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Joseph W. Dellapenna Villanova University School of Law, dellapenna@law.villanova.edu

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Behind the Red Curtain: Environmental Concerns and the End of Communism

Joseph W. Dellapenna*
Villanova University School of Law
dellapen@law.villanova.edu

In May 1992, I led a delegation of seven American environmental lawyers to the People's Republic of China to consult on the Three Gorges Dam. Ground had not yet been broken for the dam; today it towers 175 meters (540 feet) above the bed of the Yangtze River and creates a reservoir that is nearly filled—some 15 meters (47 feet) deep 500 kilometers (312 miles) upstream of the dam, making the dam is the largest in the world. We (the delegation) were going both to learn about the dam and to provide insights about the project drawn from our legal experience. About a month before we arrived, the delegation lost significance when the National People's Congress voted to authorized the dam and by the time we arrived at the dam site (after meetings in Beijing), preliminary work had begun that would lead to the breaking of ground a few weeks later. It was apparent from the beginning that our function was to help justify the project by reporting that it would be compatible with a healthy environment. We were a disappointment to our hosts because we came away deeply skeptical of the project and said so in our report. We

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^{*} Professor of Law, Villanova University; B.B.A., Univ. of Mich. (1965); J.D., Detroit College of Law (1968); LL.M. in International and Comparative Law, George Washington Univ. (1969); LL.M. (in Environmental Law), Columbia Univ. (1974). Professor Dellapenna served as Rapporteur of the Water Resources Committee of the International Law Association, and in that capacity led the drafting of the *Berlin Rules on Water Resources* (2004). He is also Director of the Model Water Code Project of the American Society of Civil Engineers.

¹ ELIZABETH C. ECONOMY, THE RIVER RUNS BLACK: THE ENVIRONMENTAL CHALLENGES TO CHINA'S FUTURE 205-07 (2004); Kari Huus, *More Dam Trouble*, FAR E. ECON. REV., Oct. 20, 1994, at 70; Robert W. Gee, Songbin Zhu, and Xioalin Li, *China' Power Sector: Global Environmental and Economic Implications*, 28 ENERGY L.J. 421, 431 (2007). *See generally* THE RIVER DRAGON HAS COME: THREE GORGES DAM AND THE FATE OF CHINA'S YANGTZE RIVER AND ITS PEOPLE (Dai Qing ed. 1998).

were not alone.² Unmentioned by our hosts was that the project had encountered major public resistance locally and nationally and that more than 600 members of the congress (out of more than 5,000 members) voted against the project.³ This was the first time since the crushing of dissent in Tiananmen Square in 1989 that anyone in the Congress had voted against a government proposal—and only government proposals came before the congress. In our travels, we found many ordinary people willing to speak publicly of their opposition to the dam in the region where the project was to be built. Yet nothing short of the collapse of the Communist system could have stopped the project and that did not happen in China. But the willingness of people to take risks to express their concerns about the environment in such a climate of extreme repression led me to wonder what role, if any, such concerns played in the then recent collapse of Communism in Eastern Europe and the former USSR. The answer, it turned out, was quite a bit.

I. COMMUNISM, THE ENVIRONMENT, AND THE COLLAPSE OF THE COMMUNIST EDIFICE

Twenty years ago, the opening (and eventual destruction) of the Berlin Wall signaled the collapse of the edifice of Communism constructed over the preceding three-quarters of a century from Berlin to Pyongyang and from Murmansk to Addis Ababa. Much of twentieth-century history is about the rise of Communism, a revolutionary force that promised to remake human society on a global scale. Yet suddenly, between 1989 and 1991, all of the Communist states in Europe collapsed, as well as some Communist states in Asia and Africa, while most of the surviv-

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² MARGARET BARBER & GRAINNE RYDER, DAMNING THE THREE GORGES: WHAT DAM BUILDERS DON'T WANT YOU TO KNOW 22 (2d ed. 1993) (noting the refusal of the World Bank and the Asian Development Bank to finance the project because of anticipated environmental problems); *Questioning Three Gorges Dam,* N.Y. TIMES, Mar. 29, 1999, at A20 (noting the refusal of the World Bank and the U.S. Export Import Bank to finance the project because of anticipated environmental problems).

³ Patricia Adams & Philip Williams, *Introduction: Opposition to an Unviable Dam*, in YANGTZE! YANGTZE! xxiii, xxiv (Dai Qing, Patricia Adams, & John Thibodeau eds., Nancy Liu *et al.* trans. 1994). Information about this vote and open discussion of whether to proceed with the project was effectively suppressed within China. Dai Qing, *The Three Gorges Dam Project and Free Speech in China*, 39 CHI. REV. 275 (1993).

ing Communist states largely abandoned Communist economic systems. While the crumbling edifice did not utterly collapse in Eastern Europe for another two years, and still hangs on, at least in vestigial forms, in some parts of the world, the collapse of the wall serves as an apt metaphor for the destruction of that edifice.

The two years between 1989 and 1991 saw the long-cherished Communist dream fulfilled a proletarian workers' revolt that spread from country to country to topple an exploitive economic and political system, ironically directed at the world's Communist governments rather than their opponents.⁴ The twentieth anniversary of the beginning of this process has produced a spate of books giving varied accounts of this collapse.⁵ These and other authors have focused their attention on the more immediately dramatic features of the collapse—the impact of the Polish Pope and the rise of Solidarnosc in Poland, the personality of Mickail Gorbachev leading him to launch *perestroika* and *glasnost*, the opening of the Hungarian border to allow thousands of East Germans to pass through Austria to West Germany, open resistance to Soviet rule in the Baltic Soviet republics, Gorbachev's refusal to use the Red Army to maintain eastern European governments, the rise of Boris Yeltsin as a product of glasnost, and the attempted coup in Moscow in 1991. Furthermore, the experience of Communism varied significantly from place to place. For example, in Russia and Ethiopia, where Communism collapsed completely, and China, Cuba, and Vietnam, where Communism did not altogether collapse, Communism was an indigenous force bound up with nationalism as much as it was in the working out of a universal

⁴ Timothy Garton Ash, 1989!, N.Y. REV. BOOKS, Nov. 5, 2009, at 4, 6.

⁵ See, e.g., György Dalos, Der Vorhang Geht auf: Das Ende der Diktaturen in Osteuropa (2009); Stephen Kotkin & Jan T. Gross, Uncivil Society: 1989 and the Implosion of the Communist Establishment (2009); Michael Meyer, The Year that Changed the World: The Untold Story behind the Fall of the Berlin Wall (2009); Michel Meyer, Histoire secrète de la chute du mur de Berlin (2009); Constantine Pleshakov, There Is No Freedom without Bread! 1989 and the Civil War That Brought down Communism (2009); Romesh Ratnesar, Tear down This Wall: A City, a President, and the Speech That Ended the Cold War (2009); Mary Elise Sarotte, 1989: The Struggle to Create Post-Cold War Europe (2009); Victor Sebestyen, Revolution 1989: The Fall of the Soviet Empire (2009); The Fall of the Berlin Wall: The Revolutionary Legacy of 1989 (Jeffrey A. Engel ed. 2009).

ideal. In Afghanistan, the non-Russian parts of the USSR, and the eight "captive" nations of Eastern Europe, Communism was an alien force imposed by foreign arms on unwilling people. Despite these central differences between Communist regimes, however, certain common themes appear in accounts of the final years of the formerly Communist nations (except perhaps Ethiopia). The most common theme, in both scholarly and popular accounts, is the growing yearning for democracy and human rights, as well as the desire for higher standards of living.⁶

While these various features are intertwined in somewhat different ways in the several nations, they do not themselves form an adequate explanation in any nation. Thus while nationalism as well as yearning for democracy produced an uprising in Hungary (1956), reform in Czechoslovakia (1968), and repeated unrest in Poland (1956, 1970, 1976, 1980), none of these succeeded and other Eastern European Communist governments confronted no such unrest. During this time, there is remarkably little evidence of widespread popular yearning for either democracy or human rights within the Soviet bloc. Black markets throughout Eastern Europe and the USSR focusing on blue jeans and rock-n-roll hardly supply such evidence. Such dissatisfaction as there was came from the growing realization among workers that their efforts were accomplishing little and earning them less. This realization was expressed in the oft-repeated joke

⁶ Dalos, *supra* note 5; Meyer, *supra* note 5; Pleshakov, *supra* note 5; Sarotte, *supra* note 5; Sebestyen, *supra* note 5; The Birth of Freedom: Shaping Lives and Societies in Eastern Europe (Andrew Nagorski ed. 1993); The Fall of the Berlin Wall, *supra* note 5; The Crisis of Leninism and the Decline of the Left (Daniel Chirot ed. 1991) ("The Crisis of Leninism"); Barry S. Clark, *Political Economy, Democracy and Eastern Europe*, 19 Int'l J. Soc. Econ. 259 (1992); Adam Meyerson, *Ash Heap of History: Why Communism Failed*, 58 Pol'y Rev. 4 (1991); Paul B. Stephan III, *The Fall—Understanding the Collapse of the Soviet System*, 29 Suffolk U.L. Rev. 17 (1995). For a major departure from this pattern, see Kotkin & Gross, *supra* note 5 (arguing that the collapse arose from an "implosion" within the Communist establishment that had little or nothing to do with the dramatic events outside the establishment that are usually identified as the "causes" of the collapse).

⁷ TIMOTHY GARTON ASH, THE MAGIC LANTERN (1990).

⁸ See, e.g., Stephan, supra note 6, at 24-25, 38, 41-42 (discussing the prevalence of a "shadow economy"—a black market—in all Communist societies).

among workers that they had a deal with the government: "We pretend to work, and they pretend to pay us." 9

Only after the dissolution of Communism was well underway did popular unrest begin to threaten the system. Even in Poland, persistent attempts to create space for open opposition to the Communist government largely failed until near the end of the system. Attempts to create "civil society," primarily through the creation of "Helsinki watch groups," are simply not enough to explain why Communism so suddenly collapsed. ¹⁰ Such an explanation seems to leave at least one aspect of the collapse missing—why then? The Communist governments had functioned for decades without serious internal or external challenge, and there was no obvious reason why they couldn't continue along the same path for decades more. Something had to crystallize the sentiment that the regimes not only had to go but could be overthrown.

In many of these countries, the something more turned out to be the environment. Communism had a dismal record on the environment. By 1989, sulfurous skies were killing people across the Soviet bloc. Single Russian factories were producing more pollution than all of Scandinavia. Immediately after the end of the Soviet Union, the Russian Federation classified one-sixth of its territory as uninhabitable because of pollution—yet the inhabitants had nowhere to go. Rivers were poisoned beyond anything found in western countries, while Lake Baikal

⁹ See, e.g., MURRAY FESHBACH & ALFRED FRIENDLY, JR., ECOCIDE IN THE USSR: HEALTH AND NATURE UNDER SIEGE 216 (1993). I heard this joke repeatedly when I lived for a year in the People's Republic of China before the market reforms took hold there, and I also heard it on visits to several Communist countries in Europe.

¹⁰ See, e.g., Michael Bernhard, Civil Society and Democratic Transition in East-Central Europe, 108 Pol. Sci. Q. 307 (1993).

¹¹ FESHBACH & FRIENDLY, *supra* note 9; BARBARA JANCAR, ENVIRONMENTAL MANAGEMENT IN THE SOVIET UNION AND YUGOSLAVIA: STRUCTURE AND REGULATION IN FEDERAL COMMUNIST STATES (1987); D.J. PETERSON, TROUBLED LANDS: THE LEGACY OF SOVIET ENVIRONMENTAL DESTRUCTION (1993); PHILIP R. PRYDE, ENVIRONMENTAL MANAGEMENT IN THE SOVIET UNION (1991); THE SOVIET ENVIRONMENT: PROBLEMS, POLICIES AND POLITICS (John Massey Stewart ed. 1992); Charles Ziegler, Environmental Policy in the USSR (1987).

¹² Michael Specter, Far North in Russia: The Mine's Fatal Blight, N.Y. TIMES, Mar. 28, 1994, at A1.

