

“Our River of Power Flowing toward War”:
David Lilienthal, the TVA, and the Evisceration of the
Concept of Public Utility in the American Century

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On June 7, 1941, a review of Tennessee Valley Authority (TVA) architecture exhibited at the Museum of Modern Art in New York City appeared in the *New Yorker*. The critic opened with breathless exhilaration: “These structures are as close to perfection as our age has come.” Subconsciously evoking “our grain elevators and storage warehouse and coalbins,” the dams and power stations of the New Deal’s poster child for statist planning had perfected an American vernacular style that reached majestically toward eternity. They reminded the reviewer of the pyramids of Egypt, although the TVA struck him as the more majestic monument:

Both pyramid and dam represent an architecture of power. But the difference is notable, too, and should make one prouder of being an American. The first grew out of slavery and celebrated death. Ours was produced by free labor to create energy and life for the people of the United States. Thanks to these dams, the colossal forces of the Tennessee River are held back or released almost as easily as one turns the water on and off at one’s private faucet, and instead of wasted water, there is an abundant electricity. Aren’t we entitled to a little collective strutting and crowing?

The reviewer’s only lament was that MoMa’s dimensions were too modest to “sufficiently indicate the architectonic treatment of the whole landscape” of the Tennessee River Valley as it was being transformed by techno-scientific mastery. “Here,” he concluded, was “modern architecture at its mightiest and its best. The Pharaohs did not do any better.”¹

Four decades earlier the historian Henry Adams had indulged a similarly incautious comparison of the dynamo to a sacred monument worshipped by a great if outdated civilization. In his classic essay, “The Virgin and the Dynamo,” Adams likened a modern electrical generator on display at the Paris Exposition of 1900 to the vast cathedral devoted to the Virgin Mary in Chartres, France—which he was in the process of studying for his own monumental work of

¹ “The Architecture of Power,” *New Yorker* (June 7, 1941), reprinted in *The 40s: The Story of a Decade*, ed. Henry Finder (New York: Random House, 2014), 530–31.

scholarship, *Mont-Saint-Michel and Chartres*.² Adams's dynamo, like the virgin and the pyramid, summoned and organized the energies of an entire society. But unlike the older monuments to power, the TVA's dams tapped new and expansive sources of social power, rather than simply redirecting or redistributing existing force. Its hydro-electric turbines were dynamic in more than one sense, producing transformative change at the same time that they threw off surplus energy for electrical generation.³

The power summoned by the TVA was transformative. Within a decade it would play an role in reversing the South's designation as "the nation's number one economic problem," helping to pull the southern Appalachian region out of its stasis as quasi-feudal backwater and connecting it to the booming growth of the emerging Sunbelt. Where farmers' shacks and impoverished hamlets had once stood, a futuristic complex of eleven major dams and myriad improved waterways would unleash exponentially amplified electrical generation, bringing with it flood control, affordable fertilizer, household modernization, more diversified employment and rising wages, among other trappings of progress. For generations since it has stood as proof of the New Deal's potency to inject public purpose and large-scale planning into the pattern of economic growth, redirecting and augmenting the marketplace without breaking it.

During and after his twenty-year stint as Director, Lilienthal traveled the world disseminating the TVA gospel as "democracy on the march."⁴ Almost since the onset of New

² Henry Adams, *The Education of Henry Adams* (Boston: Houghton & Mifflin, 1918) vol. II, ch. XXV, 204–210; this entry was written in 1901, soon after Adams' visit to the 1900 exhibition.

³ Cf. the notion of "infrastructural power" in Mann, *Sources of Social Power*. [full cite]

⁴ Lilienthal, *TVA: Democracy on the March* (New York: Harper & Bros., 1944).

