CURRICULUM VITAE Shlomo (Solly) Angel



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Senior Research Scholar and Adjunct Professor of Urban Planning

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NATIONALITY: United States of America

HIGHER EDUCATION:

1962-64	Faculty of Architecture and Town Planning, Technion, Israel Institute of
	Technology, Haifa, Israel.

1964-67	Bachelor	r of	Architecture, Su	mma Cur	n Laude, De	par	tment of Ar	chitecture,
	College	of	Environmental	Design,	University	of	California,	Berkeley,
	California, USA.							

1967-72	Ph.D. in City and	Regional Planning,	Department of City	and Regional					
	Planning, College	of Environmental	Design, University	of California,					
	Berkeley, California, USA.								

ACADEMIC APPOINTMENTS:

- 1972 Senior Lecturer, Faculty of Architecture and Town Planning, Technion, Haifa, Israel (Design Methods and Advanced Design).
- 1973 Visiting Lecturer, Department of City and Regional Planning, University of California, Berkeley (Location Theory and Spatial Interaction).
- Assistant Professor of Human Settlements Planning, Asian Institute of Technology, Bangkok, Thailand (Urban Systems Analysis, Introduction to Planning Theory, Advanced Quantitative Models for Planning, Urban Physical Planning, Introduction to Housing Issues).
- Associate Professor of Human Settlements Planning, Asian Institute of Technology, Bangkok, Thailand (Introduction to Planning and Development of Human Settlements, Current Issues in Planning and Development, Low-Income Housing, Housing Policy).
- 1982.83 Professor of Human Settlements Planning, Asian Institute of Technology, Bangkok, Thailand (Housing and land development).
- 1989 Visiting Professor, Department of Urban Studies and Planning, Massachusetts Institute of Technology, Cambridge, Mass., USA (Urban Land Management in the Developing Countries, Housing Issues in the Developing Countries).
- 1990–91 Visiting Professor, Department of Architecture, Pratt Institute, New York, USA (Understanding and Making Human Environments).
- 2000–2013 Adjunct Professor of Urban Planning, Robert F. Wagner Graduate School of Public Service, New York University, New York, USA (History and Theory of Planning, Urbanization in Developing Countries)
- 2002–2012 Lecturer in Public and International Affairs, the Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, New Jersey (Planning Theory and Process; Housing Policy in Developing Countries; Urbanization in Developing Countries; Sprawl; Policy Workshop on pPreparing for Rapid Urbanization in Tegucigalpa, Honduras; Policy Workshop on a Five-Year Housing Policy for Uruguay; Policy Workshop on Property Rights Reform in Latin American Cities; Policy Workshop on Urban Expansion, Land Conversion, and Affordable Housing in China)

RESEARCH AND PROFESSIONAL APPOINTMENTS:

- Research Analyst, Joint Committee for Bay Area Regional Organization, State of California (A study on the problems and prospects for a regional government in the San Francisco Bay Area, with particular emphasis on regional transportation planning).
- Associate, Center for Environmental Structure, Berkeley, California, (Design of a low-cost housing project in Lima, Peru for an international competition under the auspices of the United Nations Development Programme).