¹³ Jonathan D. Oldfield & Denis J.B. Shaw, *The State of the Environment in the CIS*, in EAST CENTRAL EUROPE AND THE FORMER SOVIET UNION: ENVIRONMENT AND SOCIETY 173, 175 (David Turnock ed. 2001); Sergei Zalygin, *A Brief Summary of the Report "Ideology and Ecology,"* 19 B.C. ENVTL. AFF. L. REV. 635, 636 (1992).

had become a paradigm of how not to manage a precious natural resource.¹⁵ The Aral Sea, in Central Asia, had become the prime example of "ecocide."¹⁶

Communism performed so conspicuously poorly regarding the environment for six reasons. First, Marxism carried forward the western tradition of treating nature solely as providing resources for human consumption. As Vaclav Havel explained, Marxism saw humans as the "productive force" and nature as a "production tool," destroying the necessarily intimate relationship between the two. This concept was succinctly captured in the "labor theory of value" that denied economic value to natural resources as such when consumed in productive processes because no human labor was expended in creating the natural resources. A second feature of Marxism reinforced the effect of the labor theory of value—its denial of individual responsibility. As a result, no one felt responsibility for the natural environment, leading to reckless disregard of environmental consequences. Thirdly, the socialist goal of "transforming the world" led easily to "gigantomania"—a desire for the largest and most grandiose technological feats. Gigantomania is also found in western countries, but structural features of Communism prevented effective counter-pressure that, at least sometimes, stopped some of the most substantial

¹⁴ FESHBACH & FRIENDLY, *supra* note 9, at 122.

¹⁵ ZIEGLER, *supra* note 11, at 55-59. The Russian government has been more protective of Lake Baikal in recent years. Steven Lee Myers, *Putin Reroutes Oil Line to Avoid Landmark Lake*, N.Y. TIMES, Apr. 27, 2006, at A8.

¹⁶ Branco Bosnjakovic, Negotiations in the Context of International Water-Related Agreements 16–18, 24–25, 41–42 (2003) (UNESCO doc. SC-2003/WS/45); Viktor Dukhovnyr & Vadim Sokolov, Lessons on Cooperation Building to Manage Water Conflicts in the Aral Sea Basin (2003) (UNESCO doc. SC-2003/WS/44); Stephen C. McCaffrey, The Law of International Watercourses: Non-Navigational Uses 260-65 (2001); Pryde, *supra* note 11, at 221-22.

¹⁷ Tamara Raye Crockett & Cynthia B. Schultz, *Environmental Protection Issues in Eastern Europe*, BNA Int'L

¹⁷ Tamara Raye Crockett & Cynthia B. Schultz, *Environmental Protection Issues in Eastern Europe*, BNA INT'L ENVT. RPTR., June 13, 1990, at 258. *See also Ziegler*, *supra* note 11, at 39-44; Douglas Lind, *The Crane, the Swamp, and the Melancholy: Nature and Nihilism in Soviet Environmental Literature and Law*, 23 NOTRE DAME J.L. ETHICS & PUB. POL'Y 381 (2009).

¹⁸ CZECH MINISTRY OF THE ENVIRONMENT, ENVIRONMENT OF THE CZECH REPUBLIC: EVOLUTION, SITUATIONS, AND TRENDS TO THE END OF 1989, at 11-12 (1990); ZIEGLER, *supra* note 11, at 161; Vladimir Kotov, *Russia: The Historical Dimensions of Water Management*, in THE EVOLUTION OF THE LAW AND POLITICS OF WATER 139, 143 (Joseph W. Dellapenna & Joyeeta Gupta eds. 2009); Peter B. Maggs, *Marxism and Soviet Environmental Law*, 23 CO-LUM. J. TRANSNAT'L L. 353, 359-60 (1985).

¹⁹ ZIEGLER, *supra* note 11, at 46.

²⁰ *Id.* at 24; Zalygin, *supra* note 13, at 635.

excesses in the west.²¹ This introduces a fourth factor—structural features rooted in Marxist ideology and the conspiratorial nature of Communism's rise to power—that are perhaps the most important. The "dictatorship of the proletariat" brooked no countervailing power centers.²² The Communist obsession with secrecy often kept problems hidden from both the public and the central authorities until catastrophe made the problem obvious to all.²³ Fifth, the determination to keep environmental problems secret was reinforced by the belief that such problems could not arise under Communism, which, after all, represented the most progressive ordering of society and the economy; to admit to environmental failings was to admit that Communism had failed in at least one important respect.²⁴ Finally, there was the importance of "fulfilling the plan." Success and promotion for officials—and all major economic decisions were made by officials—came only from fulfilling the plan, which generally was measured solely through quantitative achievements, resulting in pervasive poor quality production.²⁵ New construction is what the plan called for, not maintenance, while cost, in any rational sense, simply was not a factor.²⁶ The

²¹ See, e.g., Pamela Howlett, Striking the Right Balance: The Contrasting Ways in Which the United States and China Implement National Projects Affecting the Environment, 12 Mo. ENVIL. L. & POL'Y REV. 17 (2004); Stephan, supra note 6, at 33-36. See generally John Kenneth Galbraith, American Capitalism: The Concept of Countervalling Power (1952).

²² ZIEGLER, supra note 11, at 69-75. See also Stephan, supra note 6, at 27, 34-35.

²³ Judit Galambos, An International Environmental Conflict on the Danube: The Gabčikovo-Nagymaros Dams, in Environment and Democratic Transition: Policy and Politics in Central and Eastern Europe 176, 217-18 (Anna Vari & Pal Tamas eds. 1993) ("Environment and Democratic Transition"); Katherine M. Harman-Stokes, Note, Community Right-to-Know in the Newly Independent States of the Former Soviet Union: Ending the Culture of Secrecy Surrounding the Environmental Crisis, 15 Va. Envil. L.J. 77 (1995); Stephan, supra note 6, at 46-47.

²⁴ CZECH MINISTRY OF THE ENVIRONMENT, *supra* note 18, at 18-19. *See also* Margaret Bowman & David Hunter, *Environmental Reforms in Post-Communist Central Europe,* 13 MICH. J. INT'L L. 921, 926 (1992); Maggs, *supra* note 18, at 368-70; J. Cameron Thurber, *Will Retrocession to a Communist Sovereign Have a Detrimental Effect on the Emphasis and Enforcement of Laws Protecting Hong Kong's Environment? The Czech Experience as a Contraposition, 11 J. Transnat'l L. & Pol'y 39, 41-42 (2001).*

²⁵ See ZIEGLER, supra note 11, at 154. For more extended and nuanced discussions of the shortcomings of Communist-style economic planning, see John H. Moore, Agency Costs, Technological Change, and Soviet Central Planning, 24 J.L. & ECON. 189 (1981); Stephan, supra note 6, at 31-33.

²⁶ Galambos, *supra* note 23, at 209, 217; Mark Mininberg *et al.*, *Promoting Economic Growth and Environmental Protection: The Institute for Sustainable Development*, 9 CONN. J. INT'L L. 69, 71 (1993); Nicholas A. Robinson, Perestroika *and* Priroda: *Environmental Protection in the USSR*, 5 PACE ENVTL. L. REV. 351, 359-62 (1988). *See generally* Stephan, *supra* note 6, at 26.

result, as a friend in China commented to me while I was living there before the market reforms, is that "They build old buildings here." That comment could just as well be applied across Eastern Europe and the former Soviet Union.²⁷

Communism itself may have looked like an old building in 1986, but it also looked like a sturdily built building that would stand a long time. With the environment in such a problematic state, and structural and ideological problems precluding effective responses within a Communist system, it would have been remarkable if environmental problems did not play a major role in bringing down the system. In fact, a major environmental disaster on such a scale and in such a place that it could not be hidden precipitated a crippling crisis in the USSR itself when it became clear that the government could not cope. The crisis discredited the government and emboldened its critics so much that it could not survive. The structure of dissent in the Soviet bloc, such as it was, further ensured that environmental concerns would be central to the rhetoric, if not perhaps the real reasons, for the toppling of the Communist governments.

Moderately large "green" movements with a modest degree of independence had been tolerated as a sort of window dressing for the official power structure. These groups, rather than the "forums" created to monitor compliance with the *Helsinki Accords* or to agitate for democracy or human rights, formed the organizational core for the toppling of the Communist governments. The toppling of some governments after an environmental crisis in turn weakened neighboring Communist governments, again often with environmental groups leading the way. Yet the role of the environment (and more pointedly, of environmentalism) in bringing Communism to an end in Europe has largely escaped notice.²⁸

 $^{^{27}}$ See Stephan, supra note 6, at 35. 28 See, e.g., F.J.M. Feldbrugge, Russian Law: The End of the Soviet System and the Role of Law (1993); Wiktor Osiatynski, Revolutions in Eastern Europe, 58 U. CHI. L. REV. 823 (1991).

II. CHERNOBYL OPENS A CRACK IN THE EDIFICE

The old building created by the Communist system crumbled in most of the nations included within its walls in the five years following the Chernobyl nuclear accident. Dissidence only barely survived in the USSR before the Chernobyl nuclear accident. The "Helsinki Watch" and other over dissident groups were repressed; an officially sponsored "peace movement" was kept under tight party control despite growing public unhappiness over the Afghanistan adventure. The Soviet and party authorities allowed a modest degree of independence only for the environmentalist movement. There were several reasons for relative tolerance of the "Greens." First, most "Greens" were not ideological enemies of Marxism; many considered capitalism as necessarily worse for the environment than socialism or communism. Second, the Greens provided important information that would not otherwise reach the "Center" given the increasingly pervasive misinformation being passed up by the *apparatchiki*. Third, the "Greens" provided proof of "Soviet democracy" in action. Finally, "Greens" tended to be disaffected individuals who were isolated in temperament and thought from the mass of the people and thus could not present a real challenge to the regime. The last reason was perhaps the most important.

The USSR had had several nuclear accidents before Chernobyl, but they were in remote areas during periods of tight control of information and remained nothing more than unverified rumor for most people in the country.³² In April 1986, however, the Chernobyl accident occurred in the middle of large populations and near the power centers of the USSR. State control, moreover, was loosening, President Gorbachev having launched *perestroika* (the restructuring of the

²⁹ Bernhard, *supra* note 10, at 311-12.

³⁰ Oleg Yanitsky, *Environmental Initiatives in Russia: East-West Comparisons*, in Environment and Democratic Transition, *supra* note 23, at 120, 130-32.

³¹ Daniel H. Cole, *Marxism and the Failure of Environmental Protection in Eastern Europe and the USSR*, 17 LEG. STUDIES F. 35, 54-58 (1993).

³² Sergei P. Kapitza, Lessons of Chernobyl: The Cultural Causes of the Meltdown, 72 For. Aff. no. 3, at 7, 7-8 (May/June 1993).

economy). In this setting, the more perceptive members of the *nomenklatura* realized immediately that Chernobyl would be the end of the regime. For example, Marshall Sergei Akhromeev (who committed suicide after the failure of the 1991 military coup) would comment, "The two most memorable days of my life were when I learned of the German invasion in 1941 and the day of the Chernobyl explosion. It was already clear to me how dreadful the consequences were." He realized the enormity of the challenge to the system because the Chernobyl disaster was on such a scale that ordinary Soviet citizens could not ignore the utter failure of the regime. ³⁴

Millions lived with the areas subject to irradiation, which included the largest cities in Belarus (Minsk) (about 160 km, 100 mi., away) and Ukraine (Kiyev—only 110 km., 68 mi., away). Costs of food within the region rose sharply because radiation rendered food grown nearby unsafe. The government actually kept agriculture in those regions in production, but put the resulting food into long-term storage because it was too radioactive to be consumed. Eventually, the government would mix stored meat from the region with safe meat from elsewhere at a ratio of 1:10 to make sausages and then would disperse the sausages around the country to prevent an "undesirable accumulation" of radioactivity in particular populations. The Soviet Minister of Health even advised people to breathe less in order to live longer. The Soviet government even proved incapable of furnishing adequate protection to workers sent to repair and restore the site, or to provide adequate medical care for those sickened by radiation. In an effort to conceal their failures, officials reclassified the amount of "acceptable radiation exposure" to a level 50

³³ Not Just a Nuclear Explosion, THE ECONOMIST, Apr. 27, 1991, at 19.

³⁴ GRIGORI MEDVEDEV, NO BREATHING ROOM: THE AFTERMATH OF CHERNOBYL (Evelyn Rossiter trans. 1993); GRIGORI MEDVEDEV, THE TRUTH ABOUT CHERNOBYL (Evelyn Rossiter trans. 1992).

³⁵ FESHBACH & FRIENDLY, *supra* note 9, at 260.