Deal historiography—certainly since Schlesinger—most historians have echoed his assessment.⁵ Indeed, the TVA has often been presented as the quintessential New Deal reform, adapting democratic purposes and technocratic ideals to the unique needs of a regional economic albatross.⁶ In recent years historians of large-scale organization, technology, the environment, and foreign policy have challenged the democratic mythos, building on a critique by sociologist Peter Selznick back in the foundational years of the TVA.⁷

In fact the TVA was just as much a creature of war and nationalism as it was a model of social-democratic reform. It deserves to be considered within a lineage of great war engineering works, and not just within the social planning tradition with which it is usually associated. Virtually all scholarship on the TVA and its executive dynamo Lilienthal has focused on the politics of modernization. But what has gone largely overlooked by this historiography is that the TVA and its institutional kindred—such as the Bonneville Dam Authority, a similar West Coast watershed program—provided an essential infrastructural capacity on which the development of

⁵ Schlesinger, *Politics of Upheaval*; [full cite; also cite Law & Economics classics; Ekbladh, *America's Great Mission*; Patel, *Global New Deal*] Of course neoclassical economists and post-colonial critics certainly have not shared this positive view of the TVA. The latter have begun to inject a much-needed critical perspective into the scholarship on the New Deal. There is also a critical strain of scholarship that began with Selznick, and continues into the environmental and technological histories of the TVA. When noted by mainstream histories their complaints are mentioned as qualifications but not refutations of the master-narrative of progress. Their contributions will be discussed in depth in what follows.

⁶ Regan, *Designing a New America*.

⁷ Philip Selznick, *TVA and the Grassroots: A Study in the Sociology of Formal Organization* (Berkeley: University of California Press, 1953); Erwin Hargrove, *Prisoners of the Myth: The Leadership of the Tennessee Valley Authority, 1933-1990* (Princeton: Princeton University Press, 1993); Ronald C. Tobey, *Technology as Freedom: The New Deal and the Electrical Modernization of the American Home* (Berkeley: University of California Press, 1996); David Ekbladh, *The Great American Mission: Modernization and the Construction of an American World Order* (Princeton: Princeton University Press, 2010).

a new sovereign weapon, the atomic bomb, depended.⁸

Thus the power conjured by the TVA was transformative in another, less frequently realized sense. An entire sector of the economy was built around atomic weapons in the 1940s, and this sector required electrical generation on a scale that transcended anything the private sector had been capable of attaining. Commanding this sector was an agency modeled on the TVA's neo-cartelistic hybrid state-building, the Atomic Energy Commission (AEC)—built and led in its formative years between 1945–50 by the TVA's erstwhile director, David Lilienthal. He was one of the few people qualified to lead such an unprecedented agency. During WWII the secret sites of the Manhattan Project had co-opted the TVA in the South and the Hanford complex in the Pacific Northwest in order to provide sufficient electricity to produce weapons-grade uranium and plutonium isotopes, while more conventional war production plants also drew on their resources, in the process transforming these New Deal mammoths from experiments in regional economic development and social engineering into vital parts of the national defense infrastructure.⁹

Furthermore, the atomic bomb could not very readily be deployed as an instrument of sovereign force without the globe-spanning air power the US had developed during the war. The US government exercised that air power through a new air force freshly manufactured of

⁸ Elsewhere in the book I devote considerable attention to the atomic bomb and subsequent thermonuclear weapons as new conduits of sovereign power, both within international society (as they are traditionally viewed) and within “domestic” American society. The bomb (along with air power) refigured sovereignty within and beyond the United States, I argue, not only because of its grand strategy-transforming capacity to concentrate and project unprecedented force, but also because of the new institutional configurations of bureaucratic-technical power and social-political disciplinary power that its production required. The TVA and AEC's reliance on a particularly nationalistic and emergency-oriented conception of public utility was just one facet of a larger politics that fused sovereign, bureaucratic, and disciplinary power in fateful ways for the American rule of others and themselves after 1945.

