

BARGAINING TACTICS AND THE "CRITICAL RISK-CREDIBILITY" MODEL

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In the study of crisis bargaining, we are confronted by a considerable variety of bargaining tactics which, at first glance, seem to have a kind of miscellaneous or disconnected quality about them. Their broad common denominator is that they are all techniques of coercion or resisting coercion, but beyond that, we have no clear criteria for grouping tactics into classes according to the particular coercive or bargaining function performed. This essay is an attempt to provide such criteria and further, to clarify the roles of the different classes of tactics in the overall bargaining process. This will be done by relating tactics to a game-theory-type model which I shall call the "credibility-critical risk" model. It is adapted primarily from work by Daniel Ellsberg and Frederick Zeuthen.¹

1. Daniel Ellsberg, "The Theory and Practice of Blackmail," lecture delivered at Lowell Institute, Boston, March, 1959, in a series entitled "The Art of Coercion: A Study of Threats in Economic Conflict and War." Frederick Zeuthen, Problems of Monopoly and Economic Warfare (London: George Routledge and Sons, 1930), Chap. IV. This model is also presented with briefer elaboration, in my "'Prisoners' Dilemma" and "Tricken' Models in International Politics," mimeo, July 7, 1969, pp. 23-25.

		B (defender)		
		Comply .50	Stand firm .50	
A (aggressor)	Comply .40	0,0	-5,5	A's critical risk=.50 B's critical risk=.60
	Stand firm .60	10,-10	-20,-20	

This matrix portrays a crisis precipitated by an aggressor's demand that a defender yield something worth ten units, under threat of war. If the aggressor "stands firm" and the defender "complies", the payoffs are 10 and -10, respectively. If the defender is firm and the aggressor complies (fails to carry out his threat and lets the matter drop) the aggressor loses and the defender gains bargaining reputation, prestige, etc., worth five units. The consequence of both standing firm is war at a mutual cost of 20. The outcome comply-comply we assume, for convenience, is a compromise with no net gain or loss to either party.

As in any bargaining situation, if either party can commit itself absolutely and irrevocably to "standing firm", and communicate this commitment, the outcome is clear--the other party must comply. However, this model assumes that commitments are not always (perhaps hardly ever) absolute; that there is always some uncertainty in the bargainers' minds as to whether the other party is "really" committed. The adversary's commitment is subjectively perceived as a probability estimate rather than a certainty one way or the other. In the vernacular, whether a

party gives in or not depends on whether it feels the probability (credibility) of the other side's being committed is "too high to take a chance" or "worth risking."

The concept of "critical risk" expresses the notion that there is some threshold of risk representing the maximum risk a party can "stand" without capitulating. If the credibility of the other's threat or commitment is perceived as higher than this threshold, the party must give in; if it is lower, the party will continue to stand firm.

The critical risk for either side is derived from a comparison of its payoff from complying with its payoffs for standing firm. In our model, B loses 10 by complying with the demand. If he stands firm he either gains 5 or loses ²⁰10 depending upon A's choice. If he estimates a .40 chance that A will comply and a .60 chance that A will be firm, B's "expected value" from standing firm is -10, just equal to the cost of compliance. In other words, when B estimates the credibility of A's threat at .60, B is indifferent between complying or standing firm. This is B's "critical risk"--the credibility of A's threat or commitment must be at least this high to force B to back down. A similar calculation will show that A's critical risk is .50. If A estimates the probability of B's firmness at higher than this, A must retreat (renege on his threat). If the probability seems lower than .50, A will commit himself to attack.²

2. There is perhaps a little ambiguity here which needs clearing up. We are assuming that A's initial threat of war does not actually commit him, but that he has available some further move which would commit him to fight if B does not comply. Thus, his calculation of the probabilities of B's compliance or firmness are the probabilities which he foresees after this act of "final commitment." Alternatively, the model can be taken to represent bargaining between an aggressor and a supporting ally of a weak "victim". Then the act of "final commitment" might be actual attack on the victim, and the probabilities estimated just before that decision are the probabilities that the supporting ally will aid or not aid the victim.

