into account the growing role of surprise, is far from inclined to underrate the role of the permanently-operating factors, which decide the fate of wars.

The volume of the Great Soviet Encyclopedia in which the article on "The Permanently-Operating Factors of War" appears went to press in June 1955; the author of the article is Major General Talensky. The article stated:

Soviet military science does not deny the serious significance of the temporary factors: surprise, advantage in (prehostilities) mobilization, combat experience, etc., but it relies upon the permanently-operating factors to which the decisive role belongs.

Major General Ye. Boltin, in an article in Red Star in August 1955, "On Soviet and Bourgeois Military Science," emphasized the things held in common by foreign and Soviet military thinking, but nonetheless found great difference on the point of the decisive factors. Indeed, he even used the earlier phrase "in contradistinction to bourgeois military science" in describing Soviet reliance on these factors. He noted that while Soviet military science "understands the significance in contemporary war of the factor of surprise of attack and other temporary factors," it "relies on the well-known thesis of the permanently-operating factors which determine the outcome of wars...."

Reaffirmation

It may be useful, in view of a prevalent misconception assuming this thesis to have been rejected on doctrinal grounds, to note the frequency of reiteration of the thesis on the decisive role of the permanently-operating factors throughout and subsequently to the debates on military science. In the period 1953 through 1955, there were at least 57 reaffirmations of this thesis. However, in the period following Khrushchev's attack on Stalin (in February 1956), reference to the thesis by the old name virtually ceased. The factors themselves are constantly reiterated and reaffirmed, simply not under the old rubric.

The reason for the persistence of Soviet attention to the meaningful as an expression of important elements deeply imbedded in current Soviet military doctrine for nuclear as well as nonnuclear war. Even though the thesis formulation itself has fallen into disuse, the major practical significance of the factors involved continues and will continue so long as the strategic concept is basically unchanged. The fundamental importance of these factors has not at any time been rejected or criticized by any Soviet source. On the contrary, during the doctrinal revisions of 1953-55 an attempt was made to revitalize the thesis so that it would be treated not merely as a formula, but as a practical guide in creative thinking on military affairs.

Those who introduced modifications on its role and on related issues such as the role of surprise reaffirmed explicitly and unambiguously the continued role of the decisive permanently-operating factors. More recently (1956-59) these factors usually have been spoken of simply as "the decisive factors in war." This illustrates clearly what has gradually happened to the thesis-- modification in form, but not in essential content and influence. Such a change has occurred

because of the fact that the formulation of the "permanently-operating factors" was so closely associated with the name of Stalin, and aprticularly because it had become ossified into a stereoetyped formula.

What, one may ask, is the practical significance of the doctrine of the decisive factors? Colonel A. Piatkin, a professor at the Frunze Academy, has indicated their importance as follows:

The enormous significance, not only theoretical but practical also, of the thesis on the permanently-operating factors in war consists in the fact that it shows on which main tasks the strength of the combatant state must be concentrated in order to secure victory in war. That thesis is therefore the key to the understanding of the perspectives of a war and the means to gain victory.

But the potentiality must not be confused with reality. Those are two different things. In order to convert the potentiality for victory into reality, it is necessary not only to know the objective laws of war, but also to be able to apply them with complete knowledge of affairs, with a calculation of the character and all the requirements of contemporary warfare.

If, indeed, a decisive significance is attributed to these factors and they are a basis for determining priorities in military development, their practical significance is readily seen to be immense.

No Soviet Monopoly

As has been noted, it came to be realized by Soviet military thinkers in 1954 and 1955 that Soviet military doctrine had no monopoly on comprehension of the basic objective laws of war nor even on the concept of the decisiveness of basic morale, and economic and military potentialities. Inasmuch as this very concept had previously been held to give Soviet military science a superiority over bourgeois military doctrines, the changed appreciation raised the serious question of the possible disappearance of this superiority.

A solution was found which, while conceivably sophistry, is more likely to represent the real Soviet view. The new point in Soviet military thinking was introduced into available published literature in the previously mentioned collection of articles on Soviet military science printed in early 1955. The following sentences, which had not appeared in the article by Major General Pukhovsky as it was originally published in 1954, were added to his article in the symposium in 1955.

In the conditions of the socialist system, there exist all the realistic potentialities for the achievement of an advantage over the enemy in all the permanently-operating factors which decide the fate of wars....

Marshal Rotmistrov, in his article in March 1955, reiterated this point, as have others more recently.

We do not doubt that in the circumstances of our socialist economic system...there exist all the necessary potentialities for the achievement of superiority in the basic, decisive, permanently-operating factors. In that is our superiority, our strength, and our invincibility.

