M. GORDON BROWN, BS, MBA, MSc (Arch), DTech, FRICS



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Overview

I started Space Analytics in 1989 to focus on diagnosing and solving functional and economic failures of buildings and urban places from the perspective of owners and users. I have provided expert services including consultation, deposition and trial testimony in state and federal courts. Space is the common denominator of architecture, real estate, urban design and planning and I have experience and education in each.

Space Analytics is distinct in two things. A well-developed research capability applied rapidly and rigorously. An awardwinning spatial network approach that reveals and quantifies underlying spatial patterns and transforms them into hard evidence. This approach has been successfully applied to analyze problem property and in cases involving eminent domain access takings, premises liability (very large awards), architectural copyright (largest damages award in the United States), First Amendment public forum and a variety of owner-designer-contractor-user disputes. It has been successfully reviewed for Daubert compliance.

I recently was Adjunct Professor in the Architecture PhD program at Illinois Institute of Technology and Academic Fellow with the Urban Land Institute. From 2006 to 2010, I was Academic Dean and the ALDAR Dean of Business at the Higher Colleges of Technology in the UAE and before that Head of the Real Estate Management and Development Group at Eindhoven University of Technology in The Netherlands. In the 1980s, I taught architecture at the University of Colorado where I was Associate Dean, the Illinois Institute of Technology and Arizona State University. I am a Fellow of the Royal Institution of Chartered Surveyors.

My publications include articles in peer-reviewed scientific and scholarly journals, professional and critical publications and newspaper columns. I have made dozens of presentations and delivered keynote talks to local, national and international audiences. My book, *Access, Property and American Urban Space*, was published by Routledge/Taylor & Francis in March 2016.

Consulting and research areas

Diagnosing user and owner problems caused by improper building and spatial infrastructure Decision-making and judgment biases of real estate and design professionals Neuroscientific dimensions of building and urban form Pedestrian movement and premises liability Research methods and evidence

Education

University of Ulster, Northern Ireland

Doctor of Technology (Higher Doctorate) (Built Environment), 2005. *Access to real property: pattern and paradigm*: Examination of Fifth Amendment takings jurisprudence and application of complexity theory network models to impacts in eminent domain and post-war configuration changes affecting settlement patterns and real estate value in American cities. Advisors: Alastair Adair and Stanley McGreal.

University College London, London, England

Master of Science (Architecture) (thesis distinction), 1982. University College London. Advanced architectural studies course at the Bartlett School of Architecture. Thesis: *Spatial Design of Organizations* addressed interaction ofworkplace communication technology and spatial patterns . Advisor: Bill Hillier.

University of Pennsylvania, Philadelphia

Master of Business Administration, 1981. The Wharton School. Emphasis on management, organizational and strategic decision-making. Advisor: Ross Webber. The Annenberg School of Communications, 1973-74. Graduate program in communication theory, aesthetics, technology and behavior. Advisor: George Gerbner.

University of Illinois, Chicago

School of Architecture, 1978-80. Graduate professional program in architecture. (Includes study at University of Paris Pedagogical Unit #3, Versailles, France, 1980.)

Washington University, St. Louis

Graduate courses in urban economics and social systems, 1970.

University of Illinois, Urbana-Champaign

Bachelor of Science (Communications), 1970. Major in editorial journalism. Liberal and fine arts course work including classical history, geography, design and urban planning. Advisor: James W. Carey.

Others

University of Denver, 2003-04, Master Teacher courses.

The Appraisal Institute, 1992, 1993. Principles of Real Estate Appraisal; Basic Valuation Procedures; Standards of Professional Practice.

Awards, recognition

Fulbright Distinguished Chair First Alternate. Aalto University, Helsinki, Finland, 2014.

Marquis Who's Who in the World, 2014.

Fellow, Royal Institution of Chartered Surveyors (RICS), 2012.

Keynote speaker, European Real Estate Society Annual Conference, Eindhoven University of Technology, Eindhoven, The Netherlands, June 2011.

Academic Fellow, Urban Land Institute, 2010-11.

American Real Estate Society prize: best paper by a practicing professional, 2006.

Colorado Endowment for the Humanities research grant award, 2003.

Homer Hoyt Advanced Studies Institute Leadership Award, 2000.

American Real Estate Society prize: best paper on retail real estate sponsored by the International Council of Shopping Centers, 1998.

Cass Gilbert Visiting Lecturer, University of Minnesota College of Architecture and Landscape Architecture, 1998.

Architectural Record and The American Institute of Architects Walter Wagner Forum Finalist, 1989.

Visiting Science and Engineering Research Council Fellow, University of London, 1985.

Thesis distinction, "A Theory for the Spatial Design of Organizations," University of London, 1982, (Examiner: Basil Bernstein).

Wharton Graduate Scholarship, 1974.

Annenberg School Scholarship, 1973.

Governor's Citation for State of Illinois Administrative Interns, 1971.

James Scholar, University of Illinois; Illinois State Scholarship; University of Chicago Scholarship, 1964. Interviews, Quotes and Appearances:

Corporate Live Wire Eminent Domain & Condemnation Roundtable 2014; Real Estate Weekly (New York) 2013, Building Innovation (Amsterdam) 2004; Situations papers: material city 3 – Bristol; American Public Radio Marketplace; Court TV 1990; The Denver Post "Faces in the West" series 1988; Landscape Architecture Magazine; The Denver Business Journal; The Denver Post; Building Design (London); Chicago Tribune; Atlanta Journal-Constitution; The Washington Post; others.

Summary of Academic and Professional Activity

2014-current: Member, Board of Directors and Vice-president, American Economic Development Institute, Chicago.

2013-2014: Adjunct Professor of Architecture, Illinois Institute of Technology, Chicago.

2013-2014: Board of Academic Advisors, Homburg Academy, Kusnacht, Switzerland.

2012-2014: Adjunct Professor of Real Estate, Homburg Academy, Kusnacht, Switzerland.

2012-current: Member, Board of Directors, Center For Sustainable Urbanism, Sudbury, MA.

2011-2014: Chair, Royal Institution of Chartered Surveyors Midwest Chapter, Chicago.

2010-2011: Academic Fellow of the Urban Land Institute, Washington, DC.

- 2009-2010: ALDAR Dean of Business and Academic Dean for Business and IT, Higher Colleges of Technology, Abu Dhabi, UAE.
- 2007–2010: Board of Advisors, Coresta Group, Eindhoven, The Netherlands. Corporate Real Estate Consultants.
- 2006–2009: Fellow of the University and Head of the Real Estate Management and Development Group, Faculty of Architecture, Building and Planning, Eindhoven University of Technology, Eindhoven, The Netherlands (see below).
- 2005-2009: Roulac Global Research Council, Roulac Global Places, San Rafael, CA.
- 2004–2005: Board of Advisors, Range-Play Entertainment Corp., Boulder, Colorado. Developer of off-course golf practice, play and competition equipment, software and management systems.

