Fall 1997

The Globalization of Public Health: Emerging Infectious Diseases and International Relations

David Fidler
Indiana University Maurer School of Law, dfidler@indiana.edu

Follow this and additional works at: https://www.repository.law.indiana.edu/ijgls

Part of the Health Law and Policy Commons, and the International Law Commons

Recommended Citation
Available at: https://www.repository.law.indiana.edu/ijgls/vol5/iss1/2

This Symposium is brought to you for free and open access by the Maurer Law Journals at Digital Repository @ Maurer Law. It has been accepted for inclusion in Indiana Journal of Global Legal Studies by an authorized editor of Digital Repository @ Maurer Law. For more information, please contact kdcogswe@indiana.edu.
The Globalization of Public Health:
Emerging Infectious Diseases and International Relations

DAVID P. FIDLER*

In this article, Professor Fidler explains how the processes of globalization have altered traditional distinctions between national and international public health. Professor Fidler begins the article by familiarizing the reader with globalization, reminding the reader that globalization refers to the various factors that infringe upon a sovereign state's ability to control what occurs in its territory. Next, the article defines and discusses emerging infectious diseases (EIDs) and examines the contributions made by globalization to the emergence and reemergence of EIDs. The article then develops a "pathology of the globalization of public health", which helps the reader to understand better the relationship between public health and globalization. Professor Fidler suggests that the current EID crisis has made the globalization of public health a permanent feature of international relations. In response to the challenges posed by the globalization of public health, Professor Fidler explores three major international relations theories—realism, liberalism, and critical international theory—to see what lessons these theories offer about dealing with the globalization of public health. While each theory provides insights into the globalization of public health, he argues that the EID crisis creates serious challenges to our traditional frameworks of understanding international relations.

* Associate Professor of Law, Indiana University School of Law, Bloomington. B.C.L., 1991, Oxford University; J.D., 1991, Harvard Law School; M.Phil., 1988, Oxford University; B.A., 1986, University of Kansas. The author would like to thank the participants of the Symposium on The Public's Health in the Global Era: Challenges, Responses, and Responsibilities for their comments on the first draft of this article. The author also thanks Andrew Moravcsik, Anne-Marie Slaughter, and Joseph Weiler for allowing him to present an earlier version of this article at their Seminar in Law and International Relations at Harvard Law School on March 19, 1997.
I. INTRODUCTION

Political leaders and scholars recognize that the forces of globalization are among the most potent at work within late twentieth-century international relations. Globalization is evident in telecommunications, international trade, manufacturing strategies, and global capital flows. Many have seen in the powerful impetus of globalization the undermining (or perhaps even the death) of sovereignty as power flows out of the formal apparatus and legitimacy of the state and into the hands of industrialists, investment bankers, media moguls, and other transnational actors. The new phenomenon of emerging infectious diseases promises to write yet another chapter in the history of globalization—a chapter that involves public health, a topic distant from the frantic, lucrative world of global commerce and finance. The emergence and reemergence of infectious diseases in the last thirty years represent, to a large extent, the work of the processes of globalization. Most public health experts agree that the distinction between national and international public health is no longer relevant because globalization has enabled pathogenic microbes to spread illness and death globally, with unprecedented speed. The processes of globalization have undermined the ability of the sovereign state to protect the public from infectious diseases. The consequences of the globalization of public health, in light of the threat from emerging infectious diseases, are enormous.

In this article, I examine the globalization of public health, its manifestation in the worldwide crisis of emerging infectious diseases, and its consequences for understanding international relations. To date, most of the literature examining emerging infectious diseases has addressed the scientific,

---

1. This article examines the globalization of public health by looking at the global problems posed by infectious diseases, but a similar case can be made for the globalization of public health in connection with noncommunicable diseases caused by, among other things, tobacco use. The Director-General of the World Health Organization recently wrote that “[t]obacco-related diseases represent a global problem of epidemic proportions. This transnational health issue should also be a matter of concern for foreign policymakers.” Hiroshi Nakajima, Global Disease Threats and Foreign Policy, 4 BROWN J. WORLD AFF. 319, 327 (1997). For more on the global threats posed by noncommunicable diseases, see WORLD HEALTH ORG., WORLD HEALTH REPORT 1997: CONQUERING SUFFERING, ENRICHING HUMANITY (1997). For an analysis of international regulatory efforts on tobacco consumption, see Allyn L. Taylor, An International Regulatory Strategy for Global Tobacco Control, 21 YALE J. INT’L L. 257 (1996).
medical, and public health challenges of these diseases. Some policy literature does exist in which public health authorities or policymakers attempt to establish strategies to deal with emerging infectious diseases. Elsewhere, I have tried to contribute to a developing discourse on the international legal aspects of the emerging infectious disease problem. My objectives in this article are to identify, by focusing on emerging infectious diseases, the key features of the globalization of public health and, then, to evaluate the impact of such features on major theoretical traditions in the study of international relations. I contend that the globalization of public health raises serious conundrums that reach into political theory itself, challenging traditional conceptions of the citizen, the state, and international relations. The globalization of public health represents, therefore, not only a medical and scientific challenge for physicians and public health officials, but also a challenge to the conception of citizenship, the state, international relations, and humanity itself.

2. For example, most of the articles that have appeared in Emerging Infectious Diseases, a journal run by the U.S. Centers for Disease Control and Prevention to focus on emerging infectious diseases, have concentrated on medical and scientific aspects of such diseases.


II. GLOBALIZATION: DEFINITION AND DYNAMICS

A. The Meaning of Globalization

Analyzing the "globalization of public health" requires some basic understanding of what is meant by the term globalization. As used in this article, globalization refers to processes or phenomena that undermine the ability of the sovereign state to control what occurs in its territory. According to Gordon Walker and Mark Fox, "the integration of financial markets on a global basis is the paradigm example ... [b]ecause capital flows are being denationalized, [and] national sovereignty is becoming increasingly irrelevant in this area." National control over capital flows is not, by any means, the only thing subject to the sovereignty-undermining forces of globalization. Other areas where commentators have argued that globalization is at work include, among others, immigration, information, environmental protection, and culture.

The definition of globalization provided above corroborates experts' observations in the public health context. A number of people have argued
that in today’s world the traditional distinction between national and international public health has become anachronistic. National governments have traditionally shouldered the responsibility of protecting the public from the spread of infectious diseases. The blurring of the distinction between national and international health suggests that the forces of globalization are undermining the sovereign state’s ability to prevent and control infectious diseases.

B. Processes of Globalization

Globalization occurs through the operation of many different processes and phenomena that vary according to the particular issue in question. For example, the revolution in computers and telecommunication technology features prominently in analyses of globalization’s impact on financial markets, information, and culture. Inequalities between countries in the global economy encourage legal and illegal immigration, placing pressure on

PUBLIC HEALTH. Epidemiology is “[t]he branch of medicine that deals with the incidence and transmission of disease in populations, esp[ecially] with the aim of controlling it . . . .” THE NEW SHORTER OXFORD ENGLISH DICTIONARY 836 (1993).

13. CDC STRATEGY, supra note 3, at 12 (stating that the “concept of ‘domestic’ as distinct from ‘international’ health is outdated”); Seth F. Berkley, AIDS in the Global Village: Why U.S. Physicians Should Care About HIV Outside the United States, 268 JAMA 3368, 3369 (Dec. 16, 1992) (stating that the distinction between domestic and international health is obsolete); James W. LeDuc, World Health Organization Strategy for Emerging Infectious Diseases, 275 JAMA 318, 318 (Jan. 24, 1996) (stating that “national health has become an international challenge”); George A. Gelbert et al., The Obsolescence of Distinct Domestic and International Health Sectors, 10 J. PUB. HEALTH POL’Y 421, 421 (1989) (arguing that “traditional and historical bases for differentiating domestic and international health in Western nations have . . . lost meaning”).

14. The Institute of Medicine noted that in the United States “the earliest definition of public health’s mission was . . . control of epidemic disease.” FUTURE OF PUBLIC HEALTH, supra note 12, at 38. Although the concept of public health has broadened to include more than the control of infectious diseases, see id. at 38-39, this goal remains a fundamental element of public health strategies in the United States and at the World Health Organization. See, e.g., CDC STRATEGY, supra note 3; WORLD HEALTH ORGANIZATION, WORLD HEALTH REPORT 1996: FIGHTING DISEASE, FOSTERING DEVELOPMENT (1996) [hereinafter WORLD HEALTH REPORT 1996]. In addition, as the Institute of Medicine points out, the role of the government in public health is “indispensable.” FUTURE OF PUBLIC HEALTH, supra note 12, at 38.

15. Fidler, Globalization, International Law, and Emerging Infectious Diseases, supra note 4, at 78 (arguing that public health policy has been denationalized because a country cannot tackle emerging infectious diseases by itself); Nakajima, supra note 1, at 324 (stating that “the emergence of new infectious agents, as well as the re-emergence of old ones, represents an important transnational policy issue in the late twentieth century”).

16. See Walker & Fox, supra note 6, at 382 (noting that “[t]he most important factor in the globalization of financial markets is technological change”); Cate, supra note 9, at 468 (noting impact of information technology in making information inherently global); BARBER, supra note 11, at 74 (arguing that technology’s impact on information “will inevitably impact culture”).
the ability of governments to control their borders. Normal economic
activities produce substances that can damage the global environment. Government policies, like the promotion of liberalized trade and financial
markets, can also promote the conditions that weaken a government’s control
over important macroeconomic forces. Therefore, no single process, activity,
or policy can explain globalization because it is so complex. Part of my task
in this article is to identify those things that are producing globalization in the
field of public health with regard to infectious diseases.