The Soviet Union is thus described as possessing a superior potential in basic economic, morale, and military strength, a potential which must be realized by active Soviet policy measures. This statement should be read in the light of the traditional Bolshevik emphasis on distinguishing between potentialities, which are so to speak the raw material of history, and the manipulative role of proletariats and policymakers in converting these potentialities into real achievements. Colonel Piatkin made this point explicit in his earlier cited statement. In a work on Marxism-Leninism on War and the Army published in 1957, Colonel Zakharov explicitly noted that: "Victory in war depends not only on the economic and morale potentialities, the quantity and quality of troops and the armament of the army, but also on how well these factors will be utilized." Specifically, this concept provides the doctrinal basis for the policy of priority to realizing the potentialities of the Soviet economic system in military strength.

The decisive (permanently-operating) factors were defined and interpreted by Major General Talensky in the Encyclopedia article in 1955 as the "economic, political, and military factors (much as interpreted by Talensky) have continued and presently continue to be reaffirmed. The first of the factors, called "the stability of the rear," Talensky defined as "encompassing the economic, political and morale potentialities of a state." And, as a number of Soviet writers have indicated, "it is no accident that among the permanently-operating factors which decide the fate of wars, stability of the rear stands in first place."

The "rear" supplies the combat forces with the wherewithal to conduct military operations; basically, this means the war-making potential of the country. The main element in this potential is the economy, particularly industry and transportation.

In June 1958 Colonel Baz stated in the Military Herald:

The history of wars teaches that only those states withstood the trials of war which showed themselves stronger than their opponents in the development and organization of the economy. Moreover, one of the fundamental laws of victory in contemporary war consists precisely in the fact that in its foundation contemporary war is an economic war....Consequently, future war will in still greater degree than past world wars require in its preparation and conduct a precise calculation of the economic potentials of one's own country and of the enemy.

In another article in 1958, on "Economic Potential and Its Significance in Modern War," Lieutenant Colonel V. Strigachev presented the ideological basis for superiority in this particular fundamental factor: "under equal economic potentials, the military economic potential of the socialist country is greater than that of a capitalist country." But the Soviets go much further in claiming that such a superiority even offsets a greater economic production. As Colonel I. N. Levanov put it in Marxism-Leninism on War and the Army:

One cannot judge the economic potential of a country only according to the level of development of production or the strength of the production facilities and economic resources. It is essential to give attention also to the character of the economic and state structure, on which depends the effectiveness of the utilization of economic resources and the tempo of productive development, which has great significance in military affairs as well.

Thus he continues:

The socialist system of economy...gives our state an enormous superiority over any capitalist state in relation to the economic and morale potential of the country and to its utilization to achieve victory in war.

This view is regularly expressed by Soviet military writers.

Morale

Morale is the second key factor. Colonel P. Sidorov, in an article on "Morale Potential and Its Significance in Modern War," stated:

He who has the greatest reserves, the greatest sources of strength, the greatest endurance and popular steadfastness, is victorious in war. This Leninist principle is confirmed by the entire experience of wars in the (current machine era. From this it is clear that for victory in modern war it is necessary to have a superiority over the enemy in the economic morale, and military respects, that is, to command a higher potential.

If these statements reflect the true Soviet appreciation of the importance of morale, the question immediately presents itself: who has the strongest morale, and why?

As stated by General Talensky the Soviets have always shown confidence that: "The morale esprit of the armed forces of a state with an advanced social and political structure, conducting a just war, will always be higher than the morale of the armed forces of a state with a reactionary system, conducting an unjust, aggressive war."

While the Soviets in recent years have admitted that contemporary bourgeois military science cannot fail to consider economic and morale potentials of the combatant sides along with the purely military potentialities, they consistently argue that only the Soviets are able properly to understand morale and its sources, and to utilize and maximize morale. As Colonel P. Kashirin put it:

Military figures of the capitalist countries also attempt to rely upon the morale strengths of their states, but their strategy cannot count upon the lasting morale support of the entire society because it does not express the interests of the people, is not inspired by the good aims of a just war. Such a strategy leads to an overevaluation of the purely military factors, to adventurism in military art, to overestimating the role of one or another weapon, arm, or element of the armed forces.

It is of interest that the morale issue thus is related to the alleged Western overreliance on "ultimate" weapons. Thus too, Western "military ideologies" are said to grasp at deception and at the comfort of the individual soldier, rather than at the "true" political-ideological foundations for morale. In a recent article by Colonel V. Kulish this writer was singled out for attack for allegedly "crudely distorting the question of the sources of the high morale-combat qualities of the personnel of the Soviet army and navy. The American sociologist (sic) Garthoff, for example, considers that the combat and morale qualities of the Soviet soldier are due to 'the traits of the Russian character,' his 'general love for Russia'...." More precisely, although the Soviets preferred not to quote it, I had said that in World War II the Soviet soldier had generally fought well not because of the Soviet regime, but despite it.

There can be little doubt of the sincerity of Soviet concern over morale -- the extensive indoctrination and surveillance both in the armed forces and in civilian life bears witness to that fact. The matter of Soviet views of "stability" of Soviet, American, and other populations and armies is, however, one on which the publicly stated line may or may not correspond to actual estimates. But regardless of unexpressed Soviet leadership apprehensions over the morale of the Soviet people -- or even because there may be such -- the importance of this factor in Soviet military thinking is clear.

