INTERVENTIONS AS INFLUENCE

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J. David Singer (1963) developed a conceptual framework for thinking about when and how states will attempt to manipulate the behavior of other states. His logic develops from the notion of thinking clearly about what the influencer is trying to maximize and the potential strategies best able to achieve this goal. The idea of states as influencers of world events has numerous contemporary and historical applications. The civil unrest in Israel and the occupied territories, for example, is rife with attempts by the United States to modify or reinforce behavior. In Russia, the United States regularly attempts to influence behaviors with regard to political processes and nuclear controls. We suspect any policy initiative could be fruitfully thought through in terms of Singer's conceptual framework. Oddly, though, Singer offered no empirical evaluation of this model. We add to his work by testing implications about civil war interventions based on applying the internation influence model to that activity.

In this chapter we first provide a brief description of the "internation influence" model. After reviewing past research on interventions, we discuss the model in the context of intervention into ongoing civil conflict. In so doing we develop testable hypotheses about interventions based on the internation influence model. We then describe the data set and testing procedures used in evaluating those hypotheses. Along the way we replicate past research on interventions into civil wars, supporting some and recasting other previous findings. Evaluation of one of the hypotheses based on Singer's model generates a wholly new empirical finding, specifically that interventions in support of rebels are bloodier than are interventions in support of governments. Finally, we discuss possible extensions that future intervention researchers might make, and we also speculate about broader applications of the model

and the data requirements needed to test the internation influence model more directly.

SINGER'S "INTERNATION INFLUENCE" MODEL

Although subtitled a formal model, it is best to think of the internation influence model as a conceptual scheme linking the likelihood of influence attempts with their form—or strategy. Central to the internation influence model are the perceptions, predictions, and preferences of the would-be influencer. More specifically, the model centers around the influencer's perception of the target's current behavior, its predictions about the target's future behavior, and its preferences about what that future behavior should be. If the target (referred to by Singer as B) is predicted to behave in ways desired by the potential influencer (designated by Singer as A), then A is very unlikely to take violent steps to influence B. A's interest in such a situation would be to reinforce what B already is expected to do, and this is likely to involve rewards or promises thereof rather than threats and punishments. Were B predicted to behave in ways A disapproves of, then threats and punishments would be more likely. For example, a state contemplating intervening in a civil conflict must consider the current and anticipated behavior of its target. Does it agree with the target's current policy and want to reinforce it, and does it perceive that in the absence of an outside intervention the current policy will change toward a less preferred outcome? Depending on the preferences for the current and anticipated policy of the target, effective options include threats and punishment or reinforcement and rewards. We can observe this interplay of current and anticipated preferences and behavior throughout any number of civil conflicts. Are the Israelis expanding settlements? What is most preferred by the United States? Does the United States anticipate that Israeli policy will move into line with U.S. preferences, and if not, what actions are available to move Israeli policy?

We are especially attracted to Singer's conceptual model because its generality incorporates both conflict and cooperation. When perceptions of B's current behavior and predictions about its future behavior are consistent with A's preferences, we expect A and B to get along well and interactions between the two to be cooperative. When B's behavior is perceived now or predicted later to diverge from A's preferences, coercive efforts to influence B to modify its behavior are increasingly likely. By considering possibilities of modification and reinforcement within a framework running the gamut from threats and punishment to promises and rewards, Singer systematically relates situations and incentives for

	Persuasion Situations: A Prefers X				Dissuasion Situations: A Prefers O			
	1	2	3	4	5	6	7	8
Preferred Future Behavior	X	X	X	X	0	О	О	0
Predicted Future Behavior	X	X	O	O	О	O	X	X
Perceived Present Behavior	X	O	X	O	O	X	O	X
Reinforce or Modify	R	M	R	M	R	M	R	M
Punish?	No	P	No	Yes	No	P	No	Yes
Reward?	Yes	No	Yes	No	Yes	No	Yes	No
Threaten?	P	Yes	Yes	Yes	P	Yes	Yes	Yes
Promise?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

KEY: R = REINFORCE, M = MODIFY, P = PERHAPS

Fig. 1. Hypothesized relevance of influence techniques

states to use carrots or sticks to influence the target nation. The internation influence model is thus a tremendously general and flexible scheme with which to make sense of interactions between states.

It is perhaps easiest to understand the internation influence model by consulting figure 1 (a reproduction of fig. 3 from Singer's original article). It begins with all of the possible combinations of preferences, predictions, and perceptions about B's behavior. For simplification, Singer dichotomizes the target's behavior into X and O, where O simply represents "not X," although clearly actual behaviors could run along a continuum.

Consider column 1. In this scenario A prefers B do X, predicts B's likely future behavior is X, and perceives its current behavior also is X. In this situation A is likely to get a satisfactory outcome in terms of B's behavior and thus need not take steps to influence B to modify its behavior. Consequently Singer hypothesizes any actions taken by A to influence B would be to reinforce current behavior. More specifically, Singer hypothesizes influence strategies involving punishment will not be undertaken, but rather rewards and promises are most likely to be used. In contrast, column 4 offers a scenario in which A prefers B do X, but it perceives B as currently doing O and predicts that it will likely

continue to do O in the future. As a result, A is not likely to observe its preferred outcome unless something is done to modify B's behavior. In this scenario Singer predicts threats, promises, and punishment are likely influence strategies, and it is unlikely we would observe A using a reward strategy to influence B.

By presenting each possible combination of preferences, predictions and perceptions, figure 1 lays out hypothesized relationships between influence situations and the expected types of influence attempts. The internation influence model summarized in this figure offers a logical and persuasive scheme about when and how states will take steps to influence each other's behavior.

As logical and persuasive as the scheme is, however, it lacks the specificity needed to articulate precise hypotheses. That absence of specificity makes empirical testing problematic, even though the conceptual framework retains redeeming value. What is required to make it useful is the inclusion of a context within which states might find themselves presented with specific preferences, predictions, and perceptions.

