Introduction to International Relations Lecture 4: Bargaining and Dynamic Commitment

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Overview. Now that we've defined the elements of the rational actor model, we should discuss several ideas that will periodically appear throughout the course: We shall discuss some aspects of rational behavior in the abstract. For example, we shall learn about the concept of *credible commitment*, that is the ability (or inability) to make credible promises and threats. We shall also learn a bit about bargaining power.

OUTLINE OF LECTURE 4: BARGAINING AND DYNAMIC COMMITMENT

- 1. From pure conflict to pure cooperation
 - a) zero-sum games (conflict)
 - b) coordination problems (cooperation)
 - c) mixed-motive situations:
 - distributional conflict
 - coordination but conflict over terms
 - bargaining
- 2. Bargaining: influence expectations
 - a) power (not force): relative, non-fungible, strategic
 - b) communication: explicit, implicit
- 3. Bargaining power
 - a) threats and promises: selective conditional commitments
 - b) how to establish credible commitments
 - reduce freedom of action: burn bridges, delegate
 - relinquish initiative
 - manipulate payoffs: audience costs, military instrument
- 4. Communication (information transmission)
 - a) signaling: costly vs. cheap talk
 - b) signal-jamming (bluffing)
 - c) screening
- 5. Two misconceptions
 - a) what bargaining power is not
 - b) the hurt-more criterion

1 Conflict and Cooperation

At the most abstract level, we shall analyze why actors sometimes cooperate and sometimes do not. (Note that cooperation is not necessarily benign: you could cooperate in despoiling a third actor, for example. Similarly, conflict is not necessarily malign: you could fight a racist evil regime, for example. Sometimes (often?) pacifism is not a virtue.) We now begin with several examples of cooperation and conflict. The plan is to distinguish between various situations in terms of the incentives actors have for different types of behavior. We then learn how to think about these situations as occasions for bargaining (explicit or not), and will generally learn to think about every situation in terms of the bargaining power of the participants. This requires a bit of an abstract leap, but it will pay off immensely in usefulness.

1.1 International Cooperation

There are quite a few instances of fairly successful cooperation among nations. Some of it is quite wide, like the United Nations, the WTO, and the World Bank; some of it is much narrower, like OPEC and NATO; and some of it is bilateral, like an alliance or a trade agreement between two states.

The United Nations is a good example of a very broad and inclusive organization that helps states cooperate and coordinate on important issues ranging from economic development and cultural preservation to conflict management. The UN also demonstrates an important principle that many believe is fundamental to IR: might makes right. Although every sovereign state is a member of the General Assembly (GA) of the UN, it is the Security Council (SC) that makes the most important decisions, especially ones dealing with security issues.

In the GA, every member gets a vote and all votes are weighed equally. The SC is composed of five permanent members—USA, Russia, Britain, China, and France—not surprisingly the victors of the Second World War, and 10 members from the GA that serve on a rotating basis. The difference is that each of the permanent members has veto power. If even one of them decides the issue is not to its liking, it can block it and nobody can do anything about it. Powerful states like the US go around the UN for precisely that reason on issues of great importance to them: they don't want to deal with possible rejection of their resolutions.

A less inclusive example is that of OPEC which is a cartel where the members collude to set the world prices of oil by controlling production quotas. If they want to raise prices, they decrease production and if they want to lower them, they flood the market with oil. Or so it is supposed to work in theory. In practice, some of the world's largest producers of oil (Russia) are not members of OPEC and the cartel cannot influence their decisions. On top of that, even among the members there's a lot of cheating and back-stabbing because there are incentives to renege on agreements. For example, if OPEC decides to reduce quotas and every member adheres to its lower production, then each of them

has an incentive to produce secretly more and benefit from the higher prices. Scholars who study IPE tend to focus on how such cheating can be detected and discouraged in order to facilitate cooperation. Note that in this case, cooperation among the members of the OPEC may be quite detrimental to other actors on the world scene.

1.2 International Conflict

Most of you can probably name at least several conflicts that are going on right now and at least one that will probably begin in the near future. Although global war is as bad as it gets, conflict can be pretty bloody and violent on a much lesser scale. Tens of thousands of people die every year in all sorts of armed confrontations.

Iraq invading Kuwait and then an allied force invading Iraq in the Persian Gulf War is another good instance which is all the more interesting because it had both conflict (coalition versus Iraq) and cooperation (among the members of the coalition).

There is also plenty of smouldering antagonism in the world that can erupt into open fighting with little or no warning. India and Pakistan recently almost came to blows over their dispute about Kashmir. This conflict is all the more scarier because both sides are armed with nuclear weapons. The two have fought three wars already and the question is no closer to resolution as it was four decades ago.

Sometimes nations that are supposedly aligned together engage in bitter competition. Take, for example, Greece and Turkey, both members of NATO, both aligned against the USSR in the Cold War. Yet the two fought several times over territorial disputes, most of them involving the island Cyprus that is currently divided in two and exists as a precarious balancing act.