The "readjustment" of Soviet military doctrine to fit the nuclear age -- for this is what the modifications amount to -- has but enhanced the importance of morale in Soviet eyes. In one of the earliest Soviet accounts to discuss this question specifically, Colonel Piatkin wrote in Military Thought (in March 1954):

It is necessary to underline that in the complex conditions of future war, with the employment of new powerful weapons

the moral-political and moral-combat qualities of the troops and the people in the cause of winning victory over the enemy will have still greater significance.

This judgment has been repeated frequently in the 1955-59 period. For example, the Soviet military technologist Major General G. Pokrovsky concluded that "atomic weapons create a situation in which the morale factor acts still more strongly than in ordinary war." The demands on the individual soldier and the increased requirements for steadfastness, endurance, and discipline in a nuclear war are clearly recognized by the Soviets.

Remaining Factors

The remaining three "permanently-operating factors" of the old thesis require less explanation. The "quantity and quality of divisions" has been interpreted less crudely than, perhaps, was Stalin's original idea and the literal meaning of the phrase. Major General Talensky specifically indicated in the Encyclopedia article that it refers to "all arms and components of the armed forces," explaining that the division is "the basic tactical formation, the unit of calculation in the general determination of the relation of forces." This determination of the "relation of forces" is the basic Soviet military-political strategic estimate of the situation. It is, therefore, possible that this emphasis on counting divisions -- and other combat forces in being -- may exercise a larger role than in Western calculations.

The fourth factor, "the armament of the army," is (again in General Talensky's words) "one of the decisive factors determining the development of the means and forms of armed conflict." Many writers briefly examine the point. Colonel S. Kozlov published (in 1954) a monograph on "The Armament of the Army -- One of the Permanently-Operating Factors Which Decide the Fate of Wars," which discussed the subject at length. Major General A. Lagovsky, in his work "Strategy and Economics," (in 1957) also stressed this factor as well as the continuing decisiveness of basic economic potential.

The above factors ("divisions" and "armament"), together with the ability of the officers corps ("the organizing ability of the command personnel"), form military potential. The term military potential, in the words of Lieutenant General S. Krasil'nikov of the General Staff,

does not exhaust all of the potentialities of the country for conducting modern war, but is only one of the important items (which compose) these potentialities. The ability of a country to conduct a war depends not only on military potential, but also on economic and political potentialities.

In particular, in addition to "divisions" and "armament," General Krasil'nikov noted specifically two other elements of

military potential: "Cadre ground, air, and sea forces," and "trained reserves." One may question the distinction between "divisions" and "cadres," but apparently the latter means the cadre of mobilization of the reserves, in addition to combat-ready divisions (and other units) in being in peacetime. General Krasil'nikov did state that the Soviet system is best both for "mobilization" and for "retaliation," and this reference may be related to the specification of "cadres" and "divisions" (forces in being). In any case, the major point is clear: the Soviets believe there is a continuing need for a large combat-ready military force in being, "land, air, and sea," as well as strong readily mobilizable reserves.

More recently, in an article on "The Essence of Military Potential," in addition to reaffirming the aspects noted, Colonel V. Petrov has also called attention to the fact that:

The deployment of the armed forces, particularly under circumstances of the wide employment of nuclear weapons delivered by rockets and supersonic jet air power, has a serious importance to the military potential of a country.

Not only do the Soviets stress armed forces in being, but also appropriately deployed, and finally, supported by adequate reserves.

Formula Review

The thesis on the "permanently-operating factors which decide the course and outcome of wars" in its time provided a theoretical concept formulating the main elements of political-morale, economic, and military potential with which to guide the Soviet military leadership in establishing priorities on military development. But in recent years a review of the usefulness of the formula has occurred. The formulation of the thesis itself has now been jettisoned, for two reasons: first, it was a codification made by Stalin and thus served to represent a support for the claims to a perfect Stalinist military science; and second, uncritical parroting of the thesis served to freeze the doctrinal significance of the basic economic, political, morale, and military factors into a stereotyped formula.

Experiments (in 1954 and 1955) with reviving the real doctrinal essence by calling for a dynamic approach to the thesis have more recently (in 1956, 1957, and 1958) been succeeded by discarding the familiar stereotype and concentrating on the basic factors themselves. This is clearly seen in the review of a book (Marxism-Leninism on War and the Army, by Colonel P. A. Chuvikov, revised edition published in 1956) which neglected to keep pace with the evolution of Soviet military doctrinal formulation and repeated the old stereotype. The reviewers (three colonels, all doctors of military science) writing in Red Star in February 1957 stated quite frankly:

Thus the question of the conditions for achieving victory in contemporary war is presented in the book in the old way, as a question of five permanently operating factors. It would be more proper to speak of the morale-political, economic, and military factors, and to attempt to illuminate comprehensively their place in the achievement of victory in war. The author of the book to a notable degree absolutizes the permanently-operating factors.

