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Introduction

The ruling circles of the USA and its more zealous allies . . . saw in this event merely yet another opportunity to place additional obstacles in the path of development and deepening of the already troubled dialog between East and West, and to justify the arms race. . . . We view this tragedy quite differently. We understand: This is one more toll of the bell, one more terrible warning that the nuclear era demands new political thinking and new policies.

—Mikhail Gorbachev, speaking on Soviet television in the aftermath of the Chernobyl nuclear accident, 14 May 1986

Ukraine has no problem with Chernobyl. The problem exists in the West. If they want the plant shut down, this may be done in a very simple way—simply divide Ukraine's losses among the participants in the process. These include the fifteen countries of the European Union, the three G7 countries that are not members of the European Union, and Ukraine. These states need only pay $200 million each, and this price is not very high for an advanced country that would like to solve an enormous task and rid its own people of worries.

—Serhiy Parashyn, director of the Chernobyl Nuclear Power Plant, 19 April 1995

This book examines cooperation and conflict in East-West environmental politics from the late 1960s, when the first modest cooperative efforts emerged during the heyday of the Cold War, to the much more energetic—and often more contentious—post–Cold War environmental diplomacy of the 1990s. Through a comparative study of three key international environmental issues—nuclear power safety, transboundary air pollution, and the protection of the marine environment of the Baltic Sea—this study seeks to explain the changing strategies and levels of success associated with transnational efforts to promote environmental protection and the reduction of transboundary emissions in the USSR

and, subsequently, in five of the USSR's successor states: Russia, Ukraine, and the Baltic republics of Estonia, Latvia, and Lithuania.

This study is driven by a profound paradox. At first glance, we might have expected Russia and the other newly independent states to have been much more eager to address transnational environmental concerns than the USSR had been. During the Cold War period, international environmental cooperation was hampered by the hostility and secrecy that accompanied the bipolar division of the European continent, while internal efforts to address environmental degradation within the USSR were sharply constrained by the closed character of the Soviet political system and the Soviet leadership's determination to pursue military and industrial development at any cost. By contrast, in the wake of the dramatic events of 1990–1991, domestic political power increasingly devolved to the people most likely to benefit from improved environmental quality: the ordinary citizens of Russia and the other newly independent states. This transition was also accompanied by the dismantling of the notoriously inefficient and environmentally unfriendly command economy, the marked relaxation of state controls on transnational political and scientific contacts, and growing economic interdependence between East and West—all of which might reasonably be expected to be conducive to more aggressive environmental policies at home and more enthusiastic environmental cooperation abroad.

In fact, the end of the Cold War and the collapse of the Soviet Union did not prove to be an unalloyed boon for transnational efforts to promote environmental protection and nuclear power safety in the newly independent states. The period of greatest enthusiasm for East-West environmental cooperation occurred not in the 1990s, but in the second half of the 1980s—well before the unraveling of the Soviet political system or the end of the Cold War. In the wake of the 1986 Chernobyl nuclear power plant accident and the simultaneous unveiling of Mikhail Gorbachev's campaign to fundamentally reform the Soviet Union's domestic and foreign policies, Soviet diplomats enthusiastically embraced East-West environmental cooperation, undertaking a number of unprecedented commitments in areas such as transboundary air pollution, nuclear safety, and pollution in the Baltic Sea. Moreover, Soviet interest in East-West environmental cooperation did not begin with Gorbachev.

The USSR responded positively to Western calls for environmental cooperation as early as the late 1960s, and in one case—transboundary air pollution—an initiative put forward by Leonid Brezhnev paved the way for the conclusion of an international agreement embracing all of Europe and North America, an agreement that otherwise might not have come to pass.