1969-71 Senior Scientific Officer, Centre for Environmental Studies, London, England (Analytical studies in urban transport, regional science and economic geography with particular emphasis on mathematical modeling). 1971-73 Associate, Center for Environmental Structure, Berkeley, California (The formulation of a design method and a pattern language for buildings and towns with a grant from the National Institute of Mental Health (NIMH): the preparation of a master plan for the University of Oregon). 1972 Planner, Urban Planning Unit, City Engineer's Office, Municipality of Jerusalem, Jerusalem, Israel (The preparation of a policy limiting building heights in the city). 1973 Collaborating Architect, Ulrik Plesner and Associates, Ierusalem, Israel (Design of a public park outside the walls of the Old City of Jerusalem). 1976 Principal Investigator, "The Low-Income housing Delivery System in Asia" (A comparative study of low-income housing arrangements in six Asian cities). 1977 Project Director, "The Jerusalem Village Fire Protection Project" (Planning and implementation of a demonstration project in community-based slum improvement in Bangkok). 1978 Principal Investigator, "Water for the Northeast" (The preparation of a coordinated strategy for the development of small-scale water resources in Northeast Thailand). Project Director, "The Building Together Project" (Architectural design, 1978-85 planning and full implementation and construction of an experimental mutual-aid and self-help housing project in Bangkok, relying on the participation of people in building their homes and their community). 1983-84 Project Director, "Jerusalem of Gold" (Planning, architectural design and coordination of a cooperative housing project for the elderly in Jerusalem, Israel). Principal Investigator, The "Bangkok Canal Land Management Study" (A 1984-85 study of the magnitude and conditions of squatter settlements on the Bangkok canal system aiming at the formulation of policies and the preparation of alternative architectural designs for these communities). 1985-86 Consultant to the United Nations Centre for Human Settlements (Habitat), Nairobi, Kenya (Preparation of research reports and teaching materials on land sharing as an alternative to eviction, spontaneous land settlements on rural frontiers, mutual-aid housing, and land for housing). 1986-87 Team Leader and Principal Investigator, "The Bangkok Land Management Study" (A study of the land and housing markets of Bangkok and the potential for public-sector participation. The study was undertaken by Planning and Development Collaborative International (PADCO) for the

National Housing Authority of Thailand under the auspices of the Asian

Development Bank.

- 1987-88 Consultant to the United Nations Centre for Human Settlements, Nairobi, Kenya (Studies on land sharing as an alternative to eviction and the preparation of the Global Shelter Strategy).
- Designer and Developer, the Railei Beach Community (Development, planning, architectural design and initial construction of a cooperative resort community in Krabi, Southern Thailand).
- 1989 Consultant to the United Nations Development Programme (UNDP), New York, (The preparation of a special report on Urbanization and Human Development for the Human Development Report).
- Senior Housing Policy Advisor, Urban Development Division, the World Bank (co-authoring, with Stephen K. Mayo, of the Bank's Housing Policy Paper entitled *Housing: Enabling Markets to Work;* co-directing, with Stephwn K. Mayo, of the Housing Indicators Program, A Joint Program of the United Nations Centre for Human Settlements and the World Bank, based in the Urban Development division of the World Bank, Washington DC; preparing a conceptual framework and a set of indicators for measuring the performance of the housing sector, administering the data collection effort, and managing a research project based on collecting indicator data in fifty-three countries).
- Housing Policy Specialist, World Bank mission to the Russian Federation, (housing policy formulation, city selection, project designs and the creation of a monitoring system of housing sector performance and project performance for a \$500 million housing loan).
- Housing Advisor to the Department of Housing and Urban Development (preparation of a *Shelter Sector Review,* as part of the preparations for the Habitat II United Nations Conference).
- Senior Housing Policy Advisor, the Inter-American Development Bank, Washington DC (diagnostic and development of housing policies and programs for countries in Latin America and the Caribbean; preparation of housing sector assessments and guidelines for housing policy reform in ten countries: Nicaragua, Venezuela, Ecuador, Argentina, Uruguay, Guatemala, Honduras, Panama, Dominican Republic, and Trinidad–Tobago; evaluation of the Bank's housing portfolio and preparation of a housing strategy for the Bank; preparation of an indicator–based monitoring system for housing projects for the Bank; design and implementation of a monitoring study of the IDB–supported Panama housing program).
- 1996.99 Senior Partner, Angel+Gitlin Architecture, New York (design and construction of country houses).
- Housing Policy consultant, Institute for Housing and Urban Development Studies, Rotterdam, the Netherlands, (preparation of a teaching curriculum in housing policy).
- Advisor, the Economic Development Institute, the World Bank (design of a Training Course in Land Use Instruments for developing countries).

