

Abstracts and Titles of Recent Student Work

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Doctoal Dissertations

Elizabeth MacDonald. *Enduring Complexity: A History of Brooklyn's Parkways.*

This dissertation concerns the design and historical evolution of Eastern Parkway and Ocean Parkway, two streets designed by Frederick Law Olmsted and Calvert Vaux and built in Brooklyn in the 1870's. These streets are of interest for urban designers because they are examples of the multi-way boulevard street type. This once celebrated now seldom built street type may offer a model for livable, high-traffic streets in cities today because it has a form which allows heavy traffic to co-exist alongside a pedestrian-friendly environment. This study contributes to a body of recent research investigating many aspects of the potential modern-day usefulness of multi-way boulevards. Its purpose is to explore how multi-way boulevards have existed in an American context over time: how they have been built, socially used, publicly managed, influenced urban form, and adapted to change. The research focuses on the Brooklyn parkways because they are exemplars of the American version of the multi-way boulevard street type.

This study is at once a planning history, a cultural landscape history, and a built form history. It conceives of the parkways as both physical public spaces and social institutions, and uses sources that include public documents, literature, newspaper and journal articles, and historic maps and photographs.

Part One describes and analyzes Olmsted and Vaux's parkway plan, its implementation, the context into which it was inserted, and the design models that influenced it. Part Two concerns the subsequent history of the parkways, and is treated thematically. The first theme explores how the complex public open space character of the parkways was formed, arguing that it evolved over time on two intertwined levels: that of meaning and that of use. The second theme explores the role the parkways played as catalysts for urban form. Important design characteristics, implementation strategies, and management policies are identified and analyzed. The third theme explores how the parkways have shaped urban life

for the communities living around them, arguing that they have created a distinct neighborhood form and shaped a particular kind of urban experience: they are both orienting devices for neighborhood identity and focal lines for public life.

Christopher Benner. *Navigating Flexibility: Labor Markets and Intermediaries in Silicon Valley.*

This dissertation examines labor markets in Silicon Valley in order to contribute to our understanding of the transformation of work and employment in the information economy. The relative newness of the region's economic structure, the dominance of information technology industries in the regional economy, and its role as the global center of innovation and production in these industries, make especially visible patterns of work and employment associated with the rise of information technology.

Silicon Valley labor markets are characterized by high levels of flexibility, which is best understood by making a distinction between flexible work and flexible employment. The activities that workers perform on the job, the skills required, and the relationships they enter into to perform those activities are changing rapidly in unpredictable ways. Contractual relationships between employer and employee are increasingly characterized by high levels of turnover, short periods of employment, and employment contracts mediated by a set of institutions external to the firm. These dynamics are integrally linked with the character of competition in industries with a high dependence on information and knowledge, in which rapid innovation is critical.

In this environment employers and workers are turning to a variety of third party intermediaries to help them navigate through an increasingly complex and shifting labor market. Three types of intermediaries are identified and described: 1) private-sector, including temporary agencies, contractor brokers, professional employer organizations and web-based job search agencies; 2) membership-based, including professional associations and union-based initiatives; and 3) public-sector, including employment placement programs and education-based initiatives. These intermediaries have contradictory influences on the labor market, in some cases undermining career opportunities for workers, and in other cases building improved career outcomes. Regardless of their impact, intermediaries have now become integral components of the region's labor

Student Work

markets, shaping the structure and dynamics of work and employment in fundamental ways. The prevalence of intermediaries in Silicon Valley suggests that they will become increasingly central to the structure and dynamics of contemporary labor markets in many regions.

