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Warning and Surprise: Tradeoffs for the Planner

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Throughout the history of warfare, antagonists have attempted to employ surprise in order to gain an advantage. More often than not such attempts have succeeded, although often the advantage gained may have not been decisive.

There are two forms of advantage to be gained by surprise. The first is tactical, in that the aggressor hopes to profit from the victim's lack of preparation by destroying forces and equipment, seizing a key objective, or attaining a superior position, before his opponent can react. The second form of advantage is psychological. Stunned and paralyzed by disbelief, a victim may put up less resistance than would otherwise be the case. In extreme circumstances, the surprise attack may convince the victim that the situation is hopeless. The psychological effects can backfire on the aggressor, however. If the initial battle is not decisive, the victim of a surprise attack may use the attack as a rallying cry. Pearl Harbor provides a well-known example of surprise galvanizing the victim into action.

Success in surprise does not automatically lead to victory for the perpetrator, either in the immediate battle in which it is employed or the war itself. Israel surprised Egypt in 1956 and again in 1967, both times winning handily. In 1973, Egypt turned the tables, but Israel managed to recover quickly and win the war.

The country-wide, coordinated attacks of Tet, 1968, dealt the American and South Vietnamese armies a total strategic

surprise, yet was a tactical disaster for the Viet Cong. But the outcome of battles does not always determine the war, and the psychological impact of the attacks, on a scale not believed possible, marked the beginnings of the United States' long and painful decision to withdraw.

Surprise can take several forms. Complete surprise would imply that the victim was unaware of any threat of attack and, therefore, ignorant about the time, place, method, and perhaps even the identity of the enemy. But surprise need not be (and seldom is) complete to be effective. Of the factors amenable to surprise (who, when, where, and how) only one or two need be clouded with sufficient ambiguity to provide the aggressor with a high probability of success.

The counterpoint to surprise is warning. From the viewpoint of the intended victim, warning would ideally provide enough notice of a pending attack to allow its neutralization. For this reason, war plans typically include an assumption that a certain amount of warning (expressed as a period of time) will be available. As is the case with other assumptions in the planning process, the actual amount of warning provided may or may not match that assumed in the plan. If more warning is available than was planned for, so much the better. But a shorter than planned warning time may well lead to a disaster, at least in the initial stages of conflict.

Warning time in plans allows a tradeoff. The alternative to advance warning is preparedness. To repulse a completely unexpected attack (no warning) implies that the victim was at a very high state of readiness. Readiness to meet attack requires a force in being that is organized, trained, equipped, and deployed in sufficient strength to the proper positions. Given this condition, warning becomes superfluous.

At the other extreme, a nation that lacks a military establishment or defense industries would obviously require a very long warning time to meet an attack. A system of conscription or recruitment must be devised, uniforms designed and acquired, weapons purchased, support facilities obtained, taxes levied -- the list is lengthy, expensive, and, more to the point, time consuming.

Somewhere between these extremes of constant readiness for war and total disarmament is a practical continuum along which a certain amount of warning substitutes for a greater degree of preparedness. Part of the planner's art lies in correctly selecting a point on that continuum. If he allows for more warning time than is available, the risk of defeat rises substantially. If he errs on the side of caution, he wastes the resources needed to maintain a higher than necessary state of readiness. The planner's dilemma, then, is to decide how much

preparedness is enough, based on his best estimation of the warning time available.

Traditional methods to correlate forces and determine strength ratios will yield a reasonable approximation of the force needed to meet a postulated threat. Conscription, reserve activation, training, procurement, and movement data can be developed to help the planner decide when he must start mobilization to go from a peacetime status to a credible defensive posture. But as complex as this equation may be, especially when applied at the strategic or national level, the warning problem is more uncertain.

Figure 1 (page 13) illustrates the calculus of surprise attack from the point of view of the victim and the attacker. While planning for war, and the decision to go to war, can take place without providing indicators to the intended victim's intelligence services,* active preparations are much more difficult to conceal. The graph on the victim's side of the time line shows the relative volume of available indicators that would tend to signal an attack. As the date of the offensive

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*This discussion ignores the obvious possibility of a human source (spy) inside the attacker's government with access to either war plans, the decision to wage war, or both. While such a fortuitous circumstance is possible, it would be highly unusual. Further, human intelligence (HUMINT) is subject to reporting delays as well as to deception. The availability of such a well-placed source would certainly aid the victim, but would not alter the basic logic of this discussion.

approaches, preparations involve more and more organizations, and become more and more visible. They may reach a peak (total readiness for attack) some hours, days, or even weeks before the actual attack. In this case, the level of indicators might be expected to decline, as shown by the dotted line.