- Advisor, Land and Real Estate Initiative, the World Bank (design, development, and testing of a housing–sector assessment module).
- Principal Investigator, *The Urban Growth Management Initiative*, a research project for the World Bank and the U.S. National Science Foundation (a global comparative study of the different rates of urban expansion and the economic, social, demographic and policy differences that can explain them, based on analyzing census data and satellite imagery for a stratified sample of 120 cities and on the results of surveys in each city by local consultants).
- Advisor, Transport and Urban Development Department, the World Bank (contributing a paper on the current status and efficacy of housing indicators; developing an urban indicator program for *World Development Indicators*; preparing data collection instruments for urban governance, urban transport, and urban secure tenure data collection and administering them in seven pilot cities; reviewing data collection and estimates for measuring Target 11 of the Millennium Development Goals).
- 2007-2008 Principal Investigator, Habitat for Humanity (design, development and testing of a housing policy index that can be measured and published by Habitat for Humanity involving survey design and testing in seven countries: Lesotho, Senegal, Rumania, the Philippines, USA, Mexico, and Chile, and formulation of funding proposal).
- Senior Housing Policy Advisor to the World Bank, Transport and Urban Development Department (preparing an assessment of the housing sector in Belize).
- 2009-2012 Visiting Fellow, Lincoln Institute of Land Policy (writing and publishing a series of working papers, a Policy Focus Report, an atlas of urban expansion, and a book on the measurement and analysis of urban expansion in a global and historical perspective)
- 2012-present Senior Research Scholar and Adjunct Professor of Urban Planning, The Urbanization Project, Stern School of Business, New York University (leading the urban expansion initiative, a municipal action program aimed at assisting rapidly-growing cities in Sub-Saharan Africa, Latin America and the Caribbean, and South, Southeast, and East Asia in making effective preparations for their expansion).

ADMINISTRATIVE APPOINTMENTS:

Associate Chairman, Division of Community and Regional Development, Asian Institute of Technology, Bangkok, Thailand (Development of a teaching curriculum and a research program in Human Settlements Planning and Development).

- Project Manager, CIDA-AIT Human Settlements Project (Planning and supervision of a five-year research, education and dissemination of information program in the field of human settlements in Asia. The project involved the administration of student research in the countries of South, Southeast and East Asia, the initiation of exploratory research projects, the creation of a number of demonstration projects and information dissemination projects, and the conduct of short courses. The management of the project on behalf of the Canadian International Development Agency (CIDA) and the Asian Institute of Technology (AIT) involved the preparation of annual plans of operations and evaluation reports as well as the supervision of a research and teaching budget.
- 1978-83 Chairman, Board of Directors, The Building Together Company Ltd. (coordinating the activities of a non- profit company created for the design and implementation of the *Building Together* Mutual-Aid and Self-Help Housing Project in Bangkok, Thailand).
- 1979-82 Chairman, Division of Human Settlements Development, Asian Institute of Technology, Bangkok, Thailand (Management of academic and professional activities of the Division, a Master's Program of urban, rural and regional planning, comprising a total of 30-35 academic and professional staff, as well as 55-65 graduate students).
- Ex-Officio Member, Executive Committee, The Board of Trustees, Asian Institute of Technology, Bangkok, Thailand (Elected by the Faculty of the Institute as their sole representative on the governing body of the Institute, overseeing its administrative, financial and academic development).
- 1981-85 Vice President, The Building Together Association (Design and promotion of various housing schemes for low- income groups in Thailand).
- 1986-87 Project Manager, the Bangkok Land Management Study (Managing the study of the land and housing markets of Bangkok on behalf of Planning and Development Collaborative International (PADCO), for the National Housing Authority and the Asian Development Bank, including the hiring of local staff, the coordination of consultants, the conduct of surveys and seminars, and the preparation of reports).
- 1990-94 Co-director, The Housing Indicators Program, A Joint Program of the United Nations Centre for Human Settlements and the World Bank, based in the Urban Development division of the World Bank, Washington DC.
- 2002-2008 Co-director, *The Urban Growth Management Initiative*, a research project for the World Bank and the U.S. National Science Foundation (NSF) for a global comparative study of the different rates of urban expansion and the economic, social, demographic and policy differences that can explain them, based on analyzing census data and satellite imagery for a stratified sample of 120 cities and on the results of surveys in each city by local consultants.