C. Responses to Globalization

Given the jealousy with which states normally guard their sovereignty, we
might expect states to be very worried about globalization. Generalizations in
this regard are, however, dangerous because globalization does not affect all
states in the same way. Jost Delbrück points out, for example, that the
globalization of markets “is confined to the ‘sunny side of the globe’ . . .
within the framework of GATT, OECD, and to some extent the EC.”
Primarily through domestic policies, liberal free-market states of Western
Europe, North America, and East Asia have encouraged market and financial
interdependence and integration. This encouragement has come even though
such domestic policies reduce the leverage a government has over economic
activities within its territory. This decentralized harmonization of market-
oriented strategies constitutes one basic approach to globalization exhibited by
states. The other basic approach to globalization has been called
“internationalization”, which “refers to cooperative activities of national
actors, public or private, on a level beyond the nation-state . . . .” Such

17. Jeffrey A. Hart, Comments on "Changing Sovereignty Games and International Migration," 2 IND.
18. The emission of carbon dioxide through industrial production, for example, contributes to the
problem of global warming. Wilfred Beckerman, Global Warming and International Action: An Economic
Perspective, in THE INTERNATIONAL POLITICS OF THE ENVIRONMENT 253, 253 (Andrew Hurrell & Benedict
Kingsbury eds., 1992) (noting possibility of global warming resulting from emission of greenhouse gases
“in the course of innumerable human activities”).
19. Walker and Fox argue that “the marriage of computers and telecommunications . . . erodes the
traditional concept of sovereignty powerfully affecting, for example, the power of the state to issue currency
and mandate its value.” Walker & Fox, supra note 6, at 397.
20. See infra Part IV of this article.
21. Delbrück, supra note 6, at 17.
22. Id. at 19.
23. Id. at 11.
cooperation usually takes place through bilateral or multilateral cooperation within a formal, institutionalized framework. Globalization often begets internationalization because states face problems beyond their sovereign control that require international cooperation to address. This is Delbrück's idea when he argues that "[i]nternationalization . . . may be defined as a means to enable nation-states to satisfy the national interest in areas where they are incapable of doing so on their own." Other writers have also noted the necessity of international cooperation to address global problems.

The literature on emerging infectious diseases contains many references to the challenges they pose as a global problem requiring international cooperation. The World Health Organization (WHO) has, for example, asserted that infectious diseases now represent a "global crisis" that requires a coordinated international approach. The strategies crafted to date by the WHO and the United States to deal with emerging infectious diseases "are predominantly blueprints for cooperation among states and represent a call for the internationalization of responses to a problem caused by globalization." In other words, a state can no longer provide for public health in today's world without international cooperation and coordination in the control of infectious diseases.

It is important to note that globalization and internationalization in the infectious disease context are not new. States recognized at least as early as the mid-nineteenth century that international cooperation on infectious disease control was critical, because no state could independently prevent and control the spread of infectious diseases within its territory. The globalization of

24. Id. at 10.
25. Id. at 11.
26. See, e.g., Jonathan I. Charney, Universal International Law, 87 AM. INT'L L. 529, 529 (1993) (arguing that global problems like environmental protection have to be addressed through formal international fora); W. Michael Reisman, The Cult of Custom in the Late 20th Century, 17 CAL. W. INT'L L.J. 133, 142-43 (1987) (arguing that customary international law cannot deal with many global problems like the debt crisis and terrorism).
27. WORLD HEALTH REPORT 1996, supra note 14, at 1. See also the WHO Director-General's statement that "a global crisis of re-emerging and new communicable diseases looms over humanity." Nakajima, supra note 1, at 321.
29. Fidler, Globalization, International Law, and Emerging Infectious Diseases, supra note 4, at 79.
30. The WHO Director General has argued that "an isolationist foreign policy is not a rational way of addressing the transnational threat of new and re-emerging communicable diseases." Nakajima, supra note 1, at 325.
31. For discussion of the origins of international cooperation on the control of infectious diseases, see Norman Howard-Jones, Origins of International Health Work, BRIT. MED. J. 1032 (May 6, 1950); NEVILLE
public health is not, therefore, a late twentieth-century creation. Conditions in the late twentieth century have, however, resurrected globalization regarding infectious diseases and have given new urgency to the need for international cooperation.

III. EMERGING INFECTIOUS DISEASES

A. Definition and Identification of Emerging Infectious Diseases

I examine the globalization of public health through the problem of emerging infectious diseases. Emerging infectious diseases (EIDs) are defined as "diseases of infectious origin whose incidence in humans has increased within the past two decades or threatens to increase in the near future." EIDs include both new diseases and old diseases that have reemerged. A U.S. government interagency Working Group on Emerging and Reemerging Infectious Diseases, the CISET Working Group, recorded twenty-nine new diseases that have been identified since 1973, as well as twenty reemerging diseases. The scale of emergence and reemergence of infectious diseases has alarmed national and international public health officials, politicians, and academic commentators in the 1990s. The magnitude of the EID crisis is all the more sobering and disturbing given that, less than thirty years ago, the United States Surgeon General declared that infectious diseases had been conquered.
B. The Factors Behind Emerging Infectious Diseases

Explaining why EIDs now constitute a global crisis involves analyzing the factors behind their emergence and reemergence. A complete analysis of the factors behind EIDs is beyond the scope of this article, but I would like to convey briefly the frightening combination of factors that produces the conditions for pathogenic microbes to flourish and spread globally.

1. Factors Involving the Microbial World

The belief that infectious diseases had been conquered underestimated the power of microbial life. Microbes have demonstrated a resilience and an adaptability that have enabled them to survive and now threaten the human arsenal of antimicrobial drugs. Microbes compete for survival against other microbes, the immune systems of host organisms, and antimicrobial treatments. Such pressures to survive have created within the microbial world remarkable evolutionary powers that pose awesome challenges for public health. In the short term, public health officials worldwide are greatly concerned about the development of antimicrobial resistance in many pathogenic microbes. Health officials acknowledge that, in the long run, we must accept that "mutation and change are facts of nature...and that human health and survival will be challenged, ad infinitum, by new mutant microbes, with unpredictable pathophysiological manifestations."

2. Factors Involving Individual Behavior

Changes in individual behavior have contributed to the EID problem, especially with regard to sexual behavior. The last thirty years have seen a dramatic increase in multiple-partner sex around the world. This change in
sexual behavior has produced an explosion of sexually transmitted diseases. The HIV/AIDS epidemic, largely fueled by sexual transmission, has also created opportunities for other infectious diseases that take advantage of immune systems weakened by AIDS.

Changes in sexual practices are not the only behavioral changes that contribute to the EID problem. Illicit drug use, with its sharing of contaminated needles, has helped blood-borne diseases, like HIV/AIDS and hepatitis B, spread in populations. Greater use of child care facilities by single-parent and two-income families has contributed to the increase in childhood ear infections in the United States and to an increase in drug resistance in such infections.

Changes in individual behavior have, thus, helped produce the emergence of a new, deadly disease in HIV/AIDS, and the reemergence of other sexually-transmitted diseases. These changes have also contributed to the emergence of blood-borne diseases, diseases that take advantage of the ravages of HIV/AIDS, and the development of antimicrobial resistance in pathogenic microbes.

3. Factors Involving Social, Economic, and Governmental Activities

EIDs have also benefitted from fertile conditions created by a wide range of social, economic, and governmental activities. For example, countries subject to civil war or social unrest often find themselves vulnerable to increases in infectious diseases. Environmental degradation caused by economic exploitation of natural resources often creates conditions that stimulate the emergence and reemergence of infectious diseases.

number of sexual partners have been the main factor in the spread of HIV infection and other sexually transmitted diseases”).

41. WORLD HEALTH REPORT 1996, supra note 14, at 33 (stating that the WHO estimates “that at least 333 million new cases of sexually transmitted diseases, other than HIV infection, occurred in 1995”). By the year 2000, twenty-six million adults will be infected with HIV worldwide. Id. at 31.

42. The WHO notes, for example, that “tuberculosis has formed a lethal partnership with HIV.” Id. at 27.

43. Id. at 31-33; Nakajima, supra note 1, at 329.

44. See CDC STRATEGY, supra note 3, at 9 (reporting 150% increase in United States of childhood ear infections from 1975 to 1990); Id. at 12 (noting decreased effectiveness of drugs against pneumococcal infections, including childhood ear infections). For a more detailed analysis of changes in individual behavior, see Fidler, Return of the Fourth Horseman, supra note 4, at 803-06.

45. See Fidler, Return of the Fourth Horseman, supra note 4, at 800-01 (discussing social unrest and civil war as factors behind EIDs).

46. See id. at 801-03 (discussing environmental degradation as a factor behind EIDs); Nakajima, supra
Urbanization, which has in the last fifty years become “irrepressible and breathtakingly rapid” worldwide, helps make cities and megacities “microbe magnets.” Poverty also contributes significantly to the EID problem by fostering conditions—like poor housing, sanitation, and diets—conducive to opportunistic pathogenic microbes. Civil war, social unrest, environmental degradation, urbanization, and poverty combine to confront governments worldwide with a daunting set of “root causes” for the EID crisis.

Government policy has, unfortunately, also helped EIDs become the threat they are today. For example, public health officials and politicians in the United States believed that infectious diseases had been conquered and, as a result, became complacent about the threats from pathogenic microbes. This complacency directly contributed to the deterioration of the public health system in the United States and its ability to protect Americans from infectious diseases. Infectious disease control and prevention capabilities elsewhere in the world also were either inadequate or nonexistent. As the severity of the EID crisis became apparent in the early 1990s, governments found that their complacency and lack of commitment to public health capabilities left them in a weak condition to confront one of the most serious public health threats in history.

4. Factors Involving International Relations

EID experts frequently cite global travel and trade as key factors in the development of the worldwide EID threat. Pathogenic microbes often hitchhike on people and goods that move about the planet at record speeds and volumes. Thus, key modes of private and public intercourse in the contemporary international system provide opportunities for infectious

---

note 1, at 323 (stating that “global climate change could lead to the emergence and resurgence of infectious diseases”).