- 2003–2005: Adjunct Faculty in Liberal Studies, University of Denver.
- 2002–2004: Board of Directors, Vice-president, Invisible Museum, Denver, publishers of *Eye Level*, Journal of Contemporary Visual Culture, Denver.
- 2000: Managing Director, Space Syntax, Ltd., London.
- 1999–2009: of counsel, Roulac Global Places, San Rafael, CA.
- 1999–2003: Editorial Board, Eye Level, Journal of Contemporary Visual Culture, Denver.
- 1998: Cass Gilbert Visiting Lecturer, University of Minnesota College of Architecture and Landscape Architecture.
- 1995-99: Member of the Editorial Board of Contributors, The Denver Business Journal.
- 1994–1999: Free-lance writer with recent articles and book reviews appearing in the following magazines: Architectural Record, Landscape Architecture, Metropolis, PA (Progressive Architecture), Urban Land, CIO Journal.
- 1993–2002: Columnist on architecture, planning and urban design for The Denver Business Journal, a business weekly.
- 1992–94: Commercial real estate consulting involving valuation work and market analyses for investors in eminent domain cases for government agencies and private property owners with National Valuation Consultants and Hunsperger, Weston & Zink, Ltd., Denver. Worked on a variety of vacant land and improved commercial property types including industrial, retail, subdivisions, apartments.
- 1989–current: Principal, Space Analytics, LLC, Denver. Architecture and infrastructure consulting; expert services. Applied science analysis for design and location evaluation. Expert analysis and witness work on property access, urban design, architectural design and site and building function problems in the context of eminent domain, intellectual property, property owner/ designer/ contractor and first amendment conflicts. Futures forecasting seminars. Testimony featured on Court TV. Work on failed shopping centers featured on American Public Radio.
- 1989-current: owner, Exforma, a product design company. Owner of U.S. patent D465891.
- 1989–93: New venture counseling with the MIT Enterprise Forum of Colorado involving assembly of expert panels to review business plans and counsel emerging technology–based manufacturing and service companies in the Denver area (Executive Committee; Chair: Program and Public Relations Committees).
- 1989–91: Lecturer, College of Environmental Design, University of Colorado at Boulder, CO. (see below)
- 1987-89: Associate Professor, School of Architecture and Planning, University of Colorado at Denver, CO. (see below)
- 1987–88: Associate Dean and Associate Professor, School of Architecture and Planning, University of Colorado at Denver, Colorado. (see below)
- 1985-87: Associate Professor, School of Architecture, Arizona State University, Tempe, Arizona. (see below)
- 1985–90: Paper Reviewer, Environmental Design Research Association.
- 1985–86: Proposal Reviewer, National Science Foundation, Engineering Directorate, Structures and Building Systems Program.
- 1984–85: Visiting Assistant Professor, School of Architecture, College of Architecture and Environmental Design, Arizona State University, Tempe, Arizona. (see below)
- 1983–84: Visiting Assistant Professor, Department of Architecture, College of Architecture, Design and Planning, Illinois Institute of Technology, Chicago, Illinois. (see below)
- 1981-82: Full-time study at the University of London.
- 1980–81: Acting Project Architect, Douglas Schroeder Associates, Chicago, Illinois, for the \$7 million renovation of the Transportation Building in Chicago's Printing House Row. Design of high-rise residential interiors.
- 1978–80: Office Manager and Designer, Skidmore, Owings & Merrill, Chicago, Illinois, with administrative responsibility for 1000 person architecture and engineering office with \$10 million overhead budget. Design work on high rise residential projects and on the New Jeddah International Airport wide body hangars. Part-time study at the University of Illinois, Chicago.
- 1977–78: Consultant, to the Philadelphia Health & Welfare Council to develop an evaluation design for a computerized regional information and referral system; consultant, with C. W. Shaver Associates, New York, regarding strategic market planning as part of fund-raising for a private college; consultant, to Davis Associates, Chicago, on marketing interior architecture services. Part-time study at the University of Illinois, Chicago.
- 1976–77: Assistant Director of Management Services, State of Minnesota, Department of Administration St. Paul, with management responsibility for a 30 person internal consulting group providing management advice to administrators and policy–makers.
- 1974–75: Consultant, to Babcock & Wilcox Company, New York, on communication behavior and systems in management in their nuclear power division with Annenberg School Dean George Gerbner. Full-time study at the University of Pennsylvania.
- 1974: Coordinator, Philadelphia Health & Welfare Council, of an information project promoting services for elderly metropolitan area residents. Full-time study at the University of Pennsylvania.
- 1972–73: Program Analyst, Camil Associates, Philadelphia, conducting on-site research on federal labor/welfare policy implementation in state public welfare agencies. Part-time study at the University of Pennsylvania.

- 1971–72: Program Planner and Copywriter, Philadelphia Urban Coalition assisting in public relations and providing technical and budget assistance to community groups.
- 1971: Technical Planning Advisor, State of Illinois, Department of Local Government Affairs, Springfield, for the implementation of federal guidelines in housing and citizen participation and on Model Cities Information Systems.
- 1970: Graduate Research Assistant, Institute of Communications Research, University of Illinois, Urbana working on aesthetic and urban communication for James W. Carey.
- 1968–70: Planner, Springfield/Sangamon County (Illinois) Planning Commission, for Lincoln home area preservation and various small communities to develop comprehensive plans. One cited by HUD as an example of the state of the art in small community planning. Full-time study at the University of Illinois, Urbana.
- 1966–68: Planner, Planning Services, Inc., New Orleans, Louisiana, for consulting firm developing comprehensive community plans, business district, historic preservation and renewal plans in southern Louisiana and Mississippi.

Selected Space Analytics' consulting activity

Analysis for litigation

Our work has been involved in nationally known cases in state trial courts, the Colorado Supreme Court and Federal District Court.