PUBLICATIONS AND PROJECTS:

Books:

- Houses Generated by Patterns, (with Christopher Alexander, Sanford Hirshen, Sara Ishikawa and Christie Koffin) Berkeley CA: Center for Environmental Structure, 1969.
- <u>The Oregon Experiment</u>, (with Christopher Alexander, Murray Silverstein, Sara Ishikawa and Denny Abrams), New York and Oxford: Oxford University Press, 1975.
- <u>Urban Fields: A Geometry of Movement for Regional Science</u>, (with Geoffrey Hyman), London: Pion Publications, The Academic Press, 1976.
- <u>A Pattern Language: Towns, Buildings, Construction</u>, (with Christopher Alexander, Sara Ishikawa, Murray Silverstein, Max Jacobson and Ingrid Fiksdahl-King), New York and Oxford: Oxford University Press, New York, 1977.
- <u>Low-Income Housing: Technology and Policy</u> (with Ricardo Pama and J.H. de Goede, co-editors), Bangkok: Asian Institute of Technology, Bangkok, 1977.
- <u>Land Housing for the Poor</u>, (with Raymon Archer, Sidhijai Tanphiphat and Emiel Wegelin, co-editors), Singapore: Select Books, 1983.
- Housing: Enabling Markets to Work, (with Stephen K. Mayo), A World Bank Policy Paper, Washington D.C. The World Bank, 1993.
- <u>Housing Policy Matters: A Global Analysis</u>, New York and Oxford: Oxford University Press, 2000.
- <u>The Tale of the Scale: An Odyssey of Invention</u>, New York and Oxford: Oxford University press, 2004.
- Making Room for a Planet of Cities (with J. Parent, D. L. Civco and A. M. Blei, co-authors), Cambridge MA: Lincoln Institute of Lang Policy, 2012.
- Planet of Cities, Cambridge MA: Lincoln Institute of Lang Policy, 2012.
- Atlas of Urban Expansion (with J. Parent, D. L. Civco and A. M. Blei, co-authors), Cambridge MA: Lincoln Institute of Lang Policy, 2012.

Published Articles:

- "The Social Context of Transport Policy" (with Melvin Webber), in *The Science and Technology of Cities*, Committee on Science and Astronautics, U.S. House of Representatives, Washington, D.C., 1969, pp.57-72.
- "<u>Urban Velocity Fields</u>", (with Geoffrey Hyman), *Environment and Planning*, Vol.2, No.2, 1970, pp.211-224.
- "<u>Urban Travel Time</u>", (with Geoffrey Hyman), *Papers and Proceedings of the Regional Science Association*, Vol.27, 1971.
- "<u>Urban Spatial Interaction</u>", (with Geoffrey Hyman), *Environment and Planning*, Vol.4, No.1, 1972.

- "<u>Urban Transport Expenditures</u>", (with Geoffrey Hyman), *Papers and Proceedings of the Regional Science Association*, Vol.29, 1972.
- "New Patterns for University Environments", (with Ulrik Plesner), *Arkitekten*, Copenhagen, 1973.
- "Seventeen Reasons Why the Squatter Problem Can't Be Solved", (with Stanley Benjamin), *Ekistics*, Vol. 41, No. 242, January, 1976, pp. 20-26.
- "The Low-Income Housing System in Bangkok", (with Stanley Benjamin and J.H. de Goede), *Ekistics*, Vol. 44, No. 261, August, 1977, pp. 79-84.
- "The Low-Income Housing Delivery System in Asia" (with Yih-Yi Chen, Vidyadhar Deshpande, Rashidul Khan, Fashirdjal Noor, Vitaliano Sabalo and Upali Vandebona), in Pama, de Goede and Angel, editors, *Low-Income housing: Technology and Policy*, Asian Institute of Technology, Bangkok, Vol.3, 1978, pp. 1177-1218.
- "Sharing the Risk of Being Poor: Communal Savings Games in Bangkok", (with J.H. de Goede and Ramon Sevilla), *Journal of the Siam Society*, Vol. 66, Part II, July, 1978, pp. 123-145.
- "The Implementation of Habitat's Guideline for Action No. 12: Human Settlements