³⁶ Nell McAfferty, *Life after Chernobyl*, AUDUBON MAG., May-June 1996, at 86; Steven Lee Myers, *First at Chernobyl, Burning Still*, N.Y. TIMES, Apr. 26, 2006, at A8; Vladimir Novokshchenov, *The Chernobyl Problem*, CIVIL ENGINEERING, MAY 2002, AT 74.

times higher than its pre-Chernobyl standard, as secret records disclosed after the end of the USSR.³⁷

One can easily imagine how politically corrosive the public realization of such failings by any government would be. Consider the panic and suspicion generated by the comparatively mild Three Mile Island incident in the United States. ³⁸ In the USSR, the corrosive effect of the accident was exacerbated by the deliberate, but ultimately futile, government policy of covering up facts, coupled with the already pervasive distrust of the news media such that when the government began to tell the truth, nearly everyone assumed that the reality must be worse. ³⁹ *Glasnost* ("openness," referring to the open flow of information) was little more than talk in early 1986. ⁴⁰ Perhaps this talk was motivated by a sense that the USSR was falling behind the West in technological innovation and that state planning was breaking down due to the misinformation being passed up by *appartchiki*, reinforced by the emergence of a competitive model for Communism in China's nascent reforms. Yet Gorbachev's first real break the Soviet tradition of strict control of information was his reversal of the initial policies of restricting public knowledge regarding Chernobyl. ⁴¹ This came 18 days after the accident, signaling to the Soviet press that "old habits were no longer good enough." ⁴² Yet various authorities continued to attempt to cover up

³⁷ Not Just a Nuclear Explosion, supra note 33.

³⁸ See, e.g., Greg Adamson, We All Live on Three Mile Island: The Case against Nuclear Power (1981); Robert del Tredici, People of Three Mile Island (1980); Daniel F. Ford, Three Mile Island: Thirty Minutes to Meltdown (1982); Raymond L. Goldsteen & John K. Schorr, Demanding Democracy after Three Mile Island (1991); Mike Gray & Ira Rosen: Warning: Accident at Three Mile Island (1982); Christopher Lampton, Nuclear Accident (1992); Peter S. Houts et al., Three Mile Island Crisis: Psychological, Social, and Economic Impacts on the Surrounding Population (1988); Daniel Martin, Three Mile Island: Prologue or Epilogue? (1980); Joseph V. Rees, Hostages of Each Other: The Transformation of Nuclear Safety since Three Mile Island (1994); Mark Stephens, Three Mile Island (1980); Edward J. Walsh, Democracy in the Shadows: Citizen Mobilization in the Wake of the Accident at Three Mile Island (1988).

³⁹ *Not Just a Nuclear Explosion, supra* note 33.

⁴⁰ FELDBRUGGE, *supra* note 28, at 51-54.

⁴¹ THE CRISIS OF LENINISM, *supra* note 6, at 13.

⁴² Not Just a Nuclear Explosion, supra note 33.

the extent of the disaster, only serving to further discredit the regime as Western broadcasts and refugees from the area spread the word.⁴³

In the wake of these failings, large-scale public criticism of the Soviet state and its policies emerged for the first time, within the Supreme Soviet and on the street. The increasing flow information finally forced the government to admit that its "first-generation" of nuclear power reactors did not meet "modern safety standards," causing the Ministry of Atomic Power to order such reactors to be run at 70% of capacity. Eventually, the Russian Academy of Sciences recommended that these reactors be shut down. The government's evident failures empowered its critics to speak out about other ecological disasters in the USSR. This movement spread rapidly in the non-Russian republics where it mingled with re-emergent nationalisms. The relatively tolerated environmental groups provided cover for those who might actually have been more interested in nationalism or other matters. Criticism grew more slowly in Russia itself, perhaps because the ethnic Russians were responsible for the errors of industrialization in the USSR.

The reaction was particularly intense in Belarus and Ukraine, two Soviet republics in which the sense of separate nationhood had been most thoroughly repressed before Chernobyl. ⁴⁷ An independence group, Rukh, was formed in Ukraine within weeks of Chernobyl. As Sergei Odarich, the founding Secretary-General of Rukh, commented, "Chernobyl helped us to understand

⁴³ Oleg S. Kolbasov, *Ecological Disaster Area: The Chernobyl Case Study*, 19 B.C. ENVTL. AFF. L. REV. 637, 637-38 (1992).

⁴⁴ Fear that the U.S. government was covering up the details of the Three Mile Island accident led to similar suspcions and to calls for greater "democracy" there as well, although with far less impact except on the nuclear power industry. *See* GOLDSTEEN & SCHORR, *supra* note 38; WALSH, *supra* note 38.

⁴⁵ Kathleen Maloney-Dunn, Russia's Nuclear Waste Law: A Response to the Legacy of Environmental Abuse in the Former Soviet Union, 10 ARIZ. J. INT'L & COMP. L. 365, 398 (1993).

⁴⁶ HÉLÈNE CARRERE D'ENCAUSSE, THE END OF THE SOVIET EMPIRE: THE TRIUMPH OF NATIONS (1992); István Deák, *Uncovering Eastern Europe's Dark Secret*, 34 ORBIS 51 (1990); Marshall I. Goldman, *Environmentalism and Ethnic Awaking*, 19 B.C. ENVTL. AFF. L. REV. 511 (1992); Stephan, *supra* note 6, at 37-38.

⁴⁷ See David R. Marples, Belarus: A Denationalized Nation (1999); David R. Marples, Stalinism in the Ukraine (1992).

that we were a colony."⁴⁸ The first act of resurrected Ukrainian nationalism (in 1991, while Ukraine was still in the USSR) was the local Supreme Soviet's enactment of a law on "The Legal Administration of Territories Contaminated with Radionucleides as a Result of the Chernobyl Disaster."⁴⁹ Even local Communists in the Ukraine joined in the criticism in order to ensure their political survival when the "Center" fell. In Belarus, the reaction was slower, yet the Belarusian delegates to the Supreme Soviet of the USSR (almost all old-line Communists) took the lead in seeking an investigation of the handling of Chernobyl. When a wave of coal-mine strikes in 1991 reached Belarus, the strikers used their time on television to discuss Chernobyl and to demand the resignation of the President and Supreme Soviet of the USSR rather than the economic issues featured elsewhere in the Union. ⁵⁰ The discrediting of the Soviet regime continued after the end of the Communist regime when its records, on Chernobyl and other ecological disasters, became public. ⁵¹

III. THE GABČIKOVO-NAGYMAROS DAM: WALLS CRUMBLE FROM THE EDIFICE

Neither the Soviet government nor the long-troubled Polish government was the first Communist regime to fall. That honor goes to the Communist government in Hungary, perhaps best symbolized by the decision to tear down the barbed wire along the Austrian border on May 2, 1989.⁵² At about the same time, the Hungarian Socialist Workers Party (the Communists) ousted Janos Kadar, the party's Secretary-General since the failed 1956 revolution, and embarked on a

⁴⁸ *Not Just a Nuclear Explosion, supra* note 33.

⁴⁹ Pamela Bickford Sak, *Environmental Law in Ukraine: From the Roots to the Bud*, 11 UCLA J. ENVTL. L. & POL'Y 203, 212-13 (1993).

⁵⁰ M. Shimansky, *The Minsk Strike Committee Sets Forth Its Demands*, IZVESTIA, Apr. 11, 1991, at 2 (in Russian).

⁵¹ Alla Yaroshinskaya, CPSU Central Committee's Secret Protocols on Chernobyl, IZVESTIA, Apr. 18, 1993, at 1 (in Russian); Alla Yaroshinskaya, 40 Secret Protocols of the Kremlin Elders—The Lie about Chernobyl Is Just as Terrible as the Catastrophe Itself, IZVESTIA, Apr. 24, 1992, at 3 (in Russian).

⁵² TONY JUDT, POSTWAR: A HISTORY OF EUROPE SINCE 1945, at 609-12 (2005); Rett R. Ludwikowski, *Searching for a New Constitutional Model of East-Central Europe,* 17 Syr. J. INT'L L. & COMM. 91, 160 (1991).

broad program of reform that led to the regime's collapse.⁵³ Hungary technically was then ruled by a "coalition" of allied parties under the "leadership" of the Socialist Workers (Communist) Party, but the "allied" parties had never taken an independent line. Just before these events, the government allowed the emergence of *Fidesz* (the Alliance of Young Democrats) as an open opposition party, to be followed by several other opposition parties.⁵⁴ The significance of these events was obscured because long-drawn-out "discussions" about electoral reform delayed the first free election until 1990, after *Solidarnosc* had taken power in Poland.⁵⁵ These Hungarian developments, moreover, were overshadowed by the dramatic events then playing out in Tiananmen Square in Beijing. Given the scant attention given these events, one is not surprised that few noticed that the Communist government in Hungary fell because of certain dams.

The Danube River is the second longest in Europe (after the Volga). After dropping significantly across southern Germany and Austria, it flattens out as it forms the border between Hungary and Slovakia and spreads into three main channels that flow eastward across a broad flood plain, creating a network of islands and wetlands. These channels reunite at the Great Bend of the Danube after which it turns south to bisect Hungary. After falling 50 meters per 100 kilometers in Austria, the river falls only 50 meters across its 417 km. (260 mi.) length in Hungary. This is inadequate to support hydroelectric generation unless one or more large dams were built to create an artificial fall. The Communist governments in Czechoslovakia and Hungary discussed such a project for 25 years before signing a treaty in 1977 to construct a series of dams,

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⁵⁶ Galambos, *supra* note 23, at 177.

⁵³ GABOR REVESZ, PERESTROIKA IN EASTERN EUROPE: HUNGARY'S ECONOMIC TRANSFORMATION 125-27 (1990); Bernhard, *supra* note 10, at 319.

⁵⁴ Laszlo Urban, *Hungary in Transition: The Emergence of Opposition Parties*, 79 Telos 114 (1989).

⁵⁵ Bernhard, supra note 10, at 319-21; István Pogany, Constitutional Reform in Central and Eastern Europe: Hungary's Transition to Democracy, 43 INT'L & COMP. L.Q. 332, 336-39 (1993).

with the costs and the resulting electricity to be shared equally.⁵⁷ Other claimed benefits included flood control, improved navigation, storage of fresh water for use during dry periods, enhanced recreational opportunities, and the ability to extract sand and gravel from the siltation of the reservoirs.⁵⁸ The plan called for construction of a dam at Dunakiliti in Hungary to "capture" the Danube. Virtually the entire flow of the Danube and several of its tributaries would then be diverted through a 17.5 km. (11 mi.) long elevated canal to a second dam and a 720 megawatt power plant at Gabčikovo in Slovakia. The canal, to lie atop mounded earth rising as much as 18 m. (65 ft.) over the landscape, was to be lined with asphalt and plastic to prevent seepage. As a result, the flow of water in the natural channel would decline from 2,000 m³/sec. to less than 1 m³/sec. A third dam was to be built about 100 km. (62 mi.) downstream from Gabčikovo at Nagymaros in Hungary, to generate another 158 megawatts while directing the flow back to the natural channel of the river. The plan was for most of the flow of the river to be stored in a large reservoir (covering 60 km²—24 mi²) at Dunakiliti, to be released to support peak power generation at Gabčikovo. Water was to be released twice a day to flush the canal, allow the turbines at Gabčikovo to generate electricity when it was most needed, and to return to the river at Nagymaros in "12-ft. (4 m.) tidal waves."⁵⁹

The Gabčikovo-Nagymaros project was never popular in Hungary, largely because of serious ecological and social ills that the project was expected to produce in Hungary. ⁶⁰ Unpopularity rose when the Hungarian government proved unable to finance its share of the project and turned to Austria to provide the financing in exchange for the entire Hungarian share of the elec-

⁵⁷ Treaty Concerning the Construction and Operation of the Gabčikovo-Nagymaros System of Locks, Czechoslova-kia-Hungary, signed Sept. 16, 1977, 1109 UNTS 235.

⁵⁸ Paul R. Williams, *International Environmental Dispute Resolution: The Dispute between Slovakia and Hungary Concerning Construction of the Gabčikovo and Nagymaros Dams*, 19 COLUM. J. ENVIL. L. 1, 7-9 (1994).

⁵⁹ Galambos, *supra* note 23, at 177-78; Williams, *supra* note 58, at 9-11.

