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## **ACADEMIC**

### **Current Positions**

Professor of Political Science, MIT, 1978-

Senior Faculty, Center for International Studies, MIT, 1975-

Faculty Affiliate, Institute for Data, Systems, and Society, MIT, 2015-

### **Past Positions**

Massachusetts Institute of Technology

- Head, The Middle East Program, MIT, 1985-2009
- Director, Energy and Development Research Program 1980-1982
- Associate Director, Technology and Development Program, 1976-2012
- Associate Professor 1972-1978
- Assistant Professor 1969-1972

Queen's University, Canada

- Assistant Professor, Queen's University, Ontario, Canada, 1967-1969

Stanford University

- Research Associate, Stanford University (summers), 1968-1970

### **Education**

- Stanford University, California Ph.D., Political Science
- Stanford University, California M.A., Political Science
- American University, Cairo B.A., Social Sciences

## Languages

Fluent: English, French, Arabic. Limited: Spanish, Italian

## BOOKS

- *International Relations in the Cyber Age, the Co-Evolution Dilemma*, with David D. Clark. MIT Press. 2019.
- *CyberPolitics in International Relations*. MIT Press. 2012.
- *Mapping Sustainability: Knowledge e-Networking and the Value Chain*, Co-editor with Dinsha Mistree, Farnaz Haghseta, Toufic Mezher, Wallace R. Baker, and Carlos I. Ortiz, eds. Springer, 2007.
- *Global Accord: Environmental Challenges and International Responses*, ed. MIT Press. 1993.
- *The Challenge of Japan Before World War II and After: A Study of National Growth and Expansion*, co-author with Robert C. North, and Susumu Yamakage. Routledge. 1992.
- *Multidisciplinary Perspectives on Population and Conflict*, ed. Syracuse University Press. 1984.
- *Energy and Development in Latin America: Perspectives for Public Policy*. Lexington Books. 1982.
- *International Energy Futures: Petroleum Prices, Power, and Payments*, with David Scott Ross. MIT Press. 1981.
- *Forecasting in International Relations: Theory, Methods, Problems, Prospects*, co-editor with Thomas Robinson, San Francisco: W. H. Freeman. 1978.
- *The International Politics of Energy Interdependence*, with Vincent Ferraro, D.C. Heath. 1976.
- *Nations in Conflict: National Growth and International Violence*, co-author with Robert C. North. San Francisco: W.H. Freeman & Co. 1975.
- *Population Dynamics and International Violence: Propositions, Insights and Evidence*. D.C. Heath/Lexington Books. 1974.

## PATENT

Networked DataBase System for Geographically Dispersed Global Sustainability (as amended), Nazli Choucri and Juliana Kousoum. Patent Application, Allowance, and granted May 12, 1998: USSN 08/637,077 MIT Case No. 7217. (First patent in School of Humanities, Arts, and Social Science, MIT)., Web-Based System for Distributed Knowledge Management and Development (format Arabic, Chinese, English). See [gssd.mit.edu](http://gssd.mit.edu)

## PROFESSIONAL ACTIVITIES

### Editorship (select)

- Editorial Board, *American Political Science Review*, 2012-2016
- Advisory Board, *Global Environmental Politics*, 2002-
- Editorial Advisory Committee *International Political Science Review*, 2000-
- Editor, *International Political Science Review*, 1994-2000
- Founding Editor, MIT Press Series on *Global Environmental Accords*, 1993-
- Board of Editors, *Business & the Contemporary World*, 1992-1994