CIVIL WARS AS INFLUENCE ENVIRONMENTS

Civil wars are usually extremely violent events disrupting not only the states suffering through them but also those interacting with the beleaguered victims. Frequently, civil wars represent cultural or ideological conflicts in which the characteristic of the post-civil war society will be heavily influenced by which side wins the contest. For this reason, not only those involved but also those concerned about the ethnic or ideological stakes have an interest in the course and outcome of the civil war. For instance, a civil conflict in a bordering country may lead to instability among its neighbors. And if the "causes" of the conflict are rooted in manipulable behavior by the state, a neighboring state may try to influence that behavior (see Gurr 1970; Collier, Hoeffler, and Soderbom 2001; Sambanis 2001). Civil conflicts thus are situations in which many states may have powerful incentives to try to influence the outcome. Civil conflicts, viewed as intervention opportunities for other states, are an important category of potential influence situations, and thus a context within which Singer's internation influence model can be tested.

For example, the policy community frequently struggles over questions of whether and how to intervene in civil conflicts. The most glaring instance might be Rwanda in 1994. There have been many public expressions of regret since then. As the atrocities began to unfold, members of the world community contemplated taking action, but ulti-

mately they could not satisfy the condition that an intervention would have a reasonable chance of success. On a less dramatic scale this type of decision calculus has played out in the Congo, East Timor, Liberia, Israel, and a host of other countries over the past decade. Policymakers are riveted to these problems but lack a coherent plan of action. Such might begin to be provided by Singer's internation influence model. We believe it adds considerably to thinking about when and how interventions into civil conflicts might take place.

In order to move Singer's framework from the abstract to the specific we use as our point of reference recent scholarship on interventions in civil conflicts. While there are numerous policy treatments focusing on a limited number of historical cases, much of this genre of work is geared toward prescriptive advice without the support of broad-based evidence or a logical theoretic framework. We believe Singer's model can contribute by showing how to organize evidence within such a framework. The internation influence model can aid our understanding of interventions in civil conflicts and provide a framework for evaluating evidence about the relative success of outside efforts. At the core of Singer's model is a rationally calculating decision maker who attempts to maximize utility given expectations, preferences, and current information. Regan (2000) applies this type of argument to civil conflicts by adopting a decision-theoretic model largely consistent with Singer's work. Building on Regan's research on interventions into civil conflicts, we add to its theoretical and empirical rigor by explicitly adopting Singer's framework and then testing hypotheses against the data developed by Regan.

Like Singer's, Regan's (1996, 1998, 2000) studies treat potential intervenors as rational actors who evaluate the likely costs and benefits of intervening, heavily influenced by whether they expect their interventions to succeed in stopping the fighting. Stopping the fighting is treated as the goal of all potential intervenors because a cease-fire is the proximate goal without which no other goal can be achieved. In a framework informed by Singer's model an intervention is an attempt to influence the actors in a civil war to terminate their fighting, in effect to alter their current and/or anticipated future behavior.

In his work, Regan articulates a decision-theoretic model of the costbenefit calculations that potential intervenors face when deciding whether to intervene. By careful consideration of variables plausibly anticipated to affect the costs and benefits of fighting or laying down arms, Regan is able to develop hypotheses about five conditions for intervention success. He analyzes these five hypotheses against the record of 189 foreign interventions into civil wars, finding reasonably strong

support for three of them and moderate support for the other two (1996, 2000, chap. 4).

In our investigation of Singer's internation influence model, Regan's work on interventions into civil wars is an obvious referent because he consciously structures his analyses consistent with Singer's model. He not only repeatedly makes reference to it but actively constructs his argument along the lines of Singer's discussion of the model. For example, when describing how would-be influencers/intervenors consider the consequences of not attempting to influence/intervene, Singer writes, "If A's decision makers are reasonably confident that nation B either will behave in a fashion desirable to A or not behave in an undesirable fashion, the incentive to attempt to influence B will diminish" (1963, 421, emphasis in original). In describing the potential intervenor's considerations, Regan writes, "The question is posed as to the likely outcome of the conflict without an outside intervention. If the subjective estimate of the probability of a successful settlement is high without an intervention, then the expected utility for not intervening is high and the decision process stops there" (2000, 44). In either case, if the influencer/intervenor expects the target to behave as desired without interference, no interference is expected. Such similarities make connections between Singer's and Regan's work easy to draw, and thus make Regan's interventions into civil conflicts an attractive empirical beginning into evaluation of Singer's model.

Replication and extension of Regan's (and others') past work on interventions is an important justification for our study. However, we wish to reiterate that our main goal is to use the analysis of interventions into civil wars as an empirical place to start evaluating Singer's model. We believe interventions are an important topic for study. However, we use them here not out of intrinsic interest, but rather because we claim they represent efforts by states to influence the future behaviors of other states. If this reasonable claim is true, then Singer's model should offer important insights into interventionary behavior. Those insights are developed in the next section, then evaluated empirically in the rest of the chapter.