Owner-designer-user issues

- **Functional utility and unjust enrichment** in a historic gambling town. We distinguished external (economic) from functional obsolescence and showed the design and construction of the building, as it would be on completion, allowed an already contemplated assemblage with adjacent property that would result in a building very similar in functional utility to many successful casinos.
- **Structural, functional or aesthetic failure:** what makes luxury hotels different? Just as it opened, a beachfront hotel on a Pacific Island was damaged by an earthquake and lost much of its stated value. We provided evidence its functional/aesthetic character was unlike that of luxury hotels around the world and in the same area.
- **Was there a contract?** A couple wanted to build a luxury house and selected a designer-builder. Without a contract, the designer/builder retained consultants and subcontractors. The designer/builder submitted a bill, the property owner refused to pay and the designer-builder sued. We showed the design and contracting practices were unusual.
- What is an architect, really? After interviewing several architects in the closest town, a place under 100,000, the founder of a well-known company chose one to design a luxurious, 25,000 SF great house, manager's house and other facilities. Because of many delays, fee and cost increases, the owner terminated the contract and the architect counterclaimed for unpaid bills and to prevent use of his designs. We showed the architect had no academic or work experience designing a luxury house.
- **Attorney malpactice.** A warehouse-office lost an easment in perpetuity resulting in a 65% loss of value and an effective cure had to be developed. We selected the appaiser and developed an innovative design reqired to effect a functionally and economically appropriate cure.

Premises liability

Consulting and expert testimony distinguishing acceptable from unacceptable risks, evaluating human, environmental and configuration factors and identifying design, construction and management causation sources for plaintiffs and defendants in over 40 pedestrian deaths and injuries, including ADA and OSHA compliance factors, in streets, buildings, parking lots and stairs and other transitions in hospitals, supermarkets, cultural facilities, multi-family residential, transportation facilities, shopping malls, convenience stores and major public facilities in Illinois, Colorado, Oklahoma, Florida, Indiana, Kentucky, Texas, Nebraska, Wyoming.

Access takings - eminent domain and regulatory – functional/economic damages

Consulting and expert testimony in multiple cases involving **road widenings, pipeline easements and a rail line**. In multiple cases, Our work there were significant changes to the highest and best use and substantial impairment of access of these properties.by making larger parcel distinctions, by analyzing comkparables, development alternatives and required patterns of circulation, by examining factors affecting how drivers scan and perceive in their cone of vision and by showing the size, shape, position, visibility, internal and external configuration of the use in the before and after conditions.

Intellectual property

Consulting and expert testimony in multiple **trade dress and architectural copyright** cases including the most successful outlet mall, semi-custom suburban homes, a 15,000 SF great house in Beverly Hills, garden apartments in Nevada and Arizona, a well-known high-rise condominium building near Miami, Florida. Our approach passed Daubert review.

Consulting on brand value of several of the largest skyscrapers in New York. This analysis involved spatial-visual models to compare key physical form aspects and features of ultra-tall, historic and proposed skyscrapers affecting brand perception and economic value.

Public space

Expert testimony and advisory involving First Amendment public forum cases a major league ballpark and regional shopping malls and circulation, crowding and safety affected by locations of peddlers and vendors.

Analysis for planning and development

The following are examples of the variety of work we have undertaken and much of it ultimately addressed value questions. In addition to the following, our work includes diagnostic analyses of malls from small strip centers to over 2,000,000 SF regional malls, hospitality and multi-use buildings, mid size office buildings and health care buildings including two major tertiary care hospitals.

- **Regeneration of a medieval city**. This ULI Advisory Services Panel project addressed a wide range of issues including heritage assets, movement patterns and brand status with respect to tourism, economic development and resident life to initiate strategic positioning activity.
- **Retail nodes in a large new town**. We developed an approach to address the transit, auto and pedestrian accessibility and attraction of existing and planned retail areas to identify the relationship between market behavior and spatial patterns and optimal trade-offs between core and satelite retail development.
- **Spatial strategy for the corporate workplace**. A major manufacturer of office and furniture systems asked us to assist them in developing methodologies to analyze the spatial and functional/economic effects of new products in a corporate real estate context.
- **Historic public space**. For a citizens group concerned about the impact of new downtown plans on the vitality of the originally settled part of a city in Arizona, we did an audit of the existing configuration of public space patterns in the area as well as a shape-network analysis of the new plans in order to identify problems to be addressed. Subsequent plans were changed in response.
- **Regional mall redevelopment**. The owner of a portfolio of community and regional malls believed a three-level mall they acquired in a recent in a recent multi-property transaction had circulation problems affecting sales revenues of line as well as anchor tenants. We diagnosed the specifics of the spatial problem and developed a design decision model to work with the owners and architects on redesign.
- **Urban configuration analysis** For an architectural design competition, we worked with the only local architecture firm in a national competition to design a major governmental office building and analyzed pedestrian infrastructure and vehicle accessways to all buildings within 1000 feet of the site.
- **Spatial strategy for Main Street.** Commercial property values on one of the longest commercial streets in the world but had fallen proportionally far behind those of residential properties a few doors away. We identified a combination of inattention to right-of-way improvements and poor private development practices. The street has since experienced considerable public and private sector investment.
- **Highest and best use for an Elizabethan country house**. Cherokee Castle, designed and built in the manner of a late medieval castle in 1924-1926 by a prominent Denver architect is a historic property. We were retained to prepare a detailed building and highest and best use analysis of this major historic country house for re-use as a museum.
- **Hospitality in the Gulag**. A joint private/public design and construction project for an American-style motel in Magadan, Russia using modular construction in the northwest US and shipped by barge. We helped analyze data and, using translations and videotapes, reviewed and rewrote the studies.

Built environment futures

Seminars with architecture and engineering firm leaders to outline critical issues affecting knowledge needed by new leaders. Seminars and roundtables with business, professional and government leaders to develop scenarios focused on high impact, near- and mid-term strategic challenges such as boom-bust cycles affecting senior executives in built environment and real estate.

Publications: books

Brown, M. Gordon (2016), Access, Property and American Urban Space. New York & London: Routledge/Taylor & Francis. Proposes a new way to understand urban form through the relationship of real property and urban spatial patterns. Describes major changes at intervals over 200 years in the large-scale street form of American cities and shows how a regime shift occurred after WWII and its effect on economic productivity. Attention is given to property/street access patterns, property takings, design ideas, heuristics and biases issues in legal language, transaction costs and rent seeking, patterns of street development and property value anomalies. Underlying issues

addressed include utopian thought in communications and transportation, the Continental Grid and Broadacre City, the Constitution and thought of Founding Fathers.

Publications: book chapters

Brown, M. Gordon and Leonie van de Ven (2007), Creatieve Stad, ch. 4 of Smeets, J. J. A. M. (ed.)., *11x040*, Eindhoven: Trudo. A review of Eindhoven's place as a hi-tech paradise in terms of the history of creative cities in the Western world, recent patterns of technological innovation, contemporary scientific knowledge and their relation to urban spatial patterns.