In the following month Red Star published a key article by Colonel Baz, entitled "V. I. Lenin on the Fundamental Factors Which Decide the Course and Outcome of Wars." What are these new "fundamental factors"? They are the old permanently-operating factors paraphrased and reformulated: the economic and morale basis of the rear, the morale of the armed forces, the quantity and quality of combat technology, and the ability of military men. Now, of course, they are attributed to Lenin (in the style of the new "cult of Lenin"), rather than to Stalin, the author of the old thesis. (The first attempt to shift the credit for the decisive factors partly from Stalin to Lenin had occurred as early as July 1955, when Major V. Zubarev writing in the semiclassified journal of the Chief Political Administration said that: "Basing on Leninist theses...J. V. Stalin formulated the general thesis on the permanently-operating factors which determine the course and outcome of war." The same article also credited both Lenin and Stalin with acute awareness of the importance of other factors, including surprise. Finally, the permanently-operating factors were referred to as "Leninist theses on the basic factors of victory in contemporary war.")

And the article by Colonel Baz quite clearly points to the important purpose of the reformulation: Namely, the freeing from the old stereotyped formula in order more comprehensively to make use of the practical implications of the decisive factors, and of certain other factors of increased importance, particularly surprise. The key passage reads:

Nothing would be so dangerous for Soviet military science as a dogmatic interpretation of one or another question of the development of military affairs. We have had attempts to boil all military theory down to the thesis of J. V. Stalin on the permanently-operating factors which decide the course and outcome of wars. This thesis in its foundation does reproduce the Leninist ideas on the conditions for victory over the enemy. However, it does not entirely exhaust the question of factors determining the course and outcome of contemporary war. One could, for example, show that it does not include such very important factors as the training of the troops, their organization, the military art, the state of military theory of the combatant armies, and others. One should also not fail to note that in present conditions the significance of the factor of surprise in particular has grown.

The new more flexible formulation, begun in 1956, thus continued and became more explicitly the successor to the old formula. Marshal G. Zhukov in Red Star in 1957 stated that:

The success of war depends on a series of factors, in particular the technical level and condition of the forms of the armed forces (the quantity and quality of divisions; the armament of the army), the combat ability and mastery of the troops, the art of the supreme command, commanders, and operational-tactical officer cadres (the organizing ability of the command personnel), and the main thing -- whether the people and the army recognize the just aims of the war because of which the government has led them into the given war (the stability of the rear; the morale of the army)... The factors which have been noted above display their decisive influence on the character of the war and the means of its conduct.

Marshal Zhukov's words reiterated the elements which constituted the former permanently-operating factors, and clearly expressed the continuing attention to these factors, as can be seen by comparison with the old formulation which is indicated in the bracketed insertions. On another occasion in 1957, Zhukov reiterated that "Success (in war) depends on a series of factors, in particular the technical level and quality of the armed forces, the morale, the combat training and mastery of the troops." Many other Soviet military writers have continued to make similar use of the paraphrased permanently-operating -- "fundamental" or "decisive" -- factors, with no change in the period since Zhukov's fall. There have even been, in 1957 and 1958, at least six cases where the old formulation of the permanently-operating factors was explicitly and favorably used. Two of these were in military books, and none of the many reviews of these books objected to use of the term. One of the authors, indeed, was promoted from colonel to major general soon after. But, in general, the old restrictive formulation is omitted.

Old Terminology Renewed

In December 1958 a particularly interesting article, "The Creative Character of Soviet Military Science," by Colonel Sidorov returned to the use of the term "permanently-operating factor," adding newly stressed additional factors to the category. The entire passage sums up the Soviet view, and is worth our attention.

The course and outcome of contemporary war depends more than ever before on the economic, morale, and military potentialities of the combatants. This conclusion of V. I. Lenin provides the key to understanding the decisive factors which secure victory in contemporary war. Soviet military science, basing itself on Leninist theses, has extensively revealed the role in war both of the permanently-operating factors, and of the contemporary, transitory factors. This is, in particular borne witness by the well-known statement of J. V. Stalin, set forth in the Order of the Peoples Commissar of Defense of 23 February 1942, speaking of such permanently-operating factors as the stability of the rear, the morale of the army, the

quantity and quality of divisions, the armament of the army, and the organizing ability of the command personnel.

The thesis on the permanently-operating factors, which generalized Leninist ideas, was at that period a new word in Soviet military science. Under the influence of the cult of the individual, however, this thesis began to be turned into an infallible dogma. Military science, moreover, cannot at all restrict itself to the study of the factors listed. There exist also permanently-operating factors which are not decisive in some cases but can under certain circumstances acquire a determining importance. Among them, for example, are the factors of space or geography, and of time, and a number of others. In addition, one must not ignore factors which are not considered as permanently-operating: surprise, advance preparations for opening military operations, and a favorable strategic position. These factors are not operative throughout the entire course of the war, but mainly in its initial period. Their role substantially changes depending on the level of development of military technology. Thus, as a result of the unprecedented progress of contemporary weapons, and above all of nuclear weapons, jet aviation, and missiles, surprise is now in effect already turning into a permanently-operating factor, and that circumstance must be taken into account by military science.