⁹ Richard Rhodes, *The Making of the Atomic Bomb*.

aluminum, that miraculously light alloy whose production also depended on massively expanded electricity generation. The aluminum behemoth Alcoa had been one of the TVA's most important customers since its fledgling days in the mid-1930s, and during the war grew into a virtual monopoly thanks to generous plant subsidies and contracts extended by military procurement officers. Less glamorously but still of importance, the TVA easily adapted its nitrate factories to produce explosives for munitions, reverting to its origins as an Army Corps of Engineers project at Muddy Flats at the end of the First World War. That same capacity allowed it to churn out fertilizer for American farmers feeding civilians, soldiers, and Allies via Lend-Lease. None of these infrastructural pillars of extraterritorial sovereignty was possible without the scale of operation and a complexity of organization afforded by the state capitalism improvised by the United States as it built its fateful "arsenal of democracy."¹⁰

As the United States remade itself during and after WWII so as to pursue Great Power politics and extraterritorial rule on a global scale, it reconfigured the composition of its sovereignty in fateful ways that can be seen clearly in the career of the TVA and AEC. The ability to manufacture atomic weapons and deploy them via a global infrastructure of air power was a singular capability that set the United States apart from other sovereigns in the chaotic environment that followed the conclusion of WWII. Within a decade, atomic power combined with air power would alter the rules of game by which sovereign states competed with each other in international society, making the prospect of total war imminent (and immanent) on a permanent basis. The ability to generate and transmit electricity on a scale sufficient to lower prices within reach of geographically isolated farmers of modest means was also a singular

¹⁰ [lit on arsenal of democ; start w/Wilson].

capability that set the TVA apart from the privately owned public utility industry. Public power set a floor for the energy-intensive consumption of the postwar affluent society, helping to bring a middle-class standard of living within reach of all Americans. It also promised, if it did not reliably deliver, a similar modernization of living standards for Third World clients of US foreign aid. All of which is to say: the outward-looking face of American power could not be cleanly distinguished from its inward aspect; the “Janus-faced” American state gazed in all directions simultaneously.¹¹

Many developments enabled these reconfigurations of sovereignty at all levels, from the regional marketplace for electricity, to the Southern bastion of “home rule” and “states’ rights,” to the international society of Great Powers and newly independent states. This chapter explores only one: the shifting conceptualizations of “public utility” through which the TVA and AEC were justified and built. Although less tangible and perhaps more evanescent than the military, social, economic, techno-scientific, and professional dimensions of the story that have already received considerable attention from scholars, the history of public utility as refracted through the intellectual history of the TVA, the AEC, and the legal-political interventions of their founding director, David Lilienthal, reveal something about the vulnerability of the democratic state that other modalities do not.

Within ten years of its birth, Lilienthal bragged in 1943, the TVA had become “the largest producer of power for war in the Western Hemisphere.”¹² This statement rang true in multiple registers. Its mission, which would dominate the TVA and its offspring the the AEC

¹¹ Katznelson, intro, *Shaped by War and Trade*.

¹² t3b

throughout the Cold War, was a far cry from the experimentation, rational planning and social reform envisioned by the early leadership of the TVA and the Chapel Hill regionalists in the 1930s.¹³

§1. Sorcerer's Apprentice

Around noontime on December 17, 1940, a figure stood at the base of the neoclassical edifice that housed the U.S. Supreme Court. He scrawled something down in rapid, elegant shorthand. The discerning observer would have recognized that it was David Lilienthal, the renowned head of the Tennessee Valley Authority (TVA). He had just come from the chambers of his law school mentor and guiding light, Felix Frankfurter, the dean of New Deal insiders, who had taken time out over a hasty pre-hearing “lunch” of crackers and milk to chat with him. As they spoke Justice Harlan Stone, a crucial ally of the New Deal amid the recently concluded Constitutional Crisis, stopped by. As Frankfurter Placed his hand on the two men's shoulders, Lilienthal heard him say, “20 years from now when men assess the work being done in this generation that is permanent, the work of David Lilienthal will be judged the most enduring.” Stone apparently agreed, grinning: “By that time you and I, and what we have done, will all be forgotten.” Lilienthal's triumph could not have been more complete. When the note was transcribed for inclusion in the journals that Lilienthal kept for his records, it included a wry parenthetical note to seal the personal victory: “written leaning against one of Taft's fat marble pillars in the Supreme Court Building.”¹⁴

¹³ For a characteristic, if late, regionalist idealization of the TVA, see Gordon Clapp, “The Tennessee Valley Authority,” in *Regionalism in America*, ed. Merrill Jensen (Madison: University of Wisconsin Press, 1951), pp. 317–329.

