

Resources of the Future: Urban Land and Environmental Quality in Harvey Perloff's Development Planning

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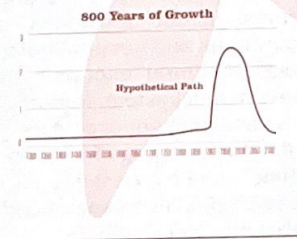
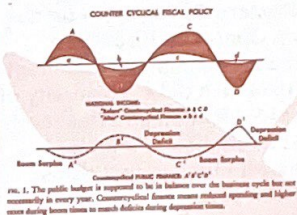
In 1937, the National Resources Committee, a New Deal-era public planning board, submitted a report on the city. The federal government's social welfare and information gathering programs had thus far largely ignored the rapid transformations of the rural landscape into teeming centers of commerce. Although the nation had importantly embarked on a consideration of physical and social resources, it had not yet taken up the challenge of "the highest and best use" of "urban communities [as] potential assets of great value."¹ The report framed rural and urban communities as interdependent landscapes in which the nation's future prosperity rested. As an initial attempt to collate reliable data on the physical and social life of the city, the report offered graphic and textual descriptions of the city's current state and future conditions. While it mostly understood the city as a site of resource consumption and instrument of wise use, the report also presaged a notion that would exert growing influence in the coming decades: that the city was a resource in itself to be managed in the development of the national economy.

This essay traces the genealogy of resource planning discourses as they intersect with international development paradigms and urban/architectural pedagogy through the career of Harvey S. Perloff, a political economist and educator who began his career overseeing industrial planning in Puerto Rico and ended it as the dean of UCLA's School of Architecture and Planning. During this time, which spans from the New Deal era to the dawn of the Reagan presidency, the status of planning changed dramatically; initially planning was a practice that possessed a heroic surety, confident in its ability to mold the world according to its own principles, but in later decades such ambitions were curtailed and state-sponsored planning was superseded by other predictive methods.² Perloff's migrations between various think tanks and committees came at a time when, as many scholars have recently shown, military-industrial-academic complexes were marshaling novel tools of research and predictive control in projects of breathtaking scope. Furthermore, as many architectural and urban historians have shown, the increasing focus on methods of computerized simulation, scenario planning, and urban "games used the logic of systems to impose a degree of rationality onto the perceived social, political, and environmental disorder of the time."³

This essay extends these accounts by showing how this scientific focus was imbued with the projective apparatus of resource and economic forecasting, planning techniques that together cast the built environment as a "natural resource" in need of conservation. However, expertise in resource planning came to be wielded less in service of state-sponsored activity and more towards the heady imagining of corporate-sponsored futurism, in part a result of the changing fates of planning discussed above. Joining these ontologies, though, was a persistent faith in qualitative and quantitative methods of projection that might scan informational environments for the resources that would secure the future. In time, Perloff even began to conceive of architecture as a resource to be developed in its own right. Perloff's career thus captures how capitalist planning tools drifted from the realms of policy into the aesthetic domains of architecture and urbanism.

A gloss on the highlights of a career that seamlessly moved between the realms of academia, research, and government gives us some clues as to these dynamics. In 1940, Harvey Perloff completed his doctorate in political economy at Harvard University with a thesis on modern budget policies. After enrolling in military service in 1943, Perloff assisted the Puerto Rican government—a quasi-colonial regime overseen by New Deal "brain trusters" and planning acolyte Rexford G. Tugwell—on the industrial development program Operation Bootstrap, one of the first and most ambitious regional development programs. Between 1947 and 1955 he led the University of Chicago's influential Program of Education and Research in Planning, which merged that institution's notable legacy of urban social sciences with the applied goals of planning.⁴ For the next fourteen years, Perloff was a lead researcher at the Ford Foundation-funded think tank Resources for the Future, where he directed the Program on Urban and Regional Studies. Resources for the Future was the first of its kind—an "environmental" think tank that produced studies for corporations and governments on the dimensions and prospects of natural resources, the very substrate of the national economic system. Perloff briefly stepped down from these activities for two years in 1961 to serve as part of an illustrious group of experts known as the "Committee of Nine", on President John F. Kennedy's Alliance for Progress a \$20 billion peace-building effort with Latin America that coincided with the

While Alvin Hansen's Depression-era prediction that lackluster population numbers and the closing of the frontier would result in the "cessation of growth"¹ was laid to waste by the expansionist policies and baby boom of the postwar period, recently, the economist Robert J. Gordon has once again been ringing the end-of-growth alarms. This tremendous consternation over growth—positioned as the panacea for high unemployment and all manner of other social ills—begs the question: from where did this idea come? The historian and degrowth activist Matthias Schmelzer traces the concept of growth, broadly speaking, to the second half of the eighteenth century, when industrialization and colonialism had resulted in a political system that was "fundamentally dependent on the continuous accumulation of wealth." Citing Reinhardt Koselleck, he notes that, concomitant with this world order, came a "perception of temporality" in which the future was characterized by "progress."² Despite this older provenance, however, Schmelzer notes that what he calls the modern-day "economic growth paradigm"—that is, when the pursuit of full employment is eclipsed by the idea that there is a domain called the "economy" and that its rate of growth indexes a country's welfare—dates only so far back as the mid-1950s.³