By contrast, the 1990s were characterized by a much more confrontational form of "smokestack diplomacy." The newly independent states were uniformly less willing to take deliberate, independent, effective action to address the sources of transboundary pollution than had been the USSR under Gorbachev, despite the fact that most of these sources generated even more severe *internal* damage as well. The newly independent states' emissions of air and water pollutants declined sharply in the early 1990s, but this decline was almost entirely the inadvertent consequence of the sharp economic recession that accompanied the collapse of the command economy. To the extent that the newly independent states undertook deliberate efforts to reduce transboundary pollution or to improve nuclear power safety, they did so only when Western governments and international lending institutions agreed to foot a considerable part of the bill. Furthermore, Russia and Ukraine threatened to expose their more affluent neighbors to greater transboundary dangers in order to exact larger payments from them—a form of "environmental blackmail" never employed by the USSR, even during the darkest days of the Cold War.

The key to this paradox is a phenomenon that has generally been overlooked in the study of international environmental politics: the *instrumental manipulation of external environmental concerns*. Unlike the affluent capitalist states—whose policies have provided most of the grist for the mill in the study of international environmental cooperation—the USSR and the newly independent states were rarely motivated to participate in international environmental cooperation by genuine concern about the domestic impact of externally generated pollution. The most severe environmental problems in these states were uniformly self-inflicted; consequently, international policy coordination was not a necessary condition for the amelioration of them. Instead, the motive that brought both the USSR and the newly independent states to

the international bargaining table was the desire to manipulate *Western* concerns about transboundary environmental problems in order to advance other goals: the mitigation of East-West hostility, economic development, and the amelioration of their own self-inflicted environmental problems.

The motives that lay behind this pattern of instrumental manipulation changed dramatically along with transition from the Cold War to the post–Cold War period. Until the collapse of the Soviet Union in 1990–1991, successive Soviet leaders used East-West environmental cooperation as a way to project an image of "cooperativeness," and thus elicit Western cooperation in nonenvironmental areas of greater interest to the USSR—a tactic that reached its apex with the astonishing but short-lived "greening" of Soviet foreign policy under Mikhail Gorbachev in the late 1980s. After the collapse of the USSR, Russia and the other newly independent states manipulated the environmental concerns of the affluent Western states for quite different reasons: to secure external financing for economic development, energy production, and the resolution of their own *internally generated* environmental problems—that is, problems that could, in principle, have been addressed through strictly domestic measures. The history of East-West environmental cooperation therefore presents an unprecedented opportunity to examine the instrumental manipulation of transboundary environmental degradation, a critical aspect of international environmental politics that has, until now, remained largely unexplored.

Just as the motives underlying instrumental manipulation changed along with the end of the Cold War and the dissolution of the USSR, so too did its form. During the Cold War, the USSR sought to advance its broader political goals by participating in formal international environmental agreements and conventions, such as the 1973 Helsinki Convention on the Protection of the Baltic Marine Environment and the 1979 Convention on Long-Range Transboundary Air Pollution (LRTAP) and its subsequent protocols. Prior to 1990, the question of external financing for Soviet environmental protection measures was never raised in these negotiations; instead, both the Soviet government and its Western counterparts assumed that the USSR was fully capable of financing and implementing its obligations under these agreements. Since the underly-

ing goal of Soviet participation in these agreements was to project an image of "cooperativeness" and thus offset Cold War tensions, the extent of the obligations undertaken by the USSR prior to its demise depended upon the reigning Soviet General Secretary's interest in the moderation of East-West hostility. Long-time Soviet leader Leonid Brezhnev desired only a limited moderation of Cold War tensions, and so kept the Soviet Union's obligations within very narrow bounds: The Soviet government agreed only to those obligations that it expected to fulfill at little or no additional cost, and it was careful to keep transnational information sharing under extremely tight control. Mikhail Gorbachev, by contrast, desired to end the Cold War altogether, and thus sought to project a far more impressive image of cooperativeness. Consequently, the USSR shared environmental information much more freely and undertook a number of extremely ambitious and potentially costly obligations to reduce its own emissions.