¹⁴ Lilienthal Journal, December 17, 1940. [7375]

Lilienthal's triumph would soon grow even greater. Later that month, President Franklin Delano Roosevelt would announce the United States' role as the "arsenal of democracy" in the mounting global cataclysm—a mission that would place the TVA atop the symbolic and material hierarchy of economic mobilization for World War II. Not long after the war's conclusion, Lilienthal would go on to become the first director of the Atomic Energy Commission (AEC), perhaps the single most important civilian agency in the postwar period and the institutional foundation for the drastically transformed meaning of "public power" in the atomic age. Lilienthal's crusade to become a great democratic statesman seemed to be coming true.

Earlier that year, in January 1940, the great progressive historian Charles Beard had impressed him deeply with an observation about the United States: "we have had too many great private men, and not enough great public men."¹⁵ Lilienthal took this to mean that he was just such a great public man, and in all likelihood he was not far off. The occasion for Beard's statement, an intense three-hour exchange in which he conveyed his enthusiasm for the TVA and "long-time 'admiration'" for Lilienthal, was the latter's high-profile address to the Columbia faculty on the TVA as a pioneer of "grass roots democracy" in the age of market failure and big government.¹⁶

Despite Lilienthal's warm reception at Columbia in early 1940, Beard's estimation of him undoubtedly must have changed as his work for the TVA and later the AEC moved him ever-closer to the center of the bellicose power Beard was determined to thwart in his storied opposition to American intervention in the mounting world war. Beard would have been further

¹⁵ Lilienthal Journal (January 28, 1940), 3. [7309]

¹⁶ Lilienthal Journal (January 28, 1940), 2; see A revised but similar version of this statement can be found in *TVA: Democracy on the March*, ch. 9.

disappointed if he had lived to see the 1950s, for it was in that decade that Lilienthal left public service to write the celebratory book, *Big Business: A New Era*; became a partner at the investment banking firm Lazard Freres; and then helped pioneer the multinational firm Development and Research (D&R), which parlayed his connections and experience into a very literal kind of privatized political capital he could monetize for client states such as Iran that were seeking US foreign aid for large-scale modernization projects.¹⁷

Thus, the arc of Lilienthal's career cast him far afield of his progressive origins, although he always retained the mantle of crusading liberal. In the interwar period Lilienthal had established himself as the enfant terrible of public utility—that legal construct and progressive ideal of statecraft which justified comprehensive regulation of private industry and public ownership of vital economic services according to their impact on the overall public welfare. But by the late 1950s Lilienthal had transformed himself into an avatar of multinational capitalism and the contractor state, both of which helped to hoist public utility by its own pétard and thereby underwrite a foundational moment of globalization. The political economy that resulted was hostile if not inimical to the ideals of accountability and collective well-being that Lilienthal had defended so ably in his youth. To his old friends in the public power world it seemed that the erstwhile champion of grassroots democracy, advocate of activist government on a worldwide scale, and defender of the democratic faith in the face of anticommunist persecution, had

¹⁷ David Lilienthal, *Big Business: A New Era* (New York: Harper & Bros., 1952); Jason Scott Smith, “The Liberal Invention of the Multinational Corporation: David Lilienthal and Postwar Capitalism,” in *What's Good for Business: Business and Politics since World War II*, ed. Kim Phillips-Fein and Julian Zelizer (New York: Oxford University Press, 2012); Steven M. Neuse, *David E. Lilienthal: The Journey of an American Liberal* (Knoxville: University of Tennessee Press, 1996).

somehow lost his nerve.¹⁸ In their eyes, the progressive mission to democratize market society had been betrayed by one of its greatest champions.

Lilienthal's trajectory was not, in the main, determined by rank opportunism or ideological incoherence. It was the consequence of a Faustian bargain he struck to realize his greatest ambitions for public enterprise as the keystone in the edifice of public utility. His bargain was conceptual as well as political. Its significance transcended personal ambitions of power and profit, or even political calculations for survival in an increasingly anti-communist and pro-capitalist context. It provides essential insight into foundational transformations in the political economy of the US and the world in the middle decades of the twentieth century.