 Education, Research, and Dissemination of Information at the Asian Institute of

 Technology", (with J.H. de Goede), Habitat International, Vol. 4, Nos. 1-2, 1979, pp. 191197.
- "The Building Together Project in Bangkok: A Search for Practical Processes of People's Participation", in Peter Swan, editor, *The Practice of People's Participation: Seven Asian Experiences in Housing the Poor*, Asian Institute of Technology, Bangkok, 1980.
- "Emphasis on Distribution: Strategies for Small-Scale Water Resource Development in Northeast Thailand", (with Anat Arbhabirama and Marcia Brewster), Water Resources Bulletin, Vol. 17, No. 3, June, 1981, pp. 483-493.
- "Upgrading Slum Infrastructure: Divergent Objectives in Search of a Consensus", Third World Planning Review, Vol. 5, No. 1, February 1983, pp. 5-22.
- "Land Tenure for the Urban Poor", in Angel, Archer, Tanphiphat and Wegelin, editors, Land for housing the Poor, Select Books, Singapore 1983, pp. 110-142.
- "Slum Reconstruction: Land Sharing as an Alternative to Eviction", (with Thipparat Chirathamkijkul), in Angel, Archer, Tanphiphat and Wegelin, editors, *Land for housing the Poor*, Select Books, Singapore 1983, pp. 430-460.
- "Land Sharing as an Alternative to Eviction", (with Somsook Boonyabancha), *Third World planning Review*, Vol. 10, No. 2, May 1988.
- "Where have all the People Gone?: Urbanization and Counter- Urbanization in Thailand", *Journal of the Siam Society*, 1988.
- <u>Portable Electronic Scale of Minimal Thickness and Weight</u>, U.S. Patent No. 4,800,973, U.S. Patent and Trademark Office, January, 1989.
- "Bangkok Slum Lands: Policy Implications of Recent Findings", (with Sopon Pornchokchai) *Cities*, May, 1989, pp. 136-146.

- "Informal Land Subdivision in Bangkok", in Paul Baross et al, editors, *The Transformation of Land Supply systems in Third World Cities*, Avebury, 1990.
- "The Low-Cost Rental Housing Market in Bangkok, 1987", (with Parpis Amtapunth), *Habitat International*, vol. 13, issue 3, 173-185, 1989.
- "The Down-Market Trend in Housing Production in Bangkok", (with Sureeporn Chuated) *Third World Planning Review*, 1990.
- Mass-Produced Flat One-Piece Load Cell and Scales Incorporating It, U.S. Patent No. 4,993,506, U.S. Patent and Trademark Office, February, 1991.
- "Land Sharing: The Sengki Project", (with Yap Kioe Sheng), in Yap, K.S., ed., Low-income Housing In Bangkok: A Review of Some housing Sub-Markets, HSD Monograph 25, Asian Institute of Technology, Bangkok, 1992, pp. 49-72.
- "The Housing Indicators Program: A Report on Progress and Plans for the future", (with Stephen K. Mayo), *Journal of Housing and the Built Environment*, Vol.8, No.1, Delft University Press, 1993, pp. 13-47.
- Mass-Produced Flat Multiple-Beam Load Cell and Scales Incorporating It, U.S. Patent No. 5,110,581, U.S. Patent and Trademark Office, April, 1996.
- "The Housing Policy Assessment and Its Application to Panama," Journal of Housing Economics, 10, 176–209, 2001.
- "An Arterial Grid of Dirt Roads", Cities 25(3), 146-162, June 2008.
- "Preparing for Urban Expansion: A Proposed Strategy for intermediate Cities in Ecuador", in George Martin, Gordon McGranahan, Mark Montgomery and Rogerio Fernandez-Casilla, eds., *The New Global Frontier: Urbanization, Poverty and Environment in the 21st Century*, 2008, 115-130.
- "Mapping Urban Areas on a Global Scale: Which of the Eight Maps Now Available Is More Accurate?" (with David Potere as lead author, Annemarie Schneider, and Daniel L. Civco), International Journal of Remote Sensing 30(24), 6531-6558, December 2009.
- "Ten Compactness Properties of Circles: The Measurement of Shape in Geography", (with Jason Parent and Daniel L. Civco), Canadian Geographer 54(4), 441-461, 2010.
- "The Dimensions of Global Urban Expansion: Estimates and Projections for All Countries, 2000-2050" (with J. Parent, D. L. Civco, A.M. Blei and D. Potere), *Progress in Planning*, Volume 75, Issue 2, 53-108, 2011.
- "Non-compactness and Voter Exchange: Towards a Constitutional Cure for Gerrymandering" (with Jason Parent) Northwestern Interdisciplinary Law Review 4 (1), 89-130, 2011.
- "The Decline in Transit-Sustaining Densities in U.S. Cities, 1910–2000" (with A. M. Blei, J. Parent, and D. L. Civco), in *Climate Change and Land Policies*, G. K. Ingram and Y. Hong, editors, Cambridge MA: Lincoln Institute of Land Policy, 191–210, 2011.
- "<u>Urban Expansion, Land Conversion, and Affordable Housing: The Case of Zhengzhou</u>" (with Midori Valdivia and Rebecca M. Lutzy) in *China's Housing Reform and Outcomes*, Joyce Y. Man, editor, Cambridge MA: Lincoln Institute of Lang Policy, 137-156, 2011.