⁶⁰ Galambos, *supra* note 23, at 198-202.

tricity for 20 years. Among the problems (all of which would largely affect only Hungary or Hungarians) were the risks of earthquake induced flooding, a drop of the water table by about 7 m. (22 ft.) that would dry up wells upon which farmers and villages had depended for centuries, and the drying of croplands and forests. Add to these, fears of pollution and disease from leaching from the asphalt that would line the canals and reservoirs and an overall 25% decline of the fish population (and perhaps a 90% drop in the commercial fish harvest). Such problems were projected to affect about 2,000,000 people in Hungary (out of a population of 10,000,000). These problems would also affect about 1,000,000 people in Slovakia (out of a population of 4,000,000). 61 While the Hungary and Slovakia had together formed the core the Kingdom of Hungary before 1918, they had separate, troubled histories thereafter. After 1957, Hungary gradually developed "Goulash Communism" that was a relatively mild single-party state, but Slovakia, in the wake of the "Prague Spring" of 1968 was, in 1989, under control of what arguably was the most repressive regime in Europe. Yet the repression so obvious in the Czech lands was considerably less in Slovakia. 62 What perhaps accounts for the different reaction in the two countries was the fact that most people put at risk in Slovakia by the project were ethnic Hungarians who received scant sympathy from the majority Slovaks.

With construction underway, Hungarians took to the streets and fields in 1985 to challenge the project on ecological grounds.⁶³ This quickly evolved into an increasingly independent ecological movement (*Duna Kor*: the Danube Circle), followed eventually by a peace group (*Dialogus*: Dialogue).⁶⁴ By late 1988, as many as 60,000 people regularly rallied in the streets of Bu-

⁶¹ *Id.* at 178-81.

⁶² *Id.* at 185-86.

⁶³ Jackson Diehl, Danube Plans Rile Hungarians: 3 Environmental Groups Bring Pamphleteering Art to East Bloc, WASH. POST, DEC. 12, 1985, AT E1; Viktoria Szirmai, The Structural Mechanisms of the Organization of Ecological-Social Movements in Hungary, in Environment and Democratic Transition, supra note 23, at 145.

⁶⁴ MAXINE POLLACK, EAST EUROPEAN FAULT LINES: DISSENT, OPPOSITION AND SOCIAL ACTIVISM 212-15 (1989); Bernhard, *supra* note 10, at 318-21; Galambos, *supra* note 23, at 180-82, 203-05.

dapest at the call of *Duna Kor*, the first open opposition to the Kadar regime since the shooting stopped in 1956. 65 Civil disobedience swept the construction site, with sit-downs in front of bulldozers and the occupation of the canal and dam sites by demonstrators. Petitions against the project collected 140,000 signatures, including signatures of 80 village mayors in the region to be affected. The protests quickly expanded to include demands for free elections, a revision of the "verdict" on 1956, support for the Hungarian minority in Romania, and, eventually, for the end of Communist rule. 66 In April 1989, the Communist regime cracked. The government suspended the Hungarian part of the project (the Dunakiliti and Nagymaros complexes) despite threats by the Austrian and Czechoslovak governments to demand hundreds of millions of dollars in compensation for breach of the treaty and the contracts.⁶⁷ The suspension emboldened the demonstrators. The "allied" parties abandoned the government, causing it to lose its parliamentary maiority and collapse. 68 This collapse immediately tilted the already on-going negotiations in Poland by a now demoralized government and an increasingly confident Solidarnosc. 69 The Polish negotiations had started in February, but made little progress until the Hungarian government collapsed. Yet in Poland, with its well organized and active political opposition, no specific role can be assigned to environmental groups or concerns, although the increasingly evident environmental failures of the government in Poland did tend to undermine its support. 70

Evidence of any impact of the Gabčikovo-Nagymaros project on the "Velvet Revolution" in Czechoslovakia is far less definite than in Hungary. Yet despite the more intense repression in

⁶⁵ Galambos, *supra* note 23, at 182-83.

⁶⁶ TIMOTHY GARTON ASH, THE USES OF ADVERSITY: ESSAYS ON THE FUTURE OF CENTRAL EUROPE 226-27 (1989); Bernhard, *supra* note 10, at 318.

⁶⁷ Galambos, *supra* note 23, at 183-85; Williams, *supra* note 58, at 11-12.

⁶⁸ Urban, *supra* note 54, at 116.

⁶⁹ JUDT, *supra* note 52, at 606-07; Tomek Grabowski, *The Party That Never Was: The Rise and Fall of the Solidarity Citizens' Committees in Poland*, 10 EAST EUROPEAN POLITICS & SOCIETIES 214 (1996). The Polish negotiations had started in February, but made little progress until the Hungarian government collapsed.

⁷⁰ Stanley J. Kabala, Environmental Affairs and the Emergence of Pluralism in Poland: A Case of Political Symbiosis, in Environment and Democratic Transition, supra note 23, at 49.

Czech regions after the "Prague Spring" of 1968, an underground petition against the project netted 3,600 signatures in Prague in May 1989.⁷¹ Signers risked the sort of beatings, imprisonment, or worse, that had largely silenced "Charter 77"—one of the first "Helsinki Watch" groups. Open criticism of the dam was tolerated in the somewhat more open Slovak region.⁷² More generalized environmental concerns seem to have played a role in the Czech lands even if the project did not.⁷³ Still, linking the "Velvet Revolution" directly to environmental concerns is more tenuous than for Hungary. Charter 77, led by Vaclav Havel, continued to speak out despite the repression, while the government's failure to manage East German refugees flooding the West German embassy in Prague signaled a weakening of the regime.

If the Gabčikovo-Nagymaros project was not central in ending Communism in Czechoslovakia, more generalized environmental concerns do seem to have played a role. Almost immediately after the "Velvet Revolution," Havel described the environmental destruction as one of the most serious problems facing the new government. ⁷⁴ Serious observers have concluded that the Czech lands of Czechoslovakia were among the most environmentally damaged in Europe and had the most seriously polluted air on the continent. ⁷⁵ The Czech Ministry of the Environment furthermore attributed the loss of confidence in the regime that led to the "Velvet Revolution" to "the ecological crisis."

⁷¹ Galambos, *supra* note 23, at 206.

 $^{^{72}}$ Id

⁷³ Richard Andrews, *Environmental Policy in the Czech and Slovak Republic*, in ENVIRONMENT AND DEMOCRATIC TRANSITION, *supra* note 23, at 5, 14.

⁷⁴ Vaclav Havel, *Our Freedom*, WASH. POST, Jan. 3, 1990, at A15. *See also* David E. Madeo, *Environmental Contamination and World Trade Integration: The Case of the Czech Republic*, 26 LAW & POL'Y IN INT'L BUS. 945, 952-53 (1995).

⁷⁵ Madeo, *supra* note 74, at 953; Thurber, *supra* note 24, at 42.

⁷⁶ CZECH MINISTRY OF THE ENVIRONMENT, *supra* note 18.

The new government in Czecho-Slovakia (as it was spelled after 1990) did not cancel the Gabčikovo-Nagymaros project, ⁷⁷ perhaps because its part of the project was already 90% complete when the Hungarians sought to cancel it in October 1989. ⁷⁸ Yet if the project was not central in ending Communism in Czechoslovakia, it did become central in the split of Czecho-Slovakia in two. Despite the belated emergence of an environmental group that opposed the project in Slovakia, Slovak leaders exploited fears of the Hungarians (inside the country as well as in Hungary) to build support for the dam as a nationalistic gesture, and then exploited that sentiment to break from Prague. ⁷⁹ Meanwhile, Austria extracted US\$ 240,000,000 from Hungary as compensation for the breach of the electricity contracts (about three times as much as Austria had expended), money that then financed Slovakia's unilateral completion of the Gabčikovo dam. ⁸⁰ The Slovak authorities re-designed the project to lie entirely within Slovakia. In November 1992, Slovakia "closed the river" and began to fill the reservoir, leading to on-going litigation before the International Court of Justice. ⁸¹

IV. MORE WALLS FALL: THE GERMAN DEMOCRATIC REPUBLIC, BULGARIA, AND ALBANIA

The Socialist Unity (Communist) Party and its German Democratic Republic had always appeared particularly vulnerable because the existence of the larger, non-Communist German Federal Republic provided an alternative model that was visibly more prosperous and that also, simply because of its greatly larger size, could claim to be "the real Germany." As a result, the German Democratic Republic always practiced a more severe repression than most other Communist regimes in Europe, a repression that prevented the emergence of even the mild dissidence

⁷⁷ Galambos, *supra* note 23, at 206.

⁷⁸ *Id.* at 183-85; Williams, *supra* note 58, at 11-13.

⁷⁹ Galambos, *supra* note 23, at 186-97, 206-07, 219-20.

⁸⁰ *Id.* at 187-88, 191-92, 202, 218; Williams, *supra* note 58, at 13-14.

⁸¹ The Gabčikovo-Nagymaros Case (Hungary v. Slovakia), 1997 ICJ No. 92.

that characterized other Communist states in the 1970s and early 1980s. ⁸² Yet as part of their struggle against West Germany and NATO, the German Communists did allow the emergence of ostensibly independent pacifist and environmentalist movements after 1981 that were intended to cooperate with their counterparts in western Germany. ⁸³ The Communists seemed to have overlooked that influence could run both ways.

No particular environmental crisis played a role in the collapse of the German Democratic Republic, but, as in Hungary, the Greens dominated the opposition and exploited popular discontent to topple the government. The Greens were unable to build a new regime, so their successes against the Communists yielded a united and decidedly un-Green Germany. The East German pacifist and environmental groups were made up mostly of clergy and intellectuals. Because the Communists had worked hard to make such people marginal in society, they apparently did not fear that they could mobilize wide support should they escape control. When the government failed to prevent the flight of large numbers of people through the Hungarian border and the West German embassy in Prague, 84 it lost control of the pacifist and green movements at home. Having had years of organizing experience, they now turned those skills against the government, leading demonstrations against the government (particularly in Leipzig). They founded a new organization (Neues Forum—the "New Forum"), which succeeded in crippling the government but was reluctant to replace the Communist regime. Neues Forum even opposed the opening of the Berlin Wall. 85 Hesitancy by *Neues Forum* at the critical moment did not prevent the collapse of the Communist regime once Soviet President Gorbachev indicated that he would not allow the

⁸² Bernhard, *supra* note 10, at 321; Michael Sodaro, *Limits to Dissent in the GDR: Fragmentation, Cooptation, and Repression,* in DISSENT IN EASTERN EUROPE 82 (Jane Leftwich Curry ed.1983).

BRUCE ALLEN, GERMANY EAST: DISSENT AND OPPOSITION (1991); ROGER WOODS, OPPOSITION IN THE GDR UNDER HONECKER, 1971-1985: AN INTRODUCTION AND DOCUMENTATION (1986).

⁸⁴ JUDT, *supra* note 52, at 612-13.

⁸⁵ Peter Rossman, Dashed Hopes for a New Socialism: East Germany, THE NATION, May 7, 1990, at 632.

Soviet Army to sustain the regime against its own people.⁸⁶ Yet opponents of the Communists—whether fleeing through Hungary or Prague, or streaming through the wall—seemed more interested in obtaining more goods and a better standard of living than in environmental issues.⁸⁷ The first thing most East Berliners did when the wall opened was to go window shopping in West Berlin.

Early projections that *Neues Forum* would sweep the interim elections in early 1990 proved false because of its organizational weaknesses and unpopular policy stands, particularly its choice to oppose German reunification in the hope of creating an alternative to both Communism and capitalism. The leaders of *Neues Forum* should have known which way the wind was blowing when their own crowds changed the chants from "*Wir sind die Volk*" ("We are the people") to "*Wir sind ein Volk*" ("We are one people"). The result of the collapse of *Neues Forum* in East Germany temporarily rendered the Greens politically insignificant in both parts of Germany. The East German Greens won only two seats in the Bundestag in 1990, while the West German Greens lost all of their seats. 90

The story in Bulgaria is even more strongly centered on their "Greens" than is the story in Hungary or East Germany—but in a curious way. Before the middle of 1989, despite (or perhaps because of) the active persecution of ethnic Turks and Bogomils living in the country, Bulgaria seems to have lacked any active dissident movement, let alone significant opposition to the re-

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⁸⁶ JUDT, *supra* note 52, at 610-16.