The work Lilienthal did, conceptually as much as politically—to erect the TVA as a monument to democratic state-building, and to found the AEC as a bulwark of civilian authority in an increasingly militarized world—cannot be separated from the influence he exerted (against his best intentions) to undermine the democratic components of the progressive project that had reached high tide in the middle years of the twentieth century. Viewing transformations in the concept and practice of public utility through the career of Lilienthal's efforts to build a lasting edifice of public power provides us with a portrait of political economy in the American Century that is especially vivid, sharply defined, and even poignant. It is a way to connect changes in the life of an idea to transformations of the institutional context in which it was realized.

¹⁸ For classic statements that made him a liberal standard-bearer throughout the postwar period, see Lilienthal, "The T.V.A.: An Experiment in the 'Grass Roots' Administration of Federal Functions," address to the Southern Political Science Association, Knoxville, TN, November 10, 1939, reprinted in the *Australian Journal of Public Administration* 4.4 (December 1942): 155–72; "The TVA: A Step Toward Decentralization," address to Graduate Faculty of Political and Social Sciences, New School for Social Research, NYC, April 3, 1940 (repr. USGPO, 1941); *TVA: Democracy on the March* (New York: Harper & Bros., 1944); and *This I Do Believe* (NY: Harper & Bros., 1949).

§2. **Enfant Terrible: From Labor Law to Public Utility**

In the first decade of the twentieth century, Lilienthal launched himself on a meteoric path into the upper ranks of progressivism. At every step his advancement depended on his ability to apprehend, refine, and advance the notion of public utility as it emerged from progressive statecraft.¹⁹ Fresh out of Dean Rosco Pound's Harvard Law School, where his strong performance in Felix Frankfurter's public utility course secured his mentor's support (if not initially his favor), he took his first job in the Chicago offices of the trailblazing labor lawyer, Donald Richberg. There, he earned a central place in the firm by working outward from its focus on labor law to take up broader regulatory problems raised by modern industrial firms, ultimately preparing briefs for two major cases before William Howard Taft's Supreme Court. Early on, he helped prepare a landmark brief involved in *Michelson v. US* (1924), which affirmed the striking workers' right to a jury trial for criminal contempt.²⁰ The project on which he toiled the longest, and to longest-lasting acclaim, involved drafting important sections of what would become the formative 1926 Railroad Labor Act.

Soon Lilienthal was the point man on a brief before the Interstate Commerce Commission unsuccessfully pushing for a Brandeisian "reproduction cost" approach to railroad valuation—an objective that would have democratized the nature of capitalization for railroads and other great enterprises impinging on public purposes. To this end, he also served as general

¹⁹ On the positive notion of democratic governance on which progressives' myriad reforms and critiques of nineteenth-century negative and formalist conceptions of economic liberalism rested, see William Novak, "The Public Utility Idea and the Origins of Modern Business Regulation," in *The Corporation and American Democracy*, eds. Novak and Naomi Lamoreaux (forthcoming, 2015).

²⁰ The other Supreme Court brief was for *Robertson v. Railroad Labor Board* (1925), involving compelled testimony. Although this was also important to the political economy of regulating railroads and other common carriers, because it took aim at a central device by which unions were made vulnerable to antitrust prosecution, the Court avoided the implications of Lilienthal and Richberg's approach by finding grounds in narrower technical issues of the law.

counsel to National Conference on Valuation of Railroads, which applied the valuation question in reverse to the re-privatization question raised by WWI nationalization. Lilienthal's prominence grew exponentially in the highly publicized battle between the City of Chicago (represented by Richberg's firm) and People's Gas, one of the holdings in Samuel Insull's empire that ruled the city's electric, gas, interurban, and other utility infrastructure. This battle put him in the company Charles Merriam, Harold Ickes, and other Chicago-area progressives who would play crucial roles in defining the nature of public enterprise in the coming decades. It also primed him for a legal, political, and intellectual confrontation with large-scale capitalist enterprise that would climax a decade later in his own leadership of the TVA, and the drafting of the Public Utility Holding Companies Act of 1935—both of which would earn the fierce resentment of big business.