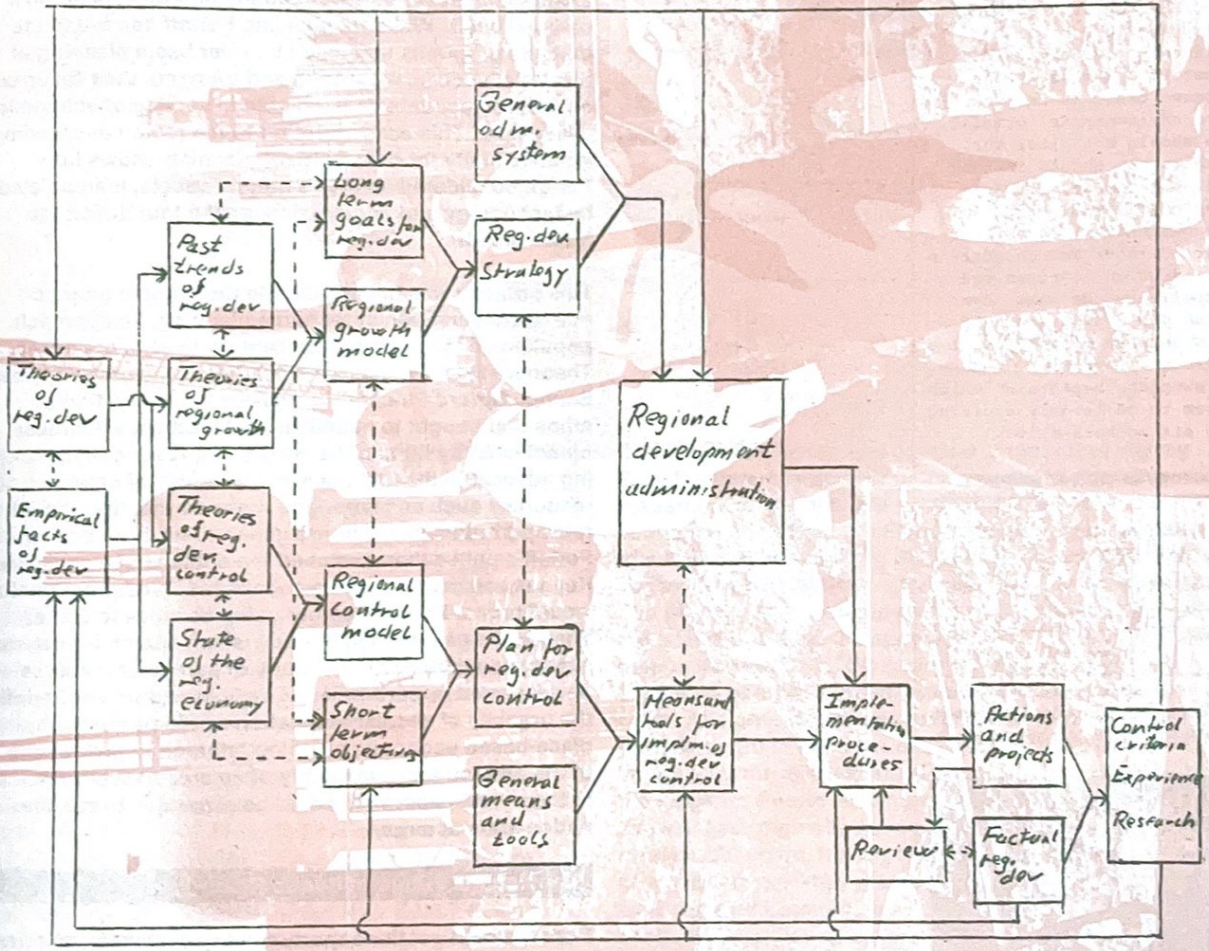


creation of the Agency for International Development. In 1968, Perloff was appointed Dean of the Graduate School of Architecture and Planning at UCLA, where he remained until his death in 1983. During this time, he advised a number of public and private research endeavors, notably publishing a book for the American Academy of Arts and Sciences' Commission on the Year 2000, a group that introduced the discipline of futurology to mainstream attention.

The essay focuses on three banner moments in this trajectory—Puerto Rico, Resources for the Future, and UCLA—chosen to elucidate Harvey Perloff's salient modes of practice in development, resources, and environment. In doing so, it argues for a reconsideration of architectural and planning pedagogy in light of their entanglements with neocolonial and imperialist power relations. For Perloff, resources became a labile material and epistemological object through which to articulate the shifting ground of politics in the post-war era, as well as a universal lens through which to understand the city and its futures. In remembrances of their colleague, scholars commended Perloff as "a social inventor whose laboratory was society... [He was a man] not content merely to analyze, but to prescribe." He had, they continued, the "ability to span the field of architecture on one hand to the world economy on the other."⁵ These dual claims to prescriptive experimentation and architectural-economic linkages are the hallmarks of a career that mobilized information and resources as coeval design tools for outlining the future.

Learning from the "American Keynes"

In order to understand how Perloff, an economist trained in Keynesian management techniques, ascended to become an elder statesman of architectural education, it is important to return to his intellectual roots in that mode. As a student at Harvard, Perloff worked closely with the influential economist Alvin Hansen. Affably known as the "American Keynes," Hansen was a leading popularizer of Keynes's economic theory following his publication of *The General Theory of Employment, Interest and Money* in 1936. Hansen was instrumental in the creation of the Council of Economic Advisers in 1946, an agency that provided the White House with objective analysis in the creation of fiscal policy. Hansen's interest in the stages of "business cycles" matured over the first half of the 20th century, from a relatively orthodox view of external disturbances such as technological change and resource depletion to a full-throated Keynesianism. As against this laissez-faire view of "automatic" fluctuations in the production of goods and capital investment, Hansen's brand of Keynesianism argued that it was in fact state monetary policy that determined business conditions. In the absence of government intervention to stabilize production and employment, Hansen warned that a form of "secular stagnation" could take hold—a prolonged, non-cyclical period of population decline and disinvestment when household savings exceeded business investment and demand correspondingly became anemic. Keynesian economic thought thus sought to stave the deflationary effects of declining resource frontiers and newly constrained immigration with a program to encourage capital expenditure by businesses and



Although the specific historical circumstances (the Depression, the need for wartime national income accounting tools, the Cold War) that produced concepts like secular stagnation and economic growth have long since passed—and although our present era is characterized by growth-fueled rising inequality and ecological collapse—old habits, it seems, die hard. Take, for example, the worldview of the currently reigning global super villain Jeff Bezos. Unaware that he is merely parroting the rhetoric of mid-century American economic planners (and eighteenth century colonizers), he argues that, in response to the environmental crisis, we should not alter our habits but should instead colonize space, extracting energy from this new resource frontier so that our children and children's children ad infinitum can experience the same "dynamism and growth" that he has been so blessed to live through.⁴ Anything to keep growth—the benefits of which seem to be largely accruing to his pockets—alive.

PATTERN OF CHRONIC STAGNATION

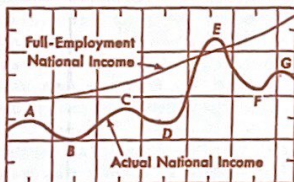


FIG. 3. Hypothetical data to illustrate case where simple countercyclical finance is held inadequate to achieve stable high employment.



- 1 Alvin Hansen, "Economic Progress and Declining Population Growth," *The American Economic Review* 29, no. 1 (March 1939), 11.
- 2 Matthias Schmelzer, *The Hegemony of Growth: The OECD and the Making of the Economic Growth Paradigm* (Cambridge: Cambridge University Press, 2016), 76.
- 3 Schmelzer, *The Hegemony of Growth*, 97.
- 4 Jeff Bezos, "Going to Space to Benefit Earth" (Blue Moon lunar lander product launch, May 9, 2019), <https://www.youtube.com/watch?v=GQ98hGue6FM>.

individuals.⁶ This milieu provided the intellectual springboard for Perloff's career in planning, which would share the Keynesian urgency to discover ways of preempting or outmaneuvering these impending resource limits.

