U.S. Foreign Policy:
Explanations for War – Costly Peace

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We now arrive at the final explanation for war that we shall consider.¹ One fundamental assumption of the bargaining approach to war is that fighting is a very risky and costly way of resolving the dispute relative to peace. However, we have also seen that peaceful resolution depends on the implied threat of war, which determines the bargaining range and so delimits the set of mutually acceptable peace deals. This implies that force plays an implicit role in the maintenance of peace — bargaining takes place in the shadow of power. What the model neglects is that military power is not free — maintaining sufficient forces to ensure a relatively attractive distribution of power and thus a preferable distribution of the benefit entails costs that must be paid regardless of whether the military is ever put to actual use. The implicit use of force in peace requires that actors pay the costs of the upkeep of the military that underpins the distribution of power on which the distribution of the benefit relies. In other words, peace is costly too.

These costs can be various: taxes raised or debt incurred to pay for the military, income diverted from other uses to pay for the military, inflationary debasement of the currency to facilitate payment for the military, wealth exported in the form of subsidies to allies, withdrawal of manpower from the economy especially during mobilizations, and economic dislocations resulting from the favored treatment by the government of some sectors of the economy at the expense of others, or the social and political implications of direct government intervention in the economy. All this expenditure of resources means that the group must forego other desirable goals (e.g., investing in economic development, civil infrastructure, social security, health care, and so forth), and the long-term cumulative effect of maintaining one’s formidable military power might be quite devastating to the overall well-being of the group.²

¹There are others, many others, actually. Unfortunately, most of them tend to be of limited value because they rest on undeveloped foundations and the arguments are often internally contradictory. Exploring these issues is well beyond the scope of this course. Interested students are encouraged to take the course “Causes of War” or at least read a useful overview like the one provided by Jack S. Levy and William R. Thompson. 2010. Causes of War. Chichester: Wiley-Blackwell. For the (disturbingly modest) statistical correlation between many of the supposed causes and war, see the study by D. Scott Bennett and Allan C. Stam. 2004. The Behavioral Origins of War. Ann Arbor: The University of Michigan Press.

²One reason for the collapse of the Soviet Union was that its economic system could not withstand the heavy defense burden imposed by the arms race with the United States. With inefficient production and shortfalls in agriculture, the USSR was increasingly reliant on borrowing from the West to pay for imports of foodstuffs. This directly curtailed its ability to act internationally but was also unsustainable in the long run. The attempt to reform the economy, however, unleashed forces that unseated the political system. See Yegor Gaidar. 2007. Collapse of an Empire: Lessons for Modern Russia. Washington: Brookings Institution Press.
These costs also help explain why conflicts over “indivisible” issues might be prone to escalating to war. With claims of indivisibility keeping the hostility alive, any sort of shared arrangement must be maintained by the implicit force of arms: the groups must essentially mutually deter each other from attempting to seize full control of the issue (e.g., a sacred place). The long-term costs of maintaining sufficient deterrent capability might outweigh the short-term costs of a war that might secure the place for a long time.

1 How Peace Can Be Worse Than War

To see now how the costs of peace might cause war, consider a slightly modified version of our original model. As in the commitment problem, the actors interact twice and they have full information about everything. We now assume that before each interaction they simultaneously decide whether to arm or not. Arming is costly: $A$ pays $k_A > 0$ if he chooses to arm, and $B$ pays $k_B > 0$ if she chooses to arm. Arming confers an advantage in the distribution of power when the opponent does not arm. We shall assume that if both players arm or if neither one arms, the distribution of power is such that each has an equal chance of winning. (This assumption is immaterial but makes exposition cleaner.) If $A$ arms but $B$ does not, then the distribution of power, $p_H$, favors $A$. If, on the other hand, $B$ arms but $A$ does not, then the distribution of power, $p_L$, favors $B$. Since we wish arming to confer an advantage to the player that arms, assume that $p_L < 1/2 < p_H$. To complete our assumptions, we shall specify that when the bargaining range exists, the actors divide the bargaining surplus evenly; that is, each actor obtains its minimal terms, and they split the rest 50-50.  