A lot of conflict seems to hibernate for years and then suddenly erupt in terrible bloodshed. The little countries on the Balkan peninsula in Europe are a good example. These countries have a very long and complicated history, but the region has been a dangerous place even before the Ottoman Empire that possessed it fell apart. After the First World War, the federal state of Yugoslavia was created out of six separate entities. The state, dominated by the Serbian majority, existed in relative stability until the collapse of the Soviet Union.

Almost immediately, the people who have been living as neighbors for decades found themselves at the opposing sides of the barricades as four of the six member states decided to separate. The Serbs fought three wars but lost all of them. You have heard about the horrors in Bosnia and Kosovo. And that's right in supposedly civilized Europe.

2 Distributional Conflict and Bargaining

Most conflict that we shall deal with involves various sides trying to distribute a limited amount of benefits among themselves. These benefits can be territory,

access to markets, or say in governance. If one thinks of various situations in terms of the incentives actors have for conflict and cooperation, one can arrange them on a continuum from **pure conflict** all the way up to **pure cooperation**:

- In situations of pure cooperation, all actors have harmonious interests and are keenly interested in cooperating. The only problem they might face is one of **coordination** because they still have to make sure they take the "correct" actions to produce the outcome they both want. Usually, they can achieve this coordination through communication.
- In situations of pure conflict, all actors have strictly opposed preferences. A gain for one is a loss for another, which is why such situations are called zero-sum games. Here players have strong incentives to **avoid coordination**, and they have no incentives to cooperate at all: anything one of them does, the other would try to take advantage of.

These classes of conflicts are quite interesting but of limited use for our purposes because very few situations match them. Most situations we shall deal with fall between the two extreme types, and are the most interesting ones (Schelling calls them "mixed-motive"). These situations exhibit elements of both conflict and cooperation: actors have incentives to reach an agreement but have opposing preferences on the terms of that agreement.

These situations are essentially occasions for **bargaining**, where actors want to **coordinate but on different outcomes**. Each actor tries to pull the agreement closer to the terms it likes most (hence the conflict) while at the same time preferring some agreement to none at all (hence the cooperation). That is, actors are bargaining over the distribution of benefits and costs, which is why we call these situations ones of **distributional conflict**.

Bargaining occurs when players want to coordinate expectations. Bargaining is the process through which actors try to influence each other's expectations. That is, they want to convince each other that they will not offer more than they currently are offering. Agreement becomes possible only after the expectations of all participants converge sufficiently that they become quite sure that they cannot obtain better terms. The big question then is *how rational players co-ordinate expectations*. It turns out that the answer to this question depends in large on the players' ability to make strategic moves, or their bargaining power.

Bargaining power refers to the degree to which an actor is able to influence the expectations of its opponent in a way that is beneficial to the interests of that actor. That is, an actor has bargaining power (relative to its opponent) if it is able, through its actions or words, to change the expectations of its opponent in such a way that the opponent acts in accordance with the actor's will.

You should note that this definition of bargaining and bargaining power relies on many elements in our rational actor model. First, to bargain, you have to identify the relevant actors. For negotiations over emissions harming the environment, you would probably not consider the other country's military as a

negotiating partner. You would deal with government representatives from the relevant bureaucracy, and perhaps pressure groups from industries.

Second, for each actor you would have to identify its preferences. In our example, this would have to include the structure of the other country's economy, what industries it has (how much they pollute and how costly it is to fix that), as well as the requirements for long-term growth and prosperity. Presumably, your negotiating partners' preferences would be some mix of national society-wide concerns and goals of powerful industry groups.

Third, you would have to identify the possibilities. What options they (and you) have available, how costly they are, what their expected benefits are, how likely they are to succeed, and so on. Here you would take into account the stuff you know, and the information you think you know, and might want to acquire and clarify.

Negotiations are extremely complex processes where all these elements come together, with various actors trying to persuade each other to accept positions closer to their preferred ones. Whether one yields or gets someone to yield depends on the information available and whether one can credibly promise (or threaten) to do something that the other likes (or does not). To get an agreement, the partner has to be sufficiently convinced that he cannot do better without one, and your bargaining power is your ability to persuade him while simultaneously getting an agreement that is as advantageous as possible for you.

We have to remember several important characteristics of bargaining power, which we shall have to keep in mind whenever we discuss the examples today and later in this course.

- Bargaining power is always relative, not absolute. That is, an actor may have bargaining power only relative to another actor with whom he is involved in bargaining. It makes no sense to say that a nation is powerful without reference to another actor and, as we shall see shortly, without reference to the issue being considered.
- *Bargaining power may not extend beyond some particular domain.* That is, an actor may be quite powerful in some particular area but his power may not translate into another area. Therefore, being able to secure a better outcome on issue *A* does not necessarily imply that he will also be able to secure a better outcome on issue *B*. We say that power is **fungible** if it can be used across domains.
- Bargaining power is strategic, not brute force. We shall talk a bit more about this when we discuss deterrence and compellence. For now, all I want to say is that bargaining power differs from brute force in that it depends on the **potential** use of force, not its **actual** application. With brute force we can bomb an enemy, kill its soldiers, and generally do all sorts of fairly destructive things to him. But with bargaining power we can get him to do our bidding. In the end, the opponent will take an action that we want, something you cannot do with brute force.