47. GARRETT, supra note 40, at 247.

48. Id. at 234. See also Nakajima, supra note 1, at 322 (discussing infectious disease problems caused by urbanization).

49. See Fidler, Return of the Fourth Horseman, supra note 4, at 808-10 (discussing poverty as a factor behind EIDs).

50. IOM REPORT, supra note 3, at vi (noting complacency toward the danger of EIDs of the “scientific and medical communities, the public, and the political leadership of the United States”).

51. See Fidler, Return of the Fourth Horseman, supra note 4, at 788-94 (discussing the complacency within and breakdown of U.S. public health infrastructure).

52. Id. at 791-92 (discussing poor condition of infectious disease control capabilities worldwide).

53. Id. at 794-800 (discussing global travel and trade as factors behind EIDs).
diseases to spread to new populations or regions. International travel and commerce have historically been the great channels for the global spread of infectious diseases.\textsuperscript{4} This situation has long placed governments in the difficult position of desiring global travel and trade but fighting the unwanted byproduct of infectious disease importation. Since 1851, international cooperation on infectious diseases has sought to resolve this dilemma.\textsuperscript{5}

\textbf{C. Do We Really Need to Worry About EIDs?}

Although public health literature in the 1990s contains much analysis indicating that EIDs are great global problems, a recent study sponsored by the WHO, the World Bank, and the Harvard School of Public Health suggests the crisis may not be so critical. Researchers at the Harvard School of Public Health and the WHO concluded that projections on the future impact of infectious diseases based on their statistical compilations indicate that deaths caused by infectious diseases will decrease by more than half as a percentage of total disease deaths.\textsuperscript{6} A key assumption driving these projections is that the progress made against infectious diseases since World War II will continue into the future.\textsuperscript{7} The study instead suggests that a greater future public health threat looms in the use of tobacco because “[b]y 2020, the burden of disease attributable to tobacco is expected to outweigh that caused by any single disease.”\textsuperscript{8}

\textsuperscript{54} P. Dorolle, \textit{Old Plagues in the Jet Age}, 23 WHO CHRON. 103, 103 (1968) (stating that the observation that diseases could be transmitted by man or goods through international transportation is ancient). On travel as a factor in the EID problem, see generally Mary E. Wilson, \textit{Travel and the Emergence of Infectious Diseases}, 1 EMERGING INFECTIOUS DISEASES 39 (Apr.-June 1995).

\textsuperscript{55} Howard-Jones, \textit{Origins of International Health Work}, supra note 31, at 1033-34 (noting that the threat of infectious diseases from travellers was one of the key reasons for holding the first international sanitary conference in 1851). The dilemma remains as illustrated by the purpose of the International Health Regulations administered by the WHO: “to ensure the maximum security against the international spread of diseases with a minimum interference with world traffic.” WORLD HEALTH ORG., \textit{INTERNATIONAL HEALTH REGULATIONS} 5 (3d ed. 1983) [hereinafter \textit{INTERNATIONAL HEALTH REGULATIONS}].

\textsuperscript{56} \textit{SUMMARY: THE GLOBAL BURDEN OF DISEASE: A COMPREHENSIVE ASSIGNMENT OF MORTALITY AND DISABILITY FROM DISEASES, INJURIES, AND RISK FACTORS IN 1990 AND PROJECTED TO 2020} 32 (Christopher J.L. Murray & Alan D. Lopez eds., 1996) [hereinafter \textit{GLOBAL BURDEN OF DISEASE}]. This projected decline in the impact of infectious diseases “runs counter to the now widely-accepted belief that infectious diseases are making a comeback worldwide.” \textit{id.} at 34.

\textsuperscript{57} The infectious disease “projection reflects the observed overall decline in [infectious diseases] over the past four decades, due to increased income, education and technological progress in the development of antimicrobials and vaccines.” \textit{id.} at 34.

\textsuperscript{58} \textit{id.} at 38.
While this study does not claim that it is time to close the book on infectious diseases (as the U.S. Surgeon General did in 1969), it does challenge the idea that EIDs are a growing global problem. A number of things combine, however, to raise the question whether the challenge posed by this study is coherent. First, although the WHO sponsored this statistical study, it does not appear to accept the projection that infectious diseases will continue to decline as a global public health burden. The WHO dedicated its 1996 World Health Report to detailing the global crisis in EIDs. More significantly, the WHO appears to believe that the great progress against infectious diseases made during the forty years after World War II cannot be projected into the future. As the WHO Director-General recently wrote, “numerous factors identified by WHO suggest that communicable diseases will continue to be a major problem well into the twenty-first century.” Those factors include ones analyzed in the previous section of this article: urbanization, poverty, environmental degradation, and global trade and travel. The study’s conclusion—“as long as, and only if, current efforts are maintained, [infectious diseases] are likely to continue to decline”—seems to ignore the compelling evidence that “current efforts” are seriously inadequate to deal with the resurgence of infectious diseases throughout the world. One conclusion to make from this study is that future policy on infectious diseases is too important to leave to statistics. Another conclusion is more frightening—if the predictions about the global crisis in EIDs continue to come true, and if the study’s predictions about tobacco-related diseases are accurate, global public health in the twenty-first century is in deep trouble.

IV. THE PATHOLOGY OF THE GLOBALIZATION OF PUBLIC HEALTH

Merely listing the awesome set of factors that contribute to the EID problem does not give much insight into the processes of globalization that are undermining sovereignty in the public health context. In this part, I analyze how the various factors behind EIDs combine to produce the globalization of public health. This analysis seeks to identify exactly what factors contribute to the denationalization of public health and stimulate the need for

60. Nakajima, supra note 14, at 322.
61. Id. at 322-24 (identifying urbanization, poverty, climate change, and global trade and travel as factors making EIDs a major global problem for the twenty-first century).
62. GLOBAL BURDEN OF DISEASE, supra note 56, at 35.
internationalization in public health policy. I attempt, if you will, a pathology of the globalization of public health both historically and in the contemporary situation. In this analysis, I do not mean to suggest that globalization is the root of all evil with respect to EIDs. Rather, I am interested in how the processes of globalization amplify or facilitate the conditions that produce the global spread of infectious disease and, thus, denationalize public health. Poverty has, for example, been part of the human condition for millennia. What is it about contemporary international relations that makes poverty in the developing world critically relevant to public health in developed countries? Developed states have considered the economic condition of developing countries to be relevant to their various policy interests such as national security, exports, and immigration. In the last few years, however, poverty in the Third World has been discussed extensively as adversely affecting public health in the First World as a result of the growing awareness of the EID threat. The factors behind EIDs and the processes of globalization produce the phenomenon of the globalization of public health.

A. Globalization of Public Health Emerges

Some historical perspective helps focus analysis on the current state of affairs. As previously indicated, since at least 1851 when efforts at international cooperation on infectious diseases first began, states have realized the threat to national public health caused by the spread of disease from foreign countries through international trade and travel.63 As early as 1866, experts were arguing that the traditional national strategy against the importation of infectious diseases—quarantine—was no longer an effective policy given the growth of international trade and travel.64 In addition, the first international sanitation conference in 1851 and subsequent such international gatherings in the nineteenth century were driven by concerns in European countries about infectious diseases spreading to Europe from non-European areas through international travel and trade.65

---

63. See Howard-Jones, The Scientific Background of the International Sanitary Conferences, 1851-1938, supra note 31, at 11 (recording that the first call for international cooperation on infectious diseases was made in 1834 by France, which was unsuccessful at that time in convening an international conference to address the spread of infectious diseases).
65. See Howard-Jones, Origins of International Health Work, supra note 31, at 1035 (arguing that European fears of contamination by non-European nations motivated nineteenth-century international health
While fears about disease importation from non-European nations may have been the foremost concern of European countries at nineteenth-century international conferences on the spread of infectious diseases, another important factor was the vulnerability of European nations to infectious disease outbreaks. For example, cholera was one infectious disease the delegates at the 1851 international sanitary conference discussed, and cities in Europe and North America suffered “four devastating pandemics of cholera” between 1830 and 1896. The major reason for these cholera outbreaks in European and North American cities was inadequate water and sewage systems. Poor public health conditions in European and North American cities additionally contributed to the spread of other infectious diseases, like tuberculosis. Public health capabilities in nineteenth-century Europe, thus, rendered European populations, particularly in urban areas, vulnerable to pathogenic microbes.

Two factors, then, combined to produce the globalization of public health initially seen in the mid-nineteenth century. The first factor was the power of international travel and trade to spread infectious diseases across borders around the world. The second factor was the inadequate public health and sanitation systems that existed (or did not exist) in both European and non-European regions. Thus, in the nineteenth century, pathogenic microbes had both fertile conditions in which to infect people and effective means of traveling to new regions to spread illness and death amongst vulnerable populations. Increasing rates and volumes of international trade and travel combined with poor or nonexistent public health capabilities to produce the pathology of the globalization of public health in the nineteenth century.

---

66. Howard-Jones, Origins of International Health Work, supra note 3, at 1033-34.
67. GARRETT, supra note 40, at 241.
68. Id. (noting that cholera “spread primarily via the cities’ fetid water and sewage ‘systems’”)
69. Id. at 240-43.
70. These two factors are similar to the two factors Goodman identified as producing official international health cooperation: (1) “the vast and rapid development of trade and travel” which “rendered commercial interests intolerant of the losses and delays imposed on them in the name of quarantine at the ports of each country”; and (2) the vulnerability of Europe to cholera epidemics. GOODMAN, supra note 31, at 36-38.
B. The Renationalization of Public Health in Developed Countries

The globalization of public health caused alarm in the latter half of the nineteenth century as evidenced by the flurry of international efforts to control the spread of infectious diseases. This sense of urgency seems to have dissipated during the twentieth century until the 1990s, when the EID crisis captured the world's attention. If my pathology of the nineteenth-century globalization of public health is correct, then we should anticipate that the decreasing sense of urgency about the international spread of infectious diseases would be produced by one or both of two trends: (1) a decrease in international trade and travel, and (2) an improvement in public health capabilities in countries around the world. Because the speed and volume of international trade and travel have astronomically increased since the nineteenth century, we should look, therefore, at possible improvements in public health worldwide to explain this decreased concern over the globalization of public health.