⁸⁷ Even now, 20 years later, many "Ossis" (east Germans) lament that their living standards have not risen as quickly as they had hoped. *See, e.g.*, Craig Whitlock, *In Unified Germany, Split over the Past*, WASH. POST, Nov. 5, 2009, at A14.

⁸⁸ Bernhard, *supra* note 10, at 321-23; Robert Darnton, *Campaign Trails: West German Politics Go East*, THE NEW REPUBLIC, Mar. 26, 1990, at 21.

⁸⁹ ASH, *supra* note 7, at 72.

⁹⁰ Andrei S. Markovits, *Germany: Power and the Left,* 38 DISSENT 354 (1991); NOMI Morris, *How Greens Withered in Germany: Mainstream Adopted Environmental Causes,* S.F. CHRON., Dec. 7, 1990, at A25; Rossman, *supra* note 85. The Greens made it back into the Bundestag in 1994 elections, but just barely and with miniscule support in eastern Germany. Judy Dempsey, *Survey of Germany,* FIN. TIMES, Nov. 21, 1994, a 3. It would be years before the Greens worked their way back to become a force, albeit a secondary force, in German politics.

gime. Bulgaria was so quietly obedient to Moscow that it was sometimes called the "16th Republic" of the USSR. 91 Then, quite suddenly, the government collapsed, entirely because of the government's minimal toleration of an apparently tame environmental movement known as EkoGlasnost (Ecological Openness).92 This came about when the Bulgarian government hosted a three-week-long conference of the Conference on Security and Cooperation in Europe to discuss increased cooperation on the environment, particularly in light of Chernobyl. 93 EkoGlasnost technically was an illegal organization, but the Bulgarian government did not pursue its members. But when the meeting, ostensibly open to the public, began on October 15, 1989, the police barred members of *EkoGlasnost* from entering the building. The ensuing scuffles were witnessed by Western delegates to the meeting. On 27 October, 1989, the Bulgarian government apologized to the delegates and to EkoGlasnost. 94 This apology touched off demonstrations against the government that led it to announce only two days later its intent to reform itself. 95 As in other Communist states when they made similar announcements, this simply touched off greater protests until the capital, Sofia, was paralyzed. 96 Unofficial trade unions, human rights groups, and political reform groups sprang up over night. Within a few days, Todor Zhivkov, long-time Secretary-General of the party, resigned and the government recognized the legitimacy of EkoGlasnost. 97 Bulgaria's apparently stable Communist regime had collapsed like hollow shell.

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⁹¹ Vladimir Tismaneanu, *Between Liberation and Freedom*, in UPROOTING LENINISM, CULTIVATING LIBERTY 1, 13 (Vladimir Tismaneanu & Patrick Clawson eds. 1992).
⁹² Bernd Baumgartl, *Environmental Protest as a Vehicle for Transition: The Case of EkoGlasnost in Bulgaria*, in

⁹² Bernd Baumgartl, Environmental Protest as a Vehicle for Transition: The Case of EkoGlasnost in Bulgaria, in Environment and Democratic Transition, supra note 23, at 157.

⁹³ Meriel Beattie, *35 Nations Gather for Environmental Forum, REUTERS LIB. REP.*, Oct. 15, 1989, Sunday BC Cycle.

⁹⁴ Meriel Beattie, *Bulgaria Says Police Who Beat Ecologists Went Too Far*, REUTERS LIB. REP., Oct. 27, 1989, Friday BC Cycle.

⁹⁵ U.S. Welcomes Encouraging Signs of Reform from Bulgaria, REUTERS LIB. REP., Oct. 30, 1989, Monday AM Cycle.

⁹⁶ Meriel Beattie, *Bulgarian Activists Find 20-Day Platform to Voice Dissent*, REUTERS LIB. REP., Nov. 5, 1989, Sunday BC Cycle.

⁹⁷ Nikola Antonov, *Bulgaria Lifts Ban on Environmentalist Group*, REUTERS LIB. REP., Dec. 11, 1989, Monday BC Cycle.

Bringing down Communism in Albania took more time and did not immediately flow from the leadership of Green groups, but those emerged very early in the process. Albania's Communists always employed one of the most repressive regimes in Europe and held on for a full year after most of the European Communist governments had fallen. Finally, on November 28, 1990, anti-Communist riots broke out in Elbasan, in southern Albania. Elbasan as the site of the riots was not fortuitous. It was the most heavily polluted industrial center in Albania, with heavy air and water pollution. One estimate is that as much of 10% of the cement produced in the town was released into the air. 98 Plants producing chrome, coke, nickel, and steel in the city also polluted its land, air, and water. The Elbasan riots led, two weeks later, to the formation of two independent parties—the Democratic Party (dedicated initially to protecting peasants' interests, but quickly broadening out to represent intellectuals and industrial workers) and the Albanian Ecological Party (founded in Elbasan and dedicated to addressing a growing ecological crisis). 99 This led to free elections in March of 1991, which brought a coalition of the Communists and the Democrats to power. 100 The Albanian Ecology Party remained in opposition, charging that the Communists had "ruined the environment here more than in any other East European country." 101 The coalition government proved fragile, collapsing in December 1991, leading to rampant lawlessness and further environmental degradation. 102 The inability of the Albanian Ecological Party to make an electoral impact led to the creation of an environmental activist group,

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⁹⁸ Regional Center Finds Economic Woes Prevent Albania from Addressing Pollution, BNA INT'L ENVIL. DAILY, Jan. 17, 1992.

⁹⁹ Dan Damon, Albanians Form Green Party, DAILY TELEGRAPH, Dec. 17, 1990, at 7.

¹⁰⁰ Carol J. Williams, *Albania—A Step to Democracy*, L.A. TIMES, Mar. 26, 1991, at 6.

¹⁰¹ Ilir Ikonomi, *Stump Lines the Avenues in Wood-Burning Albania*, REUTERS LIB. REP., Mar. 22, 1992, Sunday BC Cycle.

Hilary de Boerr, Business and the Environment: Freedom to Own and to Pollute—The Effects of Albania's New Economic Activity, FIN. TIMES, June 29, 1994, at 20; Ikonomi, supra note 101.

Perla. ¹⁰³ *Perla*, however, made only a small impact when Albania's attention was diverted to the fights of compatriots for autonomy in Serbia (Kosovo) and Macedonia.

V. WALLS TUMBLE FOR OTHER REASONS

In Europe, only in Romania and Yugoslavia was blood shed in the overthrow of Communism. And only there did environmental concerns seem wholly irrelevant to that overthrow. Each followed its own somewhat different course.

In Romania, the transition from Communism came about largely through an intraparty coup against the Ceauşescu regime that once started could not be stopped short of toppling of the Communists, in form if not in fact.¹⁰⁴ The National Salvation Front, which was set up after the Ceauşescus were summarily executed, was, in fact, dominated by *apparatchiki* of the old regime.¹⁰⁵ Only gradually and fitfully did the government evolve towards democracy.¹⁰⁶ Even Romania, however, was deeply influenced by the events in neighboring states, in nearly all which the changes were driven by environmental concerns to varying degrees.

Somewhat similarly, the Communist Party in the former Yugoslavia dissolved in power struggles over the succession to long-time dictator Josip Tito. The leaders of the constituent republics sought to exploit resurgent nationalism in order to strengthen and secure their positions. The Yugoslav Socialist Federation ended in a violent explosion of nationalism seemingly with connection with environmental concerns.

Outside of Europe, the situation in Ethiopia was much like Romania and Yugoslavia—a violent fall, this time driven by years of civil and foreign war that seemed to have little to do with

¹⁰⁴ JUDT, *supra* note 52, at 616-26; Osiatynski, *supra* note 28, at 840-44.

¹⁰³ De Boerr, *supra* note 102.

¹⁰⁵ Edwin Rekosh, *Romania: A Persistent Culture of Impunity*, in IMPUNITY AND HUMAN RIGHTS IN INTERNATIONAL LAW AND PRACTICE 129 (Naomi Roht-Arriaza ed. 1995).

¹⁰⁶ POST-COMMUNIST ROMANIA (Duncan Light & David Phinnemore eds. 2001).

¹⁰⁷ YUGOSLAVIA UNRAVELED: SOVEREIGNTY, SELF-DETERMINATION, INTERVENTION (Raju G.C. Thomas ed. 2003).

environmental concerns.¹⁰⁸ The failure of the Communist regime in Afghanistan seems to have resulted from pure nationalism, expressed religiously.¹⁰⁹ These seemingly remote and disparate failures of Communism are not without significance to our main story. In particular, the Soviet failure in the Afghan war, coming only 3 years after Chernobyl, contributed significantly to the corrosion of public support for the Soviet government, particularly among the military, contributing to the collapse of that government.

VI. WHY DID SO MUCH OF THE EDIFICE COLLAPSE?

Environmental concerns certainly played a pivotal role in corroding and collapsing Communism, but they hardly explain everything about the collapse. I do not suggest a simple, deterministic theory of environmental crises bringing down Communist (or perhaps other) authoritarian governments. There was a highly generalized disaffection with the regime, whether derived from frustrated consumerism, resurgent nationalism, or a real yearning for democracy and human rights. The willingness of the Red Army to turn against the Soviet regime in a failed coup after the disastrous war in Afghanistan also contributed to the fall. And the completely opposite roadmaps for reform followed in China and in the USSR and Eastern Europe perhaps contributed to the fall. None of this provides a fully satisfactory explanation, however. Inept governments have survived for decades or centuries until some precipitating event causes their demise. In the end much depends on how the mass of the people interpret the crisis—an interpretation that the government itself can manipulate so long as it retains effective control over the flow of information. Much also depends on the personality of leadership. Mikhail Gorbachev, no less than Louis

 $^{^{108}}$ Bahru Zewde, A History of Modern Ethiopia, 1855-1991 (2001).

¹⁰⁹ Artyom Borovik, The Hidden War: A Russian Journalist's Account of the Soviet War in Afghanistan (2001).

¹¹⁰ Ash, *supra* note 4; Manur Olson, jr., *Why the Transition from Communism Is So Difficult*, 21 EASTERN ECON. J.437 (1995).

XVI or Nikolai II, bears a heavy responsibility for the collapse of his system of government. Gorbachev was the first person to hold supreme power in the USSR since Lenin who had had a legal education, and he surrounded himself with others with legal educations (most of whom, like Gorbachev, had not actually worked as lawyers). So little attention has been to this feature that studies have been written about Gorbachev without mention of his legal training and legalistic approach to crises. The impact of the legalistic mindset (the lawyer's way of constructing reality, as it were) on the unraveling of these regimes would make an interesting case study, to only because the most conspicuous exception to the dissolution of Communist Party control (China) is the least legalistic culture of the lot.

As bad as environmental concerns have been (and continue to be) in Communist countries, people then and now seem able to tolerate an enormous amount of environment degradation even to the point of rising death rates so long as the degradation seems routine and highly generalized, dismissing it as part of the "natural background" within which humans work out their lives. ¹¹³ The collapse of Communist regimes shows, however, that when a dramatic event (a nuclear accident, a potentially disastrous dam) attributable to the government arises within this pattern of generalized degradation, it can galvanize hitherto diffused discontent against the government, so long as there is some minimal flow of information and some organized groups outside the effective control of the government. Shocks, rather than stresses, are the primary triggers of change. Governments can survive these challenges if the system is resilient. In other words, if the system

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¹¹¹ See, e.g., Stephen Hanson, Gorbachev: The Last True Leninist Believer?, in THE CRISIS OF LENINISM, supra note 6, at 33.

¹¹² FELDBRUGGE, *supra* note 28, at 65-69; ROBERT SHARLET, SOVIET CONSTITUTIONAL CRISIS: FROM DE-STALINIZATION TO DISINTEGRATION (1992).