Miriam Chion *Global Links and Spatial Transformation in Metropolitan Regions: Lima in the Nineteen Nineties.*

This study analyzes the extent to which recent processes of global economic restructuring and the expansion of production networks, intertwined with local social and institutional processes, condition the spatial transformation of metropolitan regions. The increasing number of intersections of global and local networks taking place in metropolitan regions can lead to their spatial reorganization around specialized networks of distinct urban functions. In this emerging spatial organization, places are not only defined by their accumulation of resources but by the flows of transactions, exchange of information, and their ability to attract skilled labor and visitors. Thus, the analysis of metropolitan space shifts its focus from places to the interaction among places. These processes are studied by examining the transformation of Metropolitan Lima during the 1990s through the analysis of four districts that highlight the institutional and production processes of the current spatial transformation: the Financial District, the Garment District, the Historic Center, and a Peripheral Neighborhood.

Global networks can amplify ongoing social and economic processes that take place in metropolitan regions. However, the effect of these global networks on the metropolitan space depends on the ability of local actors to intersect global flows and articulate them with the local networks. The convergence of global and local networks in Metropolitan Lima has triggered the emergence of new economic actors in new geographic areas and economic sectors as well as changes in industrial processes and relationships among workers and investors. These changes have contributed to blur boundaries between formal and informal economies and to increase social diversity in spaces of production and consumption, while deepening segregation in residential areas.

Metropolitan Lima's single-center organization of many decades has unfolded into multiple specialized metropolitan centers and networks of information-based, industrial, retail, and cultural activities. These spe-

cialized metropolitan centers have altered the distribution of activities and mobility of resources and have shaped land use and transportation patterns. They have generated a very high density of activities and flows of capital and information, creating a new hierarchy of arteries around transportation hubs, financial centers, international business services, and major industrial and commercial clusters.

Balaji Parthasarathy. *Globalization and Agglomeration in Newly Industrializing Countries: The State and the Information Technology Industry in Bangalore, India.*

As the dominant region for India's rapidly growing software industry, Bangalore is often compared to Silicon Valley. This dissertation examines the basis for the comparison by studying the software and the telecommunications equipment industries in Bangalore. The study also answers two questions. Why has India developed a globally competitive software industry when it has failed in other information technology (IT) sectors? How does the changing character of the developmental state affect the organization of production in firms and the position of regions in the international division of labor?

While India's insignificant share of world IT production reflect the limited capabilities of the state, its developmental character has changed since the 1980s. The state has reached out to private capital, especially in the IT industry. But as the software industry has grown, Bangalore's older public-sector telecommunications equipment industry has declined, although the characteristics of telecommunications equipment are now determined by software.

The divergent fortunes of the two sectors is used to show that even as the state has embedded itself in private capital, it has suffered erosion of autonomy, constraining its ability to rejuvenate the telecommunications equipment industry and other economic sectors. As the rejuvenation of any economic sector in the information age requires the use of software, it has also affected the position of the software industry in the international division of labor. Firms that began to export in the 1980s, offering low-wage, low value-added services, have since moved to more rewarding work as Indian skills have come to be prized globally. But in the 1990s, a majority of firms have struggled: rising wages have blunted the low-wage strategy, while social constraints on the state have limited the institutional support for valorizing skills either through innovation

Student Work

or local markets. This has hindered the transformation of Bangalore into a Silicon Valley style region that defines technologies.

The dissertation shows that the path to an effective developmental state is not well defined and that multiple trajectories are possible. It also shows how a specific development trajectory influences the ability of firms and regions to exploit the opportunities provided by new technologies and industries.

Holly Page Welles. *Public Participation in Waste Management Planning in Los Angeles County.*

Conflict over the siting and expansion of infrastructure projects is increasing throughout the U.S., resulting in litigation, lost time, and high costs. These projects typically benefit the population at large, but nearby neighborhoods suffer negative impacts and fight the projects vociferously. Solid waste facility siting is a key example of this problem. Conflict may be exacerbated when waste management professionals develop programs and projects in isolation rather than working with the concerned public. Advocates of participation argue that a “well-designed” public participation process improves the timeliness, nature and quality of immediate outcomes, and produces longer-term benefits by altering participants’ core attitudes and behaviors. Other researchers counter that certain classes of planning problems are inherently contentious and full of uncertainties; participation cannot resolve these problems.