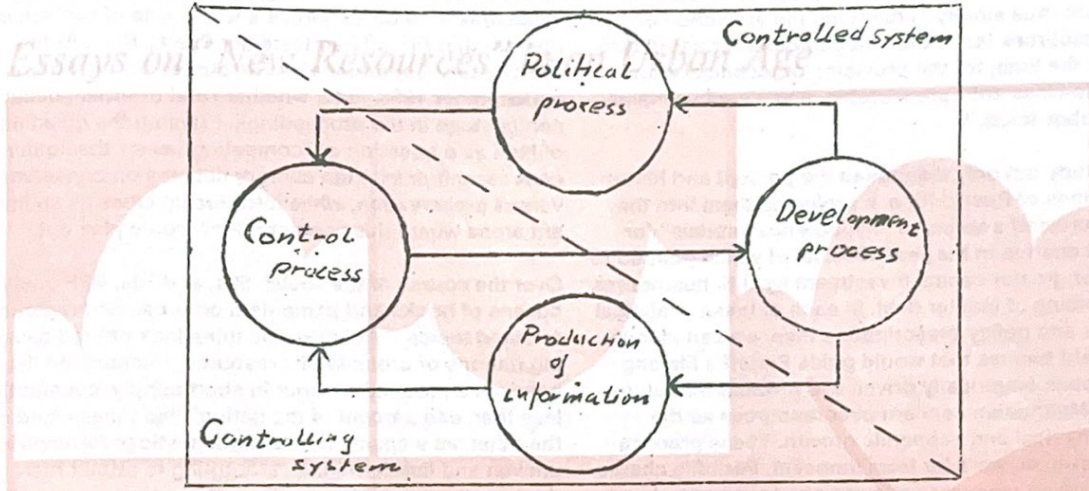
In a 1942 publication Hansen co-authored with Perloff, the two economists called for a national program of resource development modeled on the Tennessee Valley Authority's regionally based planning mechanism. They (improbably) suggested that the U.S. had yet to fully recognize the full potentials of its land, water, and air resources, and that maximum economic growth in the aftermath of WWII would require such forethought. The physiogeographic area of the river valley would serve as the basic unit of organization. The pair also called for an overseer along the lines of the TVA to administer this vision on a national basis. While Hansen and Perloff nodded to the multiple programs that made up river basin planning at this time (such as recreation and tourism), their focus was on natural resource development in service of economic expansion.⁷ This early attention to the region as an administrative entity for development planning shows how Perloff considered an area's natural assets, manipulated by technology and engineering, as the foundation for future growth.

This strategy was in line with the then dominant practice of conservationist resource planning, an approach popularized in the early 20th century by U.S. president Theodore Roosevelt and the head of newly created Forest Service Gifford Pinchot. As against a preservationist ethos that sought to establish vast tracts of wilderness unmolested by human industry, conservation thinking advocated the judicious and wise use of natural resources such as timber and water so that they would remain productive for future generations. Hansen and Perloff's publication sketched the outlines of a spatialized Keynesianism and conservationist resource program that would propel Perloff's career in the decades to come. That is, the pair melded the Keynesian search for external economic stimuli with the study of particular resource development opportunities of a given region. For Perloff, the urgency of secular stagnation would be met with place-based economic planning tethered to projections of the amount and availability of an area's resources. In theory, this approach could be expanded to suit the nation-state at large.⁸

Planning the Future of Puerto Rico

Perloff would get the opportunity to enact these theories of development with his appointment as an economic planning adviser in Puerto Rico, a position he held just as the territory was emerging as a crucial testing ground for U.S. foreign policy in the post-war. Indeed, the modern regime of global development aid came into being with President Truman's announcement of the Point Four Program in 1945, and it was the series of projects in Puerto Rico known as Operation Bootstrap that inaugurated Truman's call to develop the "Third World." As Timothy Mitchell has shown, such projects originated as a means of subverting domestic labor demands by outsourcing industrial manufacturing and energy production to autocratic foreign regimes. In doing so, officials introduced the very notion of "economy" as a discrete

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object of management predicated on a stable and knowable outline of the future. This stable future, however, depended on asymmetrical exchange between (neo) colony and metropole: the free flow of resources from foreign sovereignties on the one hand, and the provision of development aid in the form of technical knowledge on the other.⁹ These dynamics played out in Puerto Rico through vast planning efforts aimed at industrializing the rural island territory, attracting hordes of social scientists looking to study the “underdeveloped” subject and the reasons for his supposed stagnancy.

Much of this academic interest can be traced to the tenure of Rexford Tugwell, who served as Governor of Puerto Rico from 1941 to 1946. The former chairman of the New York City Planning Commission, Tugwell saw the governor’s position as an opportunity to import the state-led economic planning of the New Deal.¹⁰ Puerto Rico’s economic prospects were indeed grim; the island relied upon the monocrop export of sugar, itself controlled by American corporations and devastated by the Great Depression. Tugwell worked closely with his ultimate successor, Luis Muñoz Marín, who, although the first democratically elected governor of the territory, was an admirer of Roosevelt’s New Deal reforms and would steer away from pushing for independence. Marín and the Popular Partido Democrático (PPD) embraced policies of urban-based export-led industrialization characterized by minimal barriers to entry for U.S. business interests and an overwhelming emphasis on attracting foreign capital. With the passage of the Industrial Incentives Act of 1947, which waived all taxes on private business, Operation Bootstrap began in earnest.¹¹

It was into this social and political context that Harvey Perloff entered as an economic consultant, first on a research visit in 1946, and later to help establish an economic unit within the Planning Board. The creation of a Puerto Rico Planning Board (PRPB) had been one of Tugwell’s first initiatives after assuming the governorship. The PRPB was to oversee comprehensive development on the island, and upon its approval in 1942, was composed of a board elected by the governor. Its first members consisted of a geographer, an architect, and an agronomist. The construction of naval bases during the war years brought in an influx of capital, offering the PRPB an opening for its planning responsibilities and setting the stage for Puerto Rico’s post-war agenda. Although Tugwell had originally advocated for state-led growth and rural resettlement, his unyielding belief in the supremacy of American expertise created the institutional framework for a turn towards urban migration and loose capital controls. The mere existence of the PRPB was a catalyst for the changes that followed, as the planning apparatus itself demanded informational inputs to devise its plans, which new waves of social scientists were more than happy to supply.¹²

The results of Perloff’s efforts to meet this demand were published in a 1950 tome, *Puerto Rico’s Economic Future: A Study in Planned Development*. By this time, Perloff was a faculty member in Chicago, and the book evidently made a splash. Academic and popular reviewers were impressed with the ambitions and methodological rigor that Perloff brought to his study, and Puerto Rican officials greeted the text with fanfare. His text argued that Puerto Rico’s acute lack of natural resources and the

presumed intellectual limits of its population pointed to urbanization as the island's most rational way forward.¹³ It could ill afford the kind of centuries-long arc of development that characterized northern Europe because of its lack of undeveloped land. In the absence of resources in the countryside, development would proceed by finding resources in the city, through attractive capital arrangements and industrial districting. His proposed model of development thus simply substituted the extraction of physical resources (as in the TVA and other infrastructure projects of the time) for the provision of technical know-how, middle-class entrepreneurship, and a captive manufacturing labor-force.¹⁵