While generalizations are always suspect, I think the evidence generally suggests that public health capabilities have improved in developed countries during the twentieth century. Improvements in public sanitation and hygiene within European and North American cities during the late-nineteenth and early-twentieth centuries have had significant impact on the spread of infectious diseases. The vulnerability of developed countries to the ravages of diseases like cholera and tuberculosis dramatically decreased because of improvements to public health systems. These improvements greatly reduced the likelihood that the importation of cholera from a less affluent part of the world would trigger an epidemic in any city in the Northern Hemisphere.

71. As used in this article, "renationalization" means the process by which states regained national control of public health policies toward infectious diseases.

72. For a detailed review of these international efforts, see GOODMAN, supra note 31, at 42-69 (discussing the ten international sanitary conferences convened from 1851 to 1897); HOWARD-JONES, THE SCIENTIFIC BACKGROUND OF THE INTERNATIONAL SANITARY CONFERENCES 1851-1938, supra note 31, at 12-80 (discussing the ten international sanitary conferences held between 1851 and 1897).

73. GARRETT, supra note 40, at 242 (noting the efforts to improve urban hygiene and sanitation in the latter half of the nineteenth century and, as a result, the declining prevalence of infectious disease epidemics).

74. "Continuing improvements of water and waste systems reduced diarrheal diseases even though cities kept growing. In the 1890s, when cholera again ravaged many nations, Europe and North America went almost untouched." ARNO KARLEN, MAN AND MICROBES: DISEASE AND PLAGUES IN HISTORY AND MODERN TIMES 138 (1995).
Advances in epidemiology and antimicrobial pharmaceuticals also improved public health capabilities in the developed world. Nineteenth-century efforts to deal with the domestic or international spread of infectious diseases were handicapped by a lack of accurate scientific information about those diseases. During the late-nineteenth and early-twentieth centuries, scientists and physicians made great strides in epidemiology, which helped public health officials design more effective strategies to prevent and control infectious diseases. Scientific research and understanding of the microbial world also led to important advances in antimicrobial treatments. Laurie Garrett records that during the 1950s and 1960s "[n]early every week the medical establishment declared another ‘miracle breakthrough’ in humanity’s war with infectious disease." These scientific advances in antimicrobial drugs were so tremendous that experts began to believe that the days of infectious diseases were numbered.

Advances in public health capabilities strengthened by a potent arsenal of antimicrobial drugs dramatically reduced the frequency and costs of infectious diseases in the developed world. The sovereign states of the developed world had apparently succeeded in renationalizing public health, in that public health reforms and antimicrobial treatments gave them more control of public health within their borders.

This renationalization of public health, it is important to stress, was limited to the developed world. Infectious diseases, like tuberculosis, that virtually disappeared in the Northern Hemisphere during the twentieth century, remained deadly throughout much of the Southern Hemisphere. The continued prevalence of infectious diseases in the developing world in combination with the vast increase in international travel and trade would seem

75. Howard-Jones states, for example, that "[t]he history of the earlier international sanitary conferences is one of nations driven to international negotiation by a common danger but completely unable to reach agreement because of the limitations of scientific knowledge." Howard-Jones, Origins of International Health Work, supra note 31, at 1034.

76. KARLEN, supra note 74, at 139 (noting that "in the late nineteenth and early twentieth centuries, hardly a year went by without a major discovery about the cause, transmission, prevention, or cure of infectious disease").

77. GARRETT, supra note 40, at 30.

78. Id. (noting that "[f]ew scientists or physicians of the day doubted that humanity would continue on its linear course of triumphs over the microbes").

79. See id. at 243 (noting that while the Northern Hemisphere experienced an enormous decline in tuberculosis, it "raged across Africa, Asia, and South America"). The same is also true for malaria. While malaria has disappeared as a problem for developed countries, malaria "is endemic in 91 countries, with about 40% of the world’s population at risk." WORLD HEALTH REPORT 1996, supra note 14, at 47.
to be a likely source of concern for developed countries. And yet, for most of this century, it was not—primarily for two reasons. First, the renationalization of public health gave developed countries powerful weapons to use against any imported infectious diseases. In other words, developed countries believed their sovereignty in public health to be protected from the inherent problems within international trade and travel by improved public health systems and a potent arsenal of antimicrobial drugs. Second, those powerful weapons of improved public health capabilities and antimicrobial treatments were dispersed globally through internationalization—primarily under the programs of the WHO. Through the WHO, developing states had direct access to information about how to improve their public health infrastructures and what antimicrobial drugs to use against infectious diseases. The internationalization of public health programs featured centrally in the concept of the “health transition”, which posited that “as nations moved out of poverty and the basic food and housing needs of the populations were met, scientists could use the pharmaceutical and chemical tools at hand to wipe out parasites, bacteria, and viruses.” Through internationalization of public health programs, developing countries would learn to transition toward the type of public health enjoyed in the developed world.

The internationalization of public health did not, however, achieve the objective of improving public health capabilities in much of the developing world. In the mid-1970s, the WHO’s Director-General stated that “the most signal failure of the World Health Organization, as well as of Member States, has undoubtedly been their inability to provide the development of basic health services.” Another commentator noted in 1992 that “[s]ince WHO initiated the Health for All strategy [in 1977], disparities in health standards between rich and poor nations have increased and health spending in most developing nations has declined.” Many developing countries did not, therefore, enjoy the benefits of improved public health capabilities experienced in the developed world. Nor did the availability of antimicrobial drugs have the same dramatic effect on public health in developing countries as it did in

80. Fidler, Globalization, International Law, and Emerging Infectious Diseases, supra note 4, at 78 (noting how public health programs have “gone global”).
81. GARRETT, supra note 40, at 31.
82. Kurt Waldheim, Health in a World Perspective, in Health and Development 1, 3 (Kevin M. Cahill ed., 1976) (quoting Director-General of the WHO, Dr. Halfdan Mahler).
developed countries. One expert notes that outside the industrialized world tuberculosis “remains undaunted by ostensibly effective drugs, which are used too late, inappropriately, or not at all....” 84

The internationalization of public health programs through the WHO in the latter half of the twentieth century differs fundamentally from the internationalization of the latter half of the nineteenth century. As Norman Howard-Jones observes, in the nineteenth century, nations were “driven to international negotiation by a common danger . . . .” 85 In the twentieth century, as developed nations renationalized public health, the “common danger” faded as infectious diseases remained a problem for the developing world only. Unlike in the mid-nineteenth century when the globalization of public health was first seen, internationalization on the spread of infectious diseases was not the only solution for developed countries in the twentieth century as they became able to regain sovereign control over public health. In other words, the national interest of developed states in the international control of infectious diseases was weakened by the impact, and perceived future impact, of adequate public health systems and antimicrobial pharmaceuticals. 86 During most of the post-1945 period, then, the internationalization of public health has held marginal interest for developed countries that view it merely as a means for developing states to transition toward improved public health. 87 From a public health perspective, the international system would have states more or less self-sufficient in public health matters cooperating internationally to

84. Paul Farmer, Social Inequalities and Emerging Infectious Diseases, 2 EMERGING INFECTIOUS DISEASES 259, 263 (Oct.-Dec. 1996). Farmer quotes one of the world’s leading tuberculosis experts as saying: “It is sufficiently shameful that 30 years after the recognition of the capacity of triple-therapy . . . to elicit 95% + cure rates, tuberculosis prevalence rates for many nations remain unchanged.” Id. (quoting M. Iseman, Tailoring a Time-Bomb, 132 AM. REV. RESPR. DIS. 735-36 (1985)).


86. Evidence that national interest in international health matters in the United States during the post-1945 period has declined can be found in Kevin Cahill’s observation that the Congressional hearings on the proposed International Health Agency Act of 1971 were the first “hearings on international health in more than 15 years and the declining medical programs of the Agency of International Development (AID) were virtually unknown by those who annually allocated the funds.” Kevin M. Cahill, Introduction, in HEALTH AND DEVELOPMENT, supra note 82, at xii-xiii. On these hearings, see International Health Agency Act of 1971, Hearings on H.R. 10042 Before the House Subcomm. on Int’l Orgs. and Movements of the Comm. on Foreign Affairs, 92nd Cong. (1971).

87. Pannenborg notes, for example, that the WHO Fifth Program of Work (1973-1977) gave top priority to strengthening national health services in developing countries. CHARLES O. PANNENBORG, A NEW INTERNATIONAL HEALTH ORDER: AN INQUIRY INTO THE INTERNATIONAL RELATIONS OF WORLD HEALTH AND MEDICAL CARE 189 (1979).
supplement the sovereign state's control over infectious diseases. The focus, therefore, was clearly at the state level—not at the international level.

C. Globalization of Public Health Reemerges

The current opinion that the distinction between national and international public health has been obliterated largely through the emergence and reemergence of infectious diseases indicates that the globalization of public health has reemerged as a problem. As I have argued elsewhere, in the reemergence of the globalization of public health, "history is merely repeating itself" in that "the attention being generated on EIDs comes mainly from the developed world, which fears the spread of infectious diseases from the developing world."\(^{88}\) Not surprisingly, the pathology of the globalization of public health examined for nineteenth-century circumstances also proves useful in analyzing the globalization of public health in the era of EIDs.

