

## **ABSTRACTS:**

### **Department of City and Regional Planning, University of California at Berkeley**

#### **Ph.D. Dissertations**

##### *Cold War Metropolis: Urban Development and Economic Policy in West Berlin*

Scott Douglas Campbell  
1990

This thesis examines the urban economic development of West Berlin during the Cold War period (1945-1990). I begin by examining the 750-year history of Berlin, with particular emphasis on its urbanization and industrialization, as well as the postwar division of the city (Chapter 2). This is followed by a statistical profile of West Berlin's postwar economic problems, including comparisons with more successful West German cities and regions (Chapter 3).

I then turn to the main research question: why did this city, for one hundred years at the top of Europe's technological and financial development, endure so many economic problems during the postwar period? I present and critique, in turn, four different explanations (Chapters 4-7): geographic isolation and confinement due to the wall and the division of Germany; the loss of the city's economic momentum as a result of the Second World War; poorly designed local subsidy programs; and the loss of the capital city to Bonn.

Each of these four factors certainly undermined the city's development. But I argue that the loss of the capital was the fundamental and unifying force which shaped the other three explanations: prewar geographic centrality, economic momentum, and locally beneficial economic policies were all determined by the city's national-political role. The post-war loss of the capital city and the larger division of Germany, in turn, transformed these three factors: politically-constructed centrality became politically-constructed isolation; German Reich-driven economic momentum became Cold War-driven economic stagnation; and prewar local economic policies of a preeminent capital city were replaced by post-war local economic policies of a marginal-front city.

I conclude with analytical generalizations from the case of Berlin regarding geographic isolation, economic momentum, the conflict between local and national development policies, and the role of capital cities (Chapter 8). Finally, in a postscript I discuss how the opening of the Berlin Wall in November 1989 has fundamentally altered the

development path for Berlin. Nonetheless, the essential conclusions drawn from Berlin remain valid in the post-Cold War period.

*Environmental Policy and Industrialization: The Politics of Regulation In Puerto Rico*

Carmen M. Concepcion

1990

This study examines the effects of economic development on environmental regulation in Puerto Rico. In particular, the research analyzes how the Puerto Rican industrialization process has affected implementation of the environmental review process.

Puerto Rico exemplifies an acute conflict between an industrialization process based on capital-intensive, highly polluting industries, and a regulatory framework of insular and U.S. environmental laws and regulations. While industrialization has not solved unemployment problems on the island, environmental and health hazards have increased significantly, despite environmental regulations.

The study focuses on a change in the environmental review process in response to economic development concerns. In particular, it examines the growth and extensive use of a new environmental review document, the Environmental Assessment. Since the late 1970s, the Environmental Assessment has virtually replaced the full-scale Environmental Impact Statement (EIS) for analyzing project impacts. The Environmental Assessment is a less-comprehensive, faster procedure than the EIS report, and does not require public review. The purpose of the present study is to explain this policy shift and, more fundamentally, to analyze how and under what circumstances this change came about.

The research has two phases: (1) documenting the social, economic, and political context in which the policy process took place, and (2) tracing and analyzing the process of change to the Environmental Assessment. The study uses three types of data-gathering methods: (1) an analysis of public documents and records, (2) in-depth interviews with people acquainted with the review process or the industrialization process, and (3) case studies.

The empirical analysis confirms that the shift to using the Environmental Assessment occurred as a way to mediate the conflict between environmental and industrialization policies. In the process, three elements have changed: (1) opportunities for public participation have diminished, (2) the power of the environmental regulatory agency has decreased, and (3) the legal basis for environmental regulation has weakened.

*Visions of Urban Freeways, 1930-1970*

Clifford Donald Ellis

1990

This dissertation explores the evolution of freeway planning ideas for American central cities between 1930 and 1970. Highway engineers, city planners, architects, landscape architects, and special interest groups held different images of the existing city, the city of the future, and the place of limited-access, high-capacity highways in the emerging urban context. The study examines these theories and argues that they structured freeway planning policy and practice.

The research concentrates on the ideas of the directly involved design professionals. Highway engineers and transportation planners embraced theories and methodologies that emphasized serving traffic demand. These ideas left little room for a qualitative concern with urban life and form; traffic-moving efficiency overruled other variables. City planners, fragmented into separate factions, could not agree on a theory of "good city form," and offered few persuasive alternatives to the freeway "solution" to urban transportation problems. Architects, who often held strong ideal images for urban freeways, were excluded from the planning process until the late 1960s, too late to have a major influence. Landscape architects pioneered in parkway design during the 1920s and 1930s, but their influence on freeway planning waned thereafter, regaining strength only after the freeway revolts of the 1960s.