As before, when actors decide what to do in the first interaction they have to take into account the consequences of their actions for the second interaction. If they fight, the winner locks in the possession of the entire benefit and there is no more bargaining since there is no more opponent to contest it. If they initially negotiate a peaceful division, they must negotiate again in the future.

Consider now that bargaining in the future. We need to consider four possibilities, depending on which actor arms and which actor does not:

1. Neither actor arms. The probability that $A$ wins a war is $1/2$ and nobody pays any additional costs. The bargaining range is the set of deals in $[1/2 - c_A, 1/2 + c_B]$, and the mid-point (and thus $A$’s share) is $1/2 + z$, where $z = (c_B - c_A)/2$. Actor $B$ gets the remainder: $1/2 - z$.

2. Both actors arm. The distribution of power remains the same but the costs must be paid regardless of whether they negotiate a peace deal or fight a war. Thus, when they both arm, the bargaining range is the same as in the case where neither armed but their payoffs are reduced by the cost of arming. The payoff for $A$ is the share he obtains net the arming costs: $1/2 + z - k_A$. Analogously, $B$’s payoff is her share net her arming costs: $1/2 - z - k_B$.  

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3For those interested in these things, this division is called the Nash Bargaining Solution.  
4You can verify this by taking one of the actors, say $A$, and noting that the expected war payoff is now $W_A - k_A$, whereas the peace payoff from some deal $x$ is $x - k_A$. Actor $A$ will only agree to deals that are no worse than war, or $x \geq W_A$, which yield the same minimal terms as in the case where neither actor arms.
Figure 1: Payoffs from arming and bargaining in the second encounter.

3. A arms but B does not. The bargaining range is \( [p_H - c_A, p_H + c_B] \), whose midpoint (and thus A’s share) is \( p_H + z \). Actor A’s payoff is this share net the cost of arming: \( p_H + z - k_A \), whereas B simply obtains the remainder of the benefit without paying additional costs: \( 1 - p_H - z \).

4. B arms but A does not. The bargaining range is \( [p_L - c_A, p_L + c_B] \). Actor A’s payoff is simply his share, \( p_L + z \), whereas B’s payoff is the remainder of the benefit net her arming costs: \( 1 - p_L - z - k_B \).

Figure 1 shows these payoffs in a convenient table form with A as the row actor and B as the column actor. Within each cell, A’s payoff is in the north-west corner, and B’s payoff is in the south-east corner.

To simplify the analysis and illustrate the basic point, we shall assume that the costs of arming are not very large, at least not relative to the benefit. In particular, we shall assume that these costs are smaller than the extra share the player can secure by arming irrespective of what the opponent does. Mathematically, for A’s arming costs we assume that \( k_A < p_H - \frac{1}{2} \) and \( k_A < \frac{1}{2} - p_L \); and the assumption for B’s costs is analogous. This assumption means that each actor is always strictly better off arming regardless of what the opponent does. The intuition is that if the opponent does not arm, then the actor prefers to pay the cost of arming in order to extract a larger share of the benefit in the bargain. If the opponent does arm, the actor prefers to arm to avoid conceding a larger share to the opponent.\(^5\)

The arming and bargaining interaction can now easily be analyzed. Since each actor is better off arming irrespective of the arming choice of its opponent, both actors will arm.\(^6\) The actors will then bargain peacefully and conclude a negotiated deal. The payoffs are listed in the highlighted (north-west) cell of the table in Figure 1. It is worth noting that the individual incentive to take advantage of the opponent’s failure to arm results in an outcome that is worse for both actors. When they both arm, their shares of the benefit are exactly the same as when neither arms (the payoffs in the south-east cell of the table) but they both pay the costs of arming. They cannot disarm, however, because neither can trust the other not to renege on any such agreement: after all, when an actor expects the opponent to disarm, he would rather arm and obtain a much better peace deal. The other point worth remembering

\(^5\)For those interested in these things, the assumptions make this game a Prisoner’s Dilemma.