Perloff's study not only diagnosed the present and historical conditions of Puerto Rico, it projected them into the future. He created a series of "hypothetical models" for different scenarios in the year 1960, all of which pointed to the need for greater capital investment by U.S. businesses or the financing of insular debt. In each of these analytical techniques and policy prescriptions then, we can identify the dominant themes that would guide Perloff's lifelong study: a sober, empirically driven eye towards the future, and a neo-Malthusian concern over resources as the driver of physical and economic growth. These preoccupations, however, were far from innocent. Perloff's characteristic focus on resources allowed him to sidestep larger political questions. If Puerto Rico was currently struggling, he assured his readers that "the primary trouble is not American imperialism, but natural and human deficiencies."¹⁶ Furthermore, such a narrow, resource-centric approach produced a number of conclusions with devastating human consequences far more troubling than any endorsement of loose capital controls.

Indeed, for Perloff, the U.S. policy of accelerating urbanization, which entailed siphoning populations into urban centers as a means of diverting an idle workforce, was only a temporary stopgap to the "problem" of population itself. In his book, Perloff made the case for what he considered the immense failure of U.S. policy to encourage falling mortality rates without correlate measures to bolster economic growth or restrain reproduction. This would have served as a counter to the increased resource consumption that came with a more flourishing population. As if in revival of his early conservation training, Perloff effectively framed the population question as a problem of scientifically managing resource use over time. In so doing, Perloff and others ignored the inequitable distribution of resources and wealth in the present in favor of paternalistic control of population numbers over time.¹⁷ Puerto Rico became a laboratory for incipient efforts to control world population through forced sterilization and non-consensual clinical trials of birth control pills.¹⁸ These innocuously termed "family planning" tools were considered essential implements in the global push for development, and Perloff's text sharpened the case for urgency.¹⁹

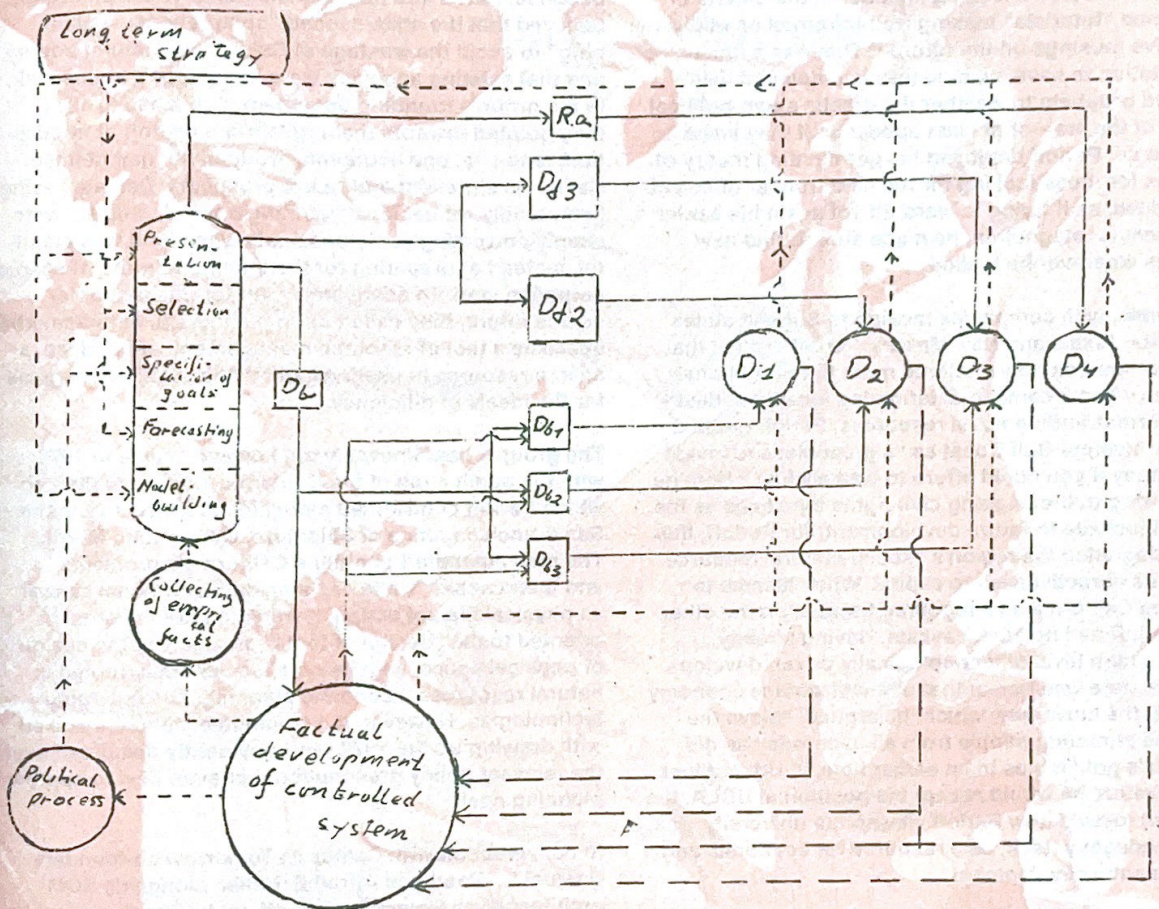
Cities and the Atmospheres of Capital

While it is unclear when exactly he began to consider himself an urban planner proper, Perloff moved onto more influential posts based on the strengths of his research agenda in Puerto Rico. After his time as faculty member

in planning at University of Chicago, Perloff joined the newly formed think tank Resources for the Future Inc. (RFF) in 1955. This non-profit research organization was established in 1953 with a grant from the Ford Foundation for \$150,000 with a brief to consider the range of natural resources available to the nation, the demands placed on them, and best practices of management and conservation.²⁰ From the beginning, RFF advanced a capacious view of resources and the kind of projective posture that Perloff had tested in Puerto Rico. At the Mid-Century Conference on Resources for the Future, held in December 1953, land, whether rural or urban, occupied center stage in the proceedings. Framing the question of land as a question of "competing uses," the conference recapitulated 20th century debates on conservation versus preservation, while introducing cities as an important arena where this "competition" would play out.²¹