The scope of Lilienthal's legal practice and political ambitions soon widened well beyond the confines of labor law, leading him to part ways amicably with Richberg and set up his own firm to focus exclusively on public utility cases. His legal practice in these years continually refined his understanding of how regulation might tame capitalism, bringing him up against the state-evading tactics of corporate behemoths like AT&T in his work for the City of Chicago in its suit against Illinois Bell. This work also provided behind-the-scenes insight through consulting work for the likes of the Hot Springs, Arkansas Electric Light and Power Company, and the Railway Express Agency. Lilienthal also paid his bills by co-authoring a legal service for the Commerce Clearing House, the Public Utility and Carrier Service, which provided him with a kind of second education from 1927 until he became Public Services Commissioner of Wisconsin under its Governor, the "boy wonder" Philip La Follette in 1931. This work placed

him at the center of an emerging network of experts in this burgeoning field. He taught courses on public utility law at Northwestern University, was appointed to a study commissioned by the American Bar Foundation's Public Utility Law Section, and came into close contact with reform-minded academics like Richard Ely at the Institute for Research in Land Economics.

The concept of public utility as Lilienthal advanced it in his work and writing during these years referred to more than a particular kind of institutional entity, or to the field of law that regulated it. It had emerged from the broader struggle waged by populists and progressives to reign in and regulate large-scale private enterprise, which was transforming the world in the first globalization of the Gilded Age. Sharpened progressively by sustained criticism of the banks, the railroads, robber barons, and political rings collectively derided as “the octopus,” the concept of public utility was the mirror-image of their monopolistic activity and arrogation of public authority.²¹ Out of this negative construct forged by the collective plight of prostrate consumers, indebted farmers, strike-broken workers, gobbled-up smallholders and Western ghost towns, a positive conception emerged of the public welfare in an industrial age. It was predicated on the value to everyone by virtue of their citizenship, and to society as a whole by virtue of its integrity, of an economic enterprise's disposition of its profits and its externalities. This rethinking required new ideas of public power and modern democracy.²²

By the 1920s, a public power movement had converged on the large holding companies that aggregated electrical utilities together with interurbans and other large infrastructural

²¹ In this sense, anti-trust and public utility partook of a long tradition of American state-building defined through negative conceptualization—starting with the anti-imperial politics and imagination that shaped the Founding and the “Empire of Liberty,” and continuing with the many varieties of “anti-statist statism” that have been used to authorize government ever since.

²² Novak, “The Public Utility Idea.”

enterprises.²³ The role played by holding companies in the financial collapse of the Crash only emboldened this movement. Organizations such as the Public Ownership League of America, the Wisconsin League of Municipalities, and the National Popular Government League insisted that public lands in the West be dedicated to publicly owned dams, while elsewhere they pressed for measures that would reach holding companies whose subsidiaries sprawled well beyond the jurisdiction of the states that sought to regulate them.

The public power movement confronted a sprawling and ungovernable giant. Holding companies manipulated securities to evade state regulations and capitalize utilities, and used investment costs as a justification for high customer rates. This broader scope of action, combined with the interstate system integration, rural electrification, newly dispersed telephony—all made possible by the higher capitalization driven by consolidation and the formation of holding companies—introduced new issues into a field that had defined itself by isolated utility plants only two decades earlier. In response, a compact legal specialization formed around public utility, building upon the legacy of the pioneering statutes in New York and Wisconsin that had established the field in the first decade of the century.²⁴ Lilienthal's work advanced cutting-edge issues at the forefront of this utility regulation.²⁵

²³ Funigiello, *Toward a National Power Policy*, 247.

²⁴ See, e.g., Morris Llewellyn Cooke, *Public Utility Regulation* (New York: Ronald, 1924). As Lilienthal noted, this body of law was based on the well-established concepts of “common carrier” and “police power.” Irwin Rosenbaum and David Lilienthal, “Motor Carrier Regulation: Federal, State and Municipal,” *American Law Review* 62 (1928): 689. On this point, see Novak, “The Public Utility Idea,” which builds on his *People's Welfare*.