Let's put these three points into context. Everyone generally agrees that the United States is the most powerful nation on earth. By this many presumably mean militarily and economically powerful, although one cannot be very sure. This statement makes no sense, however. If the U.S. is the strongest militarily, why did it lose the war in Vietnam? Nobody would ever claim that the North Vietnamese and their Vietcong allies were stronger militarily. If the U.S. is strongest economically, why did it spend so much time trying to open Japanese markets to American auto makers without success?

By just about any common measure of power that you can think of, you will find instances when the U.S. failed to obtain what it wanted even though its opponent would have been considered weak by these accepted standards. This means such standards are really of very limited use. Even as simple a statement that in war the strongest military and economy tends to win must be qualified. It is true that in general the stronger side prevails, but in many many cases this is not so. In fact, in something like over 40% of wars the weaker side prevailed!

We shall stick to our definition, which, although a bit more abstract, will be much more helpful. Now, bargaining is the process through which actors influence each other's expectations and bargaining power is simply the ability of an actor to effect such favorable changes. We want to know then what makes one more powerful in this sense precisely. Since commitments (threats and promises) are the primary means through which actors attempt to influence expectations, we want to know what makes such commitments effective.

The example of negotiation demonstrates explicit bargaining, where actors communicate offers and counter-offers, and reach agreements. However, bargaining is much more general than this. In particular, one can engage in tacit bargaining, where intentions and demands are communicated not with words but with actions. For example, during the Korean War, the Americans refrained from bombing supply bases in China and in return the North Koreans refrained from bombing harbors through which the Americans got their supplies. There was no (and could have been none) explicit agreement, it was tacitly understood that "if you don't bomb ours, we won't bomb yours." Similarly, there was an implicit promise by the U.S. not to resort to nuclear weapons (and General MacArthur was fired, in part, for his disagreement about this). Similarly, during the Second World War, the belligerents refrained from using poison gas militarily, both because it was difficult to do (can't target it properly, likely to harm own troops), but also because the other side could retaliate in kind. (This, of course, did not preclude the use of gas on civilians.) The point is that one can communicate a lot without words: it is more difficult and not as precise, but on the other hand, it is quite revealing.¹

¹You will soon see why "actions speak louder than words" and why "talk is cheap." Both truisms have very significant exceptions that we'll have to deal with.

3 Bargaining Power: Dynamic Commitment

What is a commitment? A **commitment** is a pledge to perform some action in the future. It can be a **threat** if this action involves inflicting pain on your opponent, or it can be a **promise** if it involves providing some benefit to the opponent. Perhaps somewhat to our surprise, we shall see that threats and promises are essentially the same. That is **both threats and promises are intended to influence the expectations of another actor and cause a change in his behavior**.

As we have seen, we are interested in how rational players coordinate their expectations. Since threats and promises (commitments) are the means of influencing the opponent's expectations, it follows that we must study *how rational actors use commitments strategically*.

At the most basic level, we want to see (and this is the central theme of Schelling's article) what makes commitments credible; that is, what makes threats and promises believable. It is easy to see that a threat/promise that is unbelievable will not change the expectations of the other actor because the other actor will simply disregard it.

Seeing that a non-credible commitment will not serve its intended purpose is not difficult. However, studying what makes a commitment credible can be. We want to know how one actor can persuade its opponent that it will follow through on this commitment. The actor wants to bind himself to his commitment but doing so can sometimes be surprisingly difficult.

A commitment is just a promise to take an action in the future. Some commitments are inherently persuasive, e.g. the promise of the U.S. army to defend California if invaded by another country. The U.S. does not have to spend much time telling everybody that it is going to do it, we all know it just will. These commitments, although important, are not terribly interesting from analytic point of view. There isn't much to analyze about them.

During the Cold War, on the other hand, the U.S. also promised to defend Western Europe against a Soviet invasion. For a long time, the official NATO doctrine was one of Massive Retaliation: a Soviet incursion in Western Europe, it was said, would be met with nuclear strikes against the Soviet homeland.

The French, among many others, doubted the credibility of that threat. They did not believe that the United States would risk general nuclear war with the Russians for the sake of Paris or even London. I mean, we all love croissants, but we can live just as well with doughnuts... (or maybe not). The point is, the French did not think the U.S. was prepared to bear the enormous cost of a nuclear war with the Soviet Union for the sake of Western Europe.

The French eventually decided to develop nuclears on their own and, after being bullied by the U.S. in withdrawing rather ingloriously from Suez in 1956, parted way with NATO to establish their own military defense. However troubling the French incredulity was, the potential for such incredulity in Moscow could have deadly consequences. If the Russians thought the U.S. threat was incredible, they could take Paris with impunity.

As we saw last time, the U.S. threat was problematic because *if called on to carry it out*, the U.S. would have no incentive to do so. This is a conundrum known as a **dynamic commitment problem**. It refers to the situation where it is in the interest of an actor to commit today to carrying out an action that, if called on to carry out tomorrow, it will not be in its interest to do so. In this case, the U.S. had an interest in threatening the Soviets with massive retaliation, but the problem was that should the Soviets challenge, the Americans would have no incentive to go through with their threat.