### Scientific Activities (select)

- Boston Global Forum on Global Citizenship and Cyberspace. 2018 -
- Michael Dukakis Leadership Institute 2020 -
- Centre national de la recherche scientifique; Carbon Promenades, 2000 –
- IEEE (Institute of Electrical and Electronics Engineers), 2015 -
- Council of Scientific Society Presidents Committee on Creative Heuristics Enabling Strategic Success (CHESS Club) 2000 - 2028
- Scientific Advisory Committee to World Social Science Report (WSSR), 2012
- International Institute for Strategic Studies (IISS), 2012-
- Science Board, Santa Fe Institute, 1995-2001 and 2012-2018
- Chair, Scientific Advisory Committee (SAC) of UNESCO Program Management of Social Transformation (MOST), 2009-2014
- Contributor to US Academy of Engineering study on *Information Systems and the Environment* 1997; published in 2001
- Working Group 3, UN-ICT, Preparations for World Summit on Information Technology, 2001- 2005
- Panel Member, National Academy of Sciences Committee on Terrorism, 2001-2002
- Panel Member, DARPA-National Academy of Sciences Committee on Understanding Terrorism in order to Deter Terrorism, 2001-2002
- Member, Scientific Advisory Committee, SCOPE-ICSU, 1998-
- Special Advisor to the Administrator of the United Nations Development, 1994-1996

- Member, Advisory Board, Global Stewardship Initiative, Pew Charitable Trust, 1993-1995
- Advisor to the Secretary General of the United Nations Conference on Environment and Development, 1990-1992
- Member, AAAS Committee on Population, Resources, and the Environment, Chair Working Group on International Aspects, 1990-1992
- Convener and Session Organizer, International Political Science Association, 1984-1985
- Planning Committee, International Scientific Forum on Energy, 1983-1988
- Advisory Committee, Office of Technology Assessment, U.S. Congress, 1982-1983
- Board of Directors, Pathfinder Fund, 1981-1983
- Council Member, American Political Science Association, 1981-1983
- Panel for 1979 U.S. Conference of Science and Technology for Development, National Research Council, 1977-1978.
- International Advisory Committee, World Population Society, 1976-1977
- International Social Science Documentation Committee, 1976-1978
- National Science Foundation Advisory Committee for Developing Guidelines of Research on National Resource Problems, 1973-1974
- Co-Chair, National Academy of Science, Middle East Workshop, 1973-1974
- International Committee of Advisors for National Academy of Science, Population Issues, 1972-1974

### **Synergistic Research Activities (recent)**

- Principal Investigator, *Policy Analytics for Cybersecurity of Cyber-Physical System*, Science of Security and Privacy Program, National Security Agency, managed by US Department of Defense, MIT Sub-Lab of Vanderbilt University Lab, 2018-2023
- Co-Principal Investigator, *A Multilayered Approach to Assessing the Vulnerability of Critical Infrastructure Against Cyber Attacks*, MIT-MIST Program, 2014-2016
- Principal Investigator, MIT/Harvard Project on *Explorations in Cyber International Relations*, Minerva Program, US Department of Defense, 2009-2014
- Architect & Founding Director, Global System for Sustainable Development 1998-

### **Professional Associations**

- American Political Science Association
- American Association for the Advancement of Science

- Council on Foreign Relations
- European Academy of Sciences
- IEEE (Institute of Electrical and Electronics Engineers)
- International Political Science Association
- International Studies Association

### **Reviewer (recent)**

- International Security
- European Journal of International Security
- IEEE Security and Privacy
- MIT Press
- Cambridge University Press
- Oxford University Press

### **RECOGNITION (Recent)**

- 2020 Elected Fellow, American Association for the Advancement of Science
- 2016 Recipient of International Studies Association Political Demography and Geography Section Distinguished Scholar Award
- 2005 Dr. Jean Mayer Global Citizenship Award, Tufts University Education for Public Inquiry and International Citizenship

### **INTERNATIONAL RESEARCH & POLICY in the following countries**

Abu Dhabi, Algeria, Canada, China, Colombia, Egypt, France, Germany, Greece, Honduras, Kuwait, Lebanon, Mexico, North Yemen, Pakistan, Qatar, Sudan, Switzerland, Syria, Tunisia, Turkey.