Publications: editorship

Editorial Board, Book Reviews, *Journal of Real Estate Literature*, American Real Estate Society, 2003. Editorial Board, *Eye Level*, visual culture quarterly, Denver, 2000-2003.

Member of the Editorial Board of Contributors, The Denver Business Journal. 1995-99.

Editor, *MIT Enterprise Forum of Colorado Case Compendium*. Case documentations of presentations by Colorado technology–based start–up companies and special speakers for the 1989–90 Forum season, Denver, Colorado, 1991.

Consulting Editor, *9H*, International Magazine of Architectural Translation, Criticism and Projects, London, England, 1985–87.

Publications: peer-reviewed articles

- Brown, M. Gordon (forthcoming), From savannahs to settlements: the heuristics of embodied space, *Frontiers in Psychology, section Cognitive Science*.
- Brown, M. Gordon (2010), The Owl, the City and the Creative Class, Planning Theory and Practice, 11:1.
- Brown, M. Gordon and Tjibbe Teernstra (2008), Examining investor perceptions of obsolescence and value through a behavioural economics lens, *Journal of European Real Estate Research*, 1:3, 267-290.
- Brown, M. Gordon (2008), Evading economic reality: real property access takings and the slippery slope of legal language, *International Journal of Law and Management*, 50:6, 285-300.
- Brown, M. Gordon (2008), Proximity and collaboration: measuring workplace configuration, *Journal of Corporate Real Estate*, 10:1, 5-26.
- Witvoet, Daniel, Peter J. Vliek, M. Gordon Brown and Leonie A. M. C. van de Ven (2007), Reële opties in vastgoedontwikkeling deel 2, Property Research Quarterly, 6:4, 43-48.
- Witvoet, Daniel, Peter J. Vliek, M. Gordon Brown and Leonie A. M. C. van de Ven (2007), Reële opties in vastgoedontwikkeling deel 1, *Property Research Quarterly*, 6:3, 35-40.
- Brown, M. Gordon and Stephen Roulac (2004), Why Can't A Building Be More Like A Machine, *Real Estate Issues*, Spring, 16-21.
- Black, Roy T., M. Gordon Brown, Julian Diaz, Karen M. Gibler and Terry V. Grissom, (2003), Behavioral Research in Real Estate: A Search for the Boundaries, *Journal of Real Estate Practice and Education*, 6:1, 85-112.
- Brown, M. Gordon (2002), Healthy walkways: a guide for premises liability, *Real Estate Issues*, Counselors of Real Estate, Winter 2001/2002, 26:4, 28-36.
- Brown, M. Gordon (2001), Choosing a company's building design using the architectural design competition, *Journal of Real Estate Research.*, 22:1/2, 81-106.
- Brown, M. Gordon (1999), Design and Value: Spatial Form and the Economic Failure of a Mall, *Journal of Real Estate Research*, 17:2, 189-225.
- Brown, M. Gordon (1990), Form as the Object of Experience: Georg Simmel's Influence on Mies van der Rohe's Educational Philosophy, *Journal of Architectural Education*, February.
- Brown, M. Gordon (1989), Survival and the Dilemma of Specialization, *Proceedings of the Walter Wagner Education* Forum, The American Institute of Architects, Washington, D.C.
- Brown, M. Gordon (1985), Objective Measures of Spatial Organization in Architecture, *Research & Design* 85:Architectural Applications of Design & Technology Research, American Institute of Architects, Washington, D.C.

Publications: professional articles, criticism and reviews

- Brown, M. Gordon (2011), Leasing distressed properties. Commercial Leasing Law and Strategy, December.
- Brown, M. Gordon (2011), From local to global and back, Service Magazine, 18:1.
- Brown, M. Gordon (2010), Dubai: rebuilding the brand, Service Magazine, 17:2.
- Brown, M. Gordon (2009), Globalizing Real Estate Education. Urban Land, May, 82-87.
- Brown, M. Gordon (2008), Good bye TU/e: reflections on real estate education, Service Magazine, 16:1, December, 5-7.
- Brown, M. Gordon (2003), The Denver Millennium Bridge, Eye-Level, A Quarterly Journal of Contemporary Visual Culture, Winter, 6-7.

- Brown, M. Gordon (2003), Preventing Slips and Falls: A Cognitive Perspective, *Claims*, National Underwriter Company, April, 62-66.
- Brown, M. Gordon (2002), Why Do People Fall? A Cognitive Perspective on Slip and Fall, *Trial Talk*, Colorado Trial Lawyers Association, June/July, 36-39.
- Brown, M. Gordon (2002), review: Charter of the New Urbanism, Journal of Real Estate Literature, 10:1, 147-152.
- Brown, M. Gordon (2002), La Casa by Elizabeth Wright Ingraham, *Eye-Level, A Quarterly Journal of Contemporary Visual Culture*, Spring, 12-13.
- Brown, M. Gordon (2002), Shop 'til it Dropped: Cinderella City at the End, *Eye-Level, A Quarterly Journal of Contemporary Visual Culture*, Winter, 16-17.
- Brown, M. Gordon (2001), Dam(n) Entrance: Public Art or Art in a Public Space? *Eye-Level, A Quarterly Journal of Contemporary Visual Culture*, Autumn, 12-13.
- Brown, M. Gordon (1996), review of *Reconstructing Architecture for the 21st Century* by Anthony Jackson, University of Toronto Press, Toronto, in *Architectural Record*, September.
- Brown, M. Gordon (1996), review of City Life by Witold Rybczynski, Scribner, New York, in Urban Land, September.
- Brown, M. Gordon (1995), Will Stapleton Take Off? *Landscape Architecture*, American Society of Landscape Architects, Washington, DC, August.
- Brown, M. Gordon (1995), When Business Meets Design, PA (Progressive Architecture), August.
- Brown, M. Gordon (1995), A flying leap into the future, (Cover story on the design of Denver International Airport.) *Metropolis*, New York, July-August.
- Brown, M. Gordon (1994), Autopsy of a Shopping Center, *Urban Land*, Urban Land Institute, Washington, D.C., September.
- Brown, M. Gordon (1992), CIOs' Jobs on the Line: Securing Your Job in a Volatile Profession, *Chief Information Officer Journal*, Faulkner & Gray, Inc., New York, NY, Winter.
- Brown, M. Gordon (1990), Avoiding the Failure Track: An Interview with Bayne Gibson, *The Forum Reporter*, MIT Enterprise Forum of Colorado, Winter.
- Brown, Gordon (1989), review of *Success Strategies for Design Professionals*, by Weld Coxe et al., McGraw–Hill Book Co. New York, 1987 in *Journal of Architectural and Planning Research*, 6:3, Autumn.
- Brown, Gordon and Mark Gelernter (1989), Education: Veering from Practice, Progressive Architecture, March.
- Brown, Gordon (1985), review: *The Social Logic of Space*, by Bill Hillier and Julienne Hanson, Cambridge University Press, 1984 *Triglyph*, Spring.
- Brown, Gordon (1985). Architectural Program Accreditation, Inland Architect, January/February.
- Brown, Gordon (1984). The IIT Curriculum: A Tacit Philosophy, Inland Architect, September/October.