Commitments can only be effective if they are credible, that is, if the other actor believes them (and, of course, if the other actor understands them, which will turn out to be a nontrivial requirement). This holds equally for threats and promises, which is why we lump them together under the common name of commitment.

For example, suppose the U.S. threatens North Korea with air strikes to eliminate its nuclear capacity. The U.S. would certainly benefit if the North Koreans believed the threat: they would dismantle the program on their own. However, it is clear that they would not, and there are many reasons for that: (a) the U.S. does not know very well where all facilities are located, so it may be unable to destroy them, (b) North Korea could threaten retaliation across the DMZ (demilitarized zone) against South Korea, especially its capital Seoul. Would such a threat itself be credible given that in a war, the U.S. would most likely prevail? Given the carefully fostered image of mental instability of its leader, North Korea may be perceived as being able to carry out the strikes even at the risk of certain annihilation. While the first problem renders the success of the action itself in doubt, the second makes the consequences unpalatable. The South Koreans (longtime U.S. allies) would probably do everything they can to avoid massive civilian casualties.

The inability of the U.S. to credibly commit to taking out the North Korean nuclear plant with an air strike would enable the North Koreans to blackmail the U.S. into giving them a significant bribe, which the U.S. did under the Clinton administration and seems about to do now as well. But if blackmail works, why would the North Koreans deprive themselves of the ability to extort the Americans? That is, why would they dismantle their nuclear program? They would not, they did not, and they will not. But then, why should the U.S. offer them anything in return for a promise that they would not fulfill?

In both cases, an actor's inability to credibly commit made that actor weak from a bargaining perspective. The incredible U.S. threat and the incredible North Korean promise made the U.S. vulnerable to blackmail in the first case and rendered the North Koreans unable to extract concessions in the second.

You now see how the ability to establish credible commitments relates to bargaining power. We want to understand how actors bargain in a situation of distributional conflict. Bargaining is the process of influencing expectations through making commitments. Dynamic commitments can only work if they are understood by the opponent and if the opponent finds them credible. We

arrive at the point of departure for today's lecture: what makes commitments credible? That is, how can actors credibly commit to a future course of action?

So, we shall study bargaining power. What is it? How do we get it? How do we use it? As I told you, the answer to this question revolves mostly around the ability make credible commitments. That is, the ability to make believable threats and promises, and the ability to communicate them to your opponent so that he will understand them. Our goal is to find ways of persuading the opponent to do our bidding.

As you have read in Schelling's article, both threats and promises represent a tactic of what he calls "selective and conditional self-commitment" that is, a tactic whereby one conditions his behavior on the actions of another party, selecting what to react to and how to do it.

Consider threats (but the analogous analysis holds for promises as well). What is a threat? It is a pledge to do something in a contingency that one obviously prefers not to arise in the first place. The problem is that this contingency is governed by the behavior of the other party, and so the threat is meant to induce the other party to take such actions that this undesirable contingency does not arise.

Here are some common widely-held beliefs that we must take a close look at:

- An effective threat must be one that hurts the opponent more than it hurts the threatener. Many people think that in order to be able to threaten effectively, one must make sure that carrying out the threat would hurt the opponent more than it hurts the one doing it. The logic goes like this: If the action hurts the threatener more, then it will not work because the other simply would not believe the threat. We shall see that this "logic" has everything backwards.
- Having more options is better when making decisions. Many people believe that one should always make sure one has enough options in any situation because that would presumably enable one to make the best possible choice according to the requirements of that situation. Having more options is something whose desirability is often taken for granted in policy circles. You can probably hear it on TV today when people discuss what to do with Iraq.
- It is better to seize the initiative and not let the other side dictate the time, place, and terms of an agreement. Again, this has to do with the notion that it is better to establish the "rules of engagement" so to speak, instead of letting the adversary do so. This seems to derive from military thinking where being on the defensive may sometimes have disadvantages.

We now examine several tactics: (i) reducing your own freedom of action by eliminating options or delegating choices to someone else; and (ii) relinquishing initiative to the opponent. There are other tactics that are more dangerous and complicated, and we shall learn about them when we study crisis bargaining

and war. The two generic ones in the following section will be especially useful when analyzing all sorts of problems, from security to political economy.

3.1 Reduce Freedom of Action

The first method of acquiring credibility is to structure the situation in such a way that you would have no choice but to carry out the action you have threatened or promised. Conversely, you may attempt to maneuver the opponent into a position where it will be up to him to make the painful decision.

We begin with the tactic of **burning bridges**. The Red Army, having retreated to Stalingrad is facing the advancing *Wehrmacht* troops. If the Red Army stays, then it must decide whether to defend Stalingrad in the case of an attack or retreat across Volga using the single available bridge for the purpose. Each army prefers to occupy Stalingrad but fighting is the worst outcome for both. However, before the enemy can attack, the Red Army can choose to blow up the bridge (at no cost to it), cutting off its own retreat.