### **PROJECT WEBSITES**

- Explorations in Cyber International Relations (ECIR) [ecir.mit.edu](http://ecir.mit.edu)
- Global System for Sustainable Development (GSSD) [gssd.mit.edu](http://gssd.mit.edu)
- Cyber International Relations (CyberIR) [cyberir.mit.edu](http://cyberir.mit.edu)

# PUBLICATIONS

## Articles & Chapters by Research Theme

### I. International Relations: Transformation & Change

#### 1.1 Theory & Analysis

- Co-author with Gaurav Agarwal, "The Theory of Lateral Pressure: highlights of Quantification and Empirical Analysis," in William R. Thompson ed., *Oxford Research Encyclopedia of Politics*. Oxford University Press 2017.
- Co-author with Stuart Madnick and Pricilla Koepke, "Institutions for Cybersecurity: International Responses and Data Sharing Initiatives," in Howard Shrobe, David L. Shrier, and Alex Pentland, eds., *New Solutions for Cybersecurity*, Cambridge: The MIT Press, 11-80. 2017.
- Co-author with Anne-Katrin Wickboldt. "Profiles of States as Fuzzy Sets: Methodological Refinement of Lateral Pressure Theory," *International Interactions* 32, No 2: 153-181. 2006.
- "Economic and Political Factors in International Conflict and Integration." *International Studies Quarterly* 27. 1993.
- Co-author with Robert C. North. "Roots of War: The Master Variables," in Raimo Väyrynen, in collaboration with Dieter Senghaas and Christian Schmidt, eds., *The Quest for Peace: Transcending Collective Violence and War Among Societies, Cultures and States*, London: International Social Science Council, Sage Publications, 204-16. 1993.
- "Environment and Conflict: New Principles for Environmental Conduct." *Disarmament* XV (1): 67-78. 1992.
- "Analytical and Behavioral Perspectives: Causes of War and Strategies for Peace," in W. Scott Thompson et al., eds., *Approaches to Peace: An Intellectual Map*, Washington, D.C.: United States Institute of Peace Press, 271-98. 1991.
- "Resource Constraints as Causes of Conflict." *Ecodecision* (September), 52-55.1991.
- Co-author with Robert C. North. "Lateral Pressure in International Relations: Concept and Theory," in Manus I. Midlarsky, ed., *Handbook of War Studies*, Winchester, Mass.: Unwin Hyman, Inc., 289-326. 1989.
- "The Reality of Theory: Reflections and Reassessment," in Joseph Kruzel and James Rosenau, eds., *Journeys Through World Politics: Autobiographic Reflections of Distinguished Scholars*, Lexington, Mass.: Lexington Books, 137-51. 1989.
- "Demographics and Conflict." *Bulletin of the Atomic Scientists* 42 (4). 1986.

- "Population, Resources, Technology, and Environment: Trends and Implications," in John Trent and Paul Lamy, eds., *Global Crises and the Social Sciences: North American Perspectives*, Ottawa: University of Ottawa Press/UNESCO. 1984.
- "International Political Economy: A Theoretical Perspective," in Ole R. Holsti, Randolph M. Siverson, and Alexander L. George, eds., *Change in the International System*, Boulder, Colorado: Westview Press. 1980.
- "International Non-Alignment: Quantitative Perspectives on the Afro-Asian Variant," in Michael Haas, ed., *International Systems: A Behavioral Approach*, San Francisco: Chandler Publishing Co., 123-50. 1974.
- "International Conflict Processes: A System View," in *Beitrage zu Einer Ethik des Friedens*, Vienna: Herder, 74-94. 1973.
- Co-author with Robert C. North. "Causes of World War I: A Quantitative Analysis of Longer-Range Dynamics," in Klaus Jurgen Gentzel, Gisela Kress, and Volker Rittberger, eds., *Grossmachtrivalität und Weltkrieg: Sozialwissenschaftliche Studien zum Ausbruch des Ersten Weltkrieges und Historikerkommentare*, Gutersloh: Bertelsmann Universitätsverlag, 122-56. 1972.
- Co-author with Robert C. North. "Dynamics of International Conflict: Some Policy Implications of Population, Resources, and Technology," in Raymond Tanter and Richard Ullman, eds., *Theory and Policy in International Relations*, Princeton: Princeton University Press, 80-122. 1972.
- Co-author with Dennis Meadows. *International Implications of Technological Development and Population Growth: A Simulation Model of International Conflict*. Cambridge, Mass.: Center for International Studies, MIT, 1971.
- Co-author with Robert C. North. "Determinants of International Violence." *Peace Research Society (International) Papers* 12: 33-63. 1969.
- "The Nonalignment of Afro-Asian States." *Canadian Journal of Political Science* 2 (1): 1-17. 1969.
- "The Perceptual Base of Nonalignment." *The Journal of Conflict Resolution* 13 (1): 57-73. 1969.