"The Fragmentation of Urban Landscapes" (with Jason Parent and Daniel L. Civco) in *Environment and Urbanization* 24(April), 249–283, 2012.

Unpublished Manuscripts:

- "A Report on Bay Area Regional organization", (with others), submitted to the Executive Director, Joint Committee on Bay Area Regional Organization, San Francisco, 1968.
- "Point Patterns in Urban Regions: Two Complementary Tests", Working Paper No. 91, Center for Planning and Development Research, University of California, Berkeley, 1969.
- "A Development Plan for the Administered Territories (The West Bank and the Gaza Strip), (with others), a report submitted to the Carnegie Commission on the Middle East, prepared by the Israel Institute of Applied Social research, Jerusalem, 1972.
- "Building Height Policy for Jerusalem", Urban Planning Unit, Municipality of Jerusalem, 1973.
- "Water for the Northeast: A Strategy for the Development of Small-Scale Water Resources", (with others), a report prepared for the Water Resources Subcommittee, National Economic and Social Development Board, Government of Thailand, 1978.
- "Housing Arrangements", keynote address delivered at the First National Consultation on Unconventional Approaches to Housing, Manila, 1979.
- "Building Together: Issues in Mutual-Aid Housing", (with Zilla Phoativongsacharn), a training manual in self-help and mutual- -aid housing, prepared for the Fourth United Nations Commission on Human Settlements, Manila, 1981.
- "Land for Human Settlements", draft theme paper prepared for the Fifth United Nations Commission on Human Settlements, Helsinki, 1983.
- "Mutual-Aid: House Construction through Building Groups", a training module prepared for the United Nations Centre for Human Settlements, Nairobi, 1986.
- "Spontaneous Settlement Formation in Rural Regions: Conceptual Framework and Guidelines for Action", report prepared for the United Nations Centre for Human Settlements, Nairobi, Kenya, 1986.
- "The Land and Housing Markets of Bangkok: Strategies for Public Sector Participation", (with others), Volume 1:Final Report, and Volume 2: Technical reports, prepared by Planning and Development Collaborative International (PADCO) for the National Housing Authority of Thailand (NHA), and the Asian Development Bank (ADB), 1987.
- "Land for Housing", a training module for government officials responsible for managing low-income housing programmes and projects, professional trainers and private-sector representatives engaged in the land market and in land development, prepared for the United Nations Centre for Human Settlements, Nairobi, 1988.
- "Sengki Land Sharing Project: A Preliminary Evaluation", (with Yap Kioe Sheng), report submitted to the United Nations Centre for Human Settlements, Nairobi, 1988.