As mentioned earlier, most EID experts cite international travel and trade as key factors in the EID problem. This observation echoes those made in the nineteenth century about the significance of international travel and trade in the spread of infectious diseases. A major difference with contemporary concerns about international trade and travel from historical antecedents is found in the greatly increased speed and volume of global traffic in the late twentieth century. The upward trend in international travel since 1945 has been phenomenal. In 1951, seven million passengers flew internationally.\(^{89}\) By 1967, fifty-one million passengers travelled by air internationally.\(^{90}\) By 1993, this number had increased to approximately 500 million\(^{91}\)—representing a 3,500 percent increase in international air travel since 1951. Even before the advent of air travel, experts had recognized that the scope of international travel had rendered national quarantine strategies ineffective.\(^{92}\) The explosion in global travel facilitated by air technology now threatens national public health strategies in a similar fashion.\(^{93}\)

---

89. Dorolle, * supra* note 54, at 104.
90. *Id.*
92. As early as 1866, some experts argued that quarantine measures had become ineffective. *See Gutteridge, supra* note 64, at 2.
93. In 1966, long before the EID crisis developed, a U.S. Public Health Service advisory committee concluded that "it is no longer possible to have confidence in the idea of building a fence around this country
Increases in the volumes and types of international trade also factor into the EID problem, as they had done in the context of nineteenth-century infectious diseases. Today's new twist is that trade between developed and developing countries is at its greatest level. For example, seventy percent of fruits and vegetables consumed today in the United States are imported from developing countries, and “[m]ore than 45 percent of the fish and fishery products traded on the international market come from developing countries, including some in which food-borne parasites are endemic.” Such trading channels provide opportunities for pathogenic microbes to migrate from the developing world to the developed world, which worries the Institute of Medicine: “[i]nternational trade has become so pervasive that it is virtually impossible to screen most of the food entering the country for known microbial hazards, let alone for new microbiological threats.”

International travel and trade are factors in the reemergence of the globalization of public health because they have through sheer increases in speed, volume, and type regained the potential to disrupt national public health strategies. More is needed, however, to explain this disruptive potential because travel and trade were increasing during the period in the twentieth century when developed states renationalized public health. Here is where the second element of the pathology of the globalization of public health comes into play: the capabilities of public health systems in sovereign states. Again, history is repeating itself, with some added twists.

As noted earlier, globalization of public health in the nineteenth century occurred partly because public health capabilities in developed as well as developing regions were extremely poor and because epidemiology was not well advanced. Today, the EID threat is largely attributed to (1) deteriorating or nonexistent public health infrastructures at the national level, and (2) the

---

94. Emerging Infections Hearings, supra note 36, at 44 (statement of Dr. Michael Osterholm).
95. Nakajima, supra note 1, at 324.
96. IOM REPORT, supra note 3, at 68.
97. See Ruth L. Berkelman et al., Infectious Disease Surveillance: A Crumbling Foundation, 264 SCIENCE 368, 368 (1994) (noting that ability in the United States to detect and to monitor infectious diseases is in jeopardy); J. Michael O'Brien et al., Tempting Fate: Control of Communicable Diseases in England, 306 B.RIT. MED. J. 1461, 1461 (1993) (arguing that Britain’s infectious disease surveillance system “is out of date and needs substantial reforms”); CISET REPORT, supra note 3, at 17 (noting that infectious disease surveillance in African countries “is nearly non-existent”); Id. at 45 (noting the lack of resources for public health in many developing countries).
decreasing effectiveness of antimicrobial drugs. The very weapons that allowed developed countries to reverse public health's globalization have lost much of their effectiveness. Statements by national public health officials today lamenting the condition of national public health systems in developed countries or fretting about the increased threat of antimicrobial resistance clearly suggest that the era of renationalization of public health is over.

While the EID problem exhibits the same pathology as the infectious disease problems of the nineteenth century, two new elements have to be added to give a better account for the EID crisis. Those elements are: (1) the failure of the internationalization of public health programs; and (2) the alarming deterioration in social, economic, and environmental conditions, especially in the developing world, that produce fertile habitats for pathogenic microbes.

First, as indicated earlier, the internationalization of public health in the twentieth century primarily aimed at improving public health in the developing world through the health transition concept. While significant progress against some infectious diseases has been made—most notably in the eradication of smallpox—the global EID crisis proves that infectious diseases continue to ravage the developing world. National public health infrastructures in many Third World nations still remain inadequate or nonexistent. With rare exceptions, the potent bounty of antimicrobial drugs made available globally through internationalization has had no significant impact on their intended targets. Further, the use and misuse of antimicrobial drugs in the developing world have contributed to the growth of antimicrobial resistance in such diseases as malaria and tuberculosis. The internationalization of public health started in the mid-nineteenth century and acceleration by the WHO in the latter half of the twentieth century has not proven successful in helping many states control and prevent the spread of infectious diseases.

The second new element to add to an updated pathology of the globalization of public health combines the many social, economic, and environmental factors behind EIDs outlined earlier. In the late twentieth

---


99. WORLD HEALTH REPORT 1996, supra note 14, at 9 (noting that infectious diseases will continue to exact the heaviest costs on developing countries).

100. The WHO has argued that the widespread use and misuse of antimicrobial drugs in developing countries has contributed to drug resistance developing in many diseases. World Health Org., supra note 98.
century, humankind has created a depressing menagerie of ills that nurture pestilence that did not exist or existed on much smaller scales in the nineteenth century. Unprecedented levels of sexual promiscuity, urbanization, poverty, and environmental degradation create environments where pathogenic microbes of all varieties—bacterial, viral, parasitic, and fungal—flourish at the expense of human populations. Much of the human expense is borne by those least able to withstand infectious disease threats—the people of the Third World.

Many of the social, economic, and environmental problems that benefit the opportunistic microbial world are caused or exacerbated by globalization in other contexts. International political economists have analyzed, for example, the growing loss of the sovereign state’s control over its domestic economy through global economic interdependence and integration. The globalization of markets “has intensified economic competition and increased pressure on governments to reduce expenditures, including the funding of public health programs, leaving states increasingly unprepared to deal with emerging disease problems.” In addition, the loss of economic control arguably reduces the state’s ability to counteract such socioeconomic problems as poverty or urbanization or to slow down the environmental damage resulting from economic activity. Thus, the globalization of markets for goods, capital, and services tends to exacerbate social, economic, and environmental problems, particularly in the developing world, that provide enormous opportunities for pathogenic microbes.

The new pathology for the globalization of public health in the era of EIDs contains, therefore, five parts:

1) international trade and travel as effective channels for infectious disease spread;

2) deteriorating or nonexistent public health capabilities, including the declining effectiveness of antimicrobial drugs;

3) the failure of the internationalization of public health;

101. Susan Strange, Political Economy and International Relations, in International Relations Theory Today 154, 160-61 (Ken Booth & Steve Smith eds., 1995) (analyzing why “the state can no longer exercise control over the domestic economy”).

102. Fidler, Globalization, International Law, and Emerging Infectious Diseases, supra note 4, at 78.
4) the development of unprecedented levels of deeply-rooted social, economic, and environmental problems that provide pathogenic microbes with fertile conditions; and

5) the weakening of the state's ability to control its domestic economy and thus to address public health needs and social, economic, and environmental problems because of the globalization of markets.

The implications of this new pathology are grim. Because of market globalization, developing states fail or are unable to reduce the social, economic, and environmental problems that continue to benefit pathogenic microbes. As a result, the developing world remains a giant reservoir of microbial threats. The massive scale of international trade and travel—which shows no signs of declining—means that the developed world is constantly under threat from microbial importation from the developing world. Inadequate and deteriorating public health infrastructures in the developed world leave their populations vulnerable to disease importation. Further, the same social, economic, and environmental problems confront developed states as well (albeit on smaller scales), which promotes the emergence and reemergence of infectious diseases within the territories of developed states. The inadequate public health systems also increase the vulnerability of populations to indigenous EIDs. Travel and trade connections between developed countries can also create inter-developed states infectious disease threats.

The globalization of markets also handicaps developed states, if not
as profoundly as developing countries, in addressing social, economic, and environmental problems and in finding financial resources to commit to rebuilding public health capabilities. Efforts to combat this new globalization of public health through internationalization face all the problems created by social, economic, and environmental problems; by nonexistent, inadequate, or deteriorating public health capabilities; by the scale and speed of global traffic; by the limitations on political action created by the globalization of markets; by the historical failures of prior internationalization in this area; and by the difficulty that always exists in international relations in getting sovereign states to agree to effective cooperation. The globalization of public health in the era of EIDs represents a far more complex and daunting phenomenon than its nineteenth-century predecessor.

V. RESPONSES TO THE NEW PATHOLOGY: LESSONS FROM INTERNATIONAL RELATIONS THEORY

The foreboding quality of the globalization of public health in the era of EIDs has not escaped national and international experts on infectious diseases. The United States, the European Community, and the WHO have each crafted and begun implementation of action plans designed to deal with the global crisis caused by the EID problem. Elsewhere, I have analyzed in detail the

responded by planning to block importation of European Community pork, beef, and other animal products exports. Id. According to the Financial Times, "EU officials say the dispute centres on two different approaches to food safety. The EU stresses preventative measures in various steps of the process. The US believes if the final product is made safe, then the process matters less." Emma Tucker & Nancy Dunne, US and EU to Try to Resolve Meat Hygiene Dispute, FINANCIAL TIMES, Apr. 3, 1997, at 4. In late April 1997, the U.S. and the European Community reached an agreement under which each side would recognize the other's meat inspection standards; but the agreement did not resolve the impasse over U.S. poultry processing methods. Stephanie Nall, US and EU Grind Out a Meat Inspection Pact, J. COM., May 2, 1997, at 3A. After this agreement was reached, the United States threatened to block importation of European poultry exports. Peter Blackburn, US Ruffles EU Feathers in Meat Trade Deal, Reuter Eur. Rep., May 2, 1997, available in LEXIS, News Library, NONUS File. The European Commission has threatened to take the United States to the World Trade Organization because of the U.S. move against E.C. poultry exports. Id.

105. While there has been a long history of cooperation on international control of infectious diseases, the development of such cooperation took a great deal of time. Cooper notes that "[i]t took over seventy years from the first call for international cooperation in the containment of the spread of contagious disease in 1834 to the time, in 1907, when an international organization was first put in place to deal with the problem; and even that represented only the beginning." RICHARD N. COOPER, INTERNATIONAL COOPERATION IN PUBLIC HEALTH AS A PROLOGUE TO MACROECONOMIC COOPERATION 86 (1986).