With the end of the Cold War and the concurrent disintegration of the USSR, the basic form of East-West environmental cooperation was fundamentally transformed. The Western countries, which had earlier assumed that the Soviet government was capable of carrying out far-reaching environmental reforms if only it could be convinced of the desirability of doing so, realized by the end of 1990 that this was no longer the case: The disintegrating Soviet government could no longer marshal the economic or political resources necessary for expensive independent action, nor, after 1991, could the badly fragmented Russian Federation or the other newly independent states. The innovative Western response to this new situation was *transnational subsidization*: offers to contribute significantly to the financing of concrete environmental protection measures in the newly independent states, particularly those that promised a reduction in the transboundary environmental threats of greatest concern to the West. By the end of the 1990s, the Western states had disbursed billions of dollars toward this end in the form of direct grants and low-interest loans. The newly independent states, for their part, were happy to accept this assistance when it suited their own economic and environmental interests to do so. However, the recipients' interests were rarely identical with those of the donors, and quite often the two worked at cross-purposes.

From the Western perspective, therefore, outcomes in the post–Cold War period were often as frustrating and unexpected as had been the collapse of the "greening" of Soviet foreign policy in 1990–1991. In some cases—particularly in the international effort to clean up the Baltic Sea—the results of transnational subsidization were quite impressive. At the same time, this new formula carried the seeds of conflict as well as cooperation. The prospect of subsidization encouraged policymakers in the newly independent states to shift the costs of environmental protection onto their more affluent neighbors wherever possible, and along with it the costs of other goals, such as industrial modernization and more reliable energy production. Transnational subsidization also encouraged greater environmental risk taking—a phenomenon known as "moral hazard"—and the extension of the service lives of industrial enterprises and nuclear power plants. In two cases, successor states exploited the environmental sensitivity of other states by threatening to expose the latter to even greater environmental hazards: Ukraine's threat to prolong the operation of the Chernobyl nuclear power plant unless the West paid for the closure and replacement of it, and Russia's threat to resume radioactive waste dumping at sea if its more affluent neighbors did not agree to finance alternative methods of disposal.

Outcomes were not uniform in either the Cold War or post–Cold War period. Prior to 1986, the most impressive manifestation of Soviet interest in East-West environmental cooperation was the USSR's participation in international efforts to control LRTAP. Brezhnev himself launched the initiative that ultimately led to the conclusion of the LRTAP Convention, and subsequently agreed to reduce the USSR's transboundary emissions of sulfur dioxide by 30 percent. In retrospect, however, this was a textbook lesson in "how to succeed in 'greenness' without really trying": The Soviet government had no real interest in the problem of long-range sulfur deposition and expected to meet the 30 percent reduction through previously planned shifts in its energy strategy. The outward effects of Soviet participation in East-West discussions of nuclear power safety and pollution in the Baltic Sea were less impressive, although in all three cases increased expert interaction led to the diffusion of new ideas and understandings from West to East.

After 1986, the USSR increased its participation and undertook bold new obligations in all three cases. Outcomes sharply diverged, however, with the democratization and decentralization of the Soviet political system in 1989–1990. Soviet specialists concerned with the degradation of the Baltic Sea were able to make common cause with municipal, regional, and republican officials concerned with local environmental degradation, but the specialists associated with the LRTAP regime met with little receptiveness at the local or regional level. In the nuclear power case, the effects of the expansion of political participation in the USSR ran *directly counter* to the goals of the internationally connected experts; as a result, the Soviet government and nuclear industry engaged in a new form of instrumental manipulation, making common cause with the International Atomic Energy Agency to combat antinuclear activism at home.

In the post–Cold War period, the speed, scope, and success of transnational subsidization varied both across issues and from one newly independent state to the next. Post–Cold War cooperation to address the pollution of the Baltic Sea was rapid and comprehensive, thanks to the convergent environmental interests of the donors and recipients. By contrast, external efforts to address sources of long-range air pollution within the former Soviet Union typically foundered, due to the poor fit between donor and recipient environmental interests and the economic vicissitudes of the transition period. The issue of nuclear power proved the most contentious of all: The former socialist states encouraged the West to pay for safety upgrades at the Soviet-designed reactors on their territories but refused to shut down their older and more dangerous reactors (which, they argued, could be made less dangerous with Western assistance) any earlier than absolutely necessary. The nuclear case was also marked by two cases of apparently successful "environmental blackmail": Ukraine's threat to modernize the Chernobyl nuclear power plant, and Russia's threat to resume radioactive waste dumping at sea.