Publications: proceedings

- Brown, M. Gordon (2007). De facto private places: access morphology and governance. Proceedings of the 2007 4th International Conference of the research network Private urban governance & gated communities, Université Paris 1, Panthéon-Sorbonne, Paris. This paper shows 'gatedness' is often an unintentional byproduct of contemporary planning. It clarifies the distinction between private space and property, examines the morphology of access using network techniques and the role of the public forum in self-governance.
- Brown, M. Gordon (2006), Access takings: contexts, transformations and measures. *The Institute for Local Government Studies, The Center for American and International Law*, Plano, Texas. This article presents a history of American street patterns and describes how spatial network methodology based on complexity theory represents, discriminates and measures access in actual access takings cases.
- Brown, M. Gordon (2006), Is the category imperative? Toward a spatial taxonomy for real estate research. Presented at the 13th Annual European Real Estate Society Conference, Weimar, Germany, 7-10 June. Develops a rationale for taxonomic approach to real estate spatial information.
- Brown, M. Gordon, Stephen E. Roulac, Andrew R. Goetz, (2005) Large-Scale Street Geometry and Traffic Congestion. Proceedings of the January, 2005 annual meeting of the *Transportation Research Board, National Academy of Sciences*, Washington DC. Compares geographic with geometric information about urban street patterns.
- Brown, M. Gordon (2001), Design and Value: Spatial Form and the Economic Failure of a Mall, *Proceedings: Space Syntax, 3rd International Symposium*, Georgia Institute of Technology, Atlanta. Compares deep spatial structures of two otherwise similar malls.
- Brown, M. Gordon (1998), The Emergence of Two Cultures of Building, *Forum II: Architectural Education for the 3rd Millennium*, Gazimagusa, TRNC. Contrasts architectural and real estate thought with respect to building.
- Brown, M. Gordon (1990), The Skyscraper as Organic Machine: Paradigms of Power and Control, *Proceedings of the 8th* Annual American Collegiate Schools of Architecture Technology Conference, Los Angeles.
- Brown, M. Gordon (1989), Survival and the Dilemma of Specialization, *Proceedings of the Walter Wagner Education* Forum, The American Institute of Architects, Washington, D.C.

- Brown, M. Gordon (1989), The spatial structure of a hospital floor, *Proceedings of the Architectural Research Centers Consortium Annual Research Conference*, 1988, Washington, D.C.
- Brown, M. Gordon (1989), Forecasting Spatial Form, in *An Architecture for Health Checkup, Proceedings of th e American Institute of Architects, Committee on Architecture for Health Symposium on Trends in Health Care: Impact on Architecture and Architects*, American Institute of Architects, Washington, D.C.
- Brown, M. Gordon (1988), The Functional Space of a Building, Its Measurement and Relation to an Organization and Its Productivity, in *Energy: An Integrated Approach*, Tennessee Valley Authority, Chattanooga, 1988.
- Brown, M. Gordon (1987), Buildings and Media: The Exogenous Double–Helix, *Proceedings of the 11th International Congress on Cybernetics*, International Cybernetic Association, Namur, Belgium.
- Brown, M. Gordon, (1987), The Choreography of Problem–solving, *Proceedings of the American Institute of Architects/American Collegiate Schools of Architecture Annual Research Conference*, AIA/ACSA Research Council, Washington, D.C.
- Brown, M. Gordon (1986), Buildings and Media as Access to Information in Complex Organizations, *Proceedings of the Workshop on the Impact of the Work Environment on Productivity*, Architectural Research Centers Consortium/National Science Foundation, Washington, D.C.
- Brown, M. Gordon (1985), Objective Measures of Spatial Organization in Architecture, *Research & Design '85: Architectural Applications of Design and Technology Research*, Washington, DC: The American Institute of Architects, 403–08.
- Brown, M. Gordon (1984), Education for Architectural Management: Problems and Prospects, *Proceedings of the American Collegiate Schools of Architecture West Central Regional Conference*, University of Wisconsin – Milwaukee.

Publications: newspapers and magazines

Brown, M. Gordon (1993-2003), columns in *The Denver Business Journal* on architecture, urban design and real estate. Ingraham, Elizabeth Wright and Brown, M. Gordon, *BUILT Architecture in the High West*.

Brown, Michael Gordon (1970), "The Story of Long–Range Planning at the University of Illinois," *The Daily Illini*, April 11, 1970.

Presentations and panels: national and international

American Real Estate Society Annual Meeting, Denver, March, 2016.

Presentation: Boom-bust, forecasts and the system neglect hypothesis: results and research opportunities from the RICS Foresight Roundtables

Presentation: America's most expensive urban park versus its retail neighbors: a case study of Denver's first Skyline Park (or Design and value revisited).

- Dutch Design Week, Eindhoven University of Technology, October, 2015. Public Lecture: Space? Property? Public? Private?
- Spaces & Flows: Sixth International Conference on Urban and Extra Urban Studies, Chicago, October, 2015.

Presentation: History of a regime shift: two centuries of American moral design.

- Nurtingen-Geislingen University, Geislingen, Germany, December 2014.
- Honors seminar: Trying to be rational in making real estate decisions.
- Royal Institution of Chartered Surveyors, Chicago, New York, Los Angeles, summer 2013. Roundtables and panel discussions: *RICS Americas Foresight Project* for senior built environment and real estate executives and leaders.
- ESSEC Business School, Cergy-Pontoise, France MRE Study Trip to Chicago. April 2013.

Presentation: *Printing House Row: The remarkable results of 33 years ago.* Royal Institution of Chartered Surveyors, New York, March, May, July 2013.

Webinar: Professional and Ethical Standards in Context.

Webinar: Introduction to Behavioral Real Estate.

TiasNimbas Business School, Tilburg, Netherlands MRE Study Trip to Chicago. March 2013.

Presentation: Printing House Row: The remarkable results of 33 years ago.