HYPOTHESES ABOUT INTERVENTIONS AS INFLUENCE

Singer's model can offer many hypotheses about foreign intervention into ongoing civil wars. For example, as presented in figure 1, the model suggests promises are always an appropriate reaction in any influence attempt. Threats are also common, albeit not as common as promises. As a result, we might hypothesize would-be intervenors are

very likely to threaten to intervene militarily or promise to intervene economically as first steps at encouraging civil war participants to stop the fighting on their own. Additionally, Singer's model can generate a hypothesis that interventions on the government side will be rare when the government is preponderant over the opposition. Therefore there is little if any incentive for a foreign state favoring the government to come to its assistance. Singer writes, "No nation has the resources to engage in serious efforts to influence a great many of the others at any given time" (1963, 423). Consequently, states favoring the government, if able to predict with high probability that the government will win the civil war, can preserve their resources for other influence/intervention cases yet still enjoy satisfactory outcomes. Many similar hypotheses can be drawn from Singer's model about likely interventions; we leave them for future research. Instead, we turn to hypotheses about the violence of civil wars with interventions and about the identity of foreign intervenors.1

Figure 1 indicates that the goal of reinforcing never coincides with a strategy of punishment but instead always coincides with a reward strategy. This means the internation influence model only anticipates punishment when the influencer's goal is to modify the target's behavior. If an intervention opposes the government, then it is effectively trying to alter the pre-conflict status quo, in effect attempting to modify the state's behavior. This suggests a hypothesis that civil wars in which the opposition is aided by a foreign intervention are bloodier than civil wars in which foreign intervention aids the government. The logic is as follows. When foreign intervention aids the government it is plausible to assume the intervening state prefers the government's policies and way of ruling to what it predicts the opposition would institute if it were to win. By intervening on behalf of the government the intervenor seeks to reinforce the government already in power and by connection to reinforce its existing policies. Intervention on behalf of the opposition is consistent with assuming the foreign intervenor prefers the opposition's alternate policies and/or mode of governing. Such intervention is thus geared toward modifying the policies and/or mode of governance existing in the civil war state. Conceptually altering or restoring the pre-conflict status quo reflects modifying or reinforcing state behavior, and these preferences always involve rewarding or punishing strategies (fig. 1). Since punishment is an influence strategy appropriate to situations in which the influencer wants to modify rather than reinforce, we expect to see punishment in interventions on behalf of the opposition. Putting some real-world context on the abstract category of "punishment" gives us our first hypothesis.

HYPOTHESIS 1: Interventions on behalf of the opposition will coincide with more violent civil wars than will be the case when interventions occur on behalf of the government.²

There is a second way to justify this hypothesis. In general the government is likely to be stronger—at least initially—than the opposition. Consequently, if the foreign state intervenes on behalf of the government it is reinforcing the behavior of the state by reinforcing the likely outcome of a governmental victory in the civil war. If, in contrast, it intervenes in favor of the opposition, it is attempting to modify the likely outcome so an opposition victory will occur. Thus, if the opposition is the underdog, interventions on its behalf are influence attempts to modify the likely outcome of the civil war, and punishment is thus an appropriate strategy according to the internation influence model.³ More important, an intervention on behalf of the opposition might not have as the objective an opposition victory, but rather a goal of making the opposition strong vis-à-vis the government, though not necessarily strong enough to prevail on the battlefield. Estimates of victory by either side will contribute to concessions at the negotiating table. When the opposition is strong it can extract compromises consistent with the intervenor's preferred future behavior.

Perhaps the most fruitful area within which the internation influence model offers hypotheses concerns the identity of intervening states. In his analyses of what makes intervention more likely, Regan (1996; 2000, chap. 3) analyzes what makes at least one intervention into an ongoing civil war more likely, ignoring which states specifically might intervene. Regan's argument about cost-benefit calculations of potential intervenors does not give any indication of which states are likely to bother to undertake the cost-benefit calculations in the first place. There are two types of states that do not intervene. First, there are those who undertake the cost-benefit calculation and decide intervention is not a rational response because the costs are too high or the probability of success too low. But there is also a second group of non-intervenors: those who don't even bother to undertake the cost-benefit calculation because they do not care about the civil war state. Unable to distinguish between these two types of non-intervenors, Regan's empirical emphasis is on the civil war as the unit of analysis, using as the dependent variable the presence or absence of any outside intervention.

Singer's internation influence model offers more robust expectations about which states are likely to undertake the cost-benefit calculations about whether to intervene. Specifically, Singer writes: "The first prerequisite for an influence attempt is the perception on the part of A's de-

cision-makers that A and B are, or will be, in a relationship of significant interdependence, and that B's future behavior consequently could well be such as to exercise either a harmful or beneficial impact on A" (1963, 423). States interacting regularly and significantly with the civil war state are likely to care more about the civil war's outcome, are thus more likely to undertake the cost-benefit calculation, and ultimately are more likely to intervene. That is, the pool of potential intervenors can be thought of in terms of their geographic relationship and/or their previous political and economic interactions. Thus we hypothesize states that have significant interaction with the civil war state are more likely to intervene in its civil war, which gives us our next hypotheses.

HYPOTHESIS 2: States bordering the civil war state are more likely to intervene.

HYPOTHESIS 3: States allied with the civil war state are more likely to intervene.

HYPOTHESIS 4: If a state is the former colonial metropole of the civil war state, it is more likely to intervene.

Neighbors, allies, and former colonial powers of the civil war state are likely to interact frequently with the civil war state, anticipate they will continue to do so in the future, and thus be more likely to think about and actually intervene. Including such variables in our analysis, based on the internation influence model, allows us to address the question of who are the *potential* intervenors.

In sum, we motivate two categories of hypotheses about interventions from Singer's internation influence model. The first anticipates that interventions on behalf of the opposition or insurgent forces will be bloodier or at least more aggressive than interventions on behalf of the government. This hypothesis is suggested by the fact that Singer's model identifies punishment as the appropriate strategy in situations where the influence effort seeks to modify a target's predicted future behavior. We envision interventions on behalf of the opposition as efforts to modify a state's future policies and anticipate bloodier and more aggressive activity to represent a strategy of punishment. The second category of hypothesis is represented by three specific hypotheses about characteristics of states associated with a greater likelihood they will intervene into an ongoing civil war. Singer very clearly anticipates that, due to limited resources, actors will be picky about when and where they will attempt to exert influence. Since influence attempts are costly, states are more likely to bother to try to influence others when they anticipate a high likelihood of future interactions with those others. Our specific hypotheses

anticipate that neighbors, allies, and former colonial powers of civil war states are more likely to expect to interact with civil war states in the future, thus care more about what civil war states will do in the future, and consequently are more likely to intervene to influence the outcome of the civil war. These hypotheses are so far untested in the larger literature on civil war interventions and thus are unique and original contributions of our application of Singer's internation influence model to the topic of interventions.