¹¹³ Judy Dempster, *Study Looks at Mortality in Post-Soviet Era*, N.Y. TIMES, Jan. 16, 2009, at A8; Nicholas Eberstadt, *Rising Ambitions, Sinking Population*, N.Y. TIMES, Oct. 25, 2008, at A23; Murray Feschbach, *Behind the Bluster, Russia Is Collapsing*, WASH. POST, Oct. 5, 2008, at B3; Michael Specter, *Plunging Life Expectancy Puzzles Russia*, N.Y. TIMES, Aug. 2, 1995, at A1; Michael Wines, *For All Russia, Biological Clock Is Running out*, N.Y. TIMES, Dec. 28, 2000, at A1.

provides mechanisms for airing and responding to grievances, the more mechanisms the better. Or governments can survive if they can credibly blame the event on forces beyond its control (for example, natural forces) or if it is willing and able to repress opposition ruthlessly. Compare in this regard Gorbachev's legalistic response and where it led to Deng Xiao Ping's response to the demonstrations in Tiananmen Square and where that led. When these conditions fail, governments fall—or, at least, they lose elections. 114

Whether governments survive of fall, such shocks will produce inelegant solutions—solutions that are messy and far from perfect. Nor was it inevitable that environmental concerns or environmentalist groups would form lever that would bring the walls of the Communist edifice tumbling down. If there is a broad range of information flows and organizations operating within a society, people will find many reasons and avenues for opposing the government instead of just environmental concerns. When, as in the former Communist governments, environmental groups are the only even minimally tolerated forms of dissent or criticism, all (or nearly all) opponents of the regime will gravitate to those groups and all critics will talk about the environment. In such a context, one should not be surprised that after the government falls, many who joined or supported the environmental groups proved to have little real commitment to ecological values and environmental concerns ended up far down on the list of the priorities of the new government. Thus, the non-Communist regimes in the former Communist states often have not committed much in the way of resources to cleaning up the environmental mess they inherited from the Communists or even to correcting continuing or new sources of pollution. The Even

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¹¹⁴ Philip P. Pan, *Russian Voting Tinged with Green*, WASH. POST, Apr. 10, 2009, at A1 (reporting a regional election that went against the government).

Bowman & Hunter, *supra* note 24; Elizabeth F. Brown, *In Defense of Environmental Rights in East European Countries*, 1993 U. CHI. L. SCH. ROUNDTABLE 191 (1993).

¹¹⁶ Brown, supra note 116, at 197-201; Daniel H. Cole, Poland's Progress: Environmental Protection in a Period of Transition, 2 PARKER SCH. J. EAST EUR. L. 279 (1995); Susan S. Cummings, Polish Environmental Regulations: The State of Poland's Environment, Governmental Authorities and Policy, 16 SUFFOLK TRANSNAT'L L. REV. 379 (1993);

the highly dangerous Soviet-era nuclear power plants, like that a Chernobyl, remained in operation for a considerable time, some even operating today. Chernobyl itself was not shut down until 2000, fourteen years after the accident and nearly a decade after the collapse of the USSR. In fact, whatever environmental improvements did occur, whether immediately after the collapse of the Communist regimes or at later over the last 20 years, seem to have resulted from declines in industrial production or other economic activity rather than because of environment-friendly government policies.

VII. WHAT REMAINS OF THE EDIFICE TODAY?

The Communist Party in China did not fall, despite the events in Tiananmen Square in 1989. ¹²⁰ In fact, the continuing survival of the authority of the Communist Party in China even while accepting a predominant role for a market economy may become a model for other authoritarian regimes. Even the Russians, long loathe to concede primacy to the Chinese model,

Dietrich Earnhart, Enforcement of Environmental Protection Laws under Communism and Democracy, 40 J.L. & ECON. 377 (1997); James Friedberg & Branimir Zaimov, Politics, Environment, and the Rule of Law in Bulgaria, 4 DUKE J. COMP. & INT'L L. 225 (1994); Harman-Stokes, supra note 23; Paul Stanton Kibel, Russia's Wild East: Ecological Deterioration and the Rule of Law in Siberia, 7 GEO. INT'L ENVIL. L. REV. 59 (1994); Brad Knickerbocker, Hopes of Ecological Bliss Elude the Former Soviet Bloc, CHR. SCI. MON., Mar. 16, 1994, at 6; Julia Levin, Russian Forest Laws—Scant Protection during Troubled Times, 19 ECOLOGY L.Q. 685 (1992); Karen S. Libertiny, Cause for Cautious Celebration: Hungarian Post-Communist Environmental Reform, 14 MICH. J. ENVIL. L. 518 (1993); Madeo, supra note 74, at 956-60; Marlise Simons, East Europe Sniffs Freedom's Air, and Gasps, N.Y. TIMES, Nov. 3, 1994, at A1; Specter, supra note 12; Specter, supra note 113; Thurber, supra note 24, at 43-47; Paul R. Williams, Can International Legal Principles Play a Positive Role in Resolving Central and Eastern European Transboundary Environmental Disputes?, 7 GEO. INT'L ENVIL. L. REV. 421, 450-55 (1995).

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¹¹⁷ David R. Marples, *The Post-Soviet Nuclear Power Program*, 34 Post-Soviet Geography & Econ. no. 3, at 172 (Apr./May 1993); Steven Lee Myers, *Belarus Resumes Farming in Chernobyl Radiation Zone*, N.Y. TIMES, Oct. 22, 2005, at A3 (describing other Chernobyl-style nuclear plants in operation). Lithuania only closed its Chernobyl-style nuclear plant on December 31, 2009—and then only did so under an order from the European Union. Liudas Dapkus, *Lithuania Shuts down Nuclear Power Plant in Deal with E.U.*, WASH. Post, Jan. 1, 2010, at A11.

¹¹⁸ Sharon LaFraniere, Chernobyl Closing: A Relief for Many, WASH. POST, Dec. 15, 2000, at A30.

¹¹⁹ Laura A. Henry & Vladimir Douhovnikoff, *Environmental Issues in Russia*, 33 ANN. REV. ENVT. & RESOURCES 437 (2008); Madeo, *supra* note 74, at 958-59; Whitlock, *supra* note 87.

¹²⁰ Zhao Ziyang, Prisoner of the State (2009).

have begun to study the possibility of emulating that model as they revive state authority over society and the economy. ¹²¹

China, of course, is hardly a testament to the durability of Communism, as opposed to the Communist Party—China is only nominally Communist. It is ruled by a Communist Party, but it is fully committed to a capitalist economy—without the checks and balances, ineffective as they sometimes are, that are built into democratic capitalist systems. The resulting rampant corruption is suggestive of the "robber barons" who dominated American capitalism a century earlier. Environmental problems are among the most severe in the world and continue, as of this writing to worsen. This includes megaprojects like the Three Gorges Dam as well as rampant air and water pollution, spreading desertification, and threatened resource exhaustion.

The Three Gorges Dam itself was built, and caused even more severe environmental problems than were predicted in 1992.¹²³ The failure to clean-up factories, mines, and towns flooded in the reservoir have made the reservoir into a cesspool of pollution rather than store of usable fresh water.¹²⁴ Diseases like schistosomiasis are spreading as the waters rise in the reservoir.¹²⁵

²¹ Clifford I Levy Ru

¹²¹ Clifford J. Levy, *Russia's Leaders See China as a Template for Ruling*, N.Y. TIMES, Oct. 18, 2009, § 1, p. 6 (reporting a meeting between senior Chinese officials and leaders of the governing United Russia Party at Suifenhe in China's Northeast to exchange views on the exercise of power).

¹²² See, e.g., James T. Areddy, Chinese Trial Offers Peek into Police Corruption, Wall St. J., Oct. 13, 2009, at A13; David Barboza, The Corruptibles, N.Y. Times, Sept. 4, 2009, at B1; Guangdong Officials and Senior Judges Sacked for Corruption, S. China Morn. Post, Oct. 23, 2009, at 8; He Huifeng, Another Top Cadre Snared as Crackdown Continues, S. China Morn. Post, Oct. 16, 2009, at 9; He Huifeng, Chongqing Billionaire Jailed over Gang Crimes, S. China Morn. Post, Dec. 30, 2009, at 4; Woods Lee, Ex-CCTV Anchorman Detained for Fraud, S. China Morn. Post, Oct. 19, 2009, at 5; Raymond Li, Audit Exposes 4.2b Yuan Graft, S. China Morn. Post, Feb. 1, 2008, at 7; John L. Thornton, China's Leadership Gap, 85 For. Aff. no. 6, at 133, 136-38 (Nov.-Dec. 2006).

¹²³ Kathleen E. McLaughlin, China Admits Three Gorges Dam May Be an Environmental Disaster, 30 BNA INT'L ENVT. RPTR. 771 (2007); Shai Oster, China Defends Three Gorges Despite Rising Costs, WALL ST. J., Nov. 28, 2007, at A10; Shi Jiangtao, Experts Speak Out on Worries over Three Gorges Dam: Landslides and Project's Ill Effects on Plants and Fish Already Seen, S. CHINA MORN. POST, Dec. 17, 2007, at 5; Shi Jiangtao, 100b Yuan Outlay to Cope with Dam Impact, S. CHINA MORN. POST, Apr. 23, 2009, at 5; Shai Oster, In China, New Risks Emerge at Giant Three Gorges Dam, WALL ST. J., Aug. 29, 2007, at A1; Jim Yardley, China Plans Efforts to Fight Environmental Risks at Dam, N.Y. TIMES, Nov. 22, 2007, at A12.

¹²⁴ Keith Bradsher, China Offers to Clean up Its Polluted Lakes, N.Y. TIMES, Jan. 23, 2008, at A8; Ray Cheung, Three Gorges Cleanup Is Faltering, Says Official, S. CHINA MORN. POST, Mar. 3, 2003, at 7; Flood Fear for Dam, THE EXPRESS (London, UK), June 2, 2003, at 23; Shai Oster, Why Chinese Dam Is Forcing Another Mass Exodus, WALL ST. J., Nov. 6, 2007, at A1; Zhang Jing & Jim Yardley, At China's Dams, Problems Rise with Water, N.Y.

Rather than preventing downstream flooding, the impact of the dam has degraded the channel below the dam creating risks of even more serious flooding than before. 126 Major historical and cultural assets have been flooded out with limited efforts to relocate them; 127 in one instance, the local authorities responded to the flooding of historical artifacts by creating an "underwater museum" accessible by escalator. 128 Endangered species are threatened with extinction because of the dam. 129 Reports are circulating that other, smaller reservoirs may have triggered earthquakes, 130 which, if true, create truly major worries about the Three Gorges project. Already nearly 1.3 million people have had to be relocated to make room for the dam and its reservoir according to official figures, 131 and as many as 4 million more might have to be relocated because the water logging from the reservoir is causing the collapse of lands above the reservoir into its already polluted waters. 132 The situation of the displaced people has been aptly described as "abysmal." ¹³³ Nor are the benefits of the dam all that clear. While the dam unquestionably

TIMES, Nov. 19, 2007, at A1. The proposed massive diversion of water from the Yangtze's tributaries to serve north China will only make this problem worse. See the text *infra* at notes 138-39.

¹²⁵ China's Schistosomiasis Scourge: Hello Again, God of Plague, ECONOMIST, June 20, 2009, at 6.

¹²⁶ Li Yitian et al., Channel Degradation Downstream from the Three Gorges Project and Its Impacts on Flood Level, 135 J. HYDRAULIC ENGINEERING 718 (2009); Lu Yong-Jin & Wang Zhao-Yin, 3D Numerical Simulation for Water Flows and Sediment Deposition in the Dam Areas of the Three Gorges Project, 135 J. HYDRAULIC ENGINEERING

Phillip Shenon, Digging up the Ancient Past before the Deluge, N.Y. TIMES, Sept. 10, 1994, at A2.

¹²⁸ Zan Jifeng, Treasure Fathoms below the Yangtze, BEIJING REV., July 14, 2009, at 42.

¹²⁹ See Craig T. Donovan, China's Finless Porpoise and Freshwater Resources, 22 NAT. RESOURCES & ENVT. no. 4, at 50 (Spring 2008); Michael A. Gheleta, Sustaining the Giant Dragon: Rational Use and Protection of China's Water Resources in the Twenty-First Century, 9 Colo. J. Int'l Envil. L. Rev. 221, 243 (1998).

¹³⁰ Sharon LaFraniere, Possible Link between Dam and China Quake, N.Y. TIMES, Feb. 6, 2009, at A1; Shi Jiangtao, Geologist Defies Ban to Discuss Possible Link between the Disaster and a Hydroelectric Dam, S. CHINA MORN. POST, May 12, 2009, at 9.

¹³¹ Stephen Chen, Number of People Displaced by Three Gorges Dam Put at 1.27m, S. CHINA MORN. POST, Sept. 14. 2009. at 6. See generally Duan Yuefang & Shawn Steil, China's Three Gorges Resettlement: Policy, Planning and Implementation, 16 J. REFUGEE STUD. 422 (2003); Brooke McDonald, Michael Webber, & Duan Yuefang, Involuntary Resettlement as an Opportunity for Development: The Case of Urban Resettlers of the Three Gorges Project, China, 21 J. Refugee Stud. 82 (2008).