²⁵ Irwin S. Rosenbaum and David E. Lilienthal, “Issuance of Securities by Public Service Corporations” *Yale Law Journal* 37 (April 1928): 716–745 and continued in the next issue, 908–934; Lilienthal, “The Regulation of Public Utility Holding Companies,” *Columbia Law Review* 29 (1929): 404–440; Lilienthal, “The Federal Courts and State Regulation of Public Utilities,” *Harvard Law Review* 43 (1929–30): 379–; Lilienthal, “Recent Developments in the Law of Public Utility Holding Companies,” *Columbia Law Review* 31.2 (February 1931): 189–207; Lilienthal, “Regulation of Public Utilities during the Depression,” *Harvard Law Review* XLVI.5 (March 1933): 745–775.

Lilienthal's forte in the field pertained to firm valuation and security regulation, both of which flowed from his experience with Richberg and writing the service for the Commerce Clearinghouse. He recognized that states could not effectively regulate national firms directly. Instead, he noted that effective control of utilities could be attained by regulating their relations with their parent firms as they touched on matters within the state, rather than seeking federal regulations:

The rates charged the public by the operating company, the valuation of its property for rate-making or security issues, the items chargeable by it against operating expenses, including fees or compensation paid the holding companies—these matters of immediate concern are under the watchful eyes of the state commissions. Since the holding company charges no rates to consumers and owns no operating property how could the commissions possibly protect the public interest by having power over rates which are not charged and property not possessed? Since the commissions already control the property and the securities upon the basis of which holding company securities are issued, what benefit to the public would there be in regulating the securities of the holding company, which could be no better or worse than the operating company's assets—the foundations on which they rest?²⁶

By focusing on the public's interest in control over the disposition of a utility's property within the community being considered, and declining to articulate the more general societal interest in the broader financial dimensions of business enterprise that crossed jurisdictional boundaries, he made a crucial concession on which his future successes (and their limitations) would rest. Public utility, as Lilienthal approached it, was centrally about asserting public sovereignty over the private property of utilities, without socializing it outright. The firm could not remain master in its own house; commissioners effectively determined the prices they charged the public, the value of their investments and the uses to which they were put for profit. This punctuated sovereignty did not extend very far inside the firm, however, once this narrowly

²⁶ Lilienthal, "The Regulation of Public Utility Holding Companies," 406.

defined public interest had been satisfied. It did not extend, for example, to interference with managerial control or competitive practices; prices and capitalization were sufficient devices.

The furious pace of Lilienthal's activity drew the approving attention of his old mentor, Frankfurter, and even the eminence gris Brandeis, both of whom turned to Lilienthal as the national expert on public utility. Ultimately these connections catapulted him into the La Follette administration, where his aggressive investigations of rate-making at Wisconsin Power & Light and the state telephone company (owned by AT&T), and his authorship of a landmark public utility law, propelled him out of the clutches of his rapidly multiplying enemies and into a director's seat on the newly minted TVA by 1933.

As director of the Wisconsin State Utility Commission (1931–33) and as Director of the TVA (1933–45), Lilienthal self-consciously set out to build a democratic state by controlling public utilities, and in both he aimed his efforts at lowering prices offered by private firms and exerting leverage to that end by investigating and otherwise placing pressure on firms' valuation. His laser-like focus on prices and valuation as the most parsimonious indicators of the public interest with which utilities' businesses were affected defined Lilienthal's trademark approach, which proved strikingly effective.

In Wisconsin, Governor Philip La Follette asked Lilienthal to draft a landmark public utility bill that made regulation far more systematic, authorizing controls over securities and construction, and providing wide-ranging authority to the commissioner to initiate his own investigations—and charge the utilities for the investigation. Lilienthal asked for extraordinary independence as commissioner and he got it. La Follette did not pressure him to take particular cases, utility boards remained free of patronage jobs, and municipal utility surpluses were not

folded into general city funds. He could rightly claim he acted in the public's interest in his assaults on the state's utilities.