## **1.2 Population Dynamics & International Migration**

- Co-author with Dinsha Mistree. "Globalization, Migration and New Challenges to Governance." *Current History*, 108: 717, 173-179. 2009.
- "Demography, Migration, and Security in the Middle East," in Laura Guazzone, ed., *The Middle East in Global Change: The Politics and Economics of Interdependence versus Fragmentation*, St. Martin's Press, Inc., 95-118. 1997.
- Co-author with Robert C. North. "Population and (In)Security: National Perspectives and Global Imperatives," in David B. Dewitt, David Haglund, and John Kirton, eds., *Emerging Trends in International Security*, Oxford University Press, 229-56. 1993.

- "Business and Reconstruction in the Middle East." *Business & the Contemporary World* 3 (3): 81-88. 1991.
- "Resource Scarcity and National Security in the Middle East," in Eric H. Arnett, ed., *New Perspectives for a Changing World Order*, Washington, D.C.: American Association for the Advancement of Science, pp. 100-107. 1991.
- "Population and the Global Environment." In J.W. Tesler, D.O. Wood, and N.A. Ferrari (Eds.), *Energy and the Environment in the Twenty First Century*. Cambridge, MA: The MIT Press. 1991.
- Co-author with Janet Welsh Brown, and Peter M. Haas. "Dimensions of National Security: the Case of Egypt," in Janet Welsh Brown, ed., *In the U.S. Interest: Resources, Growth, and Security in the Developing World*, Boulder, Colorado: Westview Press, 89-119. 1990.
- Impacts and Prospects of Return Migration in the Middle East. Report for the International Labor Office, April 1990. Part 1. Part 2. "Migration in the Middle East: Old Economics or New Politics?" *Journal of Arab Affairs* 7 (1): 1-18. 1988.
- "Asians in the Arab World." *Middle Eastern Studies* (April). 1986.
- "The Hidden Economy: A New View of Remittances in the Arab World." *World Development* 14 (6): 977-85. 1986.
- "Migration to the Middle East," *Middle East Review*. Vol. XIX, No. 2 Winter. 1986.
- "Assessments of Macroeconomic Impacts of Labor Migration and Remittances in Sudan." Cambridge, Mass.: *MIT Technology and Development Program Report* No. 84-4, July 1984.
- "Population Movements in the Middle East: An Analysis of Policy Issues." Cambridge, Mass.: *MIT Technology and Development Program Report* No. 84-5, 1984.
- Co-author with Peter Brecke. "Migration in the Middle East: Transformation and Change." *Middle East Review*; Vol. XVI, No. 2; Winter. 1983/1984.
- "Asians in the Arab World: Labor Migration and Public Policy. " Cambridge, Mass.: *MIT Technology Adaptation Program Report* No. 83-13, December 1983.
- Co-author with Supriya Lahiri. "Macro-Economic Impacts of Remittances in Egypt: An Exploratory Analysis. " Cambridge, Mass.: *MIT Technology Adaptation Program Report*, No. 83-10, May 1983.
- Collaboration with Peter Brecke. "Migration in the Middle East: Transformations, Policies, and Processes, " 2 vols. Cambridge, Mass.: *MIT Technology Adaptation Program Reports* Nos. 83-8, 83-9, 1983. Preface – Chapter 3, Chapter 4 – Chapter 7, Chapter 8 – Chapter 12.
- "Population and Conflict: New Dimensions of Population Dynamics." *United Nations Fund for Population Activities*. Robert C. North and Nazli Choucri. 1983.
- "The Arab World in the 1980s: Macro-Politics and Economic Change." *Journal of Arab Affairs* 1 (1): 167-87. 1982.