\(^6\)For those interested in these things, this is the unique Nash Equilibrium.
is that the outcome of the interaction is nevertheless peaceful: the actors do bargain in the shadow of power but this does not cause war in the second encounter. We conclude that if the first encounter were to conclude peacefully, the actors will arm and negotiate a peace deal in the second encounter as well.

We are now ready to analyze the first encounter. Since the second interaction always ends the same way regardless of what happens today as long as the outcome is peaceful, the actors can simply focus on obtaining the best possible deals today. But since the context is exactly the same as in the second encounter, we know that whenever peace is the outcome, the actors would both arm and negotiate the deal that splits the bargaining range between them in equal shares. In other words, the peace outcome of the first encounter involves the same payoffs as the peace outcome in the second. Since the total payoff is simply the sum of the payoffs from each interaction, we conclude that if the actors were to negotiate peacefully in the first period, the payoff for $A$ would be $\Pi_A = 1 + 2(z - k_A)$, and the payoff for $B$ would be $\Pi_B = 1 - 2(z + k_B)$. Would the actors accept such a peace or would they fight?

Just like arming is preferable when the actors expect peace to prevail, so it is when they expect war to occur. This means that the only alternative we need to consider is when they both arm but instead of negotiating peacefully, they go to war. Since victory eliminates the opponent, the winner can enjoy the entire benefit twice but only pay for arming once. When both arm, each actor expects to win with probability $\frac{1}{2}$, so the expected war payoff for $A$ is:

$$W_A = \left(\frac{1}{2}\right)(1 + 1) - c_A - k_A = 1 - c_A - k_A,$$

whereas the expected war payoff for $B$ is $W_B = 1 - c_B - k_B$. Actor $A$ strictly prefers to fight a war when $W_A > 1 + 2(z - k_A)$, which reduces to $k_A > c_B$. Analogously, $B$ strictly prefers war when $k_B > c_A$. In other words, the groups strictly prefer to fight if their arming costs are large enough.

One way to restate this result is to note that peace would be impossible whenever the total of the war expectations exceeds the total of the peace expectations:

$$W_A + W_B > \Pi_A + \Pi_B,$$

which we can simplify to $k_A + k_B > c_A + c_B$. The upshot of this (somewhat involved) analysis is clear: sometimes paying to maintain a distribution of power that underpins an attractive distribution of the benefit in peace simply does not pay. Peace by mutual deterrence might be too expensive to maintain relative to the possibility of a permanent settlement offered by war.

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7You might recall that we initially assumed that the arming costs are not too large relative to the additional share of the benefit that arming can bring in. We are now saying that if they are sufficiently large, the actors would fight. This is not a contradiction but it does require attention to the configurations of the various parameters. For example, for war to occur, we require that $c_B < \min(p_B - \frac{1}{2}, \frac{1}{2} - p_B)$. When this is satisfied, there always exist values for $k_A$ that ensure that $A$ prefers to fight. We can derive a similar requirement for $B$. 4
2 The Role of Fighting

Although this is also a theory that uses absolute war as the alternative to peace, one can readily see how the argument would extend to an ideal war. The comparison between the burdens of peace and the benefits of continuing the war could happen at any point during the war when actors are considering possible termination. If actions taken during the war increase the costs of peace, then termination will become less likely. One such possibility is the effort to finance the war — a topic that we shall consider at greater length in this course — through borrowing under limited liability. For example, if it is the case that an actor is more likely to repudiate debts when defeated in war than when either victorious or in peace (a reasonable assumption given how costly defeat could be), then the expected burden of repaying the debt is lower in war than in peace, which places heavier demands on the terms the actor would seek to secure in order to terminate the war. When the other side is unwilling to grant these concessions (this could happen for various reasons, one of which could be that it is also heavily indebted), then war termination will be unlikely. When peace is costlier than war, the bargaining range might not even exist, making these wars very difficult to end; after all, the problem is not one of locating a peaceful deal, the problem is that there are no such deals.  