106. See CDC STRATEGY, supra note 3 (detailing the U.S. strategy). See also CISET REPORT, supra
common features of these national, regional, and international EID strategies.\footnote{7} Boiled down to their main emphases, the various EID action plans promote improved (1) internationalization of infectious disease control and prevention; (2) national public health capabilities; and (3) applied epidemiological research. The common features of the EID plans bear a resemblance to the approach states took in the nineteenth century: international cooperation on infectious diseases, strengthened national public health infrastructures and policies, and better epidemiology through scientific research. EID experts do not, however, hold out any prospects for the renationalization of public health as happened in the developed world for much of the twentieth century. The globalization of public health seems, at this moment at least, like a permanent condition. In this part, I examine the implications of this permanence for our understanding of international relations. My analysis is not a detailed examination of the EID plans created to date. Rather, I am interested in broadening the discourse on EIDs by placing the globalization of public health within three major theoretical frameworks of international relations. I hope this theoretical approach yields some interesting insights that can be applied to the practical efforts underway to deal with the globalization of public health.

The theoretical frameworks utilized in this part are realism, liberalism, and what is called "critical international theory." Realism, liberalism, and Marxism have generally been considered the three great traditions in international relations theory.\footnote{8} I substitute critical international theory for Marxism because the former is partially a progeny of the latter.\footnote{9} Also, the collapse of Soviet communism has rendered classical Marxism a rather defunct note 3 (detailing the U.S. strategy). The European Community approach can be located in European Commission Concerning Communicable Disease Surveillance Networks in the European Community, COM(96) 78. The WHO strategy can be found in Division of Emergency and Other Communicable Diseases Strategic Plan Outline 1996-2000, WHO Doc. EMC/96.1 (1996).

107. See Fidler, Return of the Fourth Horseman, supra note 4, at 819-32 (analyzing EID action plans).


theory of international relations, while critical international theory remains quite vibrant.\(^{110}\)

**A. Realism**

The realist tradition in the study of international relations "is widely regarded as the most influential theoretical tradition in International Relations . . . ."\(^{111}\) The core elements of realism are (1) the proposition that states are the primary actors in international relations; (2) the belief that the anarchic nature of the international system determines state behavior in that such an anarchical system forces states to pursue power; (3) the belief that the rational pursuit of power by states in an anarchical system leads inevitably to conflict and war between states, which places a premium on the possession of military power; (4) the assertion that international law and international organizations represent mechanisms of temporary accommodation in the struggle for power but do not fundamentally alter the dynamics of international relations; and (5) the belief that the anarchical structure of the international system has the same effect on all states regardless of domestic regime type, meaning that analysis of international relations should ignore what kind of state acts in any given situation.

At first glance, realism might appear to have nothing constructive to say about the globalization of public health because realism focuses on sovereign states, their pursuit of power, and their machinations in peace and war. The globalization of public health by definition refers to the loss of sovereign power in the field of public health. Perhaps a more fruitful approach would be to consider public health as an important element in the power calculations of states in the anarchical international system. One could argue, for example, that the control of infectious diseases should be important in realism because such control (or lack thereof) affects both economic and military power. Infectious diseases can cause huge economic losses by killing or sickening workers, thus undermining a state's economic productivity and power.\(^{112}\)

---

110. *Id.* at 173 (discussing contributions of critical theory to the study of international relations).


112. The U.S. Department of State, for example, has argued that HIV/AIDS alone "threatens the sustainable development of many countries." U.S. Department of State, United States International Strategy on HIV/AIDS (Dept. of State Pub. 10296) (Sept. 1995), at 1 [hereinafter *U.S. International Strategy on*].
Since military power rests ultimately on a state's economic strength, the economic losses threaten military capabilities. More directly, infectious diseases can emaciate national military forces during times of conflict or peace. A realist case can, thus, be made for concern about EIDs. The United States' argument that EIDs threaten its national security perhaps contains such a realist perspective.

Looking at public health as part of the power calculus of realism seems, however, to miss some of the crucial themes of the globalization of public health. First, realism focuses on the state and its power relative to other states. Seeing public health as one element in a nation's power suggests that it is within the sovereign state's control to act unilaterally to improve its public health. While unilateral improvements might well strengthen a state's ability to control infectious diseases, the globalization of public health emphasizes the undermining of state sovereignty. The EID challenge is, for example, forcing states to look to international cooperation rather than to unilateral action.

Second, this need for internationalization in the EID arena runs headlong into the realist skepticism about international law and international organizations. For realists, internationalization can be nothing more than a temporary convergence of national interests that can be effective only so long as the states involved find such cooperation advantageous. A realist might very well point to the failure of the member states of the WHO to comply with the International Health Regulations—"the only piece of international legislation confronting the global threat presented by communicable HIV/AIDS]. See also Confronting a Calamity, 31 UN CHRON., June 1994, at 48, 49 (stating that AIDS "threatens to undermine development efforts, depleting workforces and striking many sectors of the economy"). The debilitating costs of other infectious diseases underscores the economic threat posed by AIDS. The WHO has asserted that malaria "is closely linked to poverty and contributes significantly to stunting social and economic development." WORLD HEALTH REPORT 1996, supra note 14, at 47.

113. The U.S. Department of State has expressed concern, for example, that HIV/AIDS may begin to erode military capabilities in African, Asian, and Latin American countries. U.S. International Strategy on HIV/AIDS, supra note 112, at 41. It believes that HIV/AIDS has the potential to be a "'war-starter' or 'war-outcome-determinant'" in international relations. Id. at 40.

114. See CISET REPORT, supra note 3, at 11 (noting that "diseases that arise in other parts of the world are repeatedly introduced into the United States, where they may threaten our national health and security"). Public health experts also appeal to the realist tendencies of the American foreign policy establishment by connecting control of infectious diseases to concepts of national security. See, e.g., Laurie Garrett, The Return of Infectious Disease, FOREIGN AFF., Jan./Feb. 1996, at 66; George Alleyne, Health and National Security, 30 BULL. PAHO 158 (1996); Nakajima, supra note 1, at 319. See also Jeffrey Goldberg, Their Africa Problem and Ours, N.Y. TIMES, Mar. 2, 1997, at 32, 35 (listing emerging new diseases as one of a number of "biological national-security issues").

115. It also overlooks the fact that public health has rarely, if ever, been discussed in any realist analysis of international relations.
diseases”—as historical evidence for the insights of realism on internationalization in infectious disease control. Proposals to reinvigorate public health internationalization, as found in EID action plans, would not impress a realist, who remains skeptical about the prospects for international cooperation in international relations. Here, realism poses a serious challenge to the plans for internationalization on EIDs because the failure of past international efforts on infectious disease control resonates with its pessimistic outlook.

Third, EID experts are fond of arguing that pathogenic microbes do not recognize borders or carry passports, which is one way of saying that what is critical to realism—the anarchical structure of the international system—is irrelevant to the microbial world. For realists, the anarchical international system drives the dynamics of international relations and the behavior of states. As a theory, then, realism is not well-suited to be sensitive to the influence of non-state actors, like pathogenic microbes. In analyzing the contemporary international political economy, Susan Strange noted how little control states exercise over their domestic economies because of the globalization of markets. A major feature in the globalization of markets is the power held by non-state actors, like private companies and banks. This undermining of state sovereignty over the domestic economy led Strange to argue that this development makes it “hard for international relations scholars to insist that the state is still the primary unit of analysis in international politics.” The reemergence of infectious disease control as a major international issue reinforces Strange’s observation about the impact of globalization on international relations theory: the structure of the international system matters less to non-state actors than it does to state actors. Realism is ill-suited to calibrate this new world, but it is precisely this new world that EIDs are helping to shape.

Fourth, as the factors behind EIDs suggest, analysis of infectious diseases today has to consider many levels below the formal structure of the state, which essentially means analyzing what kind of states exist and how they

116. Nakajima, supra note 1, at 321.
117. See Fidler, Return of the Fourth Horseman, supra note 4, at 843-49 (analyzing the failure of WHO member states to comply with the International Health Regulations and how the IHR have failed to achieve their objectives).
118. Id.
119. Strange, supra note 101, at 161.
120. Id.
121. Id.
factor into EID strategies. Realism excludes consideration of what kind of states exist in the international system. To realists, states are identical, abstract units of analysis. This approach is also ill-suited for the globalization of public health because EID experts have to care about how a state prioritizes and structures its public health infrastructure both as a matter of epidemiology and public policy. Since improving national public health capabilities features in all EID plans, analysis also has to consider the likelihood of such reforms being enacted, which entails thinking about what kind of political regime states have. In addition, the nature of the political regimes (i.e., are they democracies or dictatorships?) may affect the prospects for internationalization in infectious disease control.

In analyzing realism against the context of the globalization of public health, two conclusions seem appropriate. First, realism does not provide a very useful framework for describing or analyzing the globalization of public health. Second, realism does, however, challenge the prescriptions for the EID problem because its skepticism about internationalization is borne out by the history of international cooperation on infectious disease control. Thus, realism remains a relevant theoretical perspective by injecting caution into plans for internationalization in public health. Put another way, realism seems irrelevant in helping to describe the globalization of public health, but it remains relevant in its analysis of the limitations of internationalization. Elsewhere I have described this situation as a "paradox: globalization jeopardizes disease control nationally by eroding sovereignty, while the need for international solutions allows sovereignty to frustrate disease control internationally." 122

A realist critique of the proposed EID action plans would, I believe, point in a few clear directions. First, given its emphasis on the state and power, realism would stress national public health infrastructure improvements much more than internationalization. The focus here would be on infectious disease control as a key element of national security. Primary attention should, thus, be given to the military health infrastructure to ensure that military capabilities are not eroded by infectious diseases. Secondarily, attention should be focused on the threat of disease importation by improving surveillance and perhaps resurrecting quarantine methods. Realism would give lowest priority, if any at all, to improving domestic public health capabilities that are unrelated directly to military power or disease importation because such capabilities do

122. Fidler, *Globalization, International Law, and Emerging Infectious Diseases*, supra note 4, at 83.
not necessarily affect the state’s power in the international system. Priority for purely domestic purposes would have to be upgraded only to the extent infectious diseases were seriously eroding the capacity of the domestic economy, which would over time affect the state’s international power.