Case Selection and Methodology

Over the past three decades, the USSR and its successor states have participated in international efforts to address a broad range of

environmental and natural resource issues, ranging from the conservation of polar bears to global climate change. Of course, not all of these issues are equally significant (although polar bears might disagree), and a work of this scope could not hope to do justice to all of them in any case. Consequently, this study is based upon detailed case studies of three of the issues that have figured most prominently in East-West environmental politics to date: pollution in the Baltic Sea, transboundary air pollution, and nuclear power safety. These cases were selected for three reasons: (1) in each case, East-West interaction stretches back to the late 1960s or early 1970s; (2) in each case, one or more Western states developed an interest in the reduction of transboundary environmental threats generated within the former USSR; and (3) in none of these cases were the USSR or the newly independent states able to avoid internal environmental damage by exporting their pollution or "free riding" on emissions reductions undertaken by other states.

First, in each case, East-West interaction extends from the late 1960s or early 1970s to the end of the 1990s. This chronological span allows for the comparison of the Cold War and post–Cold War periods, as well as the comparison of the pre-1986 and post-1986 policies pursued by the USSR. Second, each of these cases is one in which one or more Western countries developed a direct interest in the solution of an environmental problem generated from within the territory of the former Soviet Union. The reason for this criterion is simple: If there were no such interest, there would have been no significant external involvement (particularly in the post–Cold War period) and hence no grounds for examining the effect of Western interest on Soviet and post-Soviet environmental diplomacy.

The third criterion for case selection—the fact that, in each case, the USSR and the newly independent states could not avoid internal environmental degradation by exporting their pollution or free-riding on the efforts of others—allows us to control for differences in the contractual structure of international environmental problems. There are two situations in which we should expect any state, regardless of its internal characteristics, to be averse to international environmental cooperation. The first is the "tragedy of the commons." If several states share the use of a common resource—the atmosphere, or a common waterway—and

none of them can insulate itself against the actions of its fellows, then each has an incentive to exploit that resource to the fullest profitable extent, regardless of what the others do. Even if others decide to limit their exploitation of the resource, a clever, self-interested state may prefer to "free ride" on the sacrifices of its fellows rather than contribute to the common good (Hardin 1968). A situation even less conducive to cooperation is the one in which "upstream" or "upwind" states find themselves relative to their "downstream" or "downwind" neighbors. If a state in such a position has the ability to export all or most of its pollution to its unfortunate neighbors while receiving little or none in return, it will have little environmental interest in contributing to international cooperation to address the problem. Were the USSR or any of the newly independent states to find itself in either of these positions, we should expect the result to be a reluctant attitude toward far-reaching international environmental cooperation, regardless of the domestic political characteristics of the state involved.

However, in each of these three cases, the activities that generated transboundary environmental degradation (or the risk of it) have generated even more severe environmental hazards *within* the USSR and the newly independent states. The Chernobyl disaster caused great alarm in Western Europe, but its external effects were trivial compared to the devastation wreaked upon the population of Ukraine, western Russia, and Belarus. The pollutants emitted in the city of Leningrad/St. Petersburg contribute significantly to the degradation of the Baltic Sea, but the effects in the immediate vicinity of the city have been considerably greater. The airborne effluents of the nickel smelters on the Kola Peninsula may well be detrimental to the health of the forests of northern Scandinavia, but the trees on the Russian side of the border are already dead. In each of these cases, internal environmental damage has been caused above all by the *direct* impact of internally generated pollution, rather than by pollutants imported from abroad. This situation was not substantially altered by the disintegration of the USSR, as self-inflicted damage remained the most pressing cause of environmental degradation in even the smallest of the newly independent states. For the most part, therefore, Soviet and post-Soviet reluctance to cooperate in the resolution of these three transboundary environmental problems cannot be

attributed to "upstream" disinterest or an attempt to "free ride," since in each case the USSR and the newly independent states were the primary victims of their own environmentally harmful activities. Indeed, all else being equal, the USSR and the newly independent states should have been not only eager to cooperate in the resolution of these problems, but also willing to take unilateral action to deal with them. (The partial exception to this rule was the post-Soviet politics of transboundary air pollution. This case will be discussed in greater detail in chapter 4.)