Over the course of the 1950s, 60s, and 70s, RFF published dozens of books and pamphlets on urban and regionally oriented topics.²² At times, the think tank offered competing notions of urban land's resource potential: on the one hand, as a production input in short supply, constituting less than one percent of the nation's land mass, and on the other, as a space of inhabitation whose fortunes were uneven and indeterminate, struggling to attract residents and capital.²³ Harvey Perloff, for his part, asserted that urban land was "the most valuable of all our natural resources, viewed from the standpoint of national wealth accounting."²⁴ At a conference on environmental quality in 1968, attendees hoped to delineate the appropriate accounting metrics for this invaluable resource. In this process, they echoed the ambitions of economic planners in the previous two decades who had developed a suite of calculative tools for the representation of the economy. At the same time, Perloff seemed to minimize the role "traditional" resource commodities now had thanks to the rise of the service industry. The natural environment no longer figured as a resource primarily in the sense of extractable goods, but as a theater of operations for the smooth functioning of commerce. With this, Perloff introduced another wrinkle in his evolving conceptualization of the city as resource: previously he saw the city almost invariably acting as a magnet for capital, where he now became attuned to the atmospheric effect of the urban environment upon economic indices.²⁵

The key to the city's potential lay precisely in this new definition of "environmental resources." These environmental resources introduced the problem of externalities into the system and thus required a revision of the "free goods" concept, a central tenet of classical economics. There were real costs associated with these natural amenities such that "while in technical economic terms fresh air remains a free good, in a social accounting sense this is no longer the case in cities, where it entails large personal and group expenditures."²⁶ Thus, while the notion of environmental quality nullified certain economic precepts, it upheld others. In other words, environmental quality was both qualitative and quantitative—as important to consumption as production. Most importantly, though, environmental quality in cities was a resource to be developed like any other, as the physical building of the urban fabric became a means to this end.²⁷ The relative conditions of air, water and land as they intersected



with an industrial, urbanized society came to dominate the resources concerns of the 1960s, rather than a focus on quantity.²⁸ This turn aligned with a broader shift in national sentiments surrounding cities, as well as a growing sense of environmental crisis. That is, with Perloff at the helm, RFF rescripted the terms of development from one of renewal and growth, to one of quality and control.

From his many years at Resources for the Future, then, Perloff had developed a peculiar brand of developmental consulting and environmental expertise that he would soon bring to his position as dean of architecture and planning at UCLA. His approach combined an experimental approach to the city with a future focused vision that sloughed off his earlier Malthusianism in favor of economic opportunism. Perloff was also by this time considered a leading member in the coterie of professional "futurists" making well-informed or wildly speculative musings on the future.²⁹ This was a lucrative reputation to have, as businesses employed these self-styled prophets to weather the drastic socio-political changes of the era—or at least appear as if they knew how to do so. Perloff deployed his germinating theory of resources for those looking for the next frontier of investment. Indeed, as if trying to ward off yet again his earlier enemy, secular stagnation, he made sure to find new resources wherever he looked.

For example, with companies moving to Sunbelt states like Florida, Texas, and New Mexico, Perloff argued that amenity resources now mattered more than traditional resources when it came to determining locational desirability. Further finding novel resources, Perloff pointed to the Mississippi Gulf Coast as "a great place to invest some money if you could afford to wait a while." Here he was referring to the ongoing civil rights injustices as the primary blockade to future development; for Perloff, this tension degraded the region's "social-cultural resource," marring its attractiveness to capital. When it came to assessing California as a resource frontier, on the other hand, Perloff had no such caveats. Having already attained a high level of technologically driven development, the state was rich in that ultimate service economy resource, the university, which, he argued, "plays the same role attracting people from all over today as did California's gold mines in an earlier time."³⁰ Uttered just months before he would accept his position at UCLA, the statement reveals how Perloff viewed the university, and indeed pedagogy itself, as a resource for economic and environmental development.

California Dreaming

California indeed presented an ideal venue for someone such as Perloff, in search of a model metropolis for the future. He called Los Angeles "a frontier city in modern dress," where planners embraced change head on.³¹ UCLA's professional school, at the time just two years old, would combine architecture, urban design, and planning, and emphasize the interrelated system each discipline inhabited: architects considering more than the building as an object, and planners with an eye towards their constituent communities. Although Perloff was trained neither as an architect nor as a designer, his skills in economics and the social sciences lent him the

credentials necessary to meet the immense changes of the city. As in the postwar experimental model of Puerto Rican development planning, Perloff was chosen to guide students' urban interventions within Los Angeles with an eye towards national and international replicability.

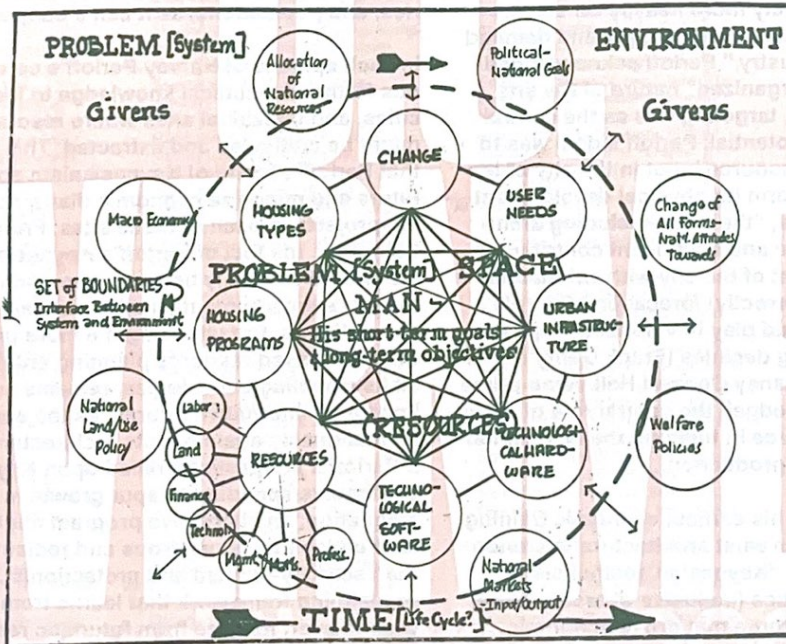
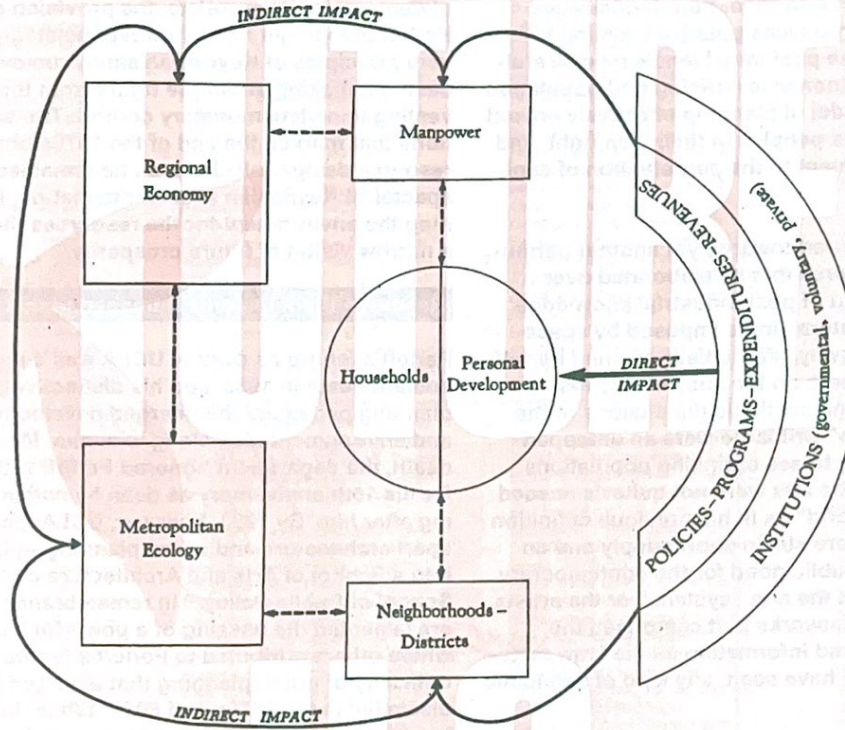
Although California offered a model of progressive values and sunny optimism to the rest of the country, it faced its own problems due to the spectacular growth of the preceding decades. Indeed, the state would be ground-zero for the anti-growth environmental movement that would seek to restrain the excesses of suburban sprawl through new land-use controls and regulatory oversight.³² In 1970, Perloff joined the advisory board of a group called California Tomorrow—a non-profit advisory group founded in 1961 in order to bridge the concerns of conservation and physical planning. The organization believed that the state needed "comprehensive planning" to avoid the wastage of California's natural bounty, and that existing agencies were ill-equipped to this task. In the group's founding document, published in 1962, they pointed towards the fragile triangulation of population, land-use, and economic productivity that defined California's present and future prospects. Despite having comparably robust local planning control, officials were simply correcting decisions made when land was plentiful, instead of preparing for the imminent future of scarce, degraded land. To adequately plan for this resource-scarce future, they called upon planners to embrace urban space as a tool of resource management, and indeed, a scarce resource in itself, caught within a zero-sum game for the ideals of efficiency.³³

