U. S. AIR FORCE

PROJECT RAND

RESEARCH MEMORANDUM

NUCLEAR WEAPONS AND LIMITED WAR

T. C. Schelling

RM-2510

December 29, 1959

Assigned to. _____

This research is sponsored by the United States Air Force under contract No. AF 49(368)-700 monitored by the Directorate of Development Planning, Deputy Chief of Staff, Development, Hq USAF.

This is a working paper. It may be expanded, modified, or withdrawn at any time. The views, conclusions, and recommendations expressed herein do not necessarily reflect the official views or policies of the United States Air Force.

The RAND Corporation
1700 MAIN ST. • SANTA MONICA • CALIFORNIA

SUMMARY

With the development of small-size and small-yield nuclear weapons, nuclear depth charges and nuclear air-to-air rockets, the technical characteristics of nuclear weapons no longer require us to treat such weapons as peculiarly different from other kinds used in limited war. But a legalistic, or symbolic, or psychological distinction can exercise a powerful influence in the bargaining process by which limits evolve and become recognized. The distinction between nuclear and other weapons is much like that between Chinese and Korean troops, or between aid in the form of materiel or aid in the form of military forces. It is a qualitative difference, but essentially an arbitrary one. (There is a "legal" difference between nationalities or territories, but not one pertinent to the limitation of war. If a territorial limit is recognized by adversaries, it is because they need limits, even arbitrary ones, which they observe voluntarily, each on condition that the other does likewise.) The tacit process of bargaining -- by maneuver and implicit threats -- needs qualitative, discrete, "obvious" limits, even though any such limits are essentially arbitrary.

The line between nuclear and other weapons is such a "limit." The symbolic distinction can be reinforced by our policies or diminished by them. Which result we should aim at depends on whether the distinction is judged to be an asset that we share with our enemies -- an asset that may help to limit mutual damage and constrain the enemy's actions as well as ours -- or a liability and an embarrassment. We should recognize that in any limited war in which nuclear weapons are used, both we and the enemy will be creating precedents for and expectations about the future role of nuclear weapons. This prospect should be taken into account in

considering both the enemy's incentive to introduce nuclears on his own initiative and his response to a nuclear initiative by us.

I

With the development of small-size, small-yield nuclear weapons suitable for local use by ground troops with modest equipment, and with the development of nuclear depth charges and nuclear rockets for air-to-air combat, the technical characteristics of nuclear weapons have ceased to provide much basis, if any, for treating nuclear weapons as peculiarly different from other weapons in the conduct of limited war. It is argued, of course, that there are political disadvantages in our using nuclear weapons in limited war, particularly in our using them first, and that those who consider a fireball as moral as napalm for burning a man to death must nevertheless recognize a worldwide revulsion against nuclear weapons as a political fact. In other words, if there is no longer a technical dividing line between the effects of nuclear weapons and the effects of other weapons, there is a political distinction that rests on the reactions of allies and neutrals.

This paper concerns a third point of view for distinguishing between nuclear and other weapons, one that involves our relations with the enemy and a distinction that may be relevant to the process of limiting war. In the interest of limiting war or of understanding limited war, it may be wise to recognize that a distinction can exist between nuclear and other weapons, a distinction that rests if not on physical, then on psychological, legalistic, or symbolic grounds. That small-yield nuclears delivered with "pinpoint" accuracy are just a form of artillery and consequently do not prejudice the issue of limits in war is an argument based exclusively on an analysis of weapon effects, not on an analysis of the limiting process -- of where limits originate in limited war, what makes them stable or unstable, what gives them authority, and what circumstances and modes of behavior are

conducive to the finding and mutual recognition of limits. The premise of the "just-another-weapon" argument is that if there is no compelling basis in weapon effects for a distinction between nuclears and other weapons, there is no basis at all that is pertinent to the limiting process.

Could one not make the same argument against discriminating between the users of weapons? There is no more difference between Russians and Chinese than there is between nuclear and other weapons; similarly for the difference between Chinese and North Koreans, or between Americans and Nationalist Chinese, British and Jordanians, Egyptians and Algerians. Yet nationality is an important distinction in the process of limiting war or destroying its limits. Similarly, there is little difference between the terrain a hundred miles north of the Soviet-Iranian border and the terrain a hundred miles south, or what lies above the Yalu and below it, or the two sides of the Greek-Yugoslav border. Yet boundaries like these do play an important role in the limiting process quite apart from any physical difficulty they may oppose to crossing them. Aside from the trouble of crossing a river or scaling a mountain, there may be good reasons not to do so.