Under contemporary conditions, the role of science and technology grow enormously; without them it would be impossible to advance any field of endeavor, including the military. Hence science too should be added to the list of permanently-operating factors determining the fate of war.

Thus we see that Soviet belief in the continued vitality and decisiveness of the basic economic-morale-military potentials led them to drop the old stereotyped thesis on the permanently-operating factors, so that consideration of the "fundamental" or "decisive" factors themselves, and of other important considerations such as geographical space and surprise, may be more fruitfully examined in military scientific investigations and more usefully applied to practical issues. For, as Major General Lagovsky put it: "All these potentials must be developed and strengthened by all measures since precisely they, in their interrelation, decide the outcome of military operations and consequently of the entire war was a whole."

Operational Significance

It is thus clear that Soviet doctrine ascribes decisive importance to the basic military, economic, and morale potentials. It is useful to inquire now into the operational significance of these factors in Soviet thinking and action.

Major General Talensky, in his key article in Military Thought in September 1953, indicated the importance attributed when he said:

Victory in modern war is achieved by a decisive defeat of the enemy...on the basis of a superiority in the permanently-operating factors which decide the outcome of wars, on the foundation of an all-sided utilization of the economic, morale-political, and military potentialities in their unity and inter-relationship.

In the discussion which followed General Talensky's article no one challenged this view, and others reiterated it. For example, an air force officer, Colonel E. Chalik, pointed out in Military Thought that "Only a state which...is capable of creating and maintaining a stable superiority in the permanently-operating factors over the course of a long period is in position to gain victory in contemporary war." The official views expressed in the April 1955 editorial in Military Thought closing the theoretical debate of 1953 to 1955 presented this same point in other words.

Marxism-Leninism places victory in war in dependence upon real, objective conditions, underlining that he wins the war who masters advantages in military, economic, and morale-political potentialities, and who is able to utilize these advantages in the armed conflict.

These terms of generality are, alone, not significant. The importance of the Soviet view reflected in these generalities is their influence on Soviet military strategy. The basic developments in military technology, political affairs, industrial progress, geographic-strategic changes -- these are all specified by the Soviets -- determine the economic, military, and morale potentials which must be calculated in the formulation of strategic plans. According to the Soviets military strategy is based on a correct utilization of the permanently-operating factors which decide the fate of wars.

The economic aspect of strategic planning, in particular, has grown. As Major General Lagovsky declared: "The potentialities of strategy now as never before depend upon the planned and accurate functioning of industry and transport." And still more fundamentally: "A strategic plan going beyond the limits of economic potentiality is adventurism. Strategy not founded in an adequate economic base inevitably will suffer failure." Marshal Vasilevsky expressed the same point several years ago, declaring "One can have fine strategic and operational plans and still lose a war, if these plans are not economically supported."

It is evident that the Soviet view of the importance of economic potential in future war is influenced by the Soviet concept that even nuclear war will be a long extended conflict.

Economic Support

The importance of economic mobilization and support deserves brief elaboration here. It may be useful also to note its

connection with the problem of morale, particularly for a war in which the enemy employs nuclear strategic bombing. As Colonel G. Fedorov stated in Red Star:

...wars are now conducted primarily on the basis of that technology, munitions, and all other forms of supply which are produced by the labor of the people in the very course of the war. Hence the degree of labor exertion, self-sacrifice and enthusiasm exhibited by the people in their work to fill the needs of the front, directly and particularly influences the course and outcome of the war. In this, the masses in the rear experience numerous and destructive bombings by enemy aviation, which brings great difficulties and deprivations and makes particularly high demands on morale.

Thus despite the expectation of nuclear bombing, continued military production apparently is anticipated. In fact, although the Soviets possess enormous stock of weapons, in the light of the cost and rapid obsolescence of many new weapons, they have even indicated as recently as 1957 that wartime production will remain primary, since even nuclear war will be long and drawn out. Colonel Levanov, in the authoritative military theoretical volume of the Officer's Library, Marxism-Leninism on War and the Army (1957), declared that: "In contemporary war reserves of prepared military items do not have as decisive an influence on satisfying the needs of the front as do energy resources, productive capacities, and reserves of strategic raw materials and fuel." Similarly, in another discussion in 1957, Colonel N. Tarasenko stated that: "Under conditions of contemporary war one cannot secure regular supply of weapons, material and supplies only from prepared stocks and reserves. Now the needs of the front can be fully satisfied only as a result of full exploitation of the current military productions."

The Soviets, therefore, regard the industrial and transportation preparedness of a state as a key aspect of planning for the eventuality of a long war. As Lieutenant General Krasil'nikov of the General Staff has stated:

The level of military potential cannot be correctly determined without considering also the degree of preparedness of the industry of a country for mass production of modern armament and combat materiel, and of transport for obtaining uninterrupted supply of everything necessary for the front.