132 Oster, supra note 124; Shai Oster, China Dam Project to Uproot Millions More, WALL St. J., Oct. 12, 2007, at

¹³³ Chen, supra note 131. See generally Sarah C. Aird, China's Three Gorges: The Impact of Dam Construction on Emerging Human Rights, 8 HUM. RTS. BRIEF no. 2, at 24 (Winter 2001); Eric Eckholm, Cracks Emerging in Three Gorges Dam Plan: Displacing 1.3 Million People Could Cause "Explosive" Social Problem, GLOBE & MAIL (Toronto, Can.), Mar. 19, 1999, at A17.

generates vast amounts of electricity, it does not resolve country's energy problems given the speed with which demand for energy is growing in China. What's more, questions are being raised about the quality of construction in the dam: Its face exhibited cracks even before construction was complete, and while these have been repaired, one cannot help but wonder about the reliability of the structure. Both the shoddy construction and the poorly implemented relocation of former inhabitants of the region resulted in part from the pervasive corruption now found in China.

In addition to the problems created by the Three Gorges project, China continues to destroy its environment to feed the ravenous appetite of its industries, particularly in the face of the global economic crisis. The air in many Chinese cities is simply poisonous. The air is so bad that breathing inside buildings in China is the greatest threat to public health. China actually succeeded in cleaning the air in Beijing for the Olympic Games in August 2008, only to see the

¹³⁴ Dai Qing & Lawrence R. Sullivan, *Three Gorges Dam and China's Energy Dilemma*, 53 J. INT'L AFF. 53 (1999); Huus, *supra* note 1. *See generally* Eric W. Orts, *Environmental Law with Chinese Characteristics*, 11 WM. & MARY BILL OF RTS. J. 545 (2003).

¹³⁵ Christopher Bodeen, *Cracks in Surface of China's Yangtze Project*, THE ADVERTISER (Australia), June 13, 2003, at 36; Fong Tak-Ho, *Repairs Begin on Gorges Dam Cracks*, S. CHINA MORN. POST, May 13, 2002, at 6; Richard Reed, *Three Gorges Dam: Filling the Cracks*, THE OREGONIAN (Portland, OR), Feb. 15, 2004, at T2; John Ridding, *Damned by Progress*, FIN. TIMES, May 2, 2002, at P1; Andrew G. Wright, *In Dambuilding, China Promises to Learn From Past Mistakes*, ENGINEERING NEWS-RECORD, June 7, 2004, at 16...

¹³⁶ He Guogiang: Low-Profile Operator, S. CHINA MORN, POST, Oct. 23, 2007, at 3; Li, supra note 122.

¹³⁷ Stephen Chen, Birth Defects Caused by Environmental Pollution, S. CHINA MORN. POST, Jan. 9, 2009, at 7; Stephen Chen, Lowest Marks over Environment, S. CHINA MORN. POST, Jan. 9 2009, at 6; Environmental Protection in China: Don't Drink the Water and Don't Breathe the Air, The Economist, Jan. 26, 2008, at 10; He Huifeng, Guangdong Admits It Is Unlikely to Meet 2010 Pollution Targets, S. CHINA MORN. POST, 12 May 12, 2008, at 8; Shi Jiangtao, Experts Blame Drought on Human Error, S. CHINA MORN. POST, Feb. 7, 2009, at 4 ("Shi, Experts"); Shi Jiangtao, Environment Takes a Back Seat: Rushed, Politically Driven Reconstruction Is Causing Alarm, S. CHINA MORN. POST, May 12, 2009, at 9.

¹³⁸ China: Lead Poisoning Signs Found in 968 Children, N.Y. TIMES, Oct. 14, 2009, at A10; He Huifeng, Grim Plight of a Polluted Town That Is Dying, S. CHINA MORN. POST, Dec. 28, 2009, at 1; Lead Poisoning Scandals Highlights China's Lack of Oversight, CHR. SCI. MON., Aug. 21, 2009, at 6; Shai Oster, China Finds More Cases of Lead in Children, WALL. ST. J., Oct. 14, 2009, at A10; Shi Jiangtao, Rise in Number of Cars Causes More Bad Air, Environment Chief Says, S. CHINA MORN. POST, Apr. 23, 2009, at 5; Fiona Tam, Cold Comfort for Villagers as Incinerator for City Is Scrapped, S. CHINA MORN. POST, Dec. 24, 2009, at 4. China has 16 of the 20 cities in the world with the worst air pollution. John M. Glionna, Lower Class Chinese Face Added Peril: Indoor Pollution, L.A. TIMES, Oct. 13, 2008, at 3.

¹³⁹ Glionna, *supra* note 138.

air deteriorate after the games. 140 This had the effect of making it clear, however, that the pollution was not simply part of the "background noise" of life, forcing the government to invest in improving air quality, at least in Beijing. 141 Just how this will play out over the country as a whole remains to be seen, and even in Beijing air quality remains poor. 142 Meanwhile many other environmental problems remain largely unaddressed.

Attractive historic buildings are torn down with little or no compensation to the owners in order to clear land for highly polluting factories or expensive modern shops and houses. 143 The north of China faces severe water shortages caused by pollution and overuse. 144 The investing of vast sums in attempting to import water from a thousand kilometers or more away in central China has foundered on strong public resistance to the project prompted by ecological concerns causing multi-year delays in the project 145—unlike the Three Gorges project where resistance had no impact. 146 Elsewhere, entire public water supply systems have had to shut down in recent

¹⁴⁰ Al Guo, Beijing Smog Takes Shine off "Golden Week," S. CHINA MORN. POST, Oct. 4, 2008, at 6; Richard Spencer, Smog Is Back in Beijing, DAILY TELEGRAPH (London, UK), Sept. 22, 2008, at 15.

Peter Ford, After Popular Blue Skies during Olympics, Beijing Brings Back Pollution Controls, CHR. Sci. Mon., Oct. 16, 2008, at 7; Michael Wines, Beijing's Air Is Steadily Getting Cleaner, But the War Is Far from Won, N.Y. TIMES, Oct. 17, 2009, at A4.

¹⁴² Wines, *supra* note 141.

¹⁴³ Kelly Chan, Demolition Gang Drags Residents from Homes, S. CHINA MORN. POST, Jan. 20, 2009, at 6; Andrew Jacobs, Finding Treasures in a City's Disappearing Past," N.Y. TIMES, Jan. 19, 2009, at A8; Ng Tze-Wei, Blockbuster Avatar Strikes a Chord with Mainland's Evictees, S. CHINA MORN. POST, Jan. 7, 2010, at 5; Ng Tze-Wei, Uygers Decry "Reconstruction Project" Set to Change the Face of Old Town in Kashgar, S. CHINA MORN. POST, Dec. 30, 2009, at 6; Michael Wines, To Protect an Ancient City, China Moves to Raze It, N.Y. TIMES, May 28, 2009, at A1; Lilian Zhang, Couple Appeal over 'Illegal' Land Grab and Demolition Ordered by Officials—Not Court, S. CHINA MORN. POST, May 8, 2009, at 8.

¹⁴⁴ Bradsher, supra note 124; He Huifeng, Beijing Faces Major Water Shortage until at Least 2014, S. CHINA MORN. POST, 12 May 12, 2009, at 6; Shi Jiangtao, Battle to Protect Yellow River after PetroChina Oil Leak, S. CHINA MORN. POST, Jan. 3, 2010, at 4; Shi, Experts, supra note 137.

¹⁴⁵ China Starts Resettling 330,000 People for Massive Project to Send Water North, HAMILTON SPECTATOR (Can.). Oct. 18, 2009, at 61; Shi Jiangtao, Public Concern and Costs Blamed for Water Scheme Delay, S. CHINA MORN. POST, May 29, 2009, at 6. See also Shi Jiangtao, New Dam Another Nail in the Yangtze's Coffin: Projects Push Many Fish Species to Extinction, S. CHINA MORN, POST, June 16, 2009, at 6 (reporting that decisions had been made to push forward with dam on the upper Yangtze—700 km., 475 mi., above the Three Gorges Dam—that would virtually wipe out a "fish reserve" established in the river after its construction was delayed nearly 20 years because of public opposition).

146 Dai Qing, *supra* note 3.

years because of massive pollution of the source waters. ¹⁴⁷ China has become the major contributor of greenhouse gases to climate disruption and will reap its reward from impending "mega-disasters." ¹⁴⁸ In 2008, the government completely overhauled the structure of its environmental regulatory agencies, ostensibly to better address the increasingly serious environmental problems. ¹⁴⁹ Careful analysis, however, suggests that this reform still didn't address the fundamental structural problems that have thus far ensured the environmental regulation has largely been ineffective. ¹⁵⁰

That reports of severe environmental problems in China circulate despite efforts of the government to suppress them perhaps suggests that the government is losing control of the flow of information. Whether other conditions will combine with that information to undermine the government remains to be seen. The fact is that environmental concerns (whether conceived narrowly in terms of pollution and ecological disruption or broadly in terms of the destruction of the built environment as well as the natural environment) are one of the driving forces behind the steadily rising incidence of "mass incidents"—anything from a modest protest to strikes to antigovernment riots—that has the government so alarmed.¹⁵¹ The government itself estimated there

¹⁴⁷ See, e.g., Flushing Algae Fails to Make Water Potable, S. CHINA MORN. POST, June 3, 2007, at 6; Zhuang Pinghui, Chao Lake Hit by Algal Bloom Again, Despite Cleanup Efforts, S. CHINA MORN. POST, July 19, 2008, at 5; Jim Yardley, China Vows to Clean up Polluted Lake, N.Y. TIMES, Oct. 27, 2007, at A5. See also Bradsher, supra note 124; Metal Poisoning Part of Everyday Life along Xiang River, S. CHINA MORN. POST, Aug. 7, 2009, at 4; Craig Simons, Water Pollution Takes a Toll in China, ATLANTA J.-CONST., Feb. 18, 2007, at E1. See generally Li Zhiping, The Challenges of China's Discharge Permit System and Effective Solutions, 24 TEMPLE J. SCI. TECH. & ENVTL. L. 375 (2005).

¹⁴⁸ Stephen Chen, *More Mega-Disasters Ahead as Environment Deteriorates*, S. CHINA MORN. Post, May 12, 2009, at 6.

at 6. 149 Xin Qiu & Honglin Li, *China's Environmental Super Ministry Reform: Background, Challenges, and the Future,* 39 ENVTL. L. RPTR. 10152 (2009). 150 *Id.* at 10157-63.

Al Guo, Further Study on Beijing's Waste Plant Ordered after Public Protest, S. CHINA MORN. POST, Mar. 12, 2009, at 12; Cary Huang, Taskforces Set up to Keep Lid on Protests, S. CHINA MORN. POST, Feb. 28, 2009, at 1; Josephine Ma, Security Panel Chief Warns of More Unrest and Social Tension, S. CHINA MORN. POST, Jan. 13, 2009, at 6; Michael Moore, China Tells Police to Plan for Mass Unrest in Downturn, Daily Telegraph (London, UK), Feb. 28, 2009, at 18; Shisou Standoff Comes to an End: Curfew, Arrests Halt Protests over Death, S. CHINA MORN. POST, June 30, 2009, at 3; Fiona Tam, Villagers Riot after Row with Officials, S. CHINA MORN. POST, Mar. 25, 2009, at 5; Michael Wines, China's Leaders See a Calendar Full of Anniversaries, and Trouble, N.Y. TIMES, Mar. 10,

were 87,000 mass incidents in 2005, more than 230 per day.¹⁵² It has not released a count since. The government is sufficiently concerned about the possibility of mass incidents escalating into chaos and disorder that it issued warnings to local governments to be especially vigilant in this year of multiple anniversaries (90 years after the "May 4 Movement"; 60 years after the founding of the People's Republic of China; 50 years after the "liberation" of Tibet; 20 years after the Tiananmen demonstrations).¹⁵³ These concerns have resulted in increased repression against those who protest against environmental degradation.¹⁵⁴

Environmental non-governmental organizations have emerged in China, ranging from "organizations" consisting of a single individual activist to organizations sponsored and tightly controlled by the government to diffused organizations of loosely connected networks of activists. All NGOs are required by law to be sponsored a government department or organization. NGOs that lack such affiliation operate illegally, always at risk of arrest or other acts of suppression; with such affiliation, the groups are unable to operate as effective checks on the government. Only some Chinese NGOs are focused on environmental issues, with others focusing on a broad range of issues, culminating in a manifesto—Charter 08, modeled after Charter 77 that help usher in the "Velvet Revolution" in Czechoslovakia 156—calling on the government to re-

^{2009,} at A5; Verna Yu, *Villager Dies as Police Fire Shots in Land Dispute*, S. CHINA MORN. POST, Jan. 15, 2010, at 8. *See generally* Carl F. Minzner, *Riots and Cover-ups: Counterproductive Control of Local Agents in China*, 31 U. PA. J. INT'L L. 53 (2009)...