Second, realism would revise the calls for internationalization on infectious diseases by refocusing the direction away from multilateralism at the WHO to unilateral and bilateral efforts at strengthening the state’s public health security. Such a direction would accord with realism’s acknowledgment that international cooperation can be a useful instrument if tailored to converging national interests as well as its skepticism about overly optimistic and ambitious scenarios for internationalization.

A realist strategy for EIDs seems to echo the renationalization of public health in the developed world during the twentieth century because of its emphasis on improving national public health capabilities. The realist strategy is not, however, a renationalization strategy because in today’s world there is too great a need for international cooperation. The realist attention to internationalization would be very focused to ensure a convergence of real national interests. Such focused internationalization might not be sufficient to protect a state from the spread of infectious diseases from other countries, but realists rarely shrink from the conclusion that foreign policy in an anarchical international system always leaves states vulnerable to a myriad of threats.

B. Liberalism

The liberal tradition in international relations theory asserts "that international relations is not fundamentally about obtaining power as a shield against anarchy but is about protecting individual liberty at home while fostering individual liberty overseas." In contrast to realism’s primary focus on the state, liberalism’s primary unit of analysis is the individual. Domestically, liberalism seeks to promote the liberty of the individual by advocating for democratic government and an economic system based on

---

123. Elsewhere I have speculated that current developments in EID diplomacy suggests “that states have decided not to rely solely on WHO to combat EIDs... Activity at multiple levels of diplomacy could be interpreted as complimentary to WHO’s leadership or more skeptically, as an alternative to WHO-dominated initiatives.” Fidler, The Role of International Law in the Control of Emerging Infectious Diseases, supra note 4, at 69.

private property and free market principles. Internationally, liberalism seeks to advance the liberty of the individual by: (1) supporting the economic interdependence of states through free trade between their peoples; (2) promoting the utility of international law and international organizations as ways to ameliorate the tensions of state interaction in the international system; and (3) seeking to foster the development of democracy and free market economics in other countries. Unlike realism, liberalism is keenly interested in the type of government and economy states have, because those are key ingredients in the recipe for individual liberty.

The first observation to make about liberalism in connection with the globalization of public health is that liberalism promotes the processes of globalization. Liberalism encourages international travel and trade because such things create economic interdependence that binds states together peacefully in mutual need.125 Liberalism cannot frown on international trade and travel as features of the globalization of public health because those processes are critical to the liberal tradition. International trade and travel may be effective channels for the global spread of infectious diseases; but they are also, under the liberal tradition, the paths toward greater individual liberty in the world and peace among states. From liberalism’s perspective, states should not reduce the scale of global trade and travel to deal with EIDs.

More problematic for liberalism is the assertion in the new pathology of the globalization of public health that the globalization of markets (which liberalism promotes) weakens the state’s ability to address the social, economic, and environmental problems that stimulate EIDs. The liberal tradition is increasingly criticized in the post-Cold War period because it diminishes the power of the state to address domestic problems while “the globalization of the world economy leaves the power of transnational corporations and financial markets unchallenged and unaccountable.”126 The globalization of markets, according to some, reduces individual liberty by subjecting individuals to the motives of unaccountable multinational corporations while reducing the scope of democratic government.

Another criticism is that the globalization of public health threatens to reduce individual liberty by exposing individuals more frequently to infectious

125. “Liberals have long sought to remove the influence of the state in commercial relations between businesses and individuals, and the collapse of national economic sovereignty is an indication that the corrupting influence of the state is rapidly diminishing.” Scott Burchill, Liberal Internationalism, in THEORIES OF INTERNATIONAL RELATIONS, supra note 109, at 62.
126. Id. at 62-63.
diseases. If governments are handicapped by the globalization of markets from effectively addressing the social, economic, and environmental problems that benefit EIDs and from committing adequate resources to public health systems, then liberalism is promoting processes that increase the likelihood of more sickness and death from infectious diseases at home and abroad.

Such criticism leads to another observation about liberalism as it relates to public health. Liberal thought traditionally has been concerned with protecting individual liberty from encroachments by the state. This focus helps explain liberalism's emphasis on individual rights, democratic government, and free market economics. Infectious disease control, and other aspects of public health, have traditionally been services provided by governments for individual and social welfare. Advocating increased government action and spending to improve deteriorating or nonexistent public health capabilities sits uneasily with the liberal tradition's classical skepticism about government involvement in social life. This discomfort and skepticism make it harder to argue the case for revitalizing national and international public health capabilities as a matter of individual liberty. In addition, liberalism's focus on the type of government running a state, which means that proposals for improving national public health infrastructures cannot be made in the abstract. The liberal tradition casts doubts on policy suggestions that make dictatorships or authoritarian governments responsible for improving public health capabilities. This attitude clearly complicates the element of EID plans that advocates improved national public health systems around the world, particularly in developing countries, because of the lack of democratic government throughout much of the developing world.

While liberalism favors democracy as a form of government, the deterioration of public health systems in the United States and other democratic countries illustrates that the presence of democracy does not necessarily go hand in hand with good public health systems. Unlike liberals, pathogenic microbes are indifferent about regime types; this means that democracy is not a sufficient public health strategy because the democracy must take certain actions based on epidemiological principles not just on the principles of liberal political theory. History demonstrates that democracies can ignore public health responsibilities to the detriment of their citizens.  

---

127. Garrett has argued that U.S. "surveillance and public health systems had reached states of inaccuracy and chaos that rivaled those in some of the world's poorest countries." Garrett, supra note 40, at 512.
These observations do not mean to imply that democracy is irrelevant to public health strategies. On the contrary, it may in fact be the case that democracies offer the best environment for improving national public health capabilities. Within democracies, the free press creates public awareness of the dangers of EIDs that eventually translates into legislative and administrative action. While skepticism of the government runs deep in the liberal tradition, so does interest in individual physical and material welfare—the provision of which sometimes necessitates government action.

The historical failure of the internationalization of public health also confronts the liberal tradition with a problem. Liberalism values international law and international organizations as mechanisms through which states can reach more pacific accommodations of conflicting interests and cooperate effectively when interests are mutually shared. In the infectious disease context, the failure of the International Health Regulations, specifically, and the WHO, generally, challenge the liberal faith in international law and institutions. The need for international cooperation produced by the globalization of public health resonates well with the liberal tradition, but embracing this need does not necessarily create successful internationalization of infectious disease control. International relations scholars have identified among liberal states more effective engagement through international law and organizations produced by the philosophical like-mindedness they share. Cooperation on infectious disease control could, thus, be very fruitful among liberal states.\(^{128}\) The problem for liberalism is that the EID plans are global in scope and thus bring into the analysis many nonliberal states, which takes away philosophical homogeneity as a catalyst for effective internationalization on infectious disease control. Liberalism is left in a position very close to realism—international cooperation is possible if national interests converge and remain converged.

Liberal recognition of the need for internationalization conforms to the EID action plans' proposal for greater international cooperation. However, liberalism's pursuit of the globalization of markets may be undermining the potential for effective internationalization on infectious disease control. The EID plans are integrated strategies, meaning that the success of each element

\(^{128}\) The United States and the European Community have, for example, begun cooperative efforts on infectious disease matters. See The New Transatlantic Agenda (visited Sept. 20, 1997) <http://europa.eu.int/en/agenda/tr06ap2.html#ii7> (noting the EID action plan that forms part of the United States and European Union New Transatlantic Agenda).
depends on the success of the other elements. If states fail or are unable to improve national public health infrastructures, then international cooperation on infectious disease is undermined because the international efforts depend on adequate national capabilities. The globalization of markets threatens the state's ability to improve national public health capabilities by (1) weakening the state's power to respond to social, economic, and environmental problems (discussed above); and (2) reducing the policy flexibility of the government to devote more resources to public health by complicating fiscal and budgetary conditions. Governments all over the world face serious fiscal constraints created by budget deficits. The globalization of markets places new pressures on governments to maintain tight fiscal policies to reduce budget deficits, interest rates, and inflation. Space for major new programs, like reinvigorating public health, is thus limited. Such domestic constraints may over time weaken efforts at internationalization on infectious disease control as the necessary national capabilities fail to materialize adequately. In addition, budget constraints at home affect the willingness of states to contribute more money for internationalization efforts. In the context of reduced state power to deal with public health threats, the individual may be forced to reconsider his or her relationship with and loyalty to the state. Losing faith in governmental institutions, particularly in an area like public health where the government traditionally has borne the burden, could damage notions of citizenship and alienate individuals from their governments. Such alienation of the individual could contribute to the weakening of the democratic process and thus in the long run threaten the principle of individual liberty.