From the victim's view, at some point following the initiation of preparations for war the level of indicators will break above the level of "noise," or routine activity. The intelligence services will continue to collect and analyze available information, until at some point a threat is discerned. Further intelligence work, spurred by additional indicators of hostilities, will lead to the conclusion that a warning of impending attack should be issued. Following acceptance of the warning by appropriate decision makers, countermeasures can be ordered and defenses put into place. With enough warning time, the policy maker should be able to call on a wide range of options from diplomacy to a preemptive strike.

Implicit in this admittedly oversimplified discussion of the warning process are many assumptions. Among the most significant: (1) The victim has an intelligence service capable of detecting and properly evaluating indications of hostility. (2) The victim's intelligence service has a functional mechanism for allowing warnings to reach policy makers with a minimum of "red tape" to delay or inhibit the process. (3) The decision

maker trusts his intelligence service, is not subject to conflicting data, and can take the decision to prepare for war with a minimum of delay. (4) The planner assumed the correct warning time to allow for needed defensive measures.

Unfortunately, none of these assumptions need be correct. Figure 2 (page 14) concentrates on the victim's side of the warning problem, and shows how uncertainty and delay can be introduced. Even here, we assume an intelligence service that is capable of detecting the indicators and discerning a threat. At this point, bureaucratic pressures can begin to introduce delay (shown as uncertainty on the chart). Detection of a credible threat is not always a simple task, and the presence of such a threat does not automatically indicate imminent hostilities. South Korea has faced an extremely credible North Korean threat for almost 40 years, but warnings of attack have been relatively infrequent.

Intelligence doctrine has long held that for an attack to take place, both capability (the means) and intent (the will) must be present. Judging capability lends itself to straightforward analysis: counting tanks, assessing industrial production, watching exercises to determine state of training, or correlating force ratios. Intent can be a much harder, and more subjective, problem. The massing of mechanized forces, backed with artillery, logistics trains, and air power, near a

previously quiescent border, invites with high probability a judgement that intent to invade exists. The same situation, however, is business as usual on the Korean peninsula, where the signals of hostile intent may be much more subtle. Troops also may be massed as a show of force, or for intimidation purposes, with no intent of invading. Or forces may be brought to a high state of readiness, then withdrawn, in multiple cycles, to create a "business as usual" mentality in the victim. Differentiating the real attack from the demonstration or feint is a problem of judging intent.

There are two significant reasons why intelligence agencies, even those charged with the specific responsibility for warning, may hesitate and debate before issuing warning. First, there is a tendency to wait for more and more confirming information. Intelligence data, especially regarding intent, are seldom so clearly unambiguous as to require no interpretation. Second, no one likes to be wrong. Intelligence agencies are bureaucracies, with layers of supervision between analyst and senior official. "Are you sure? How do you know?" is asked time and again as the analyst who suspects hostile intent attempts to make his views available to the decision maker.

Eventually, whether hours, days, or even weeks have elapsed from the initial indicators of hostile intent, the intelligence agency issues a warning. But forces are not yet able to take

effective countermeasures. A policy official or operational commander must make that decision. And here too there is room for delay and error. The same forces acting on the intelligence community also haunt the policy maker. Unpleasant news is not readily believed. And there are more distracting forces at work. Reaction to warning is expensive, and carries some risk in itself. Mobilization may be interpreted by the other side as provocative, and invite the attack it was intended to defeat or deter. Decision makers have many sources of information. Other government offices, such as the Department of State or Foreign Ministry, may not agree with the intelligence assessment. Allied governments may differ as well. Media reports add to the flood of information. Domestic political concerns may make mobilization an unpalatable option. In short, the intelligence agency is not the only source of information for the decision maker; it may not even be the most trusted one.

The point here is not that warning may not be heeded, although that is certainly a risk. The more pervasive problem is that even the strongest and clearest warning does not proceed instantaneously from threat recognition to initiation of countermeasures. The time involved, both in formulation of the warning and in taking a policy decision, is significant. It may be catastrophic. When preparations for invasion are detected, they have already been underway for some time, and those

preparations continue while analysis, warning, and decision take place. The charts in figures 1 and 2 indicate that countermeasures were completed prior to initiation of the attack. That, history tells us, is unusual indeed. The section of figure 2 marked "Margin for Error" is rarely, if ever, reached because the warning is not issued, is issued too late, is not acted upon, or is acted upon too late.