- "The Pervasiveness of Politics: Political Definitions of Population Issues," in *Ethical Issues of Population Aid*, Irvington Publishers, 239-85. 1981.
- "Demographic Changes in the Middle East: New Factors in Regional Politics," in *The Political Economy of the Middle East - Changes Since 1973*, Washington, D.C.: Library of Congress, Congressional Research Service. 1979.
- "Labor Transfers in the Arab World: Growing Interdependence in the Construction Sector" *Organization of Arab Petroleum Exporting Countries*; Vol. 5, No. 1. 1979.
- Co-author with Richard S. Eckaus, and Amr Mohie-Eldine. *Migration and Employment in the Construction Sector: Critical Factors in Egyptian Development*. Cambridge, Mass.: MIT Technology Adaptation Program, October 1978.
- "Migration Processes Among Developing Countries: The Middle East." Cambridge, Mass.: MIT Migration and Development Study Group, C/78-5, May 1978.
- "The Pervasiveness of Politics." *Populi* 5 (33): 30-44. 1978.
- "The New Migration in the Middle East: A Problem for Whom?" *International Migration Review* 11 (4): 421-43. 1977.
- "Political Implications of Population Dynamics: A Critical Assessment." *The Population Debate: Papers of the World Population Conference, Bucharest, 1974*, vol. II, United Nations. 1976.
- *Population Dynamics and Local Conflict: A Cross National Study of Population and War: A Summary*. Cambridge, Mass.: MIT Center for International Studies, C/74-9, 1974.
- Co-author with Robert C. North. "Population and the International System: Some Implications for the United States Policy and Planning" *Commission on Population Growth and the American Future; Research Reports*, Vol. 4. 1974.
- Co-author with W. Parker Mauldin, Frank W. Notestein, and Michael Teitelbaum. *A Report on Bucharest: The World Population Conference and the Population Tribune*. a publication of the Population Council, *Studies in Family Planning*, December 1974.
- "Population Dynamics and Social Inquiry: Some Methodological Imperatives," in Richard L. Clinton, ed., *Population and Politics*, Lexington, Mass.: Lexington Books. 1973.
- Co-author with Robert C. North. "Population and the Future International System." *Journal of International Affairs* 25 (2): 224-37. 1971.

### **1.3 Energy & Resources**

- Co-author with Daniel Goldsmith and Toufic Mezher. "Modeling Renewable Energy Readiness: The UAE Context," *Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE)*, 2011 20th IEEE International Workshops, June 2011: 27-9.

- Co-author with Toufic Mezher and Daniel Goldsmith. "Renewable Energy in Abu Dhabi: Opportunities and Challenges," *Journal of Energy Engineering* 137(4): 169-177. 2011.
- "Environmentalism in Comparative Politics," in Joel Krieger, ed., *Oxford Companion to Comparative Politics*, Oxford, England: Oxford University Press. 2012.
- Environmental Flashpoints in the Middle East and North Africa. Report for the Environmental Flashpoints Workshop, November 1997.
- "World Energy: Implications for Japan" Toray Corporate Business Research Inc. Vol. 2; No. 2; Spring. 1990.
- Co-author with M. Zaki Shafei. "Energy Policy in Egypt" Extrait de l'Egypte Contemporaine LXXVeme Annee; No. 395, January. 1984.
- "Energy for Survival and Development" Pontificiae Academiae Scientiarum Scripta Varia. Edited by Carlos Chagas and Umberto Colombo. June 11-14. 1984.
- "Energy and Development in Latin America." Latin America and Caribbean Contemporary Record, vol. II. 1983.
- "Energy and Development: Understanding the Risks" The MIT Report September, Vol. XI; No. 9. 1983.
- "Energy and Transportation in Latin America: The Socio-economic Basis," in *The Impact of Energy Costs on Transportation in Latin America*, Inter-American Development Bank, November 1982.
- "OPEC: Calming a Nervous World Oil Market." *Technology Review* 83 (1): 35-36. 1980.
- "Power and Politics in World Oil." *Technology Review* 85 (7): 24-36. 1980.
- "Analytical Specifications of the World Oil Market: A Review and Comparison of 12 Models." *Journal of Conflict Resolution* 23 (2): 346-72. 1979.
- "...and OPEC is justified," *The Christian Science Monitor*, November 30, 1979, pg. 23.
- Co-author with Vincent Ferraro. "International Exchanges of Alternative Energy Sources: Technology, Price, and Management," in Dennis Clark Pirages, ed., *The Sustainable Society*, Praeger Publishers, pp. 74-102. 1977.
- Energy Interdependence. Volume II of *Analyzing Global Interdependence*, by Hayward R. Alker, Jr., Lincoln P. Bloomfield, Nazli Choucri. Cambridge, Mass.: MIT Center for International Studies C/74-28, 1974.
- With the research assistance of James P. Bennett. "Population, Resources, Technology: Political Implications of the Environmental Crisis," in David A. Kay and Eugene B. Skolnikoff, eds., *World Eco-Crisis: International Organizations in Response*, Madison: University of Wisconsin Press, 9-46. 1972.