Finally, in a rare instance of specification of the Soviet strategic planning requirements, Major General Lagovsky has disclosed that: "The fundamental thing that strategy must establish are the requirements of the armed forces for the first year of military operations."

There is evidence indicating that this strong military concern for providing the industrial capacity for warmaking influenced Soviet military leaders to support the coalition of forces headed by Khrushchev which deposed Malenkov from

the premiership in February 1955. At that time, the military were assured that attention would be devoted to heavy industry, and to maintenance of large state reserves of matériel and of products, in order to increase defense capabilities.

Vulnerability

Particularly in view of the Soviet attribution to the United States of a proclivity for strategic bombing, one would anticipate keen awareness of the problem of reducing the vulnerability of the Soviet economic war potential. Measures to protect the economy from hostile military action would, it is true, hardly be discussed fully and frankly even in the military press. And, in fact, the only reference prior to 1956 known to the present writer was the statement of Colonel General of Aviation A. Nikitin in Military Thought (in 1949) that "Air power has become an effective means of action in the deep rear of the enemy, requiring a reexamination of the question of the distribution of industry."

Nonetheless, serious discussions of "the military economy" (as the Soviets term the military and war-making aspects of the economic system as a whole) would disclose no secrets in raising the problem of possible contingencies in which the economy could not be counted upon entirely for wartime availability. Yet such an awareness has been remarkably slow in penetrating Soviet military writings on the wartime role of the economy. Soviet discussions of the conversion and mobilization of the economy for war and of the role of "the military economy" which were published in the period through 1955 failed to raise the problem of the vulnerability -- and hence even the question of the full availability -- of the economy in time of war. The possible effects of nuclear and thermonuclear bombing, by either side, were ignored as if such a threat did not exist. Discussion of conversion and organization of the economy for war proceeded apparently on the implicit assumption that the peacetime economy would pass relatively unscathed into a new and important career of military service.

This represents a remarkable lack of attention to what would appear to be an obvious and dominating factor. While the earlier articles may be excused, perhaps, for this omission, a number of these discussions date from as late as 1955. To be sure, the fact that discussions of the role of economy in war lagged so strikingly in grasping a simple appreciation of the danger of nuclear attack for the economic system does not reflect a lack of high-level Soviet concern for the strategic defense of the country.

Nuclear Devastation

Apparently the earliest Soviet discussion of the role of the economic potential to recognize the effect of possible nuclear devastation appeared only in late 1956. Colonel M. Raitarovsky noted that "under conditions of the employment of

new forms of weapons (that is, nuclear weapons, and missile and other delivery systems) transport has to function under great tension," and that "such factors as the territory of a country and geographical distribution of production have great significance." In 1957 and 1958 a few additional discussions have raised this issue. As Major General Lagovsky noted in his important and well-received work on Strategy and Economics (1957): "With the probability of employment of the newest weapons against economic targets, defense of one's own economy against hostile actions assumes particularly great significance."

Colonel Raitarovsky, in his initial article on the subject, did raise one key aspect of the problem, and further alleged Soviet superiority in preparing to face the implications of this challenge. He declared that the United States cannot disperse her industry (60 percent of which is, he says, concentrated in eight northeastern states) because of the opposition of "monopolies."

On the other hand, our country with its vast spaces and rich natural resources has the opportunity of dispersing its production to make it less vulnerable to (actions of) the enemy, without violating the principle of proximity of production to the sources of raw materials and regions of consumption. Only a socialist government can take on its shoulders such grandiose tasks as the creation in a short period, in the course of the next two or three five-year plans, of a third powerful metallurgical base in the east of the country, with a production (objective) of 15 to 20 million tons of iron per year.

Whether the Soviets are really so sanguine about their ability successfully to avert devastation may be doubted, but the scope of the effort as outlined marks it as a serious one. Similarly, it is known that industrial expansion in the USSR has for some time been ordered to follow dispersal and avoidance of present urban-industrial centers, in particular Moscow and Leningrad. More recently, 1957 and 1958, the industrial reorganization and general decentralization of the Soviet economy into about 100 "economic councils" has provided a much more viable basis for meeting the needs of nuclear war. Indeed, in November 1957, Khrushchev himself declared in Pravda that: "The reorganization of the direction of industry which we have undertaken also creates a more autonomous management of industry. That, too, improves our strategic position." He declared that while this was "not the main aim of the reorganization, it is nonetheless a very considerable one."

It is not necessary here to examine the question of Soviet views on the relative importance of attacking the enemy's economy, save to note that while raising the importance of this mission they have continued to hold to the strategic concept of victory ultimately through destruction of the enemy's armed forces rather than of his warmaking capacities.