3 Sources of Costly Peace

Some of the factors we would have to consider for this explanation are fairly obvious, like the expenditures on one’s own military forces (usually in proximity to the opponent) or subsidies to allies paid to distract that opponent. This armed peace might also involve sanctions, conflicts by proxy, and incidental mobilizations to discourage the opponent’s probes. Beyond that, there are the economic costs arising from lost trade. One might also figure the domestic costs of dealing with any possible interference by the opponent who might attempt to undermine one’s rule by supporting rival claimants or encouraging secessionist movements or terrorist activities. The state of permanent military readiness could also entail societal costs as the government expands its reach into the economic and social structures, usurps political rights, and turns the polity into a “garrison state.” Finally, the measures a group takes to deter another might endanger its relations with others by damaging their economic and security interests. In short, there is a long list of costs that peace might entail, and their cumulative weight might well push a polity into an attempt to settle its differences with another by force and then enjoy peace unmolested.

Another reason for peace to be costly has to do with the behavior of third parties. We

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9This is based on Andrew J. Coe, “Costly Peace: A New Rationalist Explanation for War,” working paper, School of International Relations, University of Southern California, 2011. Coe offers another reason for a costly peace: a situation in which one of the actors is better at producing while the other is better at coercing. When the coercive actor taxes the producing one too heavily, peace can be costly for both: the producer pays higher taxes which cause him to produce less, which decreases the income of the coercer as well. Under some conditions, it might be advantageous to fight so that either the producer escapes further taxation or the coercer gains direct control of the producer (and forces him to work harder). This case, although very interesting, is not relevant for the type of American foreign policy problems we are going to discuss.
have not talked at all about the possibility of more than two actors (for the very good reason that a lot of useful insights can be had with just two) but the general conclusion from including them in our models is that they can easily exacerbate the problem of finding a peaceful resolution to a conflict of interests. For instance, consider a third party that favors one of our players, say A, and offers him benefits that can only be realized if A controls a large enough share of the territory and penalizes B as long as she makes no concessions. (Think in terms of U.S. offering benefits to opponents of Saddam Hussein in the late 1990s and implementing sanctions against his regime.) Peace under these circumstances can be very costly because A cannot enjoy any of these benefits while B tries to avoid any concessions that would give such an advantage to her opponent, and the costs B suffers in the absence of concessions drive her toward trying to eliminate A instead of bargaining with him. Under these conditions, the interference of the third party will make war between the two actors more likely.

4 Military Advantage, Sacred Land, and Divisibility

We have now developed a relatively sophisticated understanding of the factors that should be associated with using war as the instrument to achieve political objectives. The common thread to the explanations we have considered is that bargaining between competing groups takes place in the shadow of power, and so the terms each is prepared to concede or willing to demand are determined by their estimates of what war might hold in store, and what the consequences of peace would be.

An implicit, but very important, element of this analysis can be summarized colloquially as “it takes two to tango.” This is the idea that for war to occur, both opponents have to “agree” to fight. This agreement might be quite unpleasant — if one is invaded, it does not appear that there are many choices left — but it is agreement nevertheless since there is always the option of conceding the opponent’s terms without fighting. Thus, in a very important sense, wars are always voluntary — both actors must prefer to fight than to concede what the opponent demands. This makes wars a matter of choice rather than some apocalyptic inevitability of the human condition. Moreover, it points to the serious deficiency of explanations that rely on the aggressiveness of one actor to explain what is essentially a mutual act. In this view, it does not matter how evil Adolf Hitler or Saddam Hussein were — saying that the Second World War or the Iran-Iraq War were caused by their aggressive politics cannot amount to an explanation of these wars since it only considers why they demanded so much from their opponents. Without an explanation why their opponents preferred to fight rather than grant these demands, we cannot be said to have understood these wars.