What, then, should the planner consider when developing plans to counter surprise attack?

First, assumptions about warning time cannot be made lightly, but should reflect a step-by-step analysis. They should include realistic estimations of the time needed for an adversary to transition from peacetime status to full preparations for an attack. This is a subjective judgement, and as such should allow for risk and uncertainty. Backward planning from the moment when an attack becomes possible to the normal peacetime disposition of the planner's forces will yield the necessary (not the assumed) warning time.

The steps necessary for war preparation by the aggressor are then matched with indicators that can be expected to be captured by the intelligence service. From this process, warning criteria can be developed. The planner must then evaluate his own system to determine realistic time intervals from detection of indicators, to issue of warning, to policy decision.

The process is graphically depicted at figure 3 (page 15). The critical times are those at which the attacker and defender are each prepared. Note that preparation is an ongoing process for both sides, and that preparations are relative. It is too simplistic to assume that an instant in time exists at which a force goes from not ready to fully ready. An attacker may decide to launch before all his forces are in place in order to preserve surprise. He may make the same decision because of the observed speed of his opponent's defensive preparations. In other words, while the attacker may improve his position by waiting a few more days, the defender may be able to achieve greater relative strength in the same amount of time.

No matter how complex the decision process, however, the point here for the planner is that risk, for the defender, is any time during which the aggressor can mount an attack that cannot credibly be countered.

The planner must consider ways to reduce risk. First, he can lower the warning threshold. Like increasing the sensitivity on a burglar alarm, this provides earlier warning but also increases the rate of false alarms. The danger here is the "boy who cried wolf" syndrome; frequent false alarms undermine credibility and create a very real danger of downplaying or ignoring what may be the real thing.

Second, he can decrease warning and decision times by providing mechanisms to bypass much of the bureaucracy. The extreme case would be a direct channel from the analyst to the top decision authority. While this is unlikely, much red tape possibly could be removed without adverse impact on lines of authority and responsibility.

Third, the planner can decrease preparation time by raising peacetime readiness levels. This is a political decision, and an expensive one at that. But it is important for the planner to know that, in the final analysis, the tradeoff is not between surprise and warning; it is between surprise and preparedness. Warning is one way to reduce the risk, but overreliance on warning, and particularly on unrealistic assumptions about available warning time, can easily lead to a false sense of security.

Fourth, he can factor in a graduated response. Warning is a process, not an event; indicators accumulate and the situation develops over time. Increasing thresholds of warning can trigger increasing levels of preparation, reflecting the enemy's advancing time line in preparations for the attack.

Lastly, he needs to ensure that warning time assumptions are carefully computed, and driven by the situation as it exists, not by what he desires it to be. Then, satisfied that warning time estimates are realistic, he needs to check again on risk, by

asking "what if we're wrong?" Only by a realistic, unemotional evaluation of the risks and costs involved can the intelligence officer, planner, and policy maker select appropriate tradeoffs.