One could reply that these are "legal" distinctions and that legal distinctions are real ones while those between nuclear and other weapons are fictitious. But they are not really legal; they are "legalistic." There is no legal authority that forces the participants in limited war to recognize political boundaries or nationalities. The Russians are not legally obliged to treat a modest penetration of their border as a qualitative change in the war -- as a dramatic act discontinuous with action up to their border. The Chinese were not legally obliged to retaliate (rather than just to resist) if we deliberately crossed the Yalu River;

they did not lose any legal right to deny trespass by admitting occasional thoroughfare. We are not legally obliged to take cognizance of Russian pilots if they participate in a limited war, or Russian "volunteers" in a Near Eastern ground army fighting against our side. Penetrating a border, or bringing a new nationality into the conflict is like introducing a nuclear weapon; it runs the risk of enemy response. And an important determinant of enemy response is what he thinks he has tacitly acquiesced in if he fails to respond, or makes only an incremental response, to our symbolically discontinuous act.

What makes the Soviet or Chinese border a pertinent or compelling place to draw a line in the event of war in that area is principally that there is usually no other plausible line to draw. For Western troops to cross the Russian border is to challenge -- not physically but symbolically -- the territorial integrity of the USSR, and to demonstrate or at least to imply an intention to proceed. Unless one can find some "obvious" limit inside that border, such that it would be clear to the Russians where we intended to stop in the event that we cross the border, and such that it would be obvious to us that there was a limit as to how far the Russians would let us advance if we did cross it and that the Russians knew that we knew it, there is just no stopping place that can be tacitly acknowledged by both sides. Under the circumstances, for the USSR to accept the penetration of their border without a dramatic retaliation of some sort would be to admit that their territory is fair game for a gradually expanding war. The political boundary is therefore <u>useful</u> as a stopping place, not legally mandatory; it is useful to <u>both</u> sides in default of any plainly recognizable alternative, since both sides have an interest in finding some limit. The border has a <u>uniqueness</u>

that makes it a plausible limit. It is one of the few lines -- perhaps the only line, but certainly one of the few -- that could be tacitly recognized by both sides as the "obvious" geographical limit that both sides might observe. It has a compelling power of suggestion, a claim to attention, the denial of which might seem -- in default of any plainly recognizable alternative -- to be a denial of any limitation.

But in case political and national boundaries still seem to be legal, and therefore real, consider some other distinctions that are significant in the limiting process. We provided much equipment, but no manpower to the war in Indochina; we provided equipment, leadership, and advice to the Greek troops during the guerrilla war, but no combat troops. We provide direct naval support to the Nationalist Chinese in the Straits of Formosa. It has been thought that we might have provided air support to the French and Vietnamese in Indochina without appearing to be as "involved" from the Chinese and Russian point of view as we would have appeared if we had put ground forces in.

An economist can argue -- with the same persuasiveness as those who argue that "pinpoint" delivered small-yield weapons are just another form of artillery -- that equipment and manpower are fungible resources in a military campaign, that air intervention is not "really" different from ground intervention, that brains are as important as brawn for troops that lack leadership and planning skill. The controversy about re-defining service functions in the light of modern weapons, and about the usefulness of defining military-service functions in terms of the means of locomotion, suggests that an air-ground distinction or a naval-ground distinction rests on nothing but tradition. But the point of all this is that in limiting

war, tradition matters.

In fact, in a first approximation to the question of what we are dealing with in the analysis of limited war, the answer is that we are dealing with tradition -- with precedent, convention, and the force of suggestion. We are dealing with the theory of unwritten law -- with conventions whose sanction in the aggregate is the need for mutual forbearance to avoid mutual destruction, and whose sanction in each individual case is the risk that to breach a rule will collapse it and that to collapse it may lead to a jointly less favorable limit or to none at all, and may further weaken the yet unbroken rules by providing evidence that their "authority" cannot be taken for granted.

What makes atomic weapons different is a powerful conviction that they are different. The reason -- in answer to the usual rhetorical question -- why we do not turn back the clock and ban bows and arrows on the grounds that they too, like nuclear weapons, kill and maim people, is that there is a tradition for the use of bows and arrows, a jointly recognized expectation that they will be used if it is expedient to use them, and no such tradition for the use of atomic weapons. There is instead, if one may use the term, a tradition for the non-use of atomic weapons -- a jointly recognized expectation that they may not be used even in spite of declarations of readiness to use them, even in spite of tactical advantages in their use.