Potential of Morale

The second major component of power considered crucial for war is the morale potential. As Colonel Baz put it (June 1958) in the Military Herald:

But this (the economic factor) is only one aspect of the question of the decisive role of the rear in contemporary war. Another no less important aspect concerns the ever growing dependence of the armed conflict and war as a whole on the state of morale both of the armed forces and of the whole population. The morale factor has always played a decisive role in wars... Future wars will demand unprecedented intensity of all strengths, physical and morale, of all categories of personnel of the armed forces and of the population.

This evaluation reflects the long-standing Soviet concept according to Colonel G. Shabaev that: "The morale factor is considered in inseparable conjunction with the economic and other factors which decide the outcome of wars." Consequently, as Marshal Vasilevsky once noted in Red Star:

One can lose a war, despite the existence of excellent strategic plans which are economically well supported, if the war aims are unfavorable for maintaining the morale of the people on a high level for a long period of time.

We have seen earlier that the Soviets ascribe still greater importance to morale in nuclear war than ever before. One aspect of Soviet morale in a future war is of particular interest. It is, moreover, one which the Soviet leadership did not openly discuss until 1955. Would Soviet armies, would the Soviet soldier, fight as courageously and as well in a war on foreign soil as in defense of the earth of Russia? The question is not susceptible of definite answer, but it possibly a very important one. The editorial in Military Thought for May 1955 first broached this subject, indirectly, stating:

In further working out the questions of the morale factor in war it is necessary to attain an ability to calculate and to utilize realistically all its potentialities in the interests of the military art and the achievement of victory over the foe...(political instruction) in the spirit of conducting active offensive operations directed toward the complete crushing and annihilation of the enemy, assumes particularly important significance.

Very soon following this article, a Soviet military "specialist" on the role of morale, Colonel Kashirin, broached the issue in Red Star as follows:

The Soviet state is a peaceful state... But that does not mean that if the imperialists unleash a war, attack the Soviet Union, that the Soviet armed forces cannot conduct military operations on the territory of the enemy... Unfortunately, some of us often confuse two entirely different conceptions.

This is explained by the fact that there exist among us military comrades of the opinion that in the case of an attack on us of imperialist aggressors our mission will be to defend, to repulse their attack, not to permit them to enter deep in our country -- and only that.

This view, he explains, is faulty and dangerous.

And if it is necessary to advance on the territory of other states, not in order to seize their territories, to suppress some people, but in order to destroy barbarous imperialist robbers, to defend to the end the state interests of the U.S.S.R....this requires of the entire personnel of the Soviet armed forces high morale qualities.

It is, indeed, surprising to learn that some "military comrades" were so naive and so bold as to maintain that in the event of war the Soviet armed forces should not attempt to advance into other countries. And it is revealing that the justification is framed in terms of "the state interests of the U.S.S.R." -- something no one is likely to question.

Following the use of Soviet troops to put down the Hungarian Revolution in November 1956, this theme of advancing into other countries again became too sensitive to reach the open military press.

While the Soviets constantly proclaim their great superiority in morale, it is likely that the Soviet leaders are concerned over the problem of how the Soviet and satellite peoples would act in war -- especially in war initiated by the Soviet Union. It may be that despite their extensive and intensive efforts to propagandize their soldiers and general population they consider this to be an element in restraining them from war.

Military Potential

Now we reach the third major component of war-waging power -- the direct military potential. Military potential is defined by the Soviets to embrace the quantity, quality, deployment, and reserves of military manpower and weapons. Colonel Petrov, in a recent (mid-1958) article "On the Nature of Military Potential," reviews these factors with especial stress on training and preparation of the officer cadres. He also includes attention to the level of military science as a relevant factor.

The continuing Soviet emphasis on successive campaigns has been indicated. According to Colonel Levanov: "The fate of war cannot be decided by one or two engagements, no matter how grandiose a scale they might achieve. Contemporary wars assume a drawn-out character." Consequently, as Major General Talensky has recently (1958) stated: "Victory in war will now be achieved by means of determined armed struggle, by means of dealing the enemy blows mounting in strength, and the organization

for that purpose of all the forces of the people and all the resources of the country." And, as he noted on another occasion, "under contemporary conditions no major war against an economically powerful adversary can be won unless it is possible to step up the war effort continuously."

The importance of the economic potential for direct support of military operations is again emphasized. It is considered by the Soviets to be of such exceptional importance because of their image of a future nuclear war with large armies committed over vast territories for a long period of time. It is useful to cite a few statements from recent years illustrating the Soviet attention to the industrial base for armaments.

As Colonel Z. Osipov expressed it:

At the present time wars have a long, drawn-out character, they have an unprecedented scale in numbers of participants of the armed forces and the saturation of their materiel. They make tremendous demands on the armament and munitions supply and production, and require high morale and combat qualities of the personnel of the army.

Major General Pokrovsky pointed out that:

Armament depends upon the level of development of productive forces achieved at any given time, the industrial might of a country which permits supplying new forms of armament to mass armies. Contemporary armies, gigantic in their scale, would be unthinkable in the absence of mass production of weapons.

