Brief Summary Concerning StrategicWithholding (Nuclear Parsimony)

L. F. Wouters

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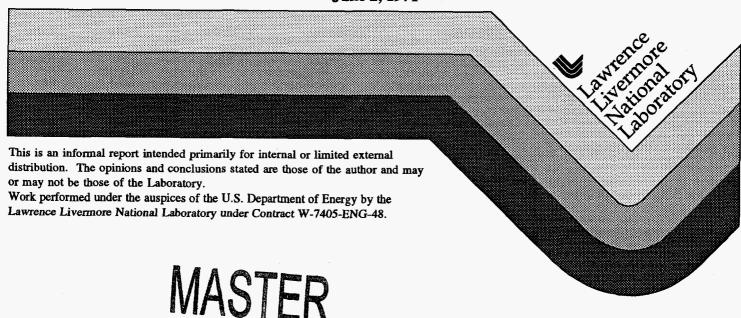
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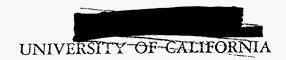
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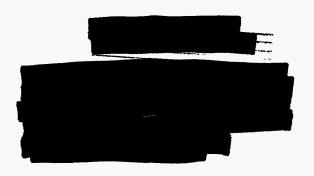
Advisory Committee on Civil Defense National Academy of Sciences 2101 Constitution Avenue, N.W. Washington, D. C. 20418

Dear Dr. Spencer:

In immediate reply to your inquiry, here follows a brief summary on my thoughts concerning "Strategic Withholding" (or perhaps, "Muclear Parsimony"). It is chiefly meant to further support the view that there should be other significant doctrines besides "Brute-Force Retaliation".

The basic doctrinal argument is that it may be broadly disadvantageous to fire one's missiles in equal, or "total", retaliation. It may be better to reply only softly, or not at all. The basic justification rests on an assumption of extended war, and on a logic addressed to what's best for the surviving population and capability at any given point. In most strategic wargame exercises, it is rarely apparent that this principle is taken into account.

The essential point of argument is that an extended war is not so different from peacetime posturing. Two-hundred missiles in their silos remain a greater influence and counter-threat than 200 empty ones --irrespective of why they might become "empty", and irrespective of the stage of the war. I might change this view, if I could be convinced that their expenditure -- in the conventional retaliatory pattern -- could reliably bring about a more favorable war outcome, or a radically higher survival probability. I have never encountered any convincing demonstration of this. Retaliation in kind (or in toto) is often summarily justified as "self-evident".



The usual "logical" discussions of strategic propositions are quantitatively quite raw. Sophisticated treatments generally lead to lines of reasoning so narrowly constrained, as to be easily discredited on grounds of speciousness. This at once also perpetuates "more brute force" as a refuge from risk and uncertainty. In order to further illustrate the logic here, I too must use raw definitions, assumptions and deductions:

First I make the "one-for-one" assumption: Force parity, and also parity in success of counterforce attack. (Any significantly different circumstance leads to "What's the point?" -- One way or the other.) In a salvo counterforce attack, the aggressor eliminates both his and your forces as significant military elements. Both sides are left with empty holes. If he miscalculates in an important way, there are two possibilities: If he overkills, then our "withholding" makes no difference. If he underkills, then he's got none left, but we've got some "filled holes".

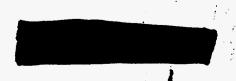
Next, consider the other (unlikely) extreme, the purely countervalue salvo attack. (Quasi-extermination.) A retaliatory value strike only salves the consciences of your dead. It does not revive them, it does not necessarily eliminate anything of later optimum military use, and a posteriori, it militarily reduces you to a par with the aggressor. One really needs to watch the course of the war to evaluate the optimum commitment pattern -- in targets and time -- and this suggests commitment on a parsimonious basis.

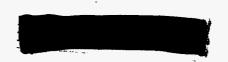
Now consider the response to a measured attack -- in other words, in the context of an extended war. Basically what needs continous evaluation, is the levels of relative attrition which can be afforded. In principle, withholding trades your cities and people in return for favorable attrition of the aggressor's strategic forces. That is a very rugged policy to consider, but I will shortly suggest why it may be unavoidable, in the near future.

The mixed counterforce-countervalue extended war is an intermediate combination of these patterns -- at least on the basis of a simple linear arithmetic. It still favors withholding, because in effect, the (aggressor) countervalue attack capability is reduced more-or-less in the same way as it would be by disarmament, and to the degree that his missiles are assigned to counterforce missions.

A withholding policy gains significance in a period of armament reduction. Suppose we count one "city" as equivalent to one warhead, and count a country as 200 cities. If both sides have 1000 w/h, there is no contest. If both sides have 200, withholding can develop a noticeable force differential.

Perhaps the most persuasive case is the multi-nuclear-pact situation. $(n \sim 4)$ Then the potential penalties on force expenditure can be severe





indeed. Frugality becomes dominant; good intelligence and deliberate analysis are indispensable in optimizing force commitment. The war cannot avoid being an extended one, with much political "back-door" trading and "siding", and with distressing trade-offs between cities and missile reserves.

Perhaps the most significant counter-reaction that can develop in an extended war, is city evacuation. It is note-worthy that the Soviets make this such a dominant feature of their civil defense plan. In a matter of three days, the worth of countervalue strikes can be radically altered by this conceptually simple action. Having elected a restrained course of combat (i.e., limited counterforce action), one is then finally led back to the original basic concept of nuclear weapon purpose, in terms of military value attacks:

1 Missile $\equiv 10^3$ to 10^4 bombers.

You will also note that I correspondingly say nothing about city hostage coercion, in the sense of the political countervalue threat of "filled holes". That may be a meaningful concept in a peaceful setting, but it rapidly evaporates in a "bloody" war. (Quite aside from the evacuation effect.)

Of course these are primitive arguments. They are easily brought to question on such raw technical points as the introduction of Polaris or of ABM. I have a modest collection of such side-notes, which also bear on your broader topic of "How to End Wars"; if and when I get them organized, I will forward a sequel. If this helps to extrude a better doctrinal rationale -- whatever that may be -- it will be a worthwhile sacrifice.

Sincerely,

Louis F. Wouters

Louis G. Montees

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