The original designers of America's urban freeways tried to portray freeway planning as an apolitical, technical process. It proved to be politically explosive, value-laden, and fraught with aesthetic and social dimensions. Planning, engineering, and design professionals need to reflect more on the ideas and images that inform their prescriptions for cities. Professional worldviews and values powerfully shape their work, including the technical analysis conventionally believed to determine plans.

*Telecommunications -- Transportation Interaction in Developing Countries: The Case of Costa Rica*

Rosendo Pujol

1991

This dissertation investigates the telephone system of Costa Rica to identify which variables explain deployment, growth, and use differentials. It tests whether higher information use, standard of living, time value, and transportation accessibility can explain higher degrees of telephone penetration and use. It explores interactions between the transportation and telecommunications systems.

Important findings are: (1) telecommunications substitute for transportation in critical situations, but mutual inducements are more significant; and (2) transportation accessibility, defined by the number of people living within a 30-minute radius, is a good explanatory variable for the differentials in telephone densities, growth, and average use.

Several variables explain residential telephone presence: a standard-of-living index, defined as a function of ownership of a refrigerator, washing machine, and/or automobile; the maximum information intensity on the job; and the maximum educational level within a household.

Telephone use is stable for residential and solo commercial telephone subscribers and is declining for private exchange (PBX) subscribers. This is found to be a consequence of rapid technological change, rapid growth in the number of PBX lines, and a progressive pricing structure.

Billing distribution for residential and solo commercial subscribers show similar shapes (truncated logarithms) in almost every telephone exchange, regardless of their size or location.

Distribution of level of telephone use for residential customers within individual telephone exchanges can be expressed by four parameters: (1) the number of impulses provided at zero marginal cost, (2) the intersection, (3) slope of the regression equation fitting the logarithms of the proportion of consumers in each range, and (4) proportion of subscribers above that level.

The deployment policy of the telephone company has reinforced centralization at the local level in favor of small and medium-sized urban clusters, as opposed to dispersed locations. The telephone fare policies favor the San Jose Metropolitan Area, where most of the system is accessible at relatively low local fares.

Call destination patterns from different cities show low interactions between second- and third-level cities in Costa Rica. Telephone interaction between cities in different regions, and in particular on opposite sides of San Jose, is almost nil. Similar results were obtained in transportation origin-destination studies in 1979.

*Trapping the Benefits of Technological Innovation:  
The Developmental Impacts of Industrial Organization  
in the Military and the Marketplace*

Jay Samuel Stowsky  
1991

This dissertation is about where technological innovation occurs and where its developmental benefits are captured. It is built around the notion that technology tends to develop along certain lines, or trajec-

ories, which represent alternative approaches to the exploitation of a technology's inherent capacities. Information about alternative trajectories diffuses among sectoral, regional, and/or national networks of technology suppliers and potential users.

Due to the evolutionary and partially tacit nature of technological learning, much of this information accumulates in the network where it originates. Linkages between users and suppliers in the network can be organized in ways that trap new technological knowledge within the network or in ways that spread the information rapidly to others. How long such information is trapped or how fast it spreads determines both where further technological innovation occurs and where the developmental benefits of that innovation are captured.

To develop this argument, I examine two sets of contrasting trajectories: (1) military and civilian, and (2) American and Japanese. The military/civilian cases detail the commercial impacts of Pentagon efforts to develop numerically-controlled machine tools, early transistors and semiconductors, very-high-speed integrated circuits, and "artificial intelligence" software. The U.S./Japanese case contrasts two national approaches to the development of advanced semiconductor production equipment. In both pairs of cases, the social organization of domestic user/supplier relationships is identified as a critical determinant of the domestic network's ability to capture the economic benefits of innovation.

Because economic outcomes are biased by an asymmetrical diffusion of technological know-how, the question of where technological innovation and its developmental impacts occur is a legitimate concern for policy. In this context, individual trade disputes become more than a matter of short-term gains and losses; they become essential to the creation of a new national production profile which is composed of technologically-dynamic and economically prolific industries. This thesis offers the contention that certain facets of domestic industrial organization can have the same positive developmental effect as neo-mercantilist trade policy, but at a lower economic and political price.