And according to Major General E. Razin:

In contemporary war superiority over the enemy in artillery, tanks, aircraft of all types, automatic weapons, new weapons, and in general superiority in military technology as a whole, has important significance. In this connection mobilization and deployment of industry, especially of heavy industry, plays a decisive role.

And similarly for transportation facilities, Lieutenant Colonel M. Shirokov stated that:

The concentration of a very large number of troops in definite sectors, with their large quantity of materiel, the necessity of constant supply to these troops of all forms of goods and reinforcements, places the question of mobilization of all forms of transport particularly sharply.

Manpower

The other essential ingredient of the military forces is, of course, manpower. And first of all in terms of direct military potential, Lieutenant General Krasil'nikov declared:

"The size of the population and its political-morale condition determine the possible limits of its military training reserves." Moreover, in strategic planning special attention is given to preparation of adequate reserves in expectation of a long war. Thus in the 1957 volume of Marxism-Leninism on War and the Army the military requirement for planning for a long war is stated by Colonel A. V. Zakharov as follows:

In the strategic planning of war the correct employment of the troops must be estimated not only for its initial period but for its whole course. A genuinely scientific approach to the determination of the sizes of the first and succeeding strategic echelons, tempos of mobilization and strategic deployment, force levels of ready and reserve forces, reinforcement of combat field formations with fresh forces during the whole extent of the war is required. Hence Soviet military science attaches enormous significance to the working out of these problems. A correct decision on these problems determines the effectiveness of the employment of the quantity and quality of the armed forces in the interests of victory in war.

Other writers too have stressed, in the words of Colonel General P. Kurochkin in Military Thought, that the possession and proper deployment of strategic reserves is "one of the most important factors for seizing the strategic initiative from the hands of the enemy."

The Soviet "annual class" conscription system (and the practice of geographically and occupationally settling many discharged conscripts at the close of their service by groups) ensures a strong reservoir of trained manpower reserves.

The Soviet conception of future war decided by economic, morale, and military potentials also leads them to plan on the basis of large, mass ground armies. Marshal Zhukov (in 1956 and 1957) provided several clear statements of the Soviet view on the role of large ground forces. After denying that air and nuclear power is now the predominant type of armed force in war, he stated in Pravda that mass armies are necessary even in general nuclear war:

Air power and nuclear weapons by themselves cannot decide the outcome of armed conflict. Along with atomic and hydrogen weapons, in spite of their tremendous destructive power, large armies and a tremendous quantity of conventional arms inevitably will be drawn into military operations.

Nor is this a statement designed simply for Western consumption. Soviet military writing is replete with similar statements reflecting this key conclusion of Soviet military thinking.

In fact, in the period since 1956, several Soviet military men have explicitly declared that "The use of nuclear weapons not only does not replace conventional armed forces, but on the contrary leads to their increase." Colonel Baz, writing the above sentence in the Military Herald in mid-1958, continued to explain the Soviet reason for that conclusion:

Means of mass destruction are so termed because their employment causes great losses. The dispersal of troops with their subsequent swift concentration on the front line and in depth is the logical consequence and inevitable result of the appearance of atomic and hydrogen weapons, and will be standard in future war. But the losses among the troops will just the same be very great. It is necessary to orient ourselves not on an easy war, but on an extremely severe war which will require throughout its whole course tremendous reinforcements for the armed forces. The possibility of great losses leads also to the substantial growth of reserves -- strategic, operational, and tactical -- which will in future war in much greater degree than in previous wars be assigned to replace knocked out of the line. Thus one must not expect in future war with mass destruction weapons any lessening or reduction of armed forces by any means, but on the contrary their further increase.

Thus forces in being sufficient to serve both as immediately available forces to seize the initiative on the ground to advance, and as cadre for rapid expansion by integration of trained reserves, and large reserves to replace those destroyed in nuclear war, are a requirement established by Soviet doctrine in accordance with their image of future extended war.

Conclusion

Thus we see in summary that in the Soviet view pointed out by Major General Lagovsky: "Only by commanding a superiority in the forces flowing from the constant interaction of these (military, economic, and morale) potentials as a whole can one count on success in armed conflict."

Soviet military doctrine and strategic thinking reflects the Marxist view of history, as expressed by Colonel A. Zheltov, "victory cannot be won by any easy means." Moreover, their basic philosophy of war as a means to political ends leads them to visualize their strategic objective in war as the conquest of other assets -- not the reduction to radioactive ash of the resources of others and of themselves. But beyond the influences of their ideological dispositions and political objectives, their military strategic concept sees victory won only through the destruction of opposing military power in what they calculate will be a long, hard, worldwide war requiring large ground armies, tense morale demands, and an all-encompassing economic effort.

The Soviets not only have developed their doctrine in terms of this view, but they have shaped the organization, composition, nature, and size of their armed forces accordingly. Soviet doctrine on the decisive factors in a war is not only evidenced in their military writings, but is borne witness to by the entire Soviet military establishment.