Traditions or conventions are not simply manifestations of limits in war, or a curious aspect of them; they are instead the very essence of the limits. The fundamental characteristic of any limit in a limited war is the fact that it is recognized by both sides as having some kind of authority, the authority deriving mainly from the mutual acknowledgment, of a "tacit

bargain." And a particular limit gains in authority from the lack of confidence that either side may have in discovering an alternative limit. The rationale behind the limit is legalistic and casuistic, not legal, moral, or physical. The limits may correspond to legal and physical differences or to moral distinctions; indeed, they usually have to correspond to something that gives them a unique and qualitative character and that provides some focus for expectations to converge on. But the authority is in the expectations themselves, and not in the thing that expectations have attached themselves to.

II

Whether limits to the use of atomic weapons, other than the limit of no use at all, can or cannot be defined in a plausible way is made more difficult, not less so, by the versatile character of atomic weapons. It is now widely recognized that there is a rather continuous gradation in the possible sizes of atomic-weapon effects, a rather continuous variation in the forms in which they can be used, in the means for their conveyance, in the targets they can be used on, and so forth. There seems, consequently, to be no "natural" break between certain limited uses and others. If we ask, then, where we might draw a line if we wished to limit somehow the size of the weapons, the means of conveyance, the situations in which or the targets on which they can be used, the answer -- in a purely technical sense -- is that we are free to draw a line anywhere we please. There is no compelling reason for drawing it at any one particular gradation rather than another. But that is precisely why it is hard to find a rationale for any particular line. There is no degree of use, or size of weapon, or

number of miles that is so much more plausible than other degrees, sizes, or distances, that it provides a focal point for both sides' expectations. Legalistic limits have to be qualitative and discrete, rather than quantitative and continuous. This is not just a matter of making violations easy to recognize, or of making adherence by one's own commanders easy to enforce. It concerns the need of any stable limit to have an evident symbolic character, such that to breach it is an overt and dramatic act that exposes both sides to the danger that alternative limits will not easily be found.

The need for qualitatively distinguishable limits that enjoy some kind of uniqueness is especially enhanced by the fact that limits are generally found by a process of tacit maneuver and negotiation; they are jockeyed for, rather than explicitly negotiated. But if the two sides must strike a "bargain" without explicit communication, the limit has to have some quality that distinguishes it from all possible alternatives; otherwise each side will have little confidence that the other acknowledges the same limit. Even a parallel of latitude, or an international dateline, or the North Pole, may have this quality when no other natural, plausible, "obvious" point or line is available for expectations to converge on.

A test of this point with respect to atomic weapons might be to pose the following problem.* Suppose that we are trying to cooperate for a prize. We are to sit down right now, separately and without any prior arrangements, and write out a proposed limitation on the use of nuclear weapons, in as little or as great detail as we please, allowing ourselves limitations of any description that appeal to us -- size of weapons, use

---

*For some experiments along this line, see the author's "Bargaining, Communication, and Limited War," Journal of Conflict Resolution, Vol. I, No. 1 (March, 1957), pp. 19-36.

of weapons, who gets to use them, what rate or frequency of use, clean versus dirty, offensive versus defensive use, tactical versus strategic, on or not on cities, with or without warning -- to see whether we can all write the same specification of limit. If we are in perfect agreement on the limits we specify, we get a prize; if our limits are different, we get no prize. We are doing this only for the sake of the prize, to see whether we can in fact agree tacitly on a statement of limits, and to see -- for those of us who do manage to coordinate our proposals tacitly -- what kinds of limits appear to be susceptible of tacit joint recognition. We are permitted the extremes of no limits at all on the one hand, or no atomic weapons at all on the other, and any gradation or variation defined in any way we please.

My argument is that there are particular limits -- simple, discrete, qualitative, "obvious" limits -- that are conducive to a concerted choice. I predict that those who specify other kinds of limits will find few partners or none at all whose limits coincide with theirs. (Since our motive in taking the test is to agree with each other, we are not concerned with any other virtues that our limits may have. In this exercise our main consideration is the likelihood that if we bend our efforts to choosing those limits that we think others will choose, knowing all along that they too are trying to coordinate their choice with ours, we will succeed.)

I do not allege that this exercise proves what kinds of limits are capable of possessing stability and authority. It does demonstrate that certain characteristics of limits, particularly their simplicity, uniqueness, discreteness, susceptibility of qualitative definition, etc., can be given an objective meaning, one that is at least pertinent to the process of

tacit negotiation. It suggests that certain kinds of limits are capable of being jointly expected by both sides, of focusing expectations, and being recognized as qualitatively distinct from all possible alternatives.