This dissertation examines the role of public participation in waste management planning, asking the question: Can a well-designed public participation process improve the prospects for problem resolution? The characteristics of a “well-designed”; public participation process are elucidated through a review of the literature. The role of participation in solid waste management planning is then examined through case studies of solid waste landfill expansions in Los Angeles County and of the preparation of the Countywide Integrated Waste Management Plan (CIWMP).

The case studies demonstrate that attempts to resolve conflicts at the project permitting level do not work very well, largely due to constraints established earlier in the planning process. The focus is on mitigation and compensation rather than on more fundamental waste management alternatives, which remain off the table. Furthermore, there is some evidence of negative learning. In one case where effective project-level public participation did occur, the neighboring communities came to believe

that there would be no further facility expansions. Proponents subsequently did propose another expansion and reduced public outreach despite expressed desires to participate. No fundamental changes in attitudes toward the public appeared to result from the earlier success nor were changes made in long-term waste management planning.

Engaging the public in the more strategic CIWMP process shows promise for resolving conflict and achieving longer-term solutions. Limitations could be reduced by: (1) increasing host community representation on state and county waste management boards and task forces; (2) improving state and local coordination by establishing regional offices; (3) developing a wider range of disposal alternatives so as to choose those that minimize neighborhood opposition; and (4) educating the public about waste management challenges and engaging them further in developing solutions.

Stephen Maxwell Wheeler. *Designing the Livable Metropolis: Metropolitan Institutions and the Evolution of Urban Form.*

This dissertation examines the evolution of urban form in two North American metropolitan regions, Portland and Toronto, main influences on that evolution, and conditions affecting the ability of public sector institutions to proactively shape the design of the urban landscape. “Urban form” is considered to include the arrangement of streets, land uses, public spaces, urban centers, and open space systems. The analysis pays special attention to dominant types of urban form that have arisen historically, and the transition between premodernist, modernist, and postmodernist landscapes. In both metropolitan areas the main effect of public sector planning in the twentieth century was to promote urban growth within modernist and postmodernist modes. However, in response to social movements protesting redevelopment of central city neighborhoods and new infrastructure such as freeways, planners in both regions reconsidered this role starting in the 1960s and 1970s.

The case studies document the subsequent emergence of a “New Regionalism” that applies environmental and humanistic values to physical planning at local and metropolitan scales. This set of concepts is seen in the language and content of planning efforts in the two regions after 1970, though more rarely within actual development. In terms of adopting and implementing a new regional physical planning agenda, Portland can be considered relatively successful while Toronto to a large ex-

Student Work

tent has failed. To understand why, it is helpful to view the region ecologically as a complex system, and to analyze factors affecting the environment for physical planning initiatives.

When the historical evidence is viewed in this way, reasons for Portland's success can be seen to include steady support from the state government, incremental construction of strong regional institutions, the existence of strong and institutionalized social movements, a relatively open and consensus-oriented planning style, and a relatively low degree of political fragmentation. Reasons for Toronto's lack of success include the absence of many of these factors. This study suggests that attention to such structural characteristics of the metropolitan regional system can help create an environment for more successful public sector influence over urban form in the future.

Ming Zhang. *Modeling Land Use Change in the Boston Metropolitan Region.*

The thesis seeks to contribute to the understanding of urban spatial structure by empirically investigating land use change in the Boston Metropolitan Region, for the period between 1971 and 1991. The key method of the research is to develop a number of econometric models to empirically test the significance and magnitude of various factors in order to explain the observed spatial transformation of land use types and identify major determinants of the underlying urban land market.