### **Professional Reports, M.C.P. [partial listing only]**

*The Korean Chonseil System of Housing Rental:  
Creative Housing Finance with Hidden Costs for Renters*

Laura Catherine Nelson  
1991

This paper examines the predominant form of rental in the housing market of the Republic of Korea. While most studies of the Korean housing market have focused on facilitating home ownership, the

rental market has been ignored despite the general agreement that the situation of renters in Korea is worsening. This paper argues that the effects of housing policy on renters should be considered on the grounds of equity, and that changing the *chonsei* (large returnable deposit payment) system of housing rental in Korea is a key element in ameliorating current affordability problems. Although *chonsei* functions to support housing purchase by filling in where the insufficiently-developed formal housing finance sector fails, the *chonsei* system is extraordinarily advantageous to landlords and unfairly burdensome for tenants. Average *chonsei* rates are close to or higher than average annual household incomes; *chonsei* renters must move frequently; *chonsei* increases the disparity of wealth between renters and landlords; *chonsei* renters' entire savings are at risk; *chonsei* payments mask rent burdens. There are some positive qualities in the *chonsei* system, and these should be preserved by maintaining some *chonsei* units and transforming other current *chonsei* rental units into certain kinds of monthly rental units. *Chonsei* is deeply intertwined with the Korean economy and it will be difficult to alter the system, but, in the interest of equity and the long-term health of the Korean housing market, policies to provide alternatives to the *chonsei* system are necessary. Some considerations for changing the rental housing market are suggested, including financing for the construction of new monthly rental units; loans for transforming existing *chonsei* units to monthly rental units; and financial assistance to renter households. Renters generally have been ignored by housing policy analysts, and it is time to consider the rental housing market itself. The suggestions provided here, however, must be understood within the larger Korean financial and urban planning policy context; real improvements will depend upon a reevaluation of many policy sectors.

### *The American Green Movement: Problems in the Democratic Reconstruction of the Public Sphere*

Sean D. Stryker

1991

A theory of social movements based on the social philosophy of Juergen Habermas is applied to an examination of the ideology and experience of the American Green movement to assess the conditions for restoring the function of moral rationality in advanced industrial society. Evidence of an inherent contradiction between communicative and strategic action orientations suggests that "system" and "lifeworld" can be recoupled only through a dynamic, historical process of social mobilization and rationalization. A strategy for Green politics in the United States is suggested based on this analysis.

*Comparative Study of Indonesian Lowland Development and American Sensitive Areas Development: A Search for New Approaches*

Syahrial Loetan

1991

Indonesia plans developing lowlands and swampland in its three main islands, Sumatera, Kalimantan, and Irian Jaya, to attain self-sufficient food production. The earlier experience of this type of development has not given significant contribution in terms of achieving specific goals in self-sufficiency. Although self-sufficiency was reached in the year 1984/1985, this achievement was mainly the result of the intensification effort made in irrigated lands in Java. With rapid urban growth in Java, a lot of fertile lands have to be given up to be used for urban facilities or other beneficial purposes. The lowlands outside Java should become the substitute for the loss of production areas.

Some of the barriers to the development of lowlands are: very slow growth of settlers' incomes; a partial disturbance of environments; ineffective planning processes; and implementation. Key issues are presented in the earlier part of the report.

From the perspective of several experiences in developing sensitive areas in the United States which have totally different environments (in the Tahoe Region, wetland restoration in California, and Sanibel Island in Florida), several criteria can be established that are applicable to Indonesian conditions.

Based on those specific criteria, some new policies are suggested for a future Indonesian Swamp Development Model that might work more effectively with minimum environmental impact.

*Population Decentralization from Seoul and Regional Development Policy*

Jai Yeong Lee

1991

This paper is a review of the regional development policy in Korea since the 1970s from the viewpoint of its primary focus on population decentralization from Seoul. Seoul has functioned as the development engine of rapid national economic growth since the 1960s. As the socioeconomic dominance of Seoul relative to other regions has been increasing and regional disparities have become severe, national spatial strategy in Korea has been focussed on two issues: containment of the expansion of the Seoul Metropolitan Region, and the promotion of less-developed regions. A battery of planning and programs (such as land use controls, industrial location incentives and regulations,

and rural development) have been introduced to curb the growth of Seoul. However, their results have been limited, and much of the success flows from the impressive economic growth performance and from non-spatial policies.

As the economy matures, the role of spatial policy may diminish. However, a national spatial policy is still needed to guide the future changes in socially desirable directions. Greater emphasis should be given to increasing the role of local government and participation of local people in the planning process. And spatial policy in Korea should assess the direction of market forces, then provide an integrated view of the sectors under various government departments and agencies, and finally set realistic planning objectives and targets.