Analyzing this situation is not difficult. If the Red Army keeps the bridge intact, then (because fighting is the worst outcome), it would be tempted to use it and escape to safety, abandoning the city to the Germans. If, however, it blows up the bridge, then it will be forced to stay and fight. The onus of decision shifts on the Germans who (because they want to avoid fighting) decide to pass on the city. In this case, the Red Army gets its most preferred outcome.²

This is an easy example that demonstrates a rather profound result of strategic interaction: if you limit your choices and do so in a way that is observable by the opponent, then you may obtain better outcomes. This is because unless the Red Army burns the bridge, it cannot credibly commit to fighting in order to induce the Germans not to attack. (Their threat to fight if attacked is not credible, and so deterrence fails.) However, by burning the bridge, they leave themselves no choice but fight if attack, even though they don't like it. This makes the threat to fight credible, and so the Germans are deterred.

The core idea is to make the tempting option unavailable to you. Thus, when William the Conqueror landed in England and Hernando Cortez landed in Mexico, the invaders burnt their ships to ensure that their armies would have no way of retreating, which would cause them to fight as hard as possible. During the last months of the Second World War, the Japanese resorted to *kamikaze* attacks: the planes only took enough fuel to reach the American ships, in which the pilots were supposed to ram them. In the less violent arena, the common European currency (the Euro) is a similar **commitment device**: by making abandonment of the Union exceedingly costly, it ensures that the participating coun-

²Stalingrad was rather peripheral in the real war as well despite its name. The German generals wanted, quite sensibly, to bypass it on their way to the rich oil fields of the Caucasus. Hitler, however, wanted the trophy for its symbolic value (although there have been many, many villages in towns with names derived from Stalin's). So he pressed the army to take it. There is quite a bit of evidence that the Red Army's way of retreating was blocked, both by the river and the threat to shoot any deserters. Hitler's clear misjudgment cost him a grievous loss that turned the tide of the war.

tries would work hard to make it work and would comply even with painful decisions. In fact, it was precisely because of this high level of commitment the Euro created that Great Britain chose to stay out of the monetary union.

Alternatively, one could try to make tempting options available to one's opponent in the hope that he will make use of them. That is, while you may want to burn the bridges behind you, you definitely do not want to burn the bridges behind your opponent. As Xenophon observed during his march with Greek troops across Persia, in battle you want to leave your opponent a way out: when things get tough, he will take it. In other words, we are applying the logic to the opponent. The same thing that would cause us to renege on our commitment would cause him to renege on his. Hence, giving him a graceful way out eases our task: if we know that he can back down because we have given him a loophole, and if he knows that we know, our threat to press him becomes credible.

A commitment is not credible if it will not be in the interest of the committing party to carry out its promises should it have to do so. Limiting one's choices in an observable way may help establish credible commitments by eliminating an embarrassing richness of choices that provide one with a temptation to bow out of the commitment.

This is probably obvious by now but sometimes people get it completely wrong. Take the Trojans who tried to burn the Greeks' ships! Had they succeeded in doing so, this would have only made the Greeks fight so much harder. (They failed and so the Greeks sailed in apparent defeat, enabling them to carry out the wooden horse ruse.) William the Conqueror and Cortez got it right when they burned *their own* ships, forcing the soldiers to fight to the end and compelling some of the opposition to surrender.

Another, less final (and so perhaps more plausible) way of constraining your choice is to **delegate** it to someone else, taking yourself out of the decision. It may help your credibility if the agent responsible for implementing the action is less tempted to avoid it than you are. For example, if Congress is more hawkish on foreign policy issues than the President, the President can benefit from delegating all responsibility for agreements to Congress. He can then tell the North Koreans that even though he would love to sign an agreement very favorable to them, he cannot do it because it is the responsibility of Congress to ratify it, and they (being hawkish) would never accept it in this form: the North Koreans must concede more.

More interestingly, a leader may constrain his choices by simply making it impossible for him to make decisions. For example, a civilian government may delegate control of nuclear weapons to the military, which has a clear mission to defend the country, may not be subject to the pressures and debates of a civilian government, and so may be prompt with their use. The French, for example, toyed with this idea for a long time. Similarly, there were serious proposals to let the Germans have direct control over NATO nuclear weapons in Europe because they could commit much more credibly to using them against

invading Russians than the Americans. Or, one can let computers play out the warfare scenario and relinquish choice completely.

Of course, delegation is not fool-proof because it may backfire (and it does reduce your flexibility), and it may not be believed. For example, a leader used to totalitarian mode of government may simply refuse to believe that the President is constrained in any meaningful way by Congress. If the constraint is real and is not believed, it may end up producing the exact insurmountable obstacles it was designed to solve.

3.2 Relinquish Initiative

The bridge burning example also yields an additional insight into the dynamics of commitment. In certain situations it is best to leave yourself no option and let the other party decide what to do. In the example with the bridge, the Red Army, having burned the bridge, could sit tight and let the Germans decide whether they wanted to incur the costs of fighting a desperate enemy who had no choice but to fight.