The group's best-known work, however, came in 1972 with the publication of the California Tomorrow Plan, to which Perloff contributed alongside architects from the San Francisco office of Skidmore, Owings and Merrill. The plan attempted to outline California's problems and their causes, while devising an institutional as well as physical plan of action. It would, in other words, be oriented to the "design of tools" as much as the design of physical space, with its core issues firmly rooted in natural resources, economic planning, and emerging technologies. However, the committee members tasked with drawing up the 1972 report evidently disagreed over the relevant policy prescriptions, or even how to approach planning itself.

In conversation with California Tomorrow co-founders Samuel E. Wood and Alfred E. Heller, alongside SOM architect Marc Goldstein, Perloff pushed back against an over-emphasis on the plan-form, or the rote distribution of population and industry across state lands. For Perloff, visual representations of future utopian conditions would be outdated almost immediately. More powerful in his mind were a series of proposed "laws, regulations, institutional changes, budget changes, and some physical changes." Rather than "seeing California as a physical entity, as a map, take 10 to 20 million people, line them up in groups (by income, black and white, etc.) alongside a checklist: excellent, very good, good, fair, bad, and so forth. Describe what will change the environment of those people in 10 years."³⁴ In contrast to his thinking on the populations of Puerto Rico, Perloff's attitude towards the people of California did not seem to prompt anxious

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musings on future social and political stability. Instead, these populations could be tabulated as informational inputs for the betterment of planning the environment. Drawing on the calculative abstractions and futuristic surety he had honed in Puerto Rico, Perloff minimized the resource, land, his group was putatively aiming to protect. In other words, he positioned land's resourcefulness as a function of economic leveraging and population management. Such a model of planning effectively erased the value of the land or its peoples in their own right, and yoked resource management to the perpetuation of capitalist accumulation.

Perloff's objections gestured towards yet another permutation of the city-as-resource that he elaborated over the 1970s—namely, a kind of post-industrial knowledge economy in which the natural limits imposed by space and time seemed to fall away. What distinguished Perloff from his other futurist peers on the subject was his attention to the artistic and aesthetic dimensions of the city. For Perloff, "the arts" writ large were an untapped fount for cities beginning to see shrinking populations and fiscal difficulties.³⁵ The arts were not quite "a needed element of the natural world" as in his previous definition of resources, but they were still in short supply and an increasingly important public good for the contemporary city. An understanding of the arts "system," or the artists, institutions, and social networks that comprised the creative economy, required information as the "raw material" of policy and, as we have seen, any kind of economic intervention whatsoever.

Rather than looking backwards at the poor record of unemployment and income differentials usually offered up by the "dismal science," Perloff unsurprisingly suggested looking towards "the role of the arts in the economic future of the central city."³⁶ He predicted that as the industrial bases of cities continued to shrink, these communities would rely more heavily on service sectors. In sketching a picture of the supply and demand outlook of the unique "industry," Perloff acknowledged the "disparate, largely unorganized" nature of the arts as an economic enterprise, targeting this as the central cause of their unrealized potential. Perloff's goal was to systematize the arts as a resource input in the city of the future and thus also transform its physical development in the process. In his words, "the arts—including architecture—can make a unique and significant contribution to the physical development of the city with substantial economic payoffs."³⁷ In (correctly) forecasting the role arts-focused buildings would play in valorizing capital accumulation in the coming decades (Frank Gehry's Bilbao Museum of Art or Disney Concert Hall being prime examples), Perloff acknowledged the central role of architecture as a physical resource in building the late-capitalist city's spaces of service production.

To link these ideas back to his earliest economic training, we might detect within them what architectural historian Arindam Dutta has called a "Keynesian aestheticism." That is, for Keynes, aesthetics (inclusive of architecture) constituted a motivational force that drove economic behaviors. The public arts might therefore encourage a pleasure principle of consumption rooted in the "animal spirits" and serve as a counter to the psychological

tendency towards thrift. In Dutta's telling, the rise of multinational construction and engineering conglomerate Arup alongside monetarist state policy expounded by Keynes shows the arts assuming a key role in the manufacturing of demand (or its correlate, the provision of supply).³⁸ Perloff then might have, however belatedly, embodied the very principles of Keynesianism by removing the frame of decision-making about the future from the individual and vesting it in state monetary control. The scarcity assumptions that marked the end of the 1970s brought Perloff's resource design full circle, as he remained guided by the specter of Keynesian secular stagnation, constantly scanning the environment for the resources that would secure a narrow vision of future prosperity.