## 1.4 Technology & Politics

- "Megacities and Global Accord." Fred Moavenzadeh, Keisuke Hanaki and Peter Baccini, Dordrecht (Eds.), In *Future Cities: Dynamics and Sustainability*. (pp. 215-225). The Netherlands: Kluwer Academic Publishers. 2002.
- "Strategic Partnerships with Multilingual Functionality for Globalisation and Localisation," Prepared for European Commission Directorate-General Information Society Workshop on "Sustainability and E-nvironment," Publication of IST99 Conference in Helsinki, November 1999, Finland. 1999.
- "Knowledge Networking for Technology 'Leapfrogging'," UNDP Cooperation South, Number Two, 1998, pp. 40-52. 1998.
- "Globalization of Eco-Efficiency: GSSD on the WWW. " *UNEP Industry and Environment*, October-December 1995, pp. 45-49. 1995.
- "Globalization of MIT: GSSD on the WWW" *MIT Faculty Newsletter*. October, Vol. VIII, No. 1. 1995.
- "Introduction." *Business & the Contemporary World, Special Issue: Global Environmental Accords: Implications for Technology, Industry and International Relations*. vol. VI (2): 6-8. 1994.
- "The Politics of Global Environmental Change: A Conceptual Framework," in *United Nations, Advanced Technology Assessment System, Environmentally Sound Technology for Sustainable Development*, United Nations Publications, pp. 230-34. 1992.
- "A Partnership with Nature: Construction Consortium for the Global Environment." *Construction Business Review* 1 (2): 37-41. 1991.
- "The Global Environment and Multinational Corporations." *Technology Review* 94 (3): 52-9. 1991.
- "The Politicization of Technology Choices." *Business & the Contemporary World*, vol. II (1). 1989.
- Co-author with Richard S. Eckaus. "Interactions of Economic and Political Change: The Egyptian Case." *World Development* 7: 783-97. 1979.

## II. COMPUTATIONAL SOCIAL SCIENCE

- Co-author with Ed Anderson, Daniel Goldsmith, Stuart E. Madnick, Michael Siegel, and Dan Sturtevant. *System Dynamics Modeling for Pro-Active Intelligence, A publication of the Air Force Research Laboratory*, January 2010.
- Co-author with Farnaz Haghseta. "Organizational Innovation: Global Workflow and Institutional e-Networking," In Nazli Choucri Dinsha Mistree, Farnaz Haghseta, Toufic Mezher, Wallace R. Baker and Carlos I. Ortiz, eds. *Mapping Sustainability: Knowledge e-Networking and the Value Chain*. Dordrecht, The Netherlands: Springer. 2007.