- "Urbanization and Human Development", a paper submitted as a chapter for the UNDP 1990 Human Development Report, UNDP, New York, 1989.
- "Housing Indicators: Preliminary Results of the Extensive Survey of 52 Countries", (with Stephen K. Mayo), 1992.
- "ASEAN Housing Sector Performance" (with Stephen K. Mayo), paper submitted to the ASEAN Conference on Mega Cities, Bangkok, November 1992.
- "Asian Housing Sector Performance" (with Stephen K. Mayo), paper submitted to the Asia Infrastructure Division of the World Bank, May 1993.
- "The Enabling Index: Quantifying Enabling Strategies and Measuring Their Effects on housing Sector Performance" (with Stephen K. Mayo), paper prepared for IRIS, University of Maryland, 1995.
- "A Housing Policy and Institutional Development Program for Nicaragua," Report to the Inter-American Development Bank, Washington, D.C., December 1998.
- "Proposed Course on Land Use Instruments," Draft Report Submitted to the Economic Development Institute, The World Bank, Washington, D.C., March 1999.
- "Housing Policy in Venezuela: Diagnosis and Guidelines for Action," Report to the Inter-American Development Bank, Washington, D.C., October 1999.
- "Housing Policy in Ecuador: Diagnosis, Priorities and Proposed Programs," Report to the Inter-American Development Bank and the Government of Ecuador, Washington, D.C., May, 2000.
- "Housing Policies and Programs in Guatemala: Diagnosis, Evaluation and Guidelines for Action," Report to the Inter-American Development Bank and the Government of Guatemala, Washington, D.C., September 2000. Spanish version.
- "A National Settlement Program for Trinidad and Tobago: The Key to Housing Policy Reform," Report to the Inter-American Development Bank and the Government of Trinidad and Tobago, Washington, D.C., November 2000.
- "Housing Policy and Housing Programs in Panama: Diagnosis and Guidelines for Action," Report to the Inter-American Development Bank and the Government of Panama, Washington, D.C., November 2000. Spanish version.
- "Housing Policy in the Dominican Republic: Diagnosis and Guidelines for Action," Report to the Inter-American Development Bank and the Government of the Dominican Republic, Washington, D.C., December 2000. Spanish version.
- "Housing Policy in Argentina: Diagnosis and Guidelines for Action," Report to the Inter-American Development Bank and the Government of Argentina, Washington, D.C., July 2001.
- "Housing Policy in Honduras: Diagnosis and Guidelines for Action," Report to the Inter-American Development Bank and the Government of Honduras, Washington, D.C., July 2002. Spanish version.
- "A Proposed Conceptual Framework for Monitoring IDB-Assisted Housing Programs", Report to the Inter-American Development Bank, Washington, D.C., September 2002.

- "An Indicator–Based Monitoring Framework for IDB–Supported Housing Projects," prepared under contract for the Inter–American Development Bank, December 2002.
- "Housing Policy in Uruguay: Diagnosis and Guidelines for Action," Report to the Inter-American Development Bank and the Government of Uruguay, Washington, D.C., March 2004. Spanish version.
- "Housing Indicators: The State of the Art," prepared for the World Bank, Washington D.C., March 2004.
- "Two Complementary Approaches to Monitoring Target 11: 'Improving the Lives of 100 Million Slum Dwellers by 2020'—A Research Note", report submitted to the U.N. Human Settlements Programme and the World Bank, June 2004.
- "<u>Defining and Monitoring Target 11: A Policy Note</u>", report submitted to the U.N. Human Settlements Programme and the World Bank, September 2004.
- "A Proposed Housing Index Monitored by Habitat for Humanity: An Exploratory Note," prepared for Habitat for Humanity, May 2005.
- <u>The Dynamics of Global Urban Expansion</u>, with Stephen C. Sheppard and Daniel L. Civco, Robert Buckley, Anna Chabaeva, Lucy Gitlin, Alison Kraley, Jason Parent, and Micah Perlin, Transport and Urban Development Department, The World Bank, Washington D.C., September 2005.
- "Towards a Housing Policy Index for Habitat for Humanity: The Construction and Pilot Testing of a Survey Instrument", (with Lucy Gitlin), January 2006.
- "Preparing for Urban Expansion in Intermediate Cities in Ecuador: A World Bank Project Focusing on Access to Land for the Urban Poor," a report prepared for the World Bank, Washington D.C., March 2006.
- "Getting Results in Housing: A Framework for Monitoring Results in Housing Projects Using Measurable Indicators (with Michael Jacobs), Sustainable Development Department, Technical Papers Series, Inter-American Development Bank, Washington, D.C., August 2006.
- "Urban Sprawl Metrics: An Analysis of Global Urban Expansion Using GIS", (with Jason parent and Daniel A. Civco), paper presented at the ASPRS Conference, February 2007.
- "A Global Housing Policy Index Monitored by Habitat for Humanity", (with Lucy Gitlin), submitted to Habitat for Humanity, May 2007.
- "The Persistent Decline in Urban Densities: Global and Historical Evidence of Sprawl", (with Jason Parent, Daniel L. Civco and Alejandro Blei), Working Paper, Lincoln Institute of Land Policy, October 2009.
- "The Fragmentation of Cities and its Decline: Global Evidence of Sprawl, 1990-2000", (with Jason Parent and Daniel L. Civco), Working Paper, Lincoln Institute of Land Policy, October 2009.
- "Housing Policy in Belize—Diagnosis and Guidelines for Action", Transport and Urban Development Department, The World Bank, January 2010.