In analyzing liberalism against the context of the globalization of public health, it is clear that liberalism is more relevant than realism in describing globalization phenomena because liberalism encourages globalization. This relevance has, however, a double edge because the globalization of markets may be undermining the liberal state's ability to deal with social, economic, and environmental problems that fuel the EID crisis and to contribute

129. The CDC asked Congress in 1995 for $125 million to implement its new infectious disease strategy, but Congress only appropriated $7.7 million. Berkelman et al., supra note 97, at 368.
130. Walker & Fox, supra note 6, at 397 ("Mobile international capital is taking a hard line on government economic policies, especially deficits . . . .").
131. Leon Gordenker, The World Health Organization: Sectoral Leader or Occasional Benefactor?, in U.S. POLICY AND THE FUTURE OF THE UNITED NATIONS 167, 176 (Roger A. Coate ed., 1994) ("The reluctance of WHO member states to provide increased funding places real constraints on the organization's ability to fund its broad agenda of health activities.").
effectively to the internationalization of infectious disease control. Liberals would probably dispute the accusation that liberalism is eroding prospects for individual liberty through globalization. Instead, liberals would argue that the combination of democracy, domestic free market economics, economic interdependence, and enlightened internationalism among states provides the best blueprint to combat the unprecedented levels of deeply rooted social, economic, and environmental problems that provide pathogenic microbes with fertile conditions. A liberal critique of the EID plans proposed to date would have to include the failure to address the need for regime transitions to democratic and free market principles. In other words, the fight against EIDs must involve not only good epidemiology but also good political philosophy in the form of liberalism applied domestically and globally. In the end, the liberal tradition advocates the same solution for the globalization of public health as it does for war—an international system made up of free market democracies operating within a globalized economy and peacefully engaging in internationalization to deal with common concerns.

C. Critical International Theory

The last theoretical perspective I will explore in the context of the globalization of public health is critical international theory (CIT). CIT is a complicated theoretical perspective that can only be briefly and incompletely explained here. CIT has been a recent development in international relations theory, but it has much older roots in the critical social theory of Marx, Hegel, Kant, and the Frankfurt School.¹³² The CIT movement in international relations theory shows a "theoretical interest in the development of a social theory which can provide a historical account of the present order, a critique of injustices and inequalities, and an assessment of immanent possibilities of change."¹³³ CIT seeks not only to explain international relations but also to make resulting explanations part of a universal project of human emancipation.¹³⁴ In this respect, CIT differs radically from realism, which teaches the permanence of conflict and power struggles in international relations and the ephemeral quality of international justice. CIT seems closer

¹³² Devetak, supra note 109, at 145-46.
¹³³ Id. at 165.
¹³⁴ Id. at 147 ("The purpose underlying critical, as opposed to traditional, conceptions of theory is to improve human existence by abolishing injustice.").
to liberalism, which has an emancipatory project focused on individual liberty. CIT differs radically from liberalism, however, because in CIT analysis the liberal tradition forms part of the present international order and helps perpetuate injustices and inequalities through its promotion of the state and global capitalism.

When applied to the pathology of the globalization of public health, CIT would immediately hone in on the development of unprecedented levels of deeply-rooted social, economic, and environmental problems that fuel infectious disease epidemics as well as the alleged worsening of these problems through the globalization of markets. These two elements of the pathology of the globalization of public health would attract CIT because they represent the institutionalization of inequality and injustices domestically and globally. CIT would seek to explain the historical origins of these inequalities by examining how the institution of the state, the dynamics of the international system, and the globalization of markets developed to produce conditions where the poor suffer disproportionately from infectious diseases. Such a historical analysis would surely examine as a key dynamic of the globalization of public health in the nineteenth and late twentieth centuries the self-interested behavior of developed states in clamoring for internationalization on infectious diseases sandwiched in between decades where developing countries continued to suffer the ravages of infectious diseases long controlled in affluent countries. CIT might see in both the international system (the focus of realism) and the globalization of markets (a goal of liberalism) patterns of human behavior that subject millions of people unnecessarily to premature death and illness from infectious diseases.

CIT might also find fertile ground for critical analysis in international travel and trade as conduits for infectious disease spread and as adjuncts to the globalization of markets. The deterioration or nonexistence of national public health systems might yield CIT insights into the behavior of political, medical, and scientific elites vis-à-vis the poor and powerless in a society.

The potential for CIT analysis of the globalization of public health is suggested by a recent article by Paul Farmer, in which he argues for the development of a critical epistemology of EIDs. Farmer maintains that a critical epistemology of EIDs should focus on (1) social inequalities as contributors to EIDs; (2) transnational forces like travel and how they affect disease emergence; and (3) the dynamics of change that would allow EID

135. Farmer, supra note 84, at 259.
analysis to avoid "outmoded units of analyses, such as the nation-state." Significantly for CIT purposes, Farmer argues that "[t]he study of borders qua borders means, increasingly, the study of social inequalities."

Key to CIT analysis is finding in the historical analysis of the development of national and international inequalities and injustices immanent possibilities for radical transformation in favor of human emancipation. CIT might view the EID action plans as defective because they accept the status quo of sovereign states, the international system, and the globalization of markets. CIT's problem with realism thus might apply to the proposed EID action plans—"By working within the given system it tends to preserve the existing global structure of social and political relations; it has a stabilizing effect." Farmer echoes this point in his assertion that "[s]tandard epidemiology, narrowly focused on individual risk and short on critical theory, will not reveal these deep socioeconomic transformations, nor will it connect them to disease emergence." Just as Farmer encourages EID analysis to break free from standard epidemiological approaches, CIT would look for potential emancipatory forces outside the recommendations for action found in EID plans.

The great enigma about CIT is what the emancipatory alternatives to realism or liberalism are. With realism and liberalism, the normative visions are very clear and precise. When it comes to this part of the analysis, CIT tends to retreat into abstract, general concepts that provide little concrete direction. Here is an example: "Critical international theory's aim of achieving an alternative theory and practice of international relations centers on the possibility of overcoming the sovereign state and inaugurating post-sovereign world politics." What exactly does this mean generally for international relations and specifically for the globalization of public health? Richard Devetak presents a CIT vision of an alternative to state sovereignty, international anarchy, and unaccountable globalization that relies on what is called "discourse ethics." Discourse ethics is apparently a way in which principles of political action—as in connection of infectious diseases—can be universally and democratically arrived at through some kind of cosmopolitan

136. Id. at 265-66.
137. Id. at 266.
138. Devetak, supra note 109, at 150.
139. Farmer, supra note 84, at 265.
140. Devetak, supra note 109, at 173.
141. Id. at 270-73 (discussing discourse ethics as a way for CIT to provide an alternative vision).
political and moral discourse.\textsuperscript{142} Discourse ethics under CIT expressly bypasses the state because the state is a structure laden with inequality and injustice. The idea apparently is to create a cosmopolitan political process that is universal, democratic, and sensitive to cultural differences centered on individuals as global citizens.\textsuperscript{143} The CIT alternative vision is, therefore, not a vision of a particular outcome but of a process. Its vision for world politics is thus procedural rather than substantive, although it is clear that two desirable results would be the overcoming of the sovereign state and the reigning in of the globalization of markets.

Because CIT’s alternative is a procedural vision, what the cosmopolitan discourse ethic would decide about the globalization of public health is not clear. Presumably the ethic would be driven by a desire to end the social, economic, and environmental problems that factor so heavily in the EID crisis. Given that the ethic would apparently be a form of post-sovereign world politics, internationalization would not be an outcome of critical cosmopolitan EID discourse. The desire to curb the excesses of market globalization might lead the cosmopolitan discourse ethic to advocate revising patterns of international trade and travel. Strengthening national public health systems would be anathema to cosmopolitan discourse ethics because such a proposal is rooted in the exclusionary and unjust patterns of sovereign state politics. Instead, people would have to reconceptualize public health not as something to be renationalized or subject to internationalization or globalization but as something to subject to cosmopolitanization.

Beyond a vague sense that what is needed is some form of cosmopolitan society exhibiting democratic and pluralistic qualities, CIT seems to offer little indication of how this society would actually come about or operate. Through what processes would this cosmopolitan discourse ethics transpire? How would these processes focus on EIDs and the globalization of public health? CIT seems not to be forthcoming on these kinds of questions, perhaps because it is leery of being corrupted or co-opted by adopting a problem-solving approach to international relations\textsuperscript{144} or because it really has nothing constructive to say beyond abstract repetitions of themes of cosmopolitan human emancipation. In connection with the globalization of public health,

\begin{footnotes}
\item[142] Id. at 171.
\item[143] Devetak argues that “by recognizing the importance of equal respect for universality and diversity, critical international theory opts for a revised version of cosmopolitanism.” Id. at 172-73.
\item[144] Id. at 150 (noting CIT’s dislike for realism because it is a “problem-solving” theory, meaning that it takes the existing world as the given framework for action).
\end{footnotes}
CIT may help bring the social, economic, and environmental problems more attention and may also reinforce fears about the impact of the globalization of markets on infectious disease control. Perhaps these will be the contributions of Farmer's critical epistemology of EIDs. What seems to be missing is any sensible roadmap for going somewhere with all the insights generated by critical thinking. "Let's have a democratic and pluralistic cosmopolitan society" is a weak foundation on which to address the EID crisis and the globalization of public health.

VI. CONCLUSION

In this article, I have analyzed the phenomenon of the globalization of public health through the EID problem and then considered the implications of this phenomenon for leading theories of international relations. It is my hope that this article not only deepens the understanding about the globalization of public health through the pathologies I present but also broadens the nature of the discourse of EIDs by showing that this global problem creates difficulties for how we think about and approach international relations. In thinking about EIDs and their role in the globalization of public health, we must think not only about principles of epidemiology but we also must contemplate the individual's relationship to the state, the very concept and future of the state, the dynamics of the international system, and the role of cosmopolitan connections and loyalties underpinning notions of humanity. We also must connect what is epidemiologically necessary in relation to EIDs with sustainable normative frameworks for acting in international relations. Dealing with the EID crisis will have to involve both an understanding of the globalization of public health and how such globalization challenges our descriptive and normative frameworks for thinking about international relations. Farmer writes that "a sea change is occurring in the study of infectious diseases even as it grows, responding, often, to new challenges—and sometimes to old challenges newly perceived." The globalization of public health is both a new challenge and an old challenge newly perceived. In both manifestations, the challenge calls for the broadest possible range of analytical capabilities to ensure that the sea change benefits humankind rather than leading it inadvertently into dangerous whirlpools.

145. Farmer, supra note 84, at 267.
where infectious diseases continue to drown the hopes and dreams of much of humanity.