Here's another example, this one taken from the Cuban Missile Crisis of 1962. You will read about it at length in the history book, but basically the Soviets tried to put secretly nuclear missiles in Cuba. The U.S. detected the attempt and President Kennedy initiated a crisis by appearing on TV and announcing that Cuba was being quarantined (that is, blockaded) by U.S. ships that have been ordered to stop every vessel bound for the island. The Soviets backed down and agreed to remove the missiles among other things.

When you read about this, think about the strategic situation. The U.S. considered several options, from the mildest (quarantine, which is what got implemented), to progressively more dangerous and escalatory ones, like a limited air strike designed to take out the missile sites, a massive air strike, and even a land invasion.

Even apart from the dangers associated with each option, the quarantine stood apart from the more military responses in terms of who had to take the next escalatory step. If the U.S. picks the blockade, the USSR can choose whether to run it or not. If it does choose to run it, the U.S. can decide whether to initiate the military option or not. Again, if the U.S. fails to respond militarily to direct Soviet challenge, the Soviets gain and the Americans lose badly. If it does respond, war results. If the USSR does not run the blockade, the Americans win concessions from them.

Given blockade and the Soviets running it, the U.S. prefers to fight. Given that the U.S. would fight should they run the blockade, the Soviets prefer not to run it. On the other hand, given a military action by the U.S. the Soviets prefer to fight. Given that the Soviets would fight a military action but would not run a blockade, the U.S. strictly prefers to impose a blockade instead of risking war.

Of course, this is a very simple setup that does not do justice to many other considerations that went into the frenzied weeks of October 1962. However, the basic feature is clear: imposing the blockade shifted to the Soviet Union the

responsibility of making the escalatory step that would have resulted in war. Note that we have *not* assumed that the Russians would not fight if challenged. On the contrary, we assumed that both the Russians and the Americans would fight if they had to! However, saddling the Russians with the choice to initiate the war conferred a great advantage on the U.S., causing the Russians to back down.

The U.S. relinquished initiative. Instead of initiating the military strikes (and thereby ensuring an automatic reprisal by the Soviets), the U.S. put up the blockade and let the Russians take the initiative in running it. Having been maneuvered in this position the Russians had no choice but back down or start a war.

Relinquishing initiative saddles the other side with the painful choice of making the last step that results in disaster for both. If the other side has a chance of backing down, it will take it. Therefore, it is also important to remember not to maneuver the other side in a position from which they cannot retreat. The worst-case scenario is to relinquish initiative when the other side has been committed to a course of action already and cannot take the exit option!

3.3 Manipulate Payoffs

Bridge-burning is a rather extreme form of commitment that may be quite dangerous because if the opponent fails to understand it, disaster is certain. As a result, policy-makers are very reluctant to use this tactic. How else could you persuade your opponent that your threat is serious? Consider a stylized description of the run-up to the last war with Iraq. The United States is trying to persuade Saddam Hussein to allow full and unlimited inspections to verify that he has dismantled his WMD programs. If he fails to comply, the U.S. is threatening to invade. The problem is that Hussein may not believe the American threat: after all, fighting will be grievously costly, and there seems to be plenty of opposition to the war, both in the U.S. and abroad. The Bush administration is therefore having trouble convincing Hussein that it will start a war, which in turn makes him recalcitrant and obstructionist. What the U.S. must do is establish the credibility of its threat that it will, in fact, invade Iraq if Hussein fails to meet its demands.

The problem is in the relative evaluation of the two courses of action: war and peace. If the U.S. invades, it will very likely defeat Iraq but at a significant cost that includes lives lost, money and resources spent, allies antagonized, and potential adversaries even more upset. This makes war a relatively unattractive option (it has a low expected utility). On the other hand, backing down in the crisis is also not without its problems that include Hussein emboldened by his success, American credibility undermined, the administration embarrassed, and possible future problems with Iraq and other adversaries emboldened by Hussein's ability to prevail. Hence, backing down also has a relatively low expected utility for the U.S. The credibility problem will exist as long as Hussein believes that the expected utility U.S. has for war is worse that its expected utility for backing down: if this is the case, the Americans will not invade even if he

stands firm.

This immediately suggests two ways the U.S. can improve its bargaining position: it can manipulate the expected payoffs from war and peace. If it succeeds in making the expected payoff from backing down worse than the expected payoff from war, then it has effectively established a credible threat to go to war. One way it can do that is by reducing the payoff from peace. The technique for doing that is called incurring audience costs, which are costs an actor pays if he threatens to do something and then fails to carry out the threat. In a crisis, escalating and then backing down is such a failure. A leader puts the nation's honor at stake and promises to persist until his demands are met. If he bails out without achieving his goals, the citizens may then punish him for engaging the nation's honor in a fruitless exercise. The Bush administration can therefore make public statements that commit it to Iraq's disarmament, thereby staking its reputation on achieving this outcome, and making sure it would incur significant audience costs of Hussein successfully defies it. If it manages to communicate their belief that they consider these costs sufficiently large, then its threat to resort to force becomes more credible.