RESEARCH DESIGN

The analyses to follow rely on extensions to the data set generated by Regan to study interventions in civil conflicts (Regan 2000, chap. 2). The data set includes all civil conflicts between 1944 and 1994, defined as "armed combat between groups within state boundaries in which there are at least 200 fatalities" (21). Regan identifies 138 civil conflicts meeting these criteria. He also provides information about whether the civil war triggered a humanitarian crisis, indicated by the flow of at least 50,000 refugees (23). The basis of the conflict is also of interest, and consequently the data set indicates whether the primary disagreement between the belligerents was rooted in identity issues, recorded in terms of the ethnic, religious, or ideological orientation of the opposition group. In addition, the level of violence of the conflict is also of interest, and thus the data set indicates the number of fatalities as well as the intensity of the conflict (fatalities/year). The final characteristic of the conflicts is whether they occurred during the Cold War, defined as ending on January 1, 1989. Thus, in the analyses to follow we include a number of variables about the characteristics of civil wars (Ethnic Conflict, Ideological Conflict, Refugees, Casualties, Intensity, and Cold War) drawn directly from Regan's previous work.

Regan's data set also includes information on the intervenors and the characteristics of their interventions. He defines "third-party intervention in intrastate conflicts as convention-breaking military and/or economic activities in the internal affairs of a foreign country targeted at the authority structures of the government with the aim of affecting the balance of power between the government and opposition forces" (2000, 10). The data set lists 197 interventions into the 138 civil wars. Of critical importance is the outcome of the intervention. In the data set "success" is operationalized as the cessation of fighting for at least six months. In addition to this outcome variable, Regan's data set also includes information on other aspects of the interventions that occurred, such as whether the intervention was of a military, economic,

or mixed nature, whether the intervenor was a major power, and whether the intervention was in aid of the government or the opposition. Thus, in the analyses to follow we include a number of variables about actual interventions (Success, Mixed Intervention, Supporting Government, Major Power Intervenor, Mixed Support for Opposition, Mixed Support for Government, and Economic Support for Opposition) drawn directly from Regan's previous work. All of this allows us to replicate his past studies, but importantly we do so within the framework of the internation influence model.

To this existing data we add cases of potential intervention by foreign states and variables representing what we think, based on the internation influence model, makes such interventions more likely. For the additional cases, we treat each civil war as an intervention opportunity for every member of the international system (as defined by COW) in existence while the civil war occurred. Thus, instead of the Greek civil war of 1944-49 having only five cases of actual interventions (by the United States, United Kingdom, Albania, Yugoslavia, and Bulgaria), our data reflect seventy-five cases of possible interventions, with five actually occurring. The Correlates of War Project lists seventy-six members of the international system between 1944 and 1949, and since Greece cannot launch a foreign intervention into its own civil war, we have seventy-five "intervention opportunities." That is, we treat each civil war as an intervention opportunity for every other system member. As a result the 138 civil wars expand to 19,533 cases of intervention opportunity, in which only 197 actual interventions occurred.

Not all system members are equally likely to intervene, of course. Consequently, based on the internation influence model, we include a number of new variables designed to help us weed through the potential intervenors and highlight a subset of likely intervenors. The first new variable "Neighbor" is a dichotomous indicator of whether the potential intervenor is directly contiguous to the civil war state at any point during the civil war. By excluding contiguity by sea we do not mean to suggest India, for instance, would not be interested in Sri Lanka's civil wars. Rather, we are trying to keep our analysis simple. Some states might be quite close, separated by only a small amount of water, but without a substantial flotilla be nevertheless unable to intervene (at least militarily). We suspect different specifications of neighbors, including sea contiguity or perhaps simple intercapital distances, would produce results very similar to the ones we found.

The second new variable, "Allied," simply indicates whether the potential intervenor and the civil war state shared a defense pact, neutrality pact, or entente at any time during the civil war. We rely on

Correlates of War alliance data in coding this variable, specifically the compilation included in EUGene (Bennett and Stam 2000a). As with Neighbor, Allied is purposefully kept simple. We can envision justifications for including variables indicating the type of alliances potential intervenors may have had with the civil war state. For instance, potential intervenors with defense pacts may be interested in the civil war state and interact with it regularly but also happen to hold preferences consistent with the current behavior of the government. It would seem reasonable that if a potential intervenor promised to defend the civil war state's government in the past, it would come to its defense when the enemy is domestic. In contrast, neutrality pacts historically have coincided with a certain enmity between governments, and thus when they exist we might expect any interventions by neutrality-pact allies to favor the opposition. It might prove interesting in subsequent studies to investigate such relationships, but our goal here is more preliminary.

Finally, we also include a variable, "Colonial History," indicating whether the potential intervenor was previously the colonizer of the civil war state. If the civil war state was never a colony, this variable equals 0 for all potential intervenors. Occasionally a civil war state had a history of being colonized sequentially by various imperial powers, and in such cases all former colonizers are coded the same. Data for coding this variable are drawn from the Issue Correlates of War Project (Hensel 2001b).

The new expanded version of Regan's data set thus has over 19,000 cases, each of which is an intervention opportunity for a specific potential intervenor into an ongoing civil war. For each case we have data representing the characteristics of the civil war, data about whether an intervention occurred, if so its form, and whether or not it succeeded. Based on our interpretation of the internation influence model, we have added data providing information about the relationship between the potential intervenor and the civil war state. We use these data to evaluate our four hypotheses about foreign intervention based on the internation influence model, and in the process we replicate and extend the second author's past research on this topic.