CNU XX (Twentieth Annual Congress of the New Urbanism), West Palm Beach, May 2012 *Space, property and the first urbanism.*

American Real Estate Society Annual Meeting, St. Petersburg, April 2012.

Panel organizer and moderator: Real estate roulette: we can stop the failure cycle.

Royal Institution of Chartered Surveyors, Chicago, November 2011.

Organizer and moderator: *Public Private Partnerships: Infrastructure and Energy Transmission and Distribution*. European Real Estate Society Annual Conference, Eindhoven University of Technology, Eindhoven, Netherlands, June 2011. Keynote Presentation: *Opportunity in failure: toward a real science in real estate.* Presentation: *The challenge of the new built asset in the Middle East* (with Mohan Guruswamy).

- Urban Land Institute Advisory Services Panel, Chester, United Kingdom, November 2010.
- Presentation: *Improving resident experience and retaining an engaged community*. http://www.uli.org/wp-content/uploads/ULI-Documents/2010ChesterReport.pdf
- American Real Estate Society Annual Meeting, Seattle, April 2011.
- Presentation: Real space, unreal assumptions and behavioral space in real estate.
- Eindhoven University of Technology, The Netherlands, October 2010.
- Presentation: *Fear and Loathing in Dubai & Abu Dhabi: a Lesson in Global Real Estate.* Urban Affairs Association 39th Annual Meeting, Chicago, March 2009.
- Presentation: The Geometry of Congestion: The Case of Denver.
- Business & Economics Society International 2008 Conference, Lugano, Switzerland, July 2008.
- Presentation: Evading economic reality: access takings and the slippery slope of legal language.
- European Real Estate Society Annual Conference, Cracow University of Economics, Krakow, June 2008. Presentation: *Examining investor perceptions of obsolescence and value through a behavioral economics lens*. Moderator: *Valuation issues*.
- NVM (Nederlandse Vereniging van Makelaars en Vastgoeddeskundigen (Dutch Association of Real Estate Brokers and Real Estate Experts) Annual Meeting: Kansen voor het Vastgoedmanagement, May 2008.

Keynote Presentation: *Monitoring obsolesence: due diligence for property managers.* College of Architecture and Planning, University of Michigan, Ann Arbor, January 2008.

- Presentation: *Emerging research opportunities at the intersection of real estate and planning.*
- The 3rd European Real Estate Society Education Seminar, ESSEC Business School, Cergy-Pontoise, December 2007. Presentation: *CRE in the MBA core: problems and prospects*.
- Workshop on Innovative Sheltering, The Netherlands Red Cross and Eindhoven University of Technology, November 2007.
 - Presentation: A Real Estate Approach to Post-disaster Redevelopment.
- Vlams Architetuur Instituut (Flemish Institute of Architecture), Antwerp, November 2007. Presentation: *Extended Schools and spatial patterns*.
- European Real Estate Society Annual Conference, Cass Business School, City of London University, London, June 2007. Presentation: *Structuring space for non-market interactions in corporate real estate: a case study.* Presentation: *Real Options to Evaluate Real Estate Development.*
- 4th International Conference of the research network Private urban governance & gated communities, University of Paris, Sorbonne, Paris, June 2007.
 - Presentation: *De facto private places: access morphology and governance.*
- American Real Estate Society Annual Meeting, San Francisco, April 2007.
- Presentation: Inter-disciplinary real estate education: the Eindhoven example. Presentation: Classifying Real Estate Objects: Toward a Scientifically Based Taxonomy. Moderator: Real Estate Markets in Different Parts of the World.
- The Center for American and International Law, Institute for Local Government Studies, Annual Program on Planning, Zoning and Eminent Domain, Plano, Texas, November, 2006; San Francisco, December, 2006. Presentation: Access takings: contexts, transformations and measures.
- European Real Estate Society Annual Conference, Weimar, Germany, June 2006.
- Presentation: Is the category imperative: Toward a spatial taxonomy for real estate research.
- American Society of Real Estate Annual Meeting, Key West, Florida, April 2006.
- Presentation: How to measure access and its impact on value.
- Eindhoven University of Technology, The Netherlands, October 2005.
- Presentation: Strategic issues and the science to address them in real estate education.
- American Society of Real Estate Annual Meeting, Santa Fe, New Mexico, April 2005.
 - Presentation: Urban history and the creative class.
 - Presentation: Capturing routines: the function of access in real estate.
 - Presentation: Evaluating falling stars in the real property investment constellation: American cities and

agglomerative geographies. Second author with Stephen Roulac and Anu Wadwhan.

- Panelist: History of real estate thought.
- Urban Land Institute Real Estate Trends Conference, New York, November 2004. Panelist: *Innovations in Construction and Development Technology* Presentation: *Spatial trends, trans-form-ations & modeling.*
- American Society of Real Estate Annual Conference, Captiva Island, Florida, April 2004.
- Presentation: Configuration, the tipping point and traffic congestion.