- “The Politics of Knowledge Management,” A publication for The UNESCO Forum on Higher Education, Research and Knowledge, 2007.
- Co-author with, Christopher Heye, and Michael Lynch.. "Analyzing Oil Production in Developing Countries: A Case Study of Egypt." *The Energy Journal* 11 (3). 1990.
- Co-author with Christopher Heye. "Simulation Models." *Energy* 15 (3/4): 363-78. 1990.
- "Domestic Energy Pricing: Trends and Implications for the Arab World." *The Journal of Energy and Development* 11 (1). 1986.
- Co-author with Supriya Lahiri. "Short-Run Energy-Economy Interactions in Egypt." *World Development* 12 (8): 789-820. 1984.
- Co-author with M. Zaki Shafei, and with the collaboration of the Egyptian General Petroleum Corporation, the Ministry of Planning, and the Ministry of Petroleum. *The Energy Policy Project: Petroleum and Natural Gas in Egypt*. Cambridge, Mass.: MIT Technology Adaptation Program Report No. 83-11, June 1983.
- "International Changes in the World Oil Market: A Simulation Perspective" *International Political Science Review* Sage Publications Inc. Beverly Hills, CA. Vol. 3, No. 4; pp. 378-403. 1982.
- "The International Petroleum Exchange Model: Reference Results and Validation" *The International Petroleum Exchange Model. Futures*; June. 1980.
- Chapters in co-edited volume, *Forecasting in International Relations: Theory, Methods, Problems, Prospects*. W. H. Freeman. 1978. Author of following chapters: Chapter 1: "Key Issues in International Relations Forecasting," Chapter 12: "Applications of Econometric Analysis to Forecasting in International Relations," Chapter 13: "System Dynamics Forecasting in International Relations," and Chapter 21: "Alternative Futures: An Exercise in Forecasting" (with Marie Bousfield).
- "An Assessment of Documentation Standards for Ten Computer Models of Political Problems," in *New Trends in Mathematical Modelling*. Ossolineum, 1978, pp. 331-43. 1978.
- "From Correlation Analysis to Computer Forecasting: The Evolution of a Research Programme in International Relations," in James N. Rosenau, ed., *In Search of Global Patterns*, The Free Press, 81-90. 1976.
- Co-author with David Scott Ross, and Dennis Meadows. "Toward a Forecasting Model of Energy Politics." *Journal of Peace Science* 1 (2): 97-111. 1976.
- "Forecasting Sources of Foreign Expansion: An Inquiry into Alternative Futures," in Mario Bunge, Johan Galtung, and Mircea Malitza, eds., *Mathematical Approaches to International Relations*, Vol. 2, Romanian Academy of Social and Political Sciences. 1975.
- "Forecasting in International Relations: Problems and Prospects." *International Interactions* 1: 63-86. 1974.

- "Applications of Economic Analysis to Forecasting in International Relations." *Peace Science Society (International) Papers* 21: 15-38. 1973.
- Co-author with Michael Laird, and Dennis Meadows. *Resource Scarcity and Foreign Policy: A Simulation Model of International Conflict*. Cambridge, Mass.: MIT Center for International Studies, C/72-9, March 1972. Collaboration with Robert C. North.
- "In Search of Peace Systems: Scandinavia and the Netherlands, 1870-1970," in Bruce Russett, ed., *Peace, War, and Numbers*, Sage Publications, 239-74. 1972
- Co-author with Robert C. North. "Background Conditions to the Outbreak of the First World War." *Peace Research Society (International) Papers* IX: 33-63. 1969.

### **III. SUSTAINABILITY, ENVIRONMENT & GLOBAL ACCORD**

- "The Political Logic of Sustainability," in Egon Becker and Thomas Jahn, eds., *Sustainability and the Social Sciences*. Zed Books. 1999.
- Co-author with Annababette Wils and Matilde Kamiya. "Threats to Sustainability: Simulating Conflict Between Nations," *System Dynamics Review* 12, No. 2-3: 129-162. 1998.
- Co-author with Rebecca Berry. "Sustainability and Diversity of Development: Toward a Generic Model." Proceedings, The 1995 *International System Dynamics Conference*, July, Tokyo, Japan. 1995.
- "Corporate Strategies toward Sustainability," in Winfried Lang, ed., *Sustainable Development and International Law*. Graham & Trotman/Martinus Nijhoff, pp. 189-201. 1994.
- "Moving Forward: Priorities and Practicalities." *Business & the Contemporary World, Special Issue: Global Environmental Accords: Implications for Technology, Industry and International Relations* VI (2): 134-5. 1994.
- "Environmentalism," in J. Krieger, ed., *Oxford Companion to Politics of the World*, Oxford University Press. 1993.
- "Introduction: International Political Economy and the Global Environment" *International Political Science Review* Vol. 14, No. 1; pp. 5-6. 1993.
- Chapters in edited volume, *Global Accord: Environmental Challenges and International Responses*, Cambridge, Mass.: MIT Press. 1993. Author of the following chapters: Chapter 1: "Introduction: Theoretical, Empirical, and Policy Perspectives," Chapter 3: "Growth, Development, and Environmental Sustainability: Profile and Paradox" (with Robert C. North), Chapter 6: "Multinational Corporations and the Global Environment", Chapter 15: "Global Accord: Imperatives for the Twenty-first Century" (with Robert C. North)