Another way to achieve that is by manipulating the expected payoff from war. Military mobilization involves spending some of the money for war upfront and improving one's ability to fight it. Once troops are mobilized and deployed to the region of potential operations, some of the costs have already been paid, which means that war is now cheaper in comparison. Further, readying the troops increases the probability that one will win. These two factors combine to increase the expected payoff from using force: after mobilization war becomes more attractive compared to what it was prior to taking that action. Hence, the U.S. can begin mobilizing troops and deploying them to countries around Iraq, and it can also send carriers to the Persian Gulf. All of these actions improve the expected utility from war, and if they are combined with audience costs (which decrease the expected utility from backing down), the threat to resort to arms may become credible.

The Bush administration pursued both tactics but was unable to persuade Hussein to concede. One problem with mobilization is that once it is underway, one must either use the military instrument or lose it: it is very costly to maintain high levels of readiness for an extended period of time. In other words, once the U.S. mobilizes, the time for decision is drastically shortened, which further gives Iraq incentives to delay agreement in the hope that the critical threshold will pass and the U.S. will demobilize instead of going to war.

Manipulating payoffs means increasing the expected utility from executing the threat, or decreasing the expected utility from failing to do so, or both. If the payoff from executing the threat is larger than the payoff from not doing it, then one has established a credible commitment. The problem is that the process of establishing such a commitment may sharply limit the time available for diplomatic solutions. There are also problems with communicating one's commitment to the opponent, a subject to which we now turn.

4 Communication: Information Transmission

Strategic moves (burning bridges, delegation, relinquishing initiative, manipulating payoffs) can serve a great variety of purposes in bargaining because they can influence the expectations of the other party. Bargaining, as all non-zero-sum conflict, is all about these expectations. In fact, we can say that bargaining is a process that simultaneously reveals information to both parties about each other and that serves them to establish commitments. What purposes can strategic moves serve? We have seen one such purpose: establishing credible commitments. However, there is another, which is just as important: transmitting information or preventing the opponent from acquiring it.

Strategic moves can send **signals**, which is a fancy way of saying that they can reveal to the other party something you know. You may want them to learn it or you may not: your actions transmit information either way, so you better make sure that what you do does not send the "wrong" signal. (We define "wrong" as simply a signal that is not in your interest to send; for example, a signal to a belligerent opponent that you are weak.) When it is not in one's interest to reveal information, one can make strategic moves designed to obfuscate it. This is called **signal-jamming** because it confuses the opponent.

Moves can **screen** out the opponent. That is, some moves set up the incentives in such a way that the response of the opponent reveals some information about it. These moves are sometimes called "probes" because you are probing the extent of your opponent's commitments. For example, you can test the waters during negotiations by making an offer than only a fairly uncommitted opponent would accept. If the offer is rejected, you can conclude that the probability of facing such an opponent is lower.

Of course, this situation is complicated by the fact that your opponent is probably aware of your strategic incentives, and so may behave to frustrate you by pretending he is stronger than he actually is, hoping that you will change your expectations anyway and make a better offer.

You, of course, also know that and so may try to treat his signal as a bluff and call it. We shall learn what conditions permit information transmission to be more reliable. In particular, we shall learn that **cheap talk** is called the way it is for a good reason. Action speak louder than words, we are told. But we shall see why it is the case. In fact, we shall see that not just any action can "speak", only the ones that are costly to the one taking them. That is, **costly signaling** is one way to convey information credibly.

5 Two Misconceptions

5.1 What Bargaining Power is Not

Let me now make a short detour and talk a bit about power. *Power* is a term bandied about very frequently by political scientists, historians, and journalists alike.

As you will see from your textbook, power is usually conceived as a combination of various physical attributes of states, such as military capabilities, economic resources, level of industrialization, population, and many others. Some fancier analyses even through in less tangible but very important factors such as regime type (whether the country is a democracy or a more autocratic society), government's ability to mobilize resources (e.g. how effective it is in taxing its citizens and extracting necessary resources from the population), or even elastic and very difficult to quantify things like a nation's resolve, honor, or even reputation. By the time you have gone through the laundry list of these factors you will realize how arbitrary some of them really are.

There is no doubt that countries that people think of as important have generally been very strong militarily and quite capable economically. When people talk about great powers, they always mention (depending on the time frame, of course), Great Britain, France, Germany, and so on. And there have been only two superpowers in existence, the U.S. and the USSR. Now, of course, there is one. There is also little doubt that these countries play important global roles that shape the destinies of many around the world.

What is less certain, however, is that these various indicators are useful when we try to understand state behavior in different contexts. As I mentioned before, even as straightforward a task as you can think of, winning a war, cannot be usefully elucidated by referring to conventional capabilities, or power, as commonly construed. This sort of "power" becomes virtually useless when we analyze less apocalyptic situations that do not involve the immediate brutal deaths of tens of thousands. There we find that countries that everyone would think of as powerful very often have to settle for outcomes that are quite apart from where their preferences lie.