It is possible, of course, that both parties will feel that the credibility of the opponent's threat of "firmness" is lower than their own critical risk. In this situation, both may firmly commit themselves and the outcome is war. It is war "by miscalculation", of course, because if either side had perceived the other's firm commitment, then the other's threat credibility would have exceeded its own critical risk and it would have conceded. Conversely, if both perceive that the credibility of the other's threat is higher than their own critical risk, neither can afford the risk of standing pat on its initial position, and the stage is set for compromise.³

We are now ready to relate coercive bargaining tactics to this model. It is easy to see that the "bargaining problem" for each side is to manipulate the other's perceptions and utilities so that the perceived credibility of its own threat of firmness is higher than the other's critical risk. Then the other must give way. Thus, there are two broad classes of coercive bargaining tactics for each side--those which attempt to increase its own threat credibility and those which seek to reduce the adversary's critical risk.

3. The formula for critical risk is $\frac{uF_1 - uC_1}{uF_1 - uW}$ when uF_1 is the utility of

successful firmness, uC_1 is the (negative) utility of compliance, and uW is the (negative) utility of war. The subscript "1" indicates that this is the situation after the first demand and counter-offer (In our example, B has, in effect, made a counter-offer of the status quo). Compromise, of course, requires concessions from these initial positions, and each concession changes the parties' critical risks. We shall not analyze the compromise process here. See Zeuthen, op. cit.

Credibility, of course, is the opponent's perception of the probability that the threatened alternative will be chosen--in our model the probability that the party will "stand firm". In part it is a function of the opponent's perception of the party's utilities or "payoffs" for alternative outcomes--in particular, whether the cost of war is greater or less than the cost of compliance. Since the opponent can seldom be certain of the "real" relationship between these (dis)utilities in the party's preference system, the subjective estimate of credibility will usually be probabilistic rather than absolute. But credibility estimates may also be made "directly," that is, without reference to perceptions of the threatening party's payoffs. That is, impressions of the party's "resolve" may depend on such things as his past behavior, the extent of his freedom of choice, his degree of rationality, and his beliefs about the opponent's resolve.⁴ Thus a party has two sub-classes of tactics available for increasing the credibility of his threats: (1) changing the opponents perceptions of his payoffs and (2) changing the opponent's estimates of the probability of his choices, without modifying his apparent payoffs.

What follows is an attempt to list and classify, in terms of the categories just mentioned, a variety of coercive bargaining tactics. The list is not exhaustive and the classification undoubtedly can be refined. But perhaps it will serve the purpose of alerting us to some

4. It is perhaps worth noting that "resolve" and "credibility" are close to being two sides of the same coin. Resolve is the party's own degree of determination to carry out the threatened alternative; credibility is the opponent's perception of that degree of determination. Theoretically resolve is likely to be more absolute (less probabilistic) than credibility because presumably a party knows more about his own incentive structure than his opponent does.

of the typical tactics we are likely to find in the case studies, and the "bargaining function" they perform. My guess is that perhaps 80% of tactics can be related to the "credibility-critical risk" model. There are some which do not fit the model very well, however, and they will be arranged in further classes near the end of the paper.

The list is presented in outline form, without discussion except for an occasional example. Most of the items are self-explanatory. For discussion of some of the items, see my "Crisis Bargaining" paper.

I. Tactics to increase credibility

A. Change one's apparent utilities (payoffs)

(Here the primary objectives are to minimize one's own net costs of war--initially, in the model, -20 for both sides, and to maximize one's apparent valuation of the stakes (maximize the cost of compliance)--initially -10 for B and -5 for A).

Reduce the apparent net cost of war

1. Increase capabilities
2. Increase readiness of capabilities
3. Various verbal statements
 - a. "We don't fear war"
 - b. "We will win"
 - c. "Your ally will not support you"
 - d. "Our ally will support us"
 - e. "We believe the war will be limited"
 - f. "The issue is so important to us that we are willing to fight over it."