Although we listed, and examined, the causes separately, in reality most conflicts would contain elements from several simultaneously. For example, here’s a “perfect storm” scenario: a conflict in which a window of temporary vulnerability (optimism) of a usually powerful opponent who is not only expensive to deter (costly peace) but is perceived to be generally on the rise (commitment problem). I am not saying that these factors need to be objectively present: it is often enough that a strong perception that they do exists. I am also not saying that the actors that are claiming these perceptions are even sincere — they might well have other reasons to want a war and are using these arguments to buttress the cause of
fighting. (This can easily happen when the people who stand to profit from the war are not the ones who are likely to bear its costs. For them, war might well be a profitable enterprise and the bargaining puzzle would not even arise.)

Going back to our original model, recall that any negotiated peace deal is supposed to allocate the benefit in shares that satisfy at least the minimal terms of both actors. One (unstated) assumption is that it is always possible to do so. Thinking of the benefit in terms of territory might appear intuitive because we can essentially draw borders wherever desired, but in practice things are not quite that convenient. Some shares of this territory might be more valuable than others in a way that cannot be shared by splitting the territory.

Suppose that the reason the territory is valuable to the polities is an oil field it covers, or access to a sea port that is especially desirable for commerce, or because it contains a defense installation whose possession might be of important strategic value. Since the full value of the benefit is 100% (we represented this by assigning it a value of 1), any deal in the bargaining range must allocate some percentage of that. Suppose, for the sake of argument, that the bargaining range comprises any deal that gives A at least 45% and B at least 35% of the benefit. Were the benefit divisible, they could agree on some distribution that meets these requirements and avoid war. But what if the benefit is not divisible (or the possible divisions do not represent shares that fall in the bargaining range)? For instance, of what value is the control of half a defense line if your opponent controls the other half? How, exactly, would one split access to the port? How do you share access to a sacred site if your religion demands exclusive access? Some scholars have argued that this type of indivisibility can be a cause of war. The problem is the physical or psychological impossibility of dividing the benefit in a way that satisfies the minimal terms of both sides.

Now, some of the issues that are said to cause indivisibility can, at least in principle, be dealt with. Take the oil field and port examples. Although they cannot be split to satisfy the actors’ terms directly, one can easily imagine an agreement that allocates the entire benefit to one of the actors who then transfers a portion of the income derived from it to the other. In the case of the oil field, the actors can even set up a joint stock company with mutual ownership in proportion to their minimal terms, and thus both would be better off even if the land nominally belongs to one of them. These sorts of agreements can be made to stick by the threat of war that the landless actor can make if the partner fails to live up to the terms. The threat is credible because in the absence of a transfer, the status quo benefit would be worse than fighting. In principle, at least, some types of physical indivisibility can be overcome with cooperative arrangements or side-payments.

This is not to say, however, that all physical indivisibility can be dealt with in such a manner. Consider the case of a defense installation whose military value is compromised unless it is used in its entirety. Alternatively, it could be that possession of a key piece of strategic territory is of considerable military advantage (e.g., a mountain would be of significant military value to the side controlling it either if one has to defend it or if one does not have to fight its way through it when attacking). This type of asset cannot really be shared because once one side is in possession the military advantage accrues to it immediately. The only way the other can hold it to any prior agreement is with the threat to fight but, by the definition of the properties of the asset, it must now do so under considerably less favorable circumstances.

One should recognize the logic of the commitment problem causing war here. Transfer
of the valuable military asset creates a power shift in favor of the owning group, and if that shift is large enough, the inability to promise not to use it against the opponent might cause the opponent to fight instead of relinquishing it. In this case it is not really indivisibility that is the source of the problem but the combined effect of a large power shift and an inability to commit to promises. From this vantage point, indivisibility is merely a manifestation of the commitment problem, so we would not need to treat it as a separate cause of war.