It was demonstrated that the *multinomial logit model* is an appropriate modeling structure for land use, as it can be derived from conventional urban economic theories of bid-rent locations. Thus the study specified and calibrated a series of multinomial logit models of land use change which, for each observation unit, establish the relationships between various explanatory variables and the probability of the unit changing to a particular use during a later period. Both *new development* on previously vacant land and *redevelopment* on existing urban land were studied. The results reveal that while there are common factors significant for all types of land use changes, important differences exist between different types of land use change and also between new development and redevelopment. Comparison over time shows that whereas the effects of neighborhood land use characteristics had quite consistent impacts, the importance of access to central location and physical constraints weakened. The results suggest that, cautiously calibrated, the modeling framework

Berkeley Planning Journal

can possibly be applied for other regions for simulation of land use changes.

Masters Theses, M.C.P.

John David Beutler. *Demand Responsive Transit for the General Public: An Assessment of Flexible Routing's Current State and Possible Future in Suburbia*

Stacey Michelle Dinstell. *Conservation Trust Planning: Lessons Learned from Hawaii's Ceded Land Trust*

Gerald Autler. *Global Networks in High Technology: The Silicon Valley-Israel Connection*

Sharon Danks. *Ecological Schoolyards*

Evelyn Ibarra. *The Façade vs. the Ground Plane*

Jeffrey Juarez. *Gentrification as a Central Issue in the Link Between Livability and Revitalization*

Soules, Michael. *A Spatial Analysis of Northwest Forest Plan Land Use Allocations*

Professional Reports, M.C.P.

Andreas Chandra. *San Francisco 3rd Street Light Rail Project Traffic Planning*

Theresa Dau. *Fulton Street Lucky Supermarket Transportation Study*

Robert Swierk. *Planning for Post-Earthquake Transportation Disruptions in the San Francisco Bay Region: Process and Proceedings from Five Sub-Regional Workshops*

Brian Trelstad. *The Georgia Regional Transportation Authority: A Case Study of an Innovative Regional Planning Institution*

Wallace Whittier. *Dinosaurs @ the Beach: Antiquated Subdivision in the Coastal Zone*

Sylvester Wong. *The Presidio Lo Bos Creek Water Resource: Management Issues Brief*

Student Work

- Simon Alejandrino. *The Commercial and Residential Gentrification Process in the Mission District, San Francisco*
- Leilani Barnett. *Downtown Pinole Parking Study*
- Autumn Buss. *24th Street BART Station Community Design Plan: Preliminary Study*
- Courtney Damkroger. *San Diego Padres Ballpark Negotiation*
- Michael Duncan. *Model for SF MUNI to Predict Bus Ridership*
- Matthew Eary. *Regional Employment Cluster 'How-To' Handbook and Analysis of the Process*
- Scott Falcone. *A Strategic Plan for Mission Dolores Park*
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- Paul Peninger. *City of Emeryville Housing Element: Needs Assessment and Background Report*
- Christopher Ranken. *Congestion pricing: Analyzing the Proposed Peak-Hour Toll Increase for the San Francisco-Oakland Bay Bridge*
- Andrea Sanchez. *Manual for the National Cooperative Bank re: Development of Food Delivery Systems*

Berkeley Planning Journal

Patricia Sepulveda. *Pedestrian Facilities Methodology Report*

Lihbin Shiao. *Eastlake Main Street Commercial Revitalization Strategy*

Leslie Shieh. *The Use of Space by Youth in Japantown: The Role of Youth in Commercial and Ethnic Neighborhoods*

Abby Jo Sigal. *Strategies to Coordinate the Revitalization of the India Basin Waterfront*

Sujata Srivastava. *Acquisition/Rehab/Resale Model of Community Development: The Unity Council's Program Initiative in the Fruitvale District of Oakland, CA*

Paul Sussman. *Strategic Plan: Northern California Community Loan Fund*

Shunji Suzuki. *Street Spaces that Create Active Pedestrian Life: A Research and Design Proposal for Comfortable Urban Space at Central Oceanview, Berkeley*

Alisa Wade. *Land Use & Transportation: 'Connecting the Pieces'*