This study is the fruit of extensive field research, including more than 150 interviews with activists, specialists, businessmen, and officials in Western Europe, Russia, Ukraine, and the Baltic states. Most of these interviews were conducted between 1990 and 1995, and a number of respondents were interviewed more than once over the course of this period. I was particularly fortunate to have lived in the (former) USSR for an extended period in 1990–1992, when the bases for the policy tool that would subsequently come to dominate East-West environmental politics in the 1990s—transnational subsidization—was only just beginning to take shape. I have also drawn extensively upon press reports, governmental reports, and documentation made available by the Helsinki Commission, the International Atomic Energy Agency, the UN Economic Commission for Europe, the European Bank for Reconstruction and Development, the World Bank, the European Union, and other international organizations involved in East-West environmental politics.

This methodology does, of course, have its limitations. It was not always possible to reconstruct important developments entirely, particularly where the pre-perestroika period was concerned; personal memories have grown hazy and selective with the passage of time, and reliable corroborative documentation remains scant. Even in the post-Soviet period, old habits of secrecy are alive and well, particularly in the nuclear power field. I was often unable to gain access to participants at the highest levels of environmental and political decision making, and even when I was able to do so, respondents "in the know" refused to discuss sensitive issues such as environmental blackmail for the record. Consequently, I have avoided relying exclusively upon any one participant's version of events, seeking instead to confirm it with information garnered from other interviews and from official documents and press reports. In

the interests of protecting my respondents from any possible harm—a very real possibility even a decade after the disintegration of the Soviet state—I cite documents or other print sources in the text wherever possible, and I rarely refer to specific individuals in my citations. However, an illustrative list of the interviews conducted is appended to the text.

An unavoidable limitation of this type of research is that it is not possible for me to definitively determine or document the *intentions* of the leaders of the governments involved. When the Ukrainian government decided in October 1993 to reverse its earlier decision to shut down the Chernobyl nuclear power plant ahead of schedule, was this a deliberate threat designed to increase the flow of Western economic assistance? Was the Russian government's decision in October 1993 to resume the dumping of low-level radioactive waste in the Sea of Japan a deliberate shot across Japan's bow, a warning that Russia was in a position to threaten Japan's perceived environmental well-being if Japan did not fund the construction of alternative disposal facilities? Based upon the documents and "for the record" interviews available to me, I cannot definitively answer these questions. Consequently, wherever possible I define and analyze phenomena such as "environmental threats" and "environmental blackmail" in terms of the observable behavior of the actors involved (including their public pronouncements) rather than the unobservable intentions of individual decisionmakers.

The Structure of the Book

Chapter 2 presents the theoretical perspective adopted in this book in greater detail. I begin with a brief overview of existing approaches to the analysis of international environmental cooperation and then turn to my analysis of instrumental manipulation before and after the Cold War. Just as the motives, form, and consequences of instrumental manipulation were very different in the Cold War and post–Cold War periods, so too are the theoretical tools that I bring to bear in order to explain them. In my analysis of the Cold War period, I emphasize the effects of the domestic political structure of the USSR, the foreign policy strategies adopted by the two key General Secretaries during the period under consideration, Leonid Brezhnev and Mikhail Gorbachev, and the unanticipated

effects of the domestic structural changes unleashed by Gorbachev in the late 1980s. In my analysis of the post–Cold War period, I expand my framework to encompass a more generalizable model of transnational environmental subsidization, based upon the work of the economist Ronald Coase. Chapters 3, 4, and 5 form the heart of the book: they contain detailed case studies of the East-West politics of pollution in the Baltic Sea, transboundary air pollution, and nuclear power safety, respectively. Finally, I conclude in chapter 6 with an analysis of the successes and failures of transnational subsidization in the post–Cold War period, and I provide recommendations for minimizing the perverse incentives and outcomes that too often attend programs of this sort and that will continue to do so in the future.