- "Political Economy of the Global Environment." *International Political Science Review* 14 (1): 103-16. 1993.
- "Environment and Conflict: New Principles for Environmental Conduct." *Disarmament* XV (1): 67-78. 1992.
- "Environment, Development, and International Assistance: Crucial Linkages," in Sheryl J. Brown and Kimber M. Schraub, eds., *Resolving Third World Conflict: Challenges for a New Era*, Washington, D.C.: United States Institute of Peace Press, pp. 91-117. 1992.
- "Le Changement Mondial et ses Implications pour la Recherche Interdisciplinaire," in Eduardo Portella, ed., *Entre Savoirs: L'interdisciplinarite en acte: en jeux, obstacles, perspectives*, Toulouse: Editions Eres. 1992.
- "Consequences of War in the Middle East" *TBR Intelligence*, Vol. 3, No. 2. 1991.
- "Comments on Scientific Forecasts in International Relations," *International Studies Quarterly*. Vol. 25; No. 1, March; pp. 145-149. 1979.

#### IV. CYBERPOLITICS & CYBERSECURITY

- Co-author with Keman Huang, Stuart Madnick and Fang Zhang, "A Systematic Framework to Understand Transnational Governance for Cybersecurity Risks from Digital Trade," *Global Policy* Volume 12, No. 5, August 2021.
- Co-author with Thomas Klemas, Rebecca Lively (US Air Force). "Cyber Acquisition: Policy Changes to Drive Innovation in Response to Accelerating Threats in Cyberspace," *Proceedings of CYCON*. 2018.
- Co-author with Gaurav Agarwal. "The Theory of Lateral Pressure: Highlights of Quantification and Empirical Analysis." In William R. Thompson, ed, *Oxford Research Encyclopedia of Politics*, Oxford University Press, 2017.
- Co-Author with Gaurav Agarwal, "Analytics for Smart Grid Cybersecurity," *Proceedings 2017 IEEE International Symposium on Technologies for Homeland Security*, IEEE, May 2017.
- "Complexities of Cybersecurity," *Global Commons Review Magazine*, March 2017.
- "Introduction." In Brandon Valeriano and Ryan C. Maness, eds., *Cyber War versus Cyber Realities: Cyber Conflict in the International System*. New York: Oxford University Press, 2016.
- "Emerging Trends in Cyberspace: Dimension and Dilemmas" in Phil Williams and Dighton Fiddner, eds, *Cyberspace, Malevolent Actors, Criminal Opportunities and Strategic Competition*, Strategic Studies Institute/United States War College Website. 2016.
- "Improving Interdisciplinary Communication With Standardized Cyber Security Terminology: A Literature Review," in *IEEE Access*, vol. 4, pp. 2216-2243, 2016.

- Co-author with Atin Basuchoudhary. “The Evolution of Network Based Security Norms: An Analytical Narrative,” IEEE IRI, 2014.
- “The Convergence of Cyberspace and Sustainability.” *e-International Relations*. April 20, 2012.
- Co-author with Daniel Goldsmith. “Lost in Cyberspace: Harnessing the Internet, International Relations and Global Security.” *Bulletin of the Atomic Scientists*. 2012. 68 (2): 70-77.
- GSSD Knowledge Meta-networking for Decision and Strategy. Cambridge, MA: MIT. 2000.
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