Presentation: Legal impairment of regulatory language: the case of property access. Panelist: The Expert Witness. Third International Space Syntax Symposium, Georgia Institute of Technology, Atlanta, May 2001 Presentation: Design and Value: Spatial Form and the Economic Failure of a Mall. American Society of Real Estate Annual Conference, Coeur d'Alene, Idaho, April 2001 Panelist: Smart Buildings: How New Technologies are Changing Commercial Real Estate Structures. Presentation: Real estate and the archeology of the experience curve. Presentation with Stephen Roulac: Why Can't A Building Be More Like A Machine? Royal Institution of Chartered Surveyors, London, September 2000. Presentation: *Defining functional utility: a spatial approach*. Weimer School of Advanced Studies in Real Estate, Homer Hoyt Institute, West Palm Beach, Florida, May, 2000. Presentation: Space Syntax Modeling for Real Estate. American Society of Real Estate Annual Conference, Santa Barbara, California, April 2000. Moderator: Spatial Design and Spatial Economics: Space Syntax in Real Estate; Panelist: Thinking Out of the Box: Ideas Shaping Real Estate Education and Research. Presentation: Design Due Diligence in the Context of Valuation. Advanced Management Institute for Architecture and Engineering, San Francisco, March 1999. Presentation to executives of mid-sized engineering firms: Critical Futurism: Trends Affecting the American Metropolis. Forum II: Architectural Education for the 3rd Millennium, Eastern Mediterranean University, Gazimagusa, TRNCyprus, April 1998. Panelist: Global Concerns in Architectural Education. Presentation: The Two Cultures of Building. American Society of Real Estate Annual Conference, Monterey, California, April 1998. Presentation: Design and Value: Spatial Form as an Object of Research. Presentation: What is a Public Forum? American Society of Real Estate Annual Conference, Sarasota, Florida, April 1997. Presentation: Design and Value: Clarifying the Objects of Research. Society of American Archeology Annual Conference, Nashville, Tennessee, April 1997. Panelist: Space Syntax: A Methodology for Southwest Studies. Presentation: Analyzing Spatial Patterns Using Space Syntax. Center for the Study of the Practice of Architecture, University of Cincinnati, April 1991. Panelist: Emerging Forms of Architectural Practice. Institute of Social Research, University of Indiana, Bloomington, April 1991. Presentation: Spatial patterns and social pathology: Autopsy of a Shopping Center. Bartlett School of Architecture and Planning, University College London, April 1989. Presentation: Spatial Performance. Environmental Design Research Association, Pomona, California, May, 1988. Panelist: Reconceptualizing the Workplace to Support Emerging Models of Organizational Effectiveness. Architectural Research Centers Consortium Annual Research Conference, Champaign, Illinois, November 1988. Panelist: Workshop on Representation and Simulation in Architectural Research. College of Design and Planning, University of Michigan, Ann Arbor, February 1987. Presentation: Buildings and Media: The Exogenous Double-Helix. Bartlett School of Architecture and Planning, University College London, June1985. Presentation: Spatial and Communication Factors in Office Design. Architecture Research Centers Consortium/National Science Foundation: Workshop on the Impact of the Work Environment on Productivity, Washington, DC, April 1985. Planning Committee Member. Illinois Institute of Technology, Chicago, April 1983. Organizer: Workshop on the Case Method of Architectural Education. Department of Architecture, University of Notre Dame, South Bend, March 1983. Presentation: Introduction to Space Syntax. School of Social Service Administration, University of Chicago, May 1981. Presentation: Partitioning Information and Space. Many reviews of graduate and undergraduate architectural design projects as a panelist at various universities.

Presentations: local

Royal Institution of Chartered Surveyors and Counselors of Real Estate, Chicago, October 2013.

Presentation: Retail's details: diagnosing distressed retail space. University of Missouri- Kansas City, Bloch School of Business, July 2010 Presentation: Fear and Loathing in Dubai & Abu Dhabi: a Lesson in Global Real Estate. Emirates Green Building Council Focus Day, Abu Dhabi, May 2010. Panelist: Green Building Education. Eindhoven University of Technology, The Netherlands, Valedictory Lecture, December 2008. Presentation: Places and media: the social thalamus. JOBInside (Jong Onroerend goed Brabant), 's Hertogenbosch, NL, October, 2006. Presentation: Real Estate in Transition. Colorado Institute of Leadership Training, Denver, February 2003. Presentation: Denver streets and the aesthetics of sprawl. The DaVinci Institute, Denver, July, 2002. Presentation: Tangible and Virtual Information in the Networked Society. Colorado Institute of Leadership Training, April 2002. Presentation: The aesthetics of sprawl. Colorado Institute of Leadership Training, March 2001. Presentation: The new feudalism: post-war spatial hierarchies and urban sprawl. Celebrate Colorado Artists, Denver, June 1999. Presentation: Urban design and the place of public art. The American Institute of Architects, Colorado Annual Design Conference, Estes Park, October 1998. Moderator and Panelist: Denver beyond the year 2000. Colorado Municipal League Annual Conference, Snowmass, June 1997. Panelist: "New Urbanism": Where did it go and why is it back? Presentation: The New Urbanism's place in the four periods of American moral design. Denver Art Museum, Design Council, May, 1997. Panelist and Moderator: Media and the Critical Care of Design, Editors, writers and architects discuss public's perception of design professionals (special guest: Professor Margaret Crawford, SCIARC). Downtown Denver Partnership and City and County of Denver, Denver, June 1996. Panelist (with Laurie Olin and Walter Hood): Skyline Park - Urban Design and Social Issues Related to Downtown Public Space. Presentation: How design encouraged the private use of public space - the spatial structure of Skyline Park. The American Institute of Architects, Colorado Annual Design Conference, Colorado Springs, December 1995. Panelist and Moderator: The Profession Observed. The American Institute of Architects, Denver Chapter, Denver, March 1989. Presentation (with Mark Gelernter): Architectural Education ... Is this what we should be teaching our children? Professional Women in Architecture and Engineering, Phoenix, April 1987.

Presentation: Closing the Gap Between Architectural Practice and Education.

Funded research

- *Measuring Access to Determine the Effect on Market Value* The Appraisers Research Foundation. 2013. Development of a publication using text and graphics describing Shape NetworkTM models and case examples for use in the analysis of access in eminent domain and police power access takings.
- *Urban real estate development, cognition and decision-making* (jointly with Construction Management and Engineering and Architectural Design Management Systems) TU/e Research Fund for PhD research, 2008. While it is known that civic infrastructure factors are related to agglomeration economies, the space market and real estate development, there has been little research providing clear evidence of these relationships. This research aims to identify 1) trigger conditions in infrastructure and configuration patterns and 2) trigger mechanisms of real estate developers' cognitive information processing schemata that lead to decisions to undertake development.
- *Neighborhood form, branding and identity* TU/e Research Fund for PhD research, 2009. Branding seems to have positive effects on revitalization, and improvement of communication between parties and implementation of social policy in these areas. But planning and the implementation of physical changes meet with two main problems: (1) the present inhabitants often resist modifications of their environmen and (2) the conversion of a marketing concept into urban design is not straightforward. The project seeks 1) to gain more insight in the relations between the identity of place of existing urban neighborhoods, the place attachment of individuals and groups and the functional, physical, spatial and morphological characteristics of the neighborhood; and 2) to develop a theoretical model accounting for the interrelations of these concepts and 3) to describe procedures and tools, based on the model, to promote successful outcomes of this type of branding and real estate redevelopment.

- *The public forum at Coors Field: where category meets pattern in jurisprudence and architecture.* Colorado Endowment for the Humanities. 2003. Documentation of the shapes and contexts of baseball fields and football stadia as they affect public space patterns.
- A Comparison of the Spatial Patterns of Recently Designed Hospitals with Those Designed in the 1950s. The Davis Partnership, P.C. 1988. Student documentation of patient floor patterns as affected by federal legislation over several decades.
- Measuring the relationship between effective spatial arrangement and successful organization structure: a network analysis method. Arizona State University Research Fund. 1986. Software development. Co-principal investigator with Kazukuni Ikegami.