Increase one's apparent valuation of the stakes (increase apparent costs of backing down)

1. Make threats which engage prestige, honor and future bargaining reputation.
2. Link the present issue with other issues; make it appear as only one aspect of a larger confrontation.
 - a. "If I give in here, you'll expect me to give in on X".
 - b. "If I give in to this demand, this will only embolden you to make further demands". (counter to "salami tactics")
 - c. "I know that your ultimate ~~aims~~ are unlimited"

3. Cite the legitimacy or "fairness of one's position"
 - a. Inviolability of the status quo
 - b. the "right" of compensation
4. Tie one's position to moral principles
5. Invoke legal rights
6. Invoke alliance obligations (moral principle as well as political value of alliance preservation and cohesion).
7. Cite need to "preserve the balance of power" or redress the balance".
8. Cite danger of internal revolution if one capitulates
9. Invoke historical tradition (e.g., Monroe Doctrine in Cuban missile crisis)

B. Increase apparent probability of firmness without changing payoffs

(Although some of the following tactics may carry indirect implications about one's payoffs, their direct intent or effect is to modify the opponents's perceptions of the probabilities of one's choices.)

1. Automation (physically eliminate the alternative of compliance, or make compliance physically or administratively difficult; "relinquish the initiative").
2. Loss of control over subordinates (actually give up control, threaten to give up control, or claim lack of control (e.g., "volunteers"))
3. Devolve decision-making authority to lower levels in the command hierarchy, to persons whose incentive structure is more favorable to firmness than that of the governmental leadership.
4. Devolve decision-making authority to a proxy state whose incentive structure is different than one's own (or threaten to do so).

5. Claim that one's constituency will not allow compliance or compromise (the constituency may be "the cabinet," "Congress", "public opinion", "allies", etc.)
6. Mobilize support of public opinion behind one's position.
7. Parliamentary votes and resolutions supporting one's position.
8. Increase the level of shared risk of inadvertent war.
9. Pretend irrationality
10. Express confidence in the adversary's rationality and good sense ("since you are reasonable and I am not, you must be the one to concede")
11. Emphasize uncertainties in the situation, or the unpredictability of one's own behavior.
12. Show of force; minor use of force.
13. Express disbelief in the opponent's commitment, or skepticism about his resolve ("my resolve is high because I think yours is low").
14. Represent oneself as a "force of nature", totally immune to argument and persuasion.
15. Pretend not to have "heard" the other side's threats.

II. Tactics to reduce the adversary's critical risk

(The adversary's critical risk is a function of his payoffs--his cost of war and his valuation of the stakes. These utilities can be manipulated, although perhaps to a lesser degree than the adversary's perception of one's own utilities)

A. Increase the adversary's estimate of his net costs of war

1. Increase one's own capabilities and readiness
2. Verbally exaggerate one's capabilities

3. Emphasize the loyalty of one's own allies and the unreliability of the adversary's allies
4. Stress the danger of escalation
5. Indicate that one's objectives will expand after the war starts.

B. Devalue the stakes for the adversary (decrease his cost of compliance).

1. Provide a loophole or rationale which permits the adversary to back down or de-commit himself with minimum humiliation.
2. Offer an apparent quid pro quo.
3. Invoke community values (e.g., "peace") which he would serve by backing down.
4. Mobilize support of international community institutions for one's own position.
5. Undermine the legitimacy of the opponent's position (e.g., the status of West Berlin is "abnormal").
6. Challenge the legality of the opponent's position.
7. Minimize the element of duress or provocation in one's demands and threats.
 - a. Pretend the crisis has arisen "autonomously" rather than by deliberate challenge (a Soviet tactic in the Berlin case).
 - b. Give a non-coercive rationale for coercive moves (e.g., citing "technical reasons" for closing the Autobahn).
 - c. Use "sign language" and "diplomatic codes"
8. "Salami tactics"
9. Stress limited nature of aims ("This is my last demand").

10. De-couple the present issue from other or future issues
("This issue is special. I will not draw any conclusions about your general resolve if you concede on this issue").
11. Help the adversary undo his commitment by arguing that the situation does not meet the conditions specified in his threat or commitment.
12. Stress the common interests in settling the dispute and avoiding war.
13. Suggest plaudits to be gained from third parties or neutrals by giving in.
14. Use proxy state to present the challenge (devalues the stakes for the adversary because it is not a test of resolve with his primary opponent).

A few interpretive remarks are worth making at this point. We have presented our list of tactics as if they were usable either for "aggression" or "defense", "compellence" or "resistance." Most of them are interchangeable, but some are not. For example, minimizing the element of duress, "salami tactics" and stressing the limited nature of one's aims are quite obviously aggressive tactics. Engaging one's bargaining reputation by invoking the interdependence of one's commitments is more clearly a defensive tactic and so is the invoking of alliance obligations.