Quite importantly, however, our criticism of the usual abuse of the concept will have to do with our findings from today and next time. We shall find that being powerful in our bargaining sense (and this is the sense we are interested in because it is bargaining that determines the outcomes) involves both much more and much less than being physically capable of doing things. In particular, we shall find that *not* being able to do things may be a bargaining power. Having fewer choices may be a bargaining power. Simply moving first in a given situation can be a bargaining power. And letting the other move last can also be a bargaining power. Paradoxically, we shall find that *being weak can be a bargaining power*. In other words, we shall find a great many things that help explain outcomes that have very little to do with physical abilities or even the psychic qualities that I mentioned. Being powerful has to do with being able to exploit the strategic situation to your advantage. This requires skill and ingenuity, not simple brute force.

5.2 The Hurt-More Criterion

Let's return to the Cuban Missile Crisis for a minute to make one last point for today. Let's assume that war is two times costlier for the U.S. than it is for the

Russians. Can the U.S. still compel the Soviets to back down in the crisis?

Perhaps surprisingly, the answer is affirmative. Let's think it through. It does not matter how much the U.S. hurts itself in war. What matters is how much the Soviet Union gets hurt *compared to its other choices*. However costly the war is for the U.S., the relevant calculation that the Russians make is the one where they compare *their* costs of backing down versus *their* costs of fighting a war. None of these include the U.S. costs and so it is not surprising that these do not matter in the end. All that matters is that war is sufficiently painful to the Russians given the pain of backing down. If war is more painful, they will back down.

This is not to say that U.S. costs do not matter at all. They do, but only for the calculations of the Americans. The threat to go to war must be credible if the Russians are going to believe it. If war is so costly that even backing down in response to a direct military challenge is preferable, then the U.S. has no viable threat. However, we assumed here that the U.S. would fight if challenged, so this was not a problem.

We conclude that the threat does not depend on the threatener having to suffer less than the threatened party. All that matters is that the threatened party would suffer more if it does the action it is being threatened not to do compared to another action. However, we must keep in mind that for the threat to be credible, the threatener must have an incentive to carry out the threat.

6 Summary

- Between pure cooperation and pure conflict are the distributional conflict situations, where actors have incentives to agree on an outcome but disagree over its terms;
- Outcomes in such situations depend on the **expectations** actors have of each other; **bargaining**, which is the process of influencing expectations;
- Bargaining power refers to the ability to influence expectations of the opponent, and
 - it is relative, not absolute,
 - it may not extend beyond a particular domain,
 - it is strategic, not brute force.
- Bargaining is both **transmission of information** and establishment of **commitments**, both of which influence expectations;
- Commitments are pledges to take some action in the future that can be interpreted either as a **threat** or as a **promise** depending on what they do for the other player

- **Dynamic commitment problems** occur when one pledges to carry out an action that would not be in its interests to fulfill; in these cases we say that commitment is **not credible**
- We can establish credible commitments by strategic moves:
 - reducing freedom of action, which refers to eliminating options that we would be tempted to take; if we eliminate the loopholes in the agreement, then we cannot be tempted to make use of them, which in turn makes the opponent concede; also, we could delegate the action to another party that has more interest in pursuing it than we do.
 - relinquishing initiative, which refers to letting the opponent make the most painful choice; given the option of a graceful exit (i.e. if he has not burned his bridges yet), the opponent would take the tempting alternative and leave us with the better outcome.
- Strategic moves also transmit information; when an actor wants to reveal something to its opponent, it engages in **signaling**, when it wants to find out something from its opponent, it engages in **screening**, and when it wants to prevent its opponent from acquiring information, it engages in **signal-jamming**;
- To reveal information credibly, signaling usually has to be **costly** in the sense that the action the actor takes to reveal its preferences must not be in the interest of an actor with different preferences: only then can one infer the preferences correctly;
- Bargaining can be **explicit** (actors communicate with words their offers and counter-offers), or it can be **tacit** (actors communicate through their actions); strategic moves can be very useful for tacit bargaining through their information transmission role;
- We found that the **hurting-more criterion** is not rationally and logically valid; it is not necessary for an action to hurt the threatened party more than it would hurt the threatener to make it an effective threat.

To help with the flow of ideas and the connections, here's the outline.

- 1. The situations we are most interested in are mixed-motive ones of distributional conflict: Actors want to cooperate to get good outcomes but conflict over the distribution of costs and benefits from their actions.
- 2. Actors bargain over the distribution of costs/benefits, and the actor's ability to get a distribution he likes depends on his bargaining power, which is his ability to influence the expectations of the other actors.
- 3. To bargain, an actor must be able to make commitments: threaten some sanction if the others do not behave in line with the actor's desires, or promise some benefit if the others comply.

- 4. To influence expectations, these commitments must be credible or else the others will ignore them. This is why just talking about something is usually not sufficient to elicit compliance, and hence explicit bargaining is often limited.
- 5. Actors can make their commitments credible through strategic moves that transmit information to the others. Once the other actors perceive this information as believable, they will adjust their expectations accordingly.
- 6. There are various types of strategic moves, but among the most important ones are reducing freedom of action and relinquishing initiative.
- 7. The transmission of information through strategic moves may have several purposes: the actor can signal what it knows to others (to be effective, this signaling must usually be costly); the actor can screen others to find out what they know; and the actor may engage in signal-jamming to obfuscate information that is disadvantageous to it.