Selected details of university teaching, administrative, research and related activity

- 2013–2014: Illinois Institute of Technology, Chicago *Adjunct Professor of Architecture* Teaching: PhD advising Developed and taught Doctoral Methodology Pre-seminar Developed new graduate course on urbanism.
- 2012–2014: Homburg Academy, Kusnacht, Switzerland Adjunct Professor of Real Estate and Member of the Board of Academic Advisors.
- 2010–2011: Urban Land Institute, Washington, DC. Academic Fellow.
- 2009–2010: Higher Colleges of Technology, Abu Dhabi, UAE ALDAR Dean of Business and Academic Dean for Business and IT Academic and administrative leader for business and information technology divisions in 16 UAE colleges with 8,000 students in an approximately 18,000 student body throughout the UAE Administrative internal: managed academic programs, personnel, budget, academic quality control; oversight of curriculum development and program assessment Administrative external: developed and maintained industrial relationships in the profit, non-profit and government sectors and international profile in association with major North American, British and continental European academic institutions, particularly The Wharton School; advised ALDAR Properties PJSC on strategic and operational transition to asset and property management as development projects are completed.
- 2006–2009: Eindhoven University of Technology, Eindhoven, Netherlands *Head of the Real Estate Management and Development Group* and *Fellow of the University* in the Faculty of Architecture, Building and Planning Academic leader overseeing eight faculty, PhD student research and BSc courses and MSc courses for 75 to 90 MSc students Administrative internal: Managed academic programs, personnel and budget issues and relations with University constituencies; initiated development of two new funded PhD positions Administrative external: Initiated successful effort to bring the European Real Estate Society annual conference (the largest academic real estate meeting) to the University Teaching: graduate lecture course on methodologies and strategies for urban real estate, co-taught graduate course on reviewing and writing scientific articles on real estate; supervised three doctoral dissertations and eleven master's theses Jury Member, International Student Design Competition *TECTONICS: Making Meaning* Coordinator of International Masters program for the Urbanism and Management Unit of the Faculty of Architecture, Building and Planning.
- 2003-2004: University of Denver, University College Adjunct Professor of Liberal Studies Teaching: Architecture for non-architects.
- 1998: University of Minnesota College of Architecture and Landscape Architecture *Cass Gilbert Visiting Lecturer* Lectures on current work, spatial analysis and reviews of student work.
- 1989–91: College of Environmental Design, University of Colorado at Boulder, Colorado. *Lecturer* (half-time) Teaching: Undergraduate course on research Issues and Programming for Architecture.
- 1987–89: School of Architecture and Planning, University of Colorado at Denver, Denver, Colorado. *Associate Dean* and *Associate Professor* Operations management for a graduate school offering degrees through five academic programs with approximately 300 FTE enrollment Development and administration of school-wide academic policies and procedures relating to recruitment, admissions, records, academic program coordination, student affairs; wrote accreditation report, catalog and related publications; oversaw facilities Teaching: graduate thesis advising and development and teaching of graduate courses workplace research, theory and case studies; practice and management in the design profession; strategic start–up and firm-wide management; spatial morphology and its economic and organizational impact Committees: Chair of School Academic Affairs Committee; Elected member and vice–chair of the Faculty Assembly Budget Priorities Council; Co-chair of the Beaux Arts Ball Committee; Dean's Support Group (campus–wide deans, associate and assistant deans and academic affairs vice chancellor and associate and assistant vice chancellors); Academic Review Committee.
- 1984–87: School of Architecture, Arizona State University, Tempe, Arizona. Associate Professor, Visiting Assistant Professor • Developed and coordinated the joint Master of Architecture/Master of Business Administration Program. Committee memberships: Master of Environmental Planning/Master of Science Committee; Speakers and Colloquia Committee; Chair of the Research Incentive Advisory Committee; Elected Member of the Faculty Senate representing the School of Architecture; International Programs Advisory Committee • Teaching:

Professional Practice I and II (Forms of organization, management and governmance; legal and market impacts and trends, design of a new architecture firm) • Architectural Management I and II (Human resource, strategic planning, fee structures and case studies) • Research studio (Spatial modeling and social factors in domestic and complex buildings).

1983–84: Department of Architecture, College of Architecture, Design and Planning, Illinois Institute of Technology, Chicago, Illinois. *Visiting Assistant Professor* • Teaching: Architectural Programming; Urban Research Studio on building types and urban spatial relations; Computer–aided analysis of architectural plans • Committees: Chair of task force on computing infusion; Graduate Study Committee.

Affiliations: Professional

American Bar Association, Associate (2015-current) Royal Institution of Chartered Surveyors (RICS) (2006-current); Chair, Midwest Chapter (2011-2014). Urban Land Institute, (2004-2011). Middle East North Africa Real Estate Society (MENARES) (2010) European Real Estate Society (ERES) (2006-current). American Real Estate Society (ARES) (1996-current). World Trade Center, Denver (2002-2003). Congress of the New Urbanism (1998-2002), Sponsor: CNU VI (6th annual meeting) Denver, 1998. The University of Colorado Real Estate Council (1996-1998). International Association of Corporate Real Estate Executives (NACORE) (1998-1999). The Appraisal Institute (1992-94). MIT Enterprise Forum of Colorado (1989–1993): Board of Directors; Chair, Program and Public Relations. Environmental Design Research Association (1984-90). American Arbitration Association: Construction Panel (1987-90). International Facility Management Association: Academic Member (1984-88). American Institute of Architects: Associate Member, Chicago Chapter; Secretary, Steering Committee for the 1992 World's Fair; Founder, Research Committee (1978-81).

Affiliations: Civic, etc.

The Cliff Dwellers, Chicago (2006-current). World Affairs Council, Denver (2004-2009). Invisible Museum, Denver, Vice-president, Board of Directors (2002-2004). Congress Park Historic Preservation Education Committee, Denver (2001). Acoma Institute, Denver, Steering Committee (2000-2002). Denver Foundation for Architecture, Trustee (1998-2000). Mayor's Downtown Denver Summit Task Force: Planning, Preservation, Design and Zoning (1991–92). Colorado Advisory Council on Mexico (1991-92). City Club of Denver (1988–1999): Board of Directors (1995-98), Secretary, Treasurer (1996-97). Chicago Council on Foreign Relations (1980-81; 82-84)

Other

Knowledge of basic French, introductory Dutch. Fluency in network analysis, word processing, spread sheet based financial and data analysis, graphic software.

Travel in Mexico, Canada, most of Europe, Turkey, Middle East, East Africa, Southeast Asia. Residence in Versailles, France; London, England; Eindhoven, The Netherlands; Abu Dhabi, UAE.

Sight-hound owner; occasional downhill skier; epee fencer (retired).

Married, one son; Honorable Discharge, USAF.