Some tactics, used defensively, are obvious counters to particular other tactics, used aggressively. For example, linking up the present issue with other or future issues ("interdependence of commitments") is clearly the appropriate counter to an aggressor's attempt to use salami tactics or to de-couple the present issue from future issues. Demonstrating the cohesion of one's alliance is a defensive counter to

the adversary's attempt to divide the alliance or throw doubt on its solidarity.

Some tactics affect more than one dimension of the "credibility-critical risk" model. Some of these multiple effects are complementary; others are contradictory. For example, to increase one's capabilities and readiness enhances one's own threat credibility by minimizing one's own war costs and it also reduces the adversary's critical risk by increasing his probable costs of war--the effects are complementary. More interesting are the tactics which have contradictory effects. Perhaps the best example is the attempt to magnify one's own values at stake by invoking the interdependence of one's commitments. If a party wants to indicate that the outcome of the present issue will affect his bargaining reputation on subsequent issues, it will be hard to prevent the opponent from drawing the same conclusion with respect to his future bargaining power. One effect is to increase one's own threat credibility but this may be largely offset by the effect in increasing the adversary's critical risk. Obviously the user of this tactic needs some rationale for portraying the values at stake as asymmetrical, so that he can plausibly argue that a concession by him would cost him much more than a concession by the adversary. The Russians attempted to resolve this incompatibility in the Berlin crisis by saying that concessions by them would encourage the Western powers to make further demands, at the same time attempting to de-couple the issue from future issues for the Western powers, by claiming that the latter were only being asked to cooperate in rectifying an "abnormal" and inherently dangerous situation, thus implying that their cooperation in this "special" situation would not generate doubts about their resolve on subsequent issues. Another example of contradictory effects is

provided by the threat which engages additional values of prestige, honor and bargaining reputation for the threatener but may also engage similar values for the recipient of the threat. Credibility is increased for the threatener but so is the critical risk of the threatenee. One way of at least partly minimizing this incompatibility is to minimize the element of provocativeness in the threat, in such a way that the threatener makes his point without "raising the hackles" and stiffening the resistance of the threat-recipient.

A crisis bargainer may face a choice between making it easier for the other party to concede and maximizing his gains if the other party does concede. When images of resolve are at stake, the choice is between minimizing damage to the opponent's image and maximizing the enhancement of one's own image. De-coupling the issue from other and future issues may serve to minimize the adversaries reputational costs of backing down, but it reduces one's own "resolve gains" if he does. Blatant, provocative tactics which make clear that if the adversary capitulates, he does so "under duress" or naked coercion, earns a bargainer maximum gain in the "balance of resolve" if the opponent does give way, but they also make it less likely that he will.

Finally, it is worth pointing out that tactics which increase a party's threat-credibility also may increase the adversary's perception of the party's critical risk, since both of these are a function of the party's own payoff structure as perceived by the adversary. The two effects are complementary: the higher one's threat-credibility, the greater the likelihood that the adversary will concede, and the higher the adversary's perception of one's critical risk, the lower his confidence that his threats and coercive tactics will succeed. Thus, particular tactics may at the same time increase the opponent's

perception of one's firmness of commitment and deter him from making firm commitments. In general, the sum of the two effects is to weaken the resolve of the adversary, but of course this dual effect works for the adversary's manipulation of his apparent payoff structure as well.

Similarly, tactics designed to reduce the opponent's critical risk, if they are perceived to be successful, may also have the effect of reducing the credibility of the opponent's threats, since both of these effects are functions of the opponent's apparent payoff structure.

Thus the manipulation of threat credibility and the manipulation of critical risk are rather closely intermingled since they both may be accomplished by modifying the payoffs or apparent payoffs of one side or the other. They should be kept separate, however, for two reasons. First, threat credibility depends on the other party's perceptions of one's payoffs, not the actual payoffs, whereas critical risk is a function of actual payoffs. A party may succeed in changing the other side's perception of the party's own payoffs without actually changing them, and similarly a party may believe he has modified the opponent's payoffs without actually having done so. The difference between perception and actuality may be important in the bargaining process and outcome. Secondly, there are other means of enhancing threat credibility besides manipulating one's payoffs or the opponent's perceptions of them, namely, directly modifying the opponent's estimates of the probabilities of one's courses of action without any intermediate modification of apparent payoffs.