III

The first conclusion to be drawn from this argument is that there is a distinction between nuclear and non-nuclear weapons, a distinction relevant to the process of limiting war. It is a distinction that we can strengthen or weaken, clarify or blur, at least to some extent. We can strengthen the tradition, and enhance the symbolic significance of this distinction, by talking and acting in a way that is dramatically consistent with it; we can erode the distinction -- but not readily destroy it -- by acting as though we do not believe in it, by emphasizing the "just-another-weapon" argument and by making it evident that we have in fact little compunction about using nuclears. Which policy we should follow depends on whether we consider the distinction between nuclear and other weapons to be an asset that we share with the USSR, a useful distinction, a tradition that helps to minimize violence -- or, instead, a nuisance, a propaganda liability, a diplomatic obstruction, and an inhibition to our decisive action and delegation of authority. Those who believe that atomic weapons ought to be used at the earliest convenience, or whenever military expedience demands, should nevertheless recognize the distinction that exists so that action can be taken to lessen the distinction during the interim.

This is not just a matter of what the Asian neutrals or our European allies feel about the distinction. It concerns a relationship between us and the Russians -- an understanding that may exist between us whether we

like it or not. It has to do with whether the Russians think we share with them a tacit expectation that there is a limit against the use of nuclear weapons. In the interest of limiting war, we shall want the Russians or the Chinese not to believe that our initial use of atomic weapons in a local war is a challenge to the whole idea of limitations, a declaration that we will not be bound by any kinds of limits. We shall want them to interpret our use of nuclear weapons as consistent with the concept of limited war and consistent with our willingness to collaborate tacitly in the discovery and recognition of limits. We shall want our use of atomic weapons not to be charged with excessive symbolic content. So if I am right that a distinction does exist in the sense pertinent to the limiting of war, and if nevertheless we do wish to use atomic weapons, we ought in the interest of limiting war to destroy or attenuate the distinction as best we can. (For example, a deliberate program for early and extensive use of "nuclear dynamite" in earth-moving projects, especially in underdeveloped countries, might help to weaken it; the same might be said for a program of training friendly troops in underdeveloped countries in how to survive nuclear weapons explosion, and making use of some actual weapons in the process.)

A second conclusion is that the principal inhibition against the use of atomic weapons in limited war may disappear with their first use. It is difficult to imagine that the tacit agreement about nuclear weapons being different would operate as powerfully during a second limited war if such weapons had already been used in a first. It is doubtful, therefore, that we could use them to our advantage in one war and then <u>subsequently</u> rely on the distinction to constrain everybody thereafter. One potential

limitation of war is likely to be substantially discredited for all time if, flouting tradition, we create a contrary precedent. (There may also be some limits or sanctuary concepts, which we take for granted, that should be re-examined to see whether they were originally by-products of the assumed nuclear ban and hence might disappear with it. The role of naval vessels, for example, may want to be looked at again, partly to anticipate enemy treatment of them, partly to avoid misinterpreting enemy intentions if he treats them differently after nuclears are brought into play.)

A third conclusion is that on the occasion of their first use we should perhaps be at least as concerned with the patterns and precedents that we establish, and with the "nuclear role" that we adopt, as with the original objectives of the limited war. For example, if nuclear weapons are used in defense of Quemoy, we ought to be much less concerned about the outcome on Quemoy than about the character of the nuclear exchange, the precedents that it establishes, the role we manage to assume for ourselves, and the role the enemy assumes in the process. We shall be importantly shaping limited nuclear wars to come. (When a boy pulls a switch-blade knife on his teacher, the teacher is likely to feel that, whatever the point at issue originally was, the overriding policy question then and in the future is his behavior in the face of a switch-blade challenge.)

Fourth, we should recognize -- at least on the first occasion when nuclear weapons are used in limited war -- that the enemy too will really be engaged in at least two different kinds of limited-war activity at the same time. One will be the limited struggle over the original objectives;

the second will be the tacit negotiation or gamesmanship over the role of nuclear weapons themselves. To illustrate, in connection with Quemoy we might decide to use nuclear weapons; ordinarily it would be supposed that we should do this only if it were necessary to the defense of Quemoy, and that we should use them in a manner that achieves our Quemoy objectives. But in considering whether the Chinese or Russians might use them in return, our main concern probably ought not to be what they think their use of nuclear weapons would do for the invasion of Quemoy. Much more important to them, it seems, would be the nature of their "response" to our nuclear initiative. They would be interested, not in assuming a submissive role, but in demanding a kind of "parity," if not dominance, in their own nuclear role. And unless we are ready for some kind of decisive showdown in which we either win all or lose all, we must be as willing to "negotiate" (by our actions) for limited objectives in terms of nuclear dominance, traditions and precedents of nuclear use, and the "rules" we jointly create for future wars, as for any other types of objectives in limited war.