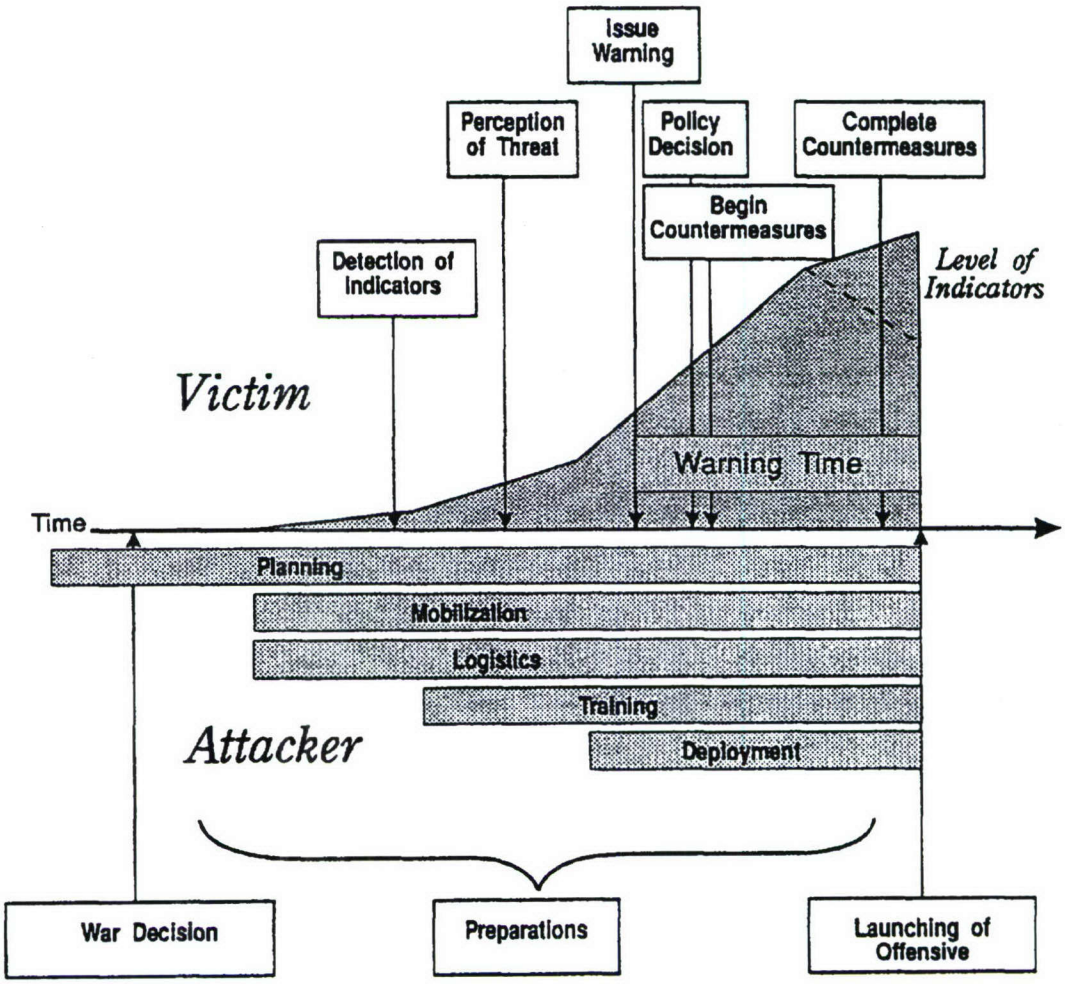

Figure 1

Adopted from
Ephraim Kam, Surprise Attack
(Cambridge, Mass:
Harvard University Press, 1988)