III. Other bargaining tactics

(Not all coercive bargaining tactics fit neatly into the "credibility-critical risk" model. Those which do not are somewhat diffuse in

their meaning and effect; they do not clearly act upon the party's own payoffs, the probabilities of the party's choices, or the opponent's payoffs, although they may affect any or all of these items in a general way. We distinguish two categories: "symbolic acts" and "acts of harassment". Symbolic acts have acquired a conventional meaning as indicators of resolve, hostility, impatience, anger, etc., but they have no effect other than this "signaling" effect. Acts of harassment also bear meanings as signals, but in addition they inflict some sort of minor harm against the opponent or his nationals.)

A. Symbolic acts

1. Visits by important officials to the crisis area
2. Keep military men in prominent view during negotiations
3. Violate normal diplomatic courtesies (as expression of contempt or "dominance")
4. Recall an ambassador
5. Break off diplomatic relations
6. Appoint to key positions individuals known for their "toughness"
7. Military displays and maneuvers
8. Refuse to negotiate, or stop negotiation, on other issues
9. Tests of resolve on minor issues

B. Acts of harassment

1. Economic reprisals (e.g. trade restrictions, blocking of transfer of assets).
2. Restrictions on tourism
3. Cancelling of cultural exchanges
4. "Spontaneous" demonstrations (e.g. against adversary's

embassy or property).

5. Bellicose speeches; verbal slander of opponent's leaders
6. Increase hostility themes in propaganda
7. Stimulate hostile press campaigns
8. Detention and harassment of the other side's nationals
9. Stimulate subversion, pressure and rioting by "fifth columns" within the adversary state.
10. Commando raids
11. Sabotage

IV. Some further dimensions of bargaining tactics and communications

(There are a number of other dimensions or variables concerning bargaining tactics which we will wish to explore in our research. In general, we want to find out how these variables vary as between different crisis conditions and bargaining contexts.)

1. Clarity vs. ambiguity

Bargainers have the option of communicating with maximum clarity and explicitness or varying degrees of ambiguity. Preliminary impressions are that most communications lie toward the ambiguous end of the continuum. We want to test this impression, discover the reasons for it, if true, try to identify various types of ambiguous declarations, and try to discover whether different types and degrees of ambiguity tend to be associated with different bargaining contexts. It would seem plausible to predict, for example, that maximum ambiguity will be found in bargaining between parties with roughly equal inherent bargaining strength, or that, between unequals, the greater degree of explicitness will be found in the communications of the stronger party.

This dimension is associated with the phenomenon of "sign

language" and "diplomatic codes." No one has yet compiled a "dictionary" of diplomatic sign language and this could be an interesting by-product of our research. What meaning is communicated, for example, when a state says an issue is "not a matter of indifference" to it, or that it is "gravely concerned", or that it "cannot be responsible for the consequences"? Is there a particular degree of resolve or commitment associated with each of the code signals? Has the code changed over time? Why do states bother to use sign language at all?

2. Tone of communications

Here the spectrum lies from extreme bellicosity, through "firmness", "moderation" and "reasonableness", to "conciliatory". The tone of communications may be associated with the proportions of conflicting and common interests which the parties see in the situation. It may also be related to the personalities of diplomats and the negotiating styles of their states. In general, the main question of interest is how the tone of communications affects the bargaining process and especially the responses of the other side.

3. Publicity vs. secrecy

The issue of "public" vs. "private" diplomacy has been debated at least since Woodrow Wilson invoked his famous principle of "open covenants openly arrived at". In contemporary bargaining theory, Schelling has pointed out the value of publicity as a means of commitment; Morgenthau, on the other hand, among others, has extolled the virtues of secrecy as enhancing flexibility and facilitating compromise. Again, the choice may turn on whether the parties visualize the situation as conflict-dominant or common interest-dominant. But it is undoubtedly more complicated than this and we may be able

to uncover some of the subtleties and complexities. The general question is: in what conditions do statesmen typically choose to communicate via the public forum and when do they choose to do so privately?