In addition, we also include information in the data set about the regime types of the civil war state and potential intervenor, and also indicate whether the potential intervenor is African. We do this to evaluate other hypotheses in broader literatures that are of interest to us. The regime type variables are suggested by a pair of articles published by Margaret Hermann and Charles Kegley (Hermann and Kegley 1996; Kegley and Hermann 1995). They find democracies are no less likely to

intervene militarily than are nondemocracies and also that democracies are disproportionately unlikely to be the targets of interventions, regardless of the regime type of the intervenor. The general body of democratic peace research suggests democracies should be unlikely to intervene against each other. Thus we indicate whether the civil war state is a democracy (at the time the civil war starts) and whether the potential intervenor is a democracy (at the time of its initial opportunity to intervene in the civil war). We use Polity III data, supplemented by Freedom House's reports for those states not included in the Polity data sets. "Democratic Intervenor" equals 1 if the potential intervenor scores 6 or greater on the Polity III index of institutionalized democracy (or if it is listed as "Free" by Freedom House), "Democratic Government" equals 1 if the government of the civil war state is a democracy according to these criteria, and "Joint Democracy" equals 1 if both potential intervenor and civil war state are democracies.

The final variable added to the data set, "African Intervenor," is recorded dichotomously, equal to 1 if the potential intervenor state is located on the African continent (or is an immediately adjacent island). Lemke finds that even controlling for an array of known and suspected correlates of interstate conflict, African states are disproportionately peaceful in their interstate relations (2002, chap. 7). But Africa is also rife with civil wars, and thus we wonder if Africans are also disproportionately peaceful with regard to interventions into ongoing civil wars. A negative coefficient on this variable in the following analyses indicates they are.⁴

These then are the cases and variables comprising our data set. We now describe the specific form of the estimations and address a few issues raised by our choice of estimator. In analysis of hypothesis 1 we offer only descriptive statistics, and little or no explanation is likely required. In order to analyze hypotheses 2, 3, and 4, we employ censored probit. Censored probit simultaneously estimates the impact of covariates on two binary dependent variables. Our first dependent variable, "Intervention," indicates whether the potential intervenor intervened. Our second dependent variable, "Success," is coded only if the first dependent variable equals 1. Success indicates whether an intervention that occurred was successful.

The simultaneous estimation of censored probit allows us to determine the direct effects of the independent variables on the dependent variables while controlling for prior indirect effects. We often think about this as "selecting into an opportunity," though many quite often fail to take into account the conditions leading states to this

choice. We model this first set of conditions as indirect effects. The indirect effects are the influence of the independent variables on the probability of Intervention equaling 1 and thus creating the opportunity for Success to equal 1. In addition to these direct and indirect effects, there can be other linkages between the two dependent variables. Censored probit allows for these other linkages by estimating a parameter, rho, which is the correlation between the disturbance terms of the two dependent variables. The rho parameter is sometimes referred to as a "selection effects" parameter, and the censored probit is often seen as a diagnostic tool allowing correction of selection bias possibly existing if the impact of the independent variables on one dependent variable is estimated independently of the other dependent variable. For these diagnostic and/or corrective purposes we estimate the impact of the covariates on the two dependent variables simultaneously within a censored probit. The censored probit is increasingly commonly used in world politics research for similar reasons (e.g., Reed 2000; Lemke and Reed 2001a, 2001b; Nooruddin 2002).

Concerns about selection bias affecting past research on foreign intervention into civil wars are important. For instance, if we were to find major powers are more likely to be successful at interventions than are minor powers, but we do so only considering the populations of civil war interventions that actually occurred, we might simply be observing the results of a process whereby states choose to intervene based on expectations of success. If major powers know they are likely to be successful and are thus more likely to intervene at all, then there are direct and indirect effects of major power status on the probability an intervention succeeds. Without explicitly controlling for this self-selection process—with an estimator like censored probit that can account for direct and indirect effects—we might reach erroneous conclusions.⁵

Regan's work is informed by such concerns. At the beginning of his book he writes, "Rarely would one expect political leaders to choose to intervene under circumstances where they expected the intervention to fail," and then, "It is clear . . . states self-select themselves into or out of interventions for a variety of identifiable reasons" (2000, 4–5, 16). However, since his framework did not address the question of "who are the potential intervenors," he was unable to estimate a selection model. Thus a great benefit to us of combining Regan's work with Singer's internation influence model is that Singer's framework allows us to address the question of identifying potential intervenors that arises out of other research designs. We are thus able to employ a statistical technique appropriate to the selection bias problem identified by Regan.

EMPIRICAL ANALYSES

We begin with evaluation of hypothesis 1, that interventions on behalf of the opposition will correspond with bloodier civil wars than will interventions on behalf of the government. We address this hypothesis through descriptive statistics.

Table 1 offers first a difference-of-means test comparing the casualty levels of instances in which interventions favored the government and those in which they favored the opposition. If "punishment" corresponds with bloodiness, then we would expect the mean casualty level to be higher in opposition-support situations than in government-support ones. As seen in table 1, the average casualty level is more than a third higher in interventions in support of the opposition, and this difference is statistically significant (albeit only at the p < 0.1 threshold). We know that civil wars without interventions are dramatically less violent than those with interventions (Regan 2000, 3). Yet even within this more deadly category of civil conflict (those with interventions) support for opposition forces results in an average of 27,000 more fatalities per conflict. This is also largely consistent with evidence of interventions supporting the opposition leading to conflicts of longer duration (Balch-Lindsay and Enterline 2000; Regan 2002). We interpret this as support for hypothesis 1. Presumably this finding would be of interest to policymakers. Supporting the rebels in order to punish a government appears to come at higher human cost than does intervention to reinforce governments.