"A Planet of Cities: Urban Land Cover Estimates and Projections for All Countries, 2000-2050 (with Jason Parent, Daniel Civco, Alexandro Blei, and David Potere), November 2010.

Films and Video Tapes:

- The People's Housing Efforts: The Low-Income Housing System in Bangkok, writer, producer and director (with Robert Theriault), a 23-minute color television film prepared for the UN Economic and Social Commission for Asia and the Pacific for presentation at Habitat, the United Nations Conference on Human Settlements, Vancouver, Canada, 1976.
- The Jerusalem Village fire Protection Project, producer-director and cameraman (with Paul Chamniern Vorratnchaiphan), a 20-minute black-and-white television film describing the progress of a community-based slum improvement project in Bangkok, 1977.
- *Learning to Build Together*, producer, a 28-minute 16mm color film monitoring the progress of the Building Together Project in Bangkok, prepared for the United Nations Centre for Human Settlements, 1982.
- Building Together: Issues in Mutual-Aid Housing, producer, a 35- minute 16mm color film for training project managers in mutual- aid housing, prepared for the United Nations Centre for Human Settlements, 1982.
- Land Sharing as an Alternative to Eviction, Script writer (with Peter Swan), 15-minute 16mm color film describing the Klong Toey Land Sharing Project in Bangkok, 1987.

Selected Building Projects:

1977	Project Director, "The Jerusalem Village Fire Protection Project" (Planning and construction of a demonstration project in community-based slum improvement in Bangkok).
1978-85	Project Director, "The Building Together Project" (Architectural design, planning and full implementation and construction of an experimental 200-unit mutual- aid housing project in Bangkok)
1983-84	Project Director, "Jerusalem of Gold" (Planning, architectural design and coordination of an 80 -unit cooperative housing project for the elderly in Jerusalem, Israel).
1987-88	Developer, The Railei Beach Community (land purchase and preparation, infrastructure development, housing design and construction, and community organization).
1996-98	Senior Partner, Angel+Gitlin Architecture (Development, Design and construction of the Condor House, a country house in Bridgehampton, New York).

COUNTRIES VISITED IN CONNECTION WITH RESEARCH/PROFESSIONAL WORK:

Canada, United States, Mexico, Guatemala, Belize, El Salvador, Honduras, Nicaragua, Panama, Dominican Republic, Colombia, Costa Rica, Ecuador, Peru, Brazil, Venezuela, Trinidad and Tobago, Argentina, Uruguay, England, the Netherlands, Italy, Hungary, the Russian Federation, Israel, Kenya, India, Sri Lanka, Nepal, Burma, Thailand, Singapore, Republic of Korea, China, Taiwan, Hong Kong, the Philippines, Papua New Guinea, and Australia.

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