¹⁵² Jane McCartney, Surge of Protests Alarms Party, THE TIMES (London, UK), Jan. 20, 2006, at 41; Irene Wang, Incidents of Social Unrest Hit 87,000: Actions by Displaced Villagers, Unpaid Migrant Labourers and Laid-off Workers Contribute to Annual 6.6pc. Increase, S. CHINA MORN. POST, Jan. 20, 2006, at 4.

¹⁵³ Kelly Chan, *Beijing Advises Local Officials to Lend an Ear to Petitioners*," S. CHINA MORN. POST, May 2, 2009, at 5.

 ¹⁵⁴ Choi Chi-Yuk, Official Crackdown the New Poison for Shaanxi Peasants, S. CHINA MORN. POST, Dec. 29, 2009, at 4; Verna Yu, Warning Police Will "Strike Hard at Hostile Forces," S. CHINA MORN. POST, Dec. 29, 2009, at 4.
 ¹⁵⁵ See Will Clem, NGOs Hope to Be Released from Legal "Grey Area: Easing of Stringent Controls Is Needed Ur-

gently, Activists Say, "S. CHINA MORN. POST, Dec. 2, 2009, at 8.

156 Charter 08, available at http://www.hrichina.org/public/contents/press?revision_id=89851&item_id=85717. See Lucien Bianco, De la Charte 77 à celle de 2008, un même combat: La résistance en Chine s'inspire de Vaclav Havel, LE MONDE, Jan. 1, 2010, at 15; Ellen Bork, Charter of Democracy, WEEKLY STD., Jan. 26, 2009, at 11; Frank Ching, Unfamiliar Territory, S. CHINA MORN. POST, Jan. 28, 2009, at 9.

spect a broad range of freedoms, including the right to organize political parties to compete with the Communist Party of China. ¹⁵⁷ Charter 08 gained some 10,000 signatures online before the government banned its mention within China. ¹⁵⁸

Activists have expressed hope that recent proposals to liberalize the oversight of NGOs working on AIDS would be extended to all NGOs.¹⁵⁹ Instead the government increasingly has cracked down all forms of dissent, including simple petitioners who surfaced because of unful-filled promises of opportunities for free expression at the Beijing Olympics.¹⁶⁰ These would-be protesters were given relatively short sentences,¹⁶¹ but the organizers of Charter 08 faced a more uncertain future. At least the future remains uncertain for most of the authors of Charter 08.¹⁶² For Liu Xiaobo, perhaps the leading organizer of the Charter 08 movement, however, the future is settled. He was held without trial for more than a year,¹⁶³ and then, in a closed trial that lasted less than three hours, was sentenced to 11 years in prison on December 25, 2009.¹⁶⁴ Others in-

¹⁵⁷ See The Other's Moore's Law, THE ECONOMIST, Feb. 14, 2009, at 66.

Andrew Jacobs, *Leading Chinese Dissident Gets 11-Year Prison Sentence*, N.Y. TIMES, Dec. 25, 2009, at A10; Ng Tze-Wei, *Charter O8 Signatories Rally to Support Arrested Dissident*, S. CHINA MORN. POST, June 25, 2009, at 4.

¹⁵⁹ Clem, *supra* note 155; Editorial, *How China's NGOs Can Make a Difference*, S. CHINA MORN. POST, Dec. 14, 2009, at 10.

Andrew Jacobs, No Voice Is Too Small for a China Still Nervous about Dissent, N.Y. TIMES, Aug. 30, 2008, at A8; Mike Jensen, Protests Didn't Take Wing, Phila. Inquirer, Aug. 24, 2008, at E11; Emily Lau, No Medals for China in the Dash for Freedom, S. China Morn. Post, Sept. 8, 2008, at 15; Evan Osnos, Cops Put up a Protest over a Permit, Chi. Trib., Aug. 24, 2008, at 15; Jim Yardley, Leading Chinese Advocate of Democracy and Human Rights Wins European Prize, N.Y. Times, Oct. 24, 2008, at A5.

¹⁶¹ See, e.g., Ariana Eunjung Cha, Apply to Protest, Face the Music: China Sentences Pair in 70s to "Re-Education," CHI. TRIB., Aug. 21, 2008, at 14; Clifford Coonan, "Re-Education" for Protest Applicants, IRISH TIMES, Aug. 22, 2008, at 11; Andrew Jacobs, Too Old and Frail to Re-Educate? Not in China, N.Y. TIMES, Aug. 21, 2008, at A1; Peter Simpson, Elderly Pair Punished for Wanting to Protest, S. CHINA MORN. POST, Aug. 21, 2008, at 5; Edward Wong, China Gives Would-Be Protester Three Years in Prison, N.Y. TIMES, Jan. 16, 2009, at A11.

Andrew Jacobs, *In Sentence of Activist, China Gives West a Chill*, N.Y. TIMES, Dec. 26, 2009, at A4; *Liberal Scholar Thrown out of Cultural Institute*, S. CHINA MORN. POST, May 23, 2009, at 5.

¹⁶³ Will Clem, Charter 08 Author to Face Charges Today: Liu Xiaobo Likely to Be Accused of Subversion, a Year after His Arrest, S. CHINA MORN. POST, Dec. 9, 2009, at 8; John M. Glionna, China Trying Dissident over Democracy Charter: Liu Xiaobo Had Urged Political Reform, L.A. TIMES, Dec. 24, 2009, at 11. Liu was "detained" for about six months, beginning two days before the charter was made public, and then formerly arrested on June 24, 2009. Ng Tze-Wei, supra note 158; Michael Wines, A Manifesto on Freedom Sets China's Persecution Machinery in Motion, N.Y. TIMES, May 1, 2009, at A9.

¹⁶⁴ Harsh Justice in China: Don't Mess with Us, ECONOMIST, Jan. 2, 2010, at 4; Jacobs, supra note 158; Steven Mufson, Chinese Dissident Liu Xiaobo Sentenced to 11 Years on "Subversion" Charges, WASH. POST, Dec. 25,

volved in Charter 08 have suffered as well, although not so dramatically. 165 The message is clear to those who would criticize the government too aggressively. 166 That message was perhaps expressed even more clearly by the doubling of total arrests for "endangering state security" between 2007 (742 arrests) and 2008 (1,712 arrests). 167

Notwithstanding the controls on environmental NGOs in the China, they have managed, often through the Internet or cell-phone texting, to coordinate resistance to activities that impose particularly egregious insults on the environment. 168 There is even an emerging informal, yet somewhat effective, movement concerned about global climate disruption. 169 Several of these organizations are focused precisely on the problems created by the Three Gorges Dam. 170 The government continues to seek to control or suppress all organizations involved in active protests or other mass incidents, and particularly to control their access to funds. ¹⁷¹ The government harasses, disbars, beats, or arrests lawyers who seek to use the courts to challenge these wrongs. 172 And the police turn even more frequently to violence to suppress mass incidents. 173 These pressures often lead to self-censorship. Whether the environmental or other organizations can, or

^{2009,} at A10. A higher Chinese court has already turned down Liu's appeal in a hearing that lasted all of 10 minutes, at which Liu was not allowed to speak. Cara Anna, Chinese Court Upholds Prominent Scholar's 11-Year Punishment, WASH. POST, Feb. 12, 2010, at A17. See generally Verna Yu, From Young Dreamer to Veteran Dissident, Liu Xiaobo Has No Regrets Despite Paying a Heavy Price for His Ideals, S. CHINA MORN, POST, Jan. 31, 2010, at

¹⁶⁵ See, e.g., Verna Yu, Police Detain Second Charter O8 Author, S. CHINA MORN. POST, Jan. 15, 2010, at 8.

¹⁶⁶ Jacobs, supra note 162; Wei Jingsheng, Why Liu Xiaobo Matters: By Harshly Punishing the Reformer, China's Hard Liners Tell the World: We Don't Care, L.A. TIMES, Jan. 1, 2010, at 31; Verna Yu, Liu's Sentence a Grim Warning to Dissidents, S. CHINA MORN. POST, Dec. 27, 2009, at 1.

¹⁶⁷ Yu, *supra* note 164.

¹⁶⁸ Jillian S. Ashley & Pengyu He, Opening One Eye and Closing the Other: The Legal and Regulatory Environment for "Grassroots" NGOs in China Today, 26 B.U. INT'L L.J. 29 (2008).

¹⁶⁹ Editorial, supra note 155.

¹⁷⁰ Three Gorges Inspires Environmental Activism, S. CHINA MORN. POST, June 7, 2003, at 10.

¹⁷¹ See, e.g., Joseph Kahn, Protector of Lake Loses Appeal in Chinese Court, N.Y. TIMES, Nov. 6, 2007, at A9. See

generally Ashley & He, supra note 149.

172 Peter Ford, China Cracks down on Human Rights Lawyers, Christian Sci. Mon., Feb. 25, 2009, at 1; Ng Tzewei, Rights Lawyers Worry about Licence Renewal, S. CHINA MORN. POST, May 28, 2009, at 6; Michael Wines, China Said to Harass Rights Lawyers, N.Y. TIMES, May 28, 2009, at A1.

¹⁷³ See, e.g., Yu, supra note 151; Yu, supra note 154.

will, perform the role in China that they did in so many of the formerly Communist countries, remains to be seen.

Looking around the world, we find several other nominally Communist systems (Cuba, Laos, and Vietnam) that have largely followed the Chinese path, and several proto-Marxist regimes (Bolivia, Nepal, Nicaragua, and Venezuela) that may go down the classic Leninist-Stalinist-Maoist path or take the modern Chinese path. Only North Korea is reputed to be a classic Communist state, ¹⁷⁴ and even there an informal market economy has grown up because of the state's failure to manage the economy with minimal effectiveness. 175 That market economy has become so robust that it employs half of North Korea's 23.5 million people and provides 80 percent of household incomes. 176 The government's response has been an attempt, in December 2009, to suppress the burgeoning free markets, an attempt that has produced the first large-scale public resistance to the regime. 177 North Korea, moreover, is an environmental and economic basket case. 178 It may be that all political-economic systems, whether classically Communist, capitalist, or following some "third way," will end up like North Korea if we do not constrain our excesses, 179 but there is still something to be said for getting their more slowly than classic Communism seems to. And that is perhaps the reason that classic Communism collapsed.

¹⁷⁴ See, e.g., MIKE KIM, ESCAPING NORTH KOREA: DEFIANCE AND HOPE IN THE WORLD'S MOST REPRESSIVE REGIME (2008).

175 See Andrei Lankov, North of the DMZ: Essays on Daily Life in North Korea (2007).

¹⁷⁶ Blaine Hardin, In North Korea, a Strong Movement Recoils at Kim Jong Il's Attempt to Limit Wealth, WASH. POST, Dec. 27, 2009, at A16. ¹⁷⁷ *Id*.

¹⁷⁸ See, e.g., Blaine Harden, Inflation-Hit North Korea Has Fired Top Economic Officials, South's Media Report, WASH. POST, Feb. 7, 2010, at A8; Blaine Harden, N. Korea Currency Crackdown Fuels Inflation, Food Shortages, WASH. POST, Jan. 7, 2010, at A11; Blaine Harden, North Korea Revalues Currency, Destroying Personal Savings, WASH. POST, Dec. 2, 2009, at A8; Blaine Harden, This Time, Promises Alone May Not Feed North Korea, WASH. POST, Nov. 19, 2009, at A10. See generally Sangmin Nam, The Legal Development of the Environmental Policy in the Democratic People's Republic of Korea, 27 FORDHAM INT'L L.J. 1322 (2004).

¹⁷⁹ See James K. Galbraith, Predator State: How Conservatives Abandoned the Free Market and Why LIBERALS SHOULD TOO (2008).