Punishment need not correspond with blood, of course. Recognizing this, we also present in table 1 a pair of cross-tabulations comparing whether the intervenor assisted the government or opposition with whether the intervention was militarized. Here we find 70 of 88 interventions in support of the opposition were militarized while only 61 of

TABLE 1. Support for Opposition as a Punishing Strategy

Intervention Supporting Government			Intervention Supporting Opposition			
Militarized Intervention	No	Yes		No	Yes	
No	20	31	No	33	18	
Yes	75	61	Yes	66	70	
N = 92 Average Casualty = 61,385			N = 88 Average Casualty = 88,845			

Note: Odds Ratio: 1.2. F = 2.853, p = 0.093

92 interventions in support of the government were militarized. This generates an odds ratio of 1.2, meaning interventions in support of the opposition are 20 percent more likely to be militarized than are interventions in support of the government. This result might be a more appropriate evaluation of hypothesis 1 than the difference-of-means test. As mentioned in note 2, we do not know if the casualty figures represent bloody conflicts into which bloodless interventions occur or relatively bloodless civil wars made gory by the intervention. With the categorical analysis, however, we offer information about the intervention separate from the civil war itself. If military action is a prerequisite for "punishment," then this too supports hypothesis 1.

We turn now to our evaluation of hypotheses 2 through 4. Table 2 presents two censored probit models indicating the influence of 21 variables on whether interventions into civil wars occur and if so whether the interventions are successful at stopping the fighting for at least six months. In column 1 the correlates of successful intervention include general categories of intervention (Mixed Intervention, Supporting Government). In column 2 the correlates of successful intervention include more specific target-and-type categories (Mixed Support for Opposition, Military Support for Government, Economic Support for Opposition). Collinearity between the general and specific variables is high, and it seems prudent to follow Regan's earlier example and estimate separate models (hence columns 1 and 2). Attentive readers may note the sample size in our censored probits drops from the original 19,533 to just below 16,000. Almost all of the dropped cases are lost due to missing data on the "Refugees" variable. We lack comprehensive data on Refugees, and thus including it causes almost 20 percent of the cases to be deleted. We think Refugees is an important variable and thus include it even though we lose many cases by doing so. We have replicated table 2 omitting Refugees, and there are only minor changes.⁹

We begin evaluation of table 2 by discussing what these results say about each of the three hypotheses pertinent to it, then make some general comments about its meaning for empirical patterns in civil war intervention occurrence and about whether such interventions succeed. We also consider what its results say relevant to past studies of interventions and close with specific comments about table 2's results and Singer's internation influence model.

The results of our multivariate analyses strongly support hypotheses 2 through 4. Recall those hypotheses all concern the likely identity of civil war intervenors, and based on the internation influence model we anticipate states likely to interact frequently with the civil war state in the future are most likely to intervene. Consistent with these expecta-

tions we find the coefficients for Neighbor, Allied, and Colonial History are all large, positive, and statistically significant. Each of these conditions substantially increases the probability of intervention. States with repeated interaction with the civil war state are more likely to intervene, precisely as anticipated by our interpretation of the internation influence model.

Turning to more general questions of when intervention opportunities are more likely to actually have interventions, we find results consistent with past research. Major powers are more likely to intervene in

TABLE 2. Censored Probits of Intervention and Success

	Column 1	Column 2	
Intervention			
Constant	-3.73***	-3.72***	
Intensity	-0.13	-0.12	
Refugees	0.32***	0.32***	
Cold War	0.53***	0.52***	
Casualties	6.17e-07**	5.95e-07**	
Neighbor	1.36***	1.37***	
Allied	0.47***	0.47***	
Colonial history	0.81***	0.81***	
Major power intervenor	1.37***	1.37***	
African intervenor	-0.14*	-0.13*	
Democratic intervenor	0.06	0.07	
Democratic government	0.27**	0.26**	
Joint democracy	-0.14	-0.14	
Ethnic conflict	0.25**	0.25*	
Ideological conflict	0.28**	0.28**	
Success			
Constant	-2.22***	-2.32***	
Ethnic conflict	-0.08	-0.01	
Ideological conflict	-0.18	-0.11	
Mixed intervention	-0.38*	_	
Supporting government	0.42**	_	
Casualties	-6.28e-07	-9.96e-07	
Major power intervenor	0.97***	0.94***	
Mixed support for opposition	_	0.58	
Military support for government	_	0.75***	
Economic support for opposition	_	0.20	
Number of cases	Y1:15931, Y2:156	Y1:15931, Y2:156	
Model χ^2	19.63***	22.61**	
Rho	0.71**	0.61**	

^{*}p < 0.10, **p < 0.05, ***p < 0.01, one-tailed significance tests with robust standard errors.

civil wars than are minor powers. Civil wars with many refugees, with high numbers of casualties, and with ethnic or ideological motivations behind the fighting are also more likely to draw interventions. We find Intensity negatively related to the probability of an intervention (although it is not statistically significant). Finally, civil wars during the Cold War were more likely to experience interventions than were civil wars after that period. All of these general results are consistent with Regan's past findings even though our unit of analysis (the intervention opportunity) differs from his (the civil war).

When we turn our attention to what increases the probability intervenors will enjoy success, far fewer variables seem to matter. Major power intervenors enjoy a greater probability of success than do minor power intervenors. Supporting the government, either generally or specifically with military assistance, is associated with a greater probability of success. Finally, the general category of Mixed Intervention decreases the odds of success.