Resource Planning on a Damaged Planet

Perloff's tenure as dean at UCLA was cut short by his sudden death in 1983, and his distinctive architectural and planning pedagogy that merged development, resources, and environment died along with him. Months before his death, the department honored Perloff with a celebration for his 15th anniversary as dean by naming its main building after him. By 1993, however, UCLA moved to break apart architecture and urban planning—placing the former into a School of Arts and Architecture and the latter a School of Public Policy.³⁹ In remembrance, some observers lamented the passing of a powerful interdisciplinarity, where others attributed to Perloff's tenure a burgeoning criticality of urban planning that emerged from within the discipline in the 1970s and 80s.⁴⁰ While this paper has been critical of the resource managerialism exhibited by Perloff's planning ideology, this is not to discount the design disciplines adopting a wider, socially inflected practice, or even one that would instrumentalize economy as technique. Rather it is to show how even the explicit foregrounding of resources and environment can just as easily assist capitalist restructuring of the city, its territories, and populations, as it can a cooperative holism.

In each episode of Harvey Perloff's career, he used various forms of technical knowledge to identify regions, cities, and individual sites where resources and capital might be cultivated and extracted. This paper has argued that Perloff's brand of Keynesianism sought to divine the future and minimize economic disruptions by developing projects in each of these sites. From Puerto Rico to California, the foci of Perloff's Keynesian stimulus proposals shifted variously between pure natural resources, the city's environmental milieu, and arts-based capital expenditures. But what might a more progressive vision of urban-based resource planning entail? Planning, with all its troubling genealogies, remains an essential tool for imagining alternative futures, as the specter of environmental quality again haunts architecture and urbanism. If Perloff's suggestions relied upon Keynesian injections of stimulus spending to spur growth in the face of feared stagnation, an alternative program might foreground a land ethics that is generous and redistributive rather than scarcity-minded and protectionist. An architectural or planning framework that learns from Perloff would be wise to avert its gaze from futuristic resource scenarios and reinvest its attention in the remnants of nature left in capital's wake.