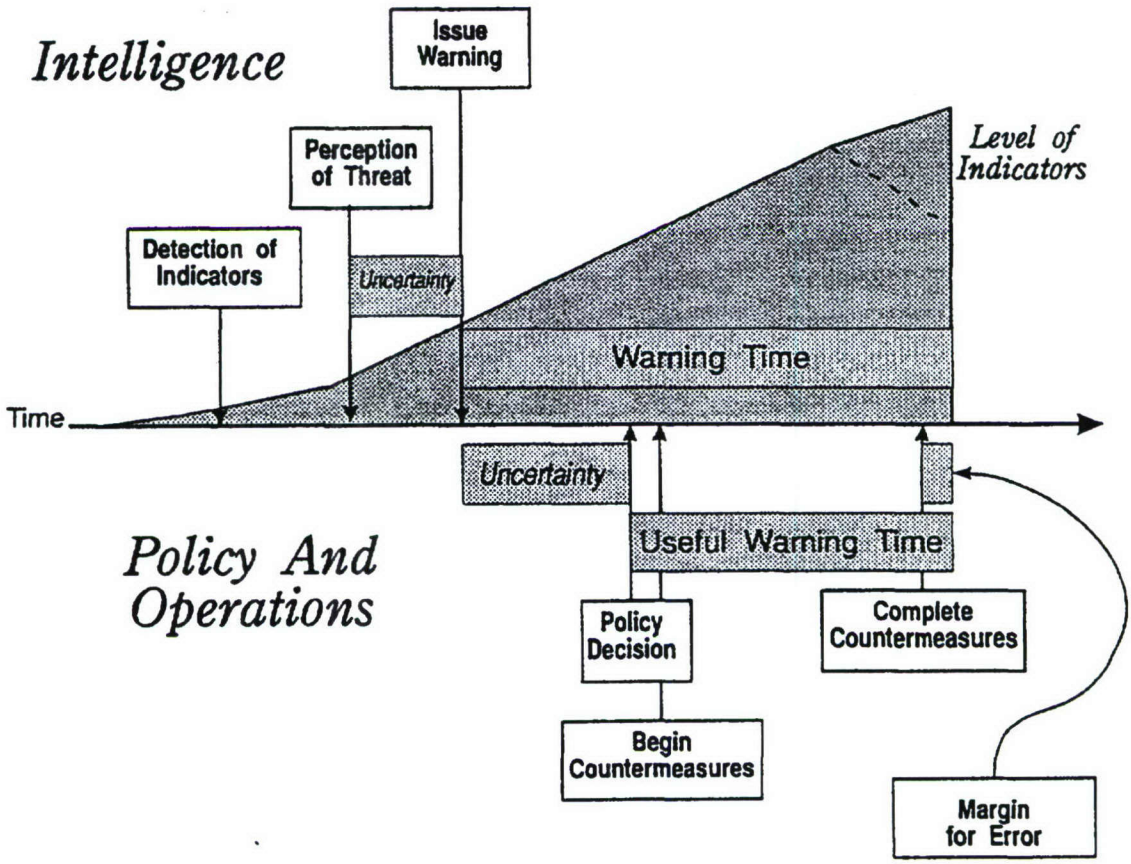

Figure 2

Adopted from
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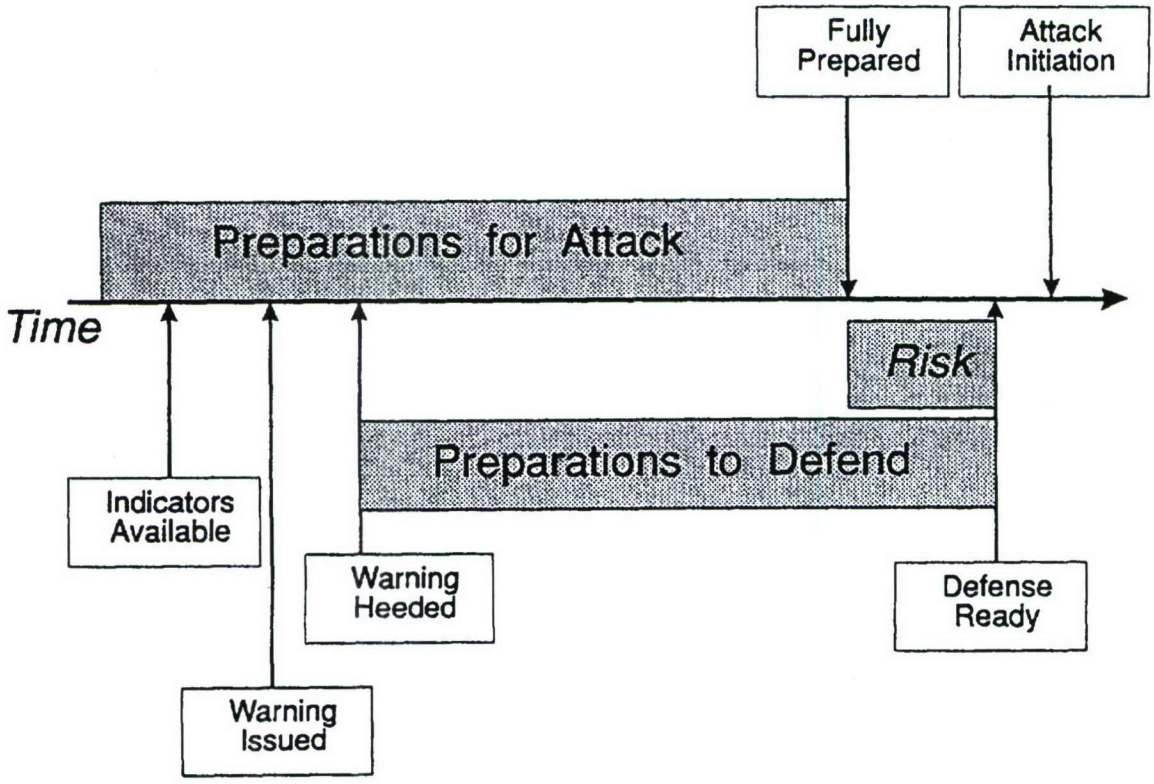
Fully Prepared
Attack Initiation
Preparations for Attack
Time
Risk
Preparations to Defend
Indicators Available
Warning Heeded
Defense Ready
Warning Issued

Figure 3