In our analysis of the correlates of intervention success, our unit of analysis is the same as Regan's, but the big difference now is that our censored probit allows us to determine if the selection bias concerns he talked about affect the results. We find that even controlling for the indirect effects of many of our variables on the prior stage of whether an intervention occurs in the first place, interventions by major powers and those favoring the government generally, as well as those specifically with military assistance, are more likely to be successful than are those by minor powers or those not bringing aid to the government's cause. There are no major differences between Regan's past studies and this one, only marginal variation in coefficient size likely attributable to the more appropriate estimator used here. For example, we suspect that being allied, having a history of prior colonial interaction, or being a neighboring country probably predispose intervenors to come to the government's aid. If true, then most of the statistical oomph of the Supporting Government variable will be felt at the prior stage of whether an intervention occurs at all. It is possible this explains why our Supporting Government coefficient is only one-third the size of Regan's earlier estimate. The statistically significant rho parameter suggests there are other linkages across the two dependent variables, bolstering suspicions of selection bias causing the minor differences between the earlier work and that reported here.

We included a series of variables representing the regime types of the civil war state and the potential intervenor. We find democracies involved in civil conflicts are more likely to experience foreign intervention. We also demonstrate democratic potential intervenors are no

more likely to intervene than are nondemocratic potential intervenors, and jointly democratic potential intervenor-civil war state dyads are no more or less likely to involve interventions than are other types of dyads. That is, democratic linkages do not determine the outcome of internation influence opportunities. These results run counter to Hermann and Kegley's previous findings. In contrast to our estimates, they report democracies are more likely to intervene than are nondemocracies, and democracies are less likely to experience interventions than are nondemocracies. A number of possible explanations may be offered for the disparity between our and their findings. First, Hermann and Kegley study a shorter time span than we do. Second, Hermann and Kegley restrict themselves to military interventions, while we include economic and mixed interventions along with the military category. Finally, we consider only interventions into ongoing civil wars, whereas Hermann and Kegley employ data sets about interventions across a larger range of intervention opportunities. With so many differences it is not surprising we produce different results. What is of interest, however, is the clues our research and theirs might jointly offer about the democratic peace and internation influence strategies. If our democratic civil war states with interventions are disproportionately drawing economic interventions, then our results do not contradict Hermann and Kegley's. What's more, it might be that civil war democracies disproportionately experience economic interventions because military interventions are believed unlikely to succeed since democracies are hard to defeat (as argued by, among others, Bueno de Mesquita et al. 1999). Closer analysis of such issues might be an interesting avenue for future research.

Finally, what of international pacificity among African states (Lemke 2002)? Our results include a negative and statistically significant coefficient for African Intervenor. Given the rather small coefficient size and modest statistical significance, support for our expectation is present, but tentative. This result is perhaps consistent with one of Regan's more puzzling findings. He reports that as the number of bordering states increases, the probability of an intervention declines. African states have more common borders than countries on other continents with significant amounts of armed civil violence, and if African states are more pacific internationally, the higher number of common borders in Africa could account for Regan's result. Even though the substantive and statistical significance of our result is marginal, this may suggest an explanation for a puzzling finding in Regan's earlier work regarding the number of borders and an unanticipated lower probability of intervention.

Moreover, this uncommon continental control variable also might suggest Singer's internation influence model has a narrower range of applicability than we initially thought. Lemke's work focuses on Africa because he investigates whether underdeveloped states are able to respond to international stimuli as developed states do. After all, if the treasury is empty or there is no road by which soldiers can be transported to the border, can a state decide to go to war with another? If underdevelopment reduces the range of options that third world leaders face internationally, we might be better off not expecting them to behave like leaders of developed states. Singer's internation influence model suggests states attempt to influence each other given the resources to do so and an anticipation of interaction in the future. If underdevelopment coincides with reduced resources and shorter time horizons, perhaps some level of development must be achieved before states worry about influencing each other. In that case, perhaps Singer's model will apply to developed states well, but underdeveloped states poorly. This interpretation is consistent with the negative African Intervenor estimate, as well as with Lemke's (2002) investigation.¹⁰

In this section we offered a variety of analyses running from simple difference-of-means tests through somewhat more complicated censored probit analyses. We find support for all four hypotheses about foreign intervention into ongoing civil wars based on the internation influence model. Our results successfully replicate Regan's earlier findings but may contradict Hermann and Kegley's studies. Finally, there is some evidence of African aversion to intervening in civil wars. Again, all four hypotheses are supported by our analyses here.

DISCUSSION AND CONCLUSIONS

In this chapter we tested two implications of J. David Singer's internation influence model, one being the role of interest in the likelihood of interventions into civil conflicts and the other questioning the destructiveness of punishment as an influence strategy. Our empirical analyses support our expectations. States with continuing interests in civil war states are more likely to intervene in those civil wars. Situations that the internation influence model leads us to expect to be ones in which punishment is the appropriate influence strategy are demonstrably bloodier than instances in which less aggressive influence strategies are expected. But Singer's model has a considerably broader range of applications that we do not address. We return later to Singer's model to discuss other applications and explore some requirements for future empirical verification.

By focusing on the decision to intervene in civil conflicts we neglect a host of other potential influence environments. For example, our focus on civil conflicts narrows the scope to conflictual behavior. However, it is clear from Singer's model that states also attempt to influence cooperative policies and interactions. In fact, the distribution of conflictual behaviors may constitute but a small fraction of the total range of behaviors that states attempt to manipulate. We miss all forms of cooperative trade, immigration policies, triangular interactions among states A and C of interest to state B, as well as other diplomatic activities potentially useful to the influencer. Furthermore, by narrowing our analysis we fail to capture influence attempts involving interstate conflict, possibly the main interest behind Singer's initial inquiry.

Empirical verification of the broad range of applicability, however, must confront some rather knotty issues. Two key components of Singer's model—and we concur with their conceptual necessity—are the preference and prediction parts of the decision calculus. Both preferences and predictions, especially ex ante, are difficult to observe. We can readily observe current behaviors but have a much harder time knowing what the potential influencer's prediction of future behavior is, let alone its preferences about current and anticipated behavior. What we have done in our analysis is to make an indirect inference from an aspect of structural conditions (proximity, alliance, etc.) to preferred behavior. This may obscure much of what Singer was trying to illuminate. The difficulty lies in identifying systematically empirical traces to form the backbone of reliable and valid indicators. Presumably the strength of any influence attempt would be directly related to the magnitude of the difference between predicted and preferred behavior. If we think about these two conditions in spatial terms, then the distance between them would help predict the type of influence attempt and the amount of resources a state invests.