- 1 Urbanism Committee to the National Resources Committee, *Our Cities: Their Role in the National Economy* (Washington, D.C.: U.S.G.P.O., 1937), v. For more on the executive successor, the National Resources Planning Board, see Philip W. Warken, *A History of the National Resources Planning Board* (New York: Garland Publishing Inc., 1979).
- 2 On the rise of "planning" as a concept and tool used in capitalist societies see Patrick D. Reagan, *Designing a New America: the Origins of New Deal Planning, 1890-1943* (Amherst: University of Massachusetts Press, 1999); Otis L. Graham, *Toward a Planned Society: From Roosevelt to Nixon* (New York: Oxford University Press, 1977).
- 3 Felicity Scott, "Discourse, Seek, Interact: Urban Systems at MIT," in *A Second Modernism: MIT, Architecture, and the 'Techno-Social' Movement*, ed., Arindam Dutta (Cambridge: MIT Press, 2013), 342-393; Jennifer Light, "Taking Games Seriously," *Technology and Culture*, Vol. 49, No.2 (April 2008): 347-375. Pamela M. Lee, *Think Tank Aesthetics: Midcentury Modernism, the Cold War, and the Neoliberal Present* (Cambridge: MIT Press, 2020); Jill Lepore, *If Then: How the Simulmatics Corporation Invented the Future* (New York: W.W. Norton Co., 2020).
- 4 This short-lived program has been termed the "Chicago school" of planning. Despite having a moniker similar to that of their counterparts in neoliberal economics, however, the department positioned itself as against the anti-planning ideology of colleagues such as Milton Friedman. Heavily influenced by early faculty member Rexford Tugwell's vision of planning as fourth branch of government, the program trained graduates for positions in the NRPP, TVA, and UN. It took a view of planning as the administration of decision-making processes and the effective allocation of resources within organizations. Although this was "a planning model which fit the American brand of welfare state liberalism," Perloff found himself defending planning as a legitimate business tool against a climate suspicious of its aims. Jean-Louis Sarbib, "The University of Chicago Program in Planning: A Retrospective Look," *Journal of Planning Education and Research*, Vol. 2, No. 2 (January 1983): 77-81.
- 5 Leland S. Burns, "Harvey S. Perloff (1915-1983): A Tribute," *Urban Studies*, Vol. 21 (1984): 217; John Friedmann quoted in Theresa Walker, "Harvey Perloff, Architectural Educator, Dies," *Los Angeles Times*, July 31, 1983.
- 6 Alvin Hansen, *Business Cycle Theory: Its Development and Present Status* (Boston: Ginn & Co., 1927); Alvin Hansen, *Full Recovery or Stagnation?* (New York: W.W. Norton Co., 1938).
- 7 Alvin Hansen and Harvey Perloff, *Regional Resource Development* (Washington, D.C.: National Planning Association); see also Hansen and Perloff, *State and Local Finance in the National Economy* (New York: W.W. Norton & Co., 1944).
- 8 "TVA Model Urged for Whole Nation," *New York Times*, November 21, 1942.
- 9 Timothy Mitchell, "Economicity: How the Future Entered Government," *Critical Inquiry*, Vol. 40, No. 4 (Summer 2014): 479-507.
- 10 In fact, he held his governorship thanks to FDR himself, who hoped to neutralize the rise of home-rule political parties. Michael Lapp, "The Rise and Fall of Puerto Rico as a Social Laboratory, 1945-1965," *Social Science History*, Vol. 19, No. 2 (1995): 169-199.
- 11 Déborah Berman Santana, "Puerto Rico's Operation Bootstrap: Colonial Roots of a Persistent Model for 'Third World' Development," *Revista Geográfica*, No. 124 (December 1998): 87-116.
- 12 Brandon Howell, "The Planning System of Puerto Rico," *The Town Planning Review*, Vol. 23, No. 3 (October 1952): 211-222.
- 13 Louis Brownlow, "Puerto Rico Blueprints 'Operation Bootstrap,'" *Washington Post*, February 12, 1950.
- 14 Herein lay the crux of post-war development thinking and Puerto Rico's experimental value to America: in attempting to accelerate historical forces and leapfrog earlier stages of development, the island would provide an instructive model in building the "Third World" into a market for American goods and services. Harvey S. Perloff, *Puerto Rico's Economic Future* (Chicago: University of Chicago Press, 1950), 194.
- 15 It is worth noting that, although many development economists rejected Operation Bootstrap in the years after, it remained highly influential in American contexts. The Clinton administration's so-called "Urban Enterprise Zones" had their roots in a 1978 congressional bill sponsored by New York representative (and later Secretary of Housing and Urban Development) Jack Kemp that referenced Operation Bootstrap as a model for developing U.S. inner cities. Kemp was an integral force in the deregulation of public housing in the 1980s and served as George H.W. Bush's HUD secretary: Mark Byrnes, "The Quarterback Who Wrote the Playbook on Fighting Urban Poverty," *Bloomberg City Lab*, January 6, 2020 (<https://www.bloomberg.com/news/articles/2020-01-06/when-jack-kemp-took-on-urban-poverty-and-lost>).
- 16 Paul Blanshard, "Puerto Rico's Tomorrow," *New York Times*, January 1, 1950.
- 17 Milton C. Taylor, "Neo Malthusianism in Puerto Rico," *Review of Social Economy*, Vol. 10, No. 1 (March 1952): 42-54.
- 18 Laura Briggs, *Reproducing Empire: Race, Sex, Science, and U.S. Imperialism in Puerto Rico* (Berkeley: University of California Press, 2002). See also Matthew Connelly, *Fatal Misconceptions: The Struggle to Control World Population* (Cambridge: Harvard University Press, 2008).
- 19 When Luis Muñoz Marín stepped down as governor in 1964, Perloff celebrated the success of his leadership, declaring Operation Bootstrap a success. Future historians would no doubt see that it was "a grand design for progress carried out through a thoroughgoing but peaceful economic and social transformation." See Perloff, "Puerto Rico's Muñoz—Exposer of Social, Economic Cliches," *Los Angeles Times*, August 23, 1964.
- 20 "Group Will Consider Resources of the Future," *New York Times*, October 18, 1953.
- 21 Henry Jarrett, ed., *The Nation Looks at Its Resources* (Washington, D.C.: Resources for the Future, 1954), 26-60.
- 22 Mark Perlman, *Human Resources in the Urban Economy* (Washington, D.C.: Resources for the Future, 1963); Harvey S. Perloff and Lowdon Wingo Jr., *Issues in Urban Economics* (Washington, D.C.: Resources for the Future, 1968); Harvey S. Perloff, *A National Program of Research in Housing and Urban Development* (Washington, D.C.: Resources for the Future, 1961); Richard F. Babcock and Marion Clawson, *Modernizing Urban Land Policy* (Washington, D.C.: Resources for the Future, 1971); Marion Clawson and Peter Hall, *Planning and Urban Growth: An Anglo-American Comparison* (Washington, D.C.: Resources for the Future, 1973).
- 23 Lowdon Wingo, Jr., ed., *Cities and Space: The Future Use of Urban Land* (Washington, D.C.: Resources for the Future, 1963), 7-10.
- 24 Harvey S. Perloff, ed., *The Quality of the Urban Environment: Essays on "New Resources" in an Urban Age* (Washington, D.C.: Resources for the Future, 1967), vii.
- 25 As Michelle Murphy has written, Keynesian economic thought "rendered capitalism as a kind of national atmosphere that needed explication (through economics) and taking care (through planning)." *The Economization of Life* (Durham, N.C.: Duke University Press, 2017), 20.
- 26 Perloff, *The Quality of the Urban Environment: Essays on "New Resources" in an Urban Age*, 6.
- 27 See also, Harvey S. Perloff, "Towards the Developmental-Servicing City in the Century Ahead," *Ekistics*, Vol. 21, No. 123 (February 1966): 95-101.
- 28 On the dominant narratives of environmental politics of the 1960s see Samuel P. Hays and Barbara D. Hays, *Beauty, Health, and Permanence: Environmental Politics in the United States, 1955-1985* (New York: Cambridge University Press, 1987).
- 29 On futurists and the rise of futurology more generally see Jenny Andersson, *The Future of the World: Futurology, Futurists, and the Struggle for the Cold War Imagination* (Oxford: Oxford University Press, 2018); Elke Seefried, "Steering the future: The emergence of 'Western' futures research and its production of expertise, 1950s to early 1970s," *European Journal of Futures Research*, Vol. 2, No. 1 (2014): 2195-2248.
- 30 William H. Honan, "The Futurists' Takes Over the Jules Verne Business," *New York Times*, April 9, 1967.
- 31 Ray Hebert, "Los Angeles—Testing Ground for the Cities of Tomorrow?" *Los Angeles Times*, May 5, 1968.
- 32 See Adam Rome, *Bulldozer in the Countryside: Suburban Sprawl and the Rise of Environmentalism* (New York: Cambridge University Press, 2001); Andrew Wiese, "The Giddy Rise of the Environmentalists: Corporate Real Estate Development and Environmental Politics in San Diego, California, 1968-1973," *Environmental History*, Vol. 19, No. 1 (January 2014): 28-54.
- 33 Samuel E. Wood and Alfred E. Heller, *California Going, Going.... Our state's struggle to remain beautiful and productive* (Sacramento: California Tomorrow, 1962).
- 34 Harvey Perloff, "Meeting of the Steering Committee, The California Tomorrow Plan, April 16, 1970," Box 43, Folder 2, California Tomorrow Records, MS 3641, California Historical Society.
- 35 At a time of incipient deindustrialization, Perloff advanced an argument for considering the ills of urban atrophy against the previous fears of overcrowding that had animated urban professions in both the U.S. and developing worlds, an idea that would prove prescient. See Art Seidenbaum, "Present Myth and Future Fantasy," *Los Angeles Times*, January 26, 1976. + Harvey S. Perloff, *Planning the Post-Industrial City* (Chicago: The American Planning Association, 1980).
- 36 Harvey S. Perloff, ed., *The Arts in the Economic Life of the City* (New York: American Council of the Arts, 1979), 5. Italics his.
- 37 Ibid, 10.
- 38 Arindam Dutta, "Marginality and Metaengineering: Keynes and Arup," in *Governing by Design: Architecture, Economy, and Politics in the Twentieth Century*, eds., Aggregate Architectural History Collaborative (Pittsburgh: University of Pittsburgh Press, 2012), 237-268.
- 39 William Fulton, "UCLA's Plan to Reorganize its Professional Schools is Sheer Madness," *Los Angeles Times*, June 20, 1993.
- 40 Bish Sanyal, the head of MIT's Department of Urban Studies and Planning from 1994 to 2002, and himself a distinguished scholar of development, reflected on his time as a doctoral student at UCLA, during which the program earned a reputation for what would be called "critical planning." Though he asserted critiques of modernization and developmentalism were integral to the program, he also noted a disconnect between these ethos and the pragmatism exhibited by Perloff as dean. In one instance, Perloff asked students and faculty what advice they would give to planners faced with the exodus of manufacturing from their cities and was met with silence. For Sanyal, the question and its paralyzed reception evinced the troubling state of criticality in the field, which had tied planners' hands in knots of dialectics and problematics: Bish Sanyal, "Critical about Criticality," *Critical Planning: UCLA Journal of Urban Planning*, Vol. 15 (Summer 2008): 143-160.