This might lead one to conclude that when it comes to physical indivisibility, we have no new mechanism to explain war: it is either the case that there exist ways of providing compensation to the relevant actor without a physical transfer of the property rights, or the case that when such an arrangement is not feasible, the mechanism leading to war is already specified by the large power shift creating a credible commitment problem.

This conclusion might not yet be warranted, however, because some issues might be perceived as indivisible because of psychological factors even if they are physically divisible. That is, in order to provide benefits to the group, the issue must remain in the group’s control in its entirety; whole or nothing! Consider sacred spaces — that is, landmarks or plots of land with clearly defined boundaries that are of spiritual importance to some group. These spaces could be sacred for religious or for secular (e.g., nationalist) reasons but they all share in common the notion that they are of unique importance for the well-being of the group. To make things worse, some religions effectively prohibit sharing of such spaces by not simply requiring their exclusive use by the believers but sometimes even mandating the destruction of competing sacred spaces and their replacement with those that adhere to the faith. This clearly poses a problem for any sharing scheme along the lines we explored above for mundane income-generating assets like oil fields. It might appear that a conflict over a sacred space must either end in one group perpetually excluding the other by force when necessary or degenerate into a fight that eliminates one of the claimants.

The difficulty with this line of reasoning is that it does not look like it is historically impossible to share even supposedly indivisible sacred spaces. When neither group can reasonably hope to eliminate or exclude the other, the only possible solution is some type of accommodation. Part of the sacred space can be reserved for one group while another part for the other, or they could have access to the space on alternate days. At any rate, when the alternative is perpetual hostilities and the potential destruction of the site itself, even the most indivisible issue seems to become shareable, if not divisible.

This points to a fundamental problem with the indivisibility approach: the difficulty of separating expressions of genuinely indivisible preferences (sincere belief that the sacred space would be desecrated if the other group is not excluded from accessing it) from strategic expressions of such preferences designed to induce the other side to give up its claims. Given the wealth of historical precedent for sharing sacred spaces, presumably the most difficult to divide, one might well doubt whether genuinely indivisible issues really exist. In light of this, claims of indivisibility are to be taken with a huge grain of salt: they might be ruses that motivated groups use to mobilize support for their cause or to demand larger concessions from their opponents. This obfuscates the straightforward inference one is supposed to make from such claims and can cause actors to ignore such pronouncements much like they would ignore claims of strength in the asymmetric information problem we

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discussed above.

Despite all these caveats, claims to indivisibility should be taken seriously in our study of war and society. Even if the political leadership cynically maintains such claims for the sake of boosting its popular support or mobilizing support for its policies, the fact that they can do so implies that there is some resonance in the public when it comes to the issue and that the leadership can then behave as if there exists a de facto indivisibility. In other words, it might not be important whether they are sincere or not in their professed beliefs in indivisibility - it matters whether others believe it enough to enable their policies.

When one moves from absolute to ideal war, it becomes very difficult to see how a conflict over a truly indivisible issue can possibly be resolved through fighting short of disarming the opponent or eliminating it altogether. One possibility is that one of the sides becomes convinced that the issue is not worth continuing to fight and gives it up entirely. This would imply that the underlying cause was not so much the indivisibility as the inflated expectation of what can be achieved by war, which puts us back in the mutual optimism camp — indivisibility might exacerbate the fighting because now one side has to become very pessimistic about its chances in order to agree to give up the entire benefit; however, it does not appear to function on its own as a separate cause of war. Thus, we can say that in this model, war occurs because of either mutual optimism or a commitment problem, and fighting continues in order to resolve the cause except that (apparent) indivisibility of stakes can prolong the process, making war termination harder to achieve.