We do not offer an empirical solution to this vexing problem but rather point it out as a challenge for future scholarship. This challenge, moreover, has a more modern-day corollary. Regardless of whether we employ a 1960s version of a formal model or one articulated in the twenty-first century, we need to come to grips with the empirical centrality of preferences and predictions.

Finally we end with a word about the generalizability of Singer's model. That is, we speculate as to whether the model is too general and instead requires contextual—or contingent—modifications in order to be widely applicable. For instance, information is critical to the model, and the information required may transcend the capabilities of all but the most technologically sophisticated states. This might be changing

with time and modern communication technology, but the demands of preferences and predicted future behavior mean the confidence intervals around predictions from the model may vary systematically with a number of conditions found in both the potential intervenor and the target. It also may be that as the behavior of interest moves from "normal" diplomatic relations to trade to security issues the demands of information required by the model decrease its reliability. This might suggest Singer's model—or an empirical extension—may be more directly applicable to major power interactions and trade issues than to those of minor powers and conflictual behavior. The negative African Intervenor coefficient is consistent with this possibility.

In the final analysis Singer's influence model provides a conceptual framework within which to think about when and why states attempt to manipulate the behavior of others. Moreover, his work also extends conceptually the categories of actions available to the influencer. By making, for instance, the distinction between promise and reward, threat and punishment he allows for the subtleties of internation influence to be at the forefront of the policy agenda. A promise can be less easily observed than a reward, though under a certain set of conditions a promise may be sufficient to achieve the desired outcome. Much of the emphasis in international politics has been on the more directly observable, and consequently we might be simply failing to observe many or most efforts by states to influence each other. Our analyses shed light on the empirical validity of Singer's model, but they remain far from definitive tests of this rich theoretical framework.

NOTES

- 1. We apologize for discussing untested hypotheses. Tests would require data collection neither of us has undertaken, and thus they are left to future research. However, we nevertheless discuss such hypotheses here in order to demonstrate that Singer's model has utility beyond the few hypotheses we actually do test. We regard fertility as a desirable characteristic of models, and much of our enthusiasm for Singer's model is related to its fertility.
- 2. Our analysis of this hypothesis is far from perfect. Ideally we would like to observe the violence associated with the intervention alone rather than the total violence (as indicated by the number of casualties) in the entire civil war. Unfortunately, our data are not amenable to such detailed evaluation, and thus the support we uncover for hypothesis 1 is tentative pending the eventual collection of more appropriate data.
- 3. We recognize that both of these justifications for this hypothesis potentially contradict the second author's previous assumption of stopping the fighting as the goal of interventions. It is possible intervenors would like the oppo-

sition to win but calculate that helping the government is most conducive to speedy institution of a cease-fire. In such a situation the proximate goal and long-term preference may be at odds.

- 4. We recognize our efforts to replicate various past studies might distract readers from our primary goal of using civil war intervention behavior to test Singer's internation influence model. However, we believe this risk worth taking because, in a volume honoring his contributions to the scientific study of world politics, replications demonstrating where his work fits within cumulative research traditions is important.
- 5. Of course, if the causes of civil wars themselves are also causes of interventions and of interventionary success, then our omission of the logically prior stage of civil war onset could introduce selection bias even though we are so careful to avoid it subsequently. Three points are relevant. First, there is an infinite regress of possible linked causation because we have no ultimate starting point for international or domestic politics. That there always could have been something previous does not mean that correcting for subsequent selection bias is undesirable. Second, our uninformed sense is that the "decision" to start a civil war is not one made with much consideration given to the likely course of subsequent foreign intervention. We have trouble envisioning the prospects of foreign intervention playing a large role in the decision calculus of opposition parties as they launch civil wars. Surely there may be cases in which potential external support (or opposition) weighs large, but generally so? Third, studies of civil war onset (Collier and Hoeffler 1998; Hegre et al. 2001) suggest civil wars are not "caused" by variables important to our analysis. Collier and Hoeffler's "ethno-linguistic fractionalization" variable may be related to our "Ethnic Conflict" variable, but if so it is the only connection across our analyses. Like us, Hegre et al. use an indicator of how democratic the civil war state is, but otherwise our analyses do not overlap. Readers may want to be suspicious of our Ethnic Conflict and Democratic Government variables if they believe potential interventions are an important part of the opposition's calculus (or the government's) in starting civil wars.
- 6. Attentive readers will note that 92 interventions in support of the government plus 88 in support of the opposition equals 180, not 197, interventions. The omitted interventions were neutral ones favoring neither the government nor opposition. As such they do not provide any information relevant to this first test.
- 7. An OLS regression with casualties as the dependent variable and "support opposition" as the independent variable generates a positive and statistically significant coefficient. The overall regression is also significant, but the r^2 is tiny.
- 8. This comparison requires two cross-tabulations because there are some interventions that support neither the government nor the opposition.
- 9. Clearly, 75 cases of intervention opportunity within just the Greek civil war (for example) are not independent of each other. Recognizing this, the results in table 2 are calculated with robust standard errors. Being able to guess

something about the likely non-independence of cases, we also reran both analyses with robust standard errors clustered on each civil war and on each potential intervenor. Nearly identical results obtain across the three different standard error calculations.

10. Alternatively, one might argue the African pacifism is explained by other forms of underdevelopment, lack of power projection capabilities, difficult terrain, etc. Lemke (2002, chap. 7) considers all of these factors and concludes none adequately accounts for Africa's disproportionate pacificity.