4. Who communicates to whom?

A good deal of the impact of a communication may depend on the identity of the communicator and the role he plays in the communicating government. Hypothetically, the highest credibility is granted to declarations by heads of state, prime ministers and foreign ministers, lower credibility to persons lower in the official hierarchy, or to persons with little or no direct responsibility for decision-making in foreign affairs. The severest, most explicit, communications are likely to be issued by lower-status officials or persons without foreign affairs responsibilities because they can easily be disavowed. The choice of the recipient of private communications may also be a significant variable. In general, we want to explore the relationship between the variables of status and role and other variables in the bargaining process.

5. Medium and forum of communication

This dimension relates to the context in which a communication is issued, and involves a continuum running from extreme casualness to high formality or solemnity. Probably the more formal the medium and forum and the more solemn the occasion, the greater impact and credibility a communication will have. For example a threatening statement made in a State of the Union message, especially if delivered by the president himself, has a high degree of formality. Toward the casual end of the continuum would be "leaks" to the press or "inspired" stories in controlled newspapers, or remarks made at a dinner or cocktail

party. Somewhere in between are congressional resolutions, statements made at a press conference and oral communications between ambassadors and foreign ministers. We want to try and establish the bargaining significance of various media and forums in much the same way that we identify the conventional meanings of various forms of verbal "sign language."

6. "Operational codes" and diplomatic "styles"

The notion of "operational code" as reformulated recently by Alexander George⁵ refers to an actor's political belief system as it affects his approach to political calculation and decision-making. It includes two components: (1) "philosophical beliefs" about the general nature of politics and conflict, and (2) "instrumental beliefs" concerning the choice of goals, selection of appropriate means, calculation and acceptance of risks, etc. The idea of a nation's diplomatic "style" has much the same sort of content.⁶ The constructs of "operational code" and "style" would seem to have an important relevance to the study of bargaining. For example, the Soviets' operational code apparently includes the injunction to optimize or maximize gains ("push to the limit") which is bounded or balanced by the maxim of "avoiding

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5. Alexander L. George, "The 'Operational Code': A Neglected Approach to the Study of Political Leaders and Decision-Making," International Studies Quarterly, Vol. 13, No. 2 (June, 1969), pp. 190-222. This article builds upon earlier work by Nathan Leites in A Study of Bolshevism (Glencoe, Ill.: The Free Press, 1953), and The Operational Code of the Politburo (New York: McGraw-Hill, 1951).
 6. Stanley Hoffmann has recently analyzed the American diplomatic style in Gulliver's Troubles (New York: McGraw-Hill, 1968). Treatments of the styles of other countries may be found in Sir William Hayter, The Diplomacy of the Great Powers (London: Hamish Hamilton, 1960), and Sir Harold Nicolson, Diplomacy (New York: Oxford University Press, 1964).

adventures". They are willing to accept high risks so long as the undesired event is quite distant in the future and they think they can control the sequence of events leading up to it. But they believe they should "yield to superior force." That such maxims are important in determining a state's crisis behavior, and furthermore are taken account of in the adversary's perceptions, is illustrated by the fact that in the Cuban missile crisis Charles Bohlen sought to predict Soviet behavior by citing Lenin's adage "If you strike steel, pull back: if you strike mush, keep going."

Each state, we may assume, has its own operational code or style which affects its definition of the situation, its choices of strategies and tactics and its perceptions of the opponent's intentions and probable behavior. The prominence of moral principle in the American style undoubtedly affects U. S. crisis behavior (it affected both our choice of moves and our reactions to Russian moves in the Cuban missile crisis). Some aspects of the British style are pragmatism, "muddling through" and a reluctance to make commitments in advance for "hypothetical circumstances". The latter characteristic in particular seems to have strongly affected British behavior in the World War I crisis.

Systematic research on operational codes and styles is just beginning, although there is some rather impressionistic literature. Despite the paucity of high-confidence data, we should be on the alert for instances in which choices of bargaining moves or interpretations of others' moves seem best explainable in terms of peculiarities of national style. Variations in style naturally will work against the discovery of regularities common to all participants, but they may be extremely important for explaining national deviations from apparently "typical"

bargaining behavior, or from generalizations deduced from models and logical reasoning.