Lilienthal concentrated most of his energies on aggressive investigations, including high-profile battles with Wisconsin Power & Light (WP&L) and Wisconsin Telephone (WTC), and AT&T company. In six months he opened four times as many cases as the Railroad Commission had handled in the four years between 1925–9, saving the public \$3 million in his first year.²⁷ The techniques he used to do so built on his distinctive understanding of how public utility should be practiced. For example, by blocking the issuance of dividends by WP&L, he was able to prevent its parent company from draining its assets and bilking the consumers of Wisconsin in the process. Although his fight with WTC proved unsuccessful in the end, it directed an intense spotlight on the practices of AT&T, which also drained local coffers through fees and other devices. Bringing the WTC before the bar also allowed him to call progressive allies John R. Commons, Edwin Seligman, and Jacob Viner to the stand, recasting the stakes of economic regulation in a broader framework of democratic accountability. In doing so, he built a case that calculations of reasonable rates of return on investment (and consumer prices justified by them) should include Brandeisian social facts, such as deflation and the decreased purchasing power it brought, the difficulty imposed by expensive telephone service in a time of widespread unemployment, and the risk posed to the public by financial speculations indulged by elaborate holding company arrangements. While Lilienthal's emphasis on prices and valuation allowed him to call the Wisconsin utilities to task, it also narrowed the criteria of public utility severely, conflating the concept with lower prices for consumers.

²⁷ Neuse, *Lilienthal*, 50.

§3. TVA & Public Power: Building Public Enterprise

Lilienthal's conception of public utility would only continue to narrow as he applied them to the multi-state regional watershed governed by the TVA. The bigger canvas of the TVA afforded Lilienthal the authoritative scope he needed to match the utilities' economies of scale, but it further concentrated his criteria along similar lines, and compounded the conflation of public utility with consumer prices by chaining both to rising standards of living in the South, which FDR deemed "America's Number One Economic Problem" in a decade defined by them. And the independence he had sought under La Follette became even more pronounced under Roosevelt. This he attained, as the director in charge of the electrification component of the TVA, by setting rates at an extremely low "yardstick," and demonstrating that it was possible to make a profit on cheap electricity if the scale of generation were sufficiently great—an experiment that exceeded even the resources of the holding companies.²⁸

This "yardstick" was possible because he reverse-engineered the valuation practices of his commissioner days, drastically underestimating or omitting the costs of TVA's generation. One notable omission was the vast subsidy of transmission and distribution infrastructure provided by loans from Harold Ickes' Interior Department. Another was the kick to demand provided by the appliances financed by the EHFA. It didn't hurt that he had power of eminent domain, and ultimately, an upper hand when negotiating with C&S over exclusive territorial control of the Tennessee River Valley.²⁹ Nor did it hurt that he could sell the vast majority of TVA's enormous generating capacity to Alcoa and other industrial clients—quite contrary to the

²⁸ Ronald Tobey, *Technology as Freedom: The New Deal and the Electrical Modernization of the American Home* (Berkeley: University of California Press, 1996).

²⁹ The story is of course more complicated than that; the best account is still McCraw, *TVA and the Power Fight*.

public image he projected of a “people’s power” whose distribution through municipalities was mostly aspirational because it was critically delayed by lawsuits. Up to the defense period, the great majority of TVA electricity was not sold to consumers through community programs. And once the defense effort took off by 1940, TVA sent upwards of three-fourths of the power it produced to the war effort—even after it had tripled its production.

Becoming the economic sovereign in the Tennessee River Valley allowed the TVA to greatly decrease seasonal hazards of flooding, drastically lower the price of electricity and fertilizer for rural families and farmers, greatly expand the availability of credit, and elevate the standard of living in one of the poorest regions of the country. But those public goods came at a cost. Even before the coinage “grassroots democracy” had ever issued from his pen, Lilienthal had transformed his progressive practice of public utility into a model of state enterprise driven by demands that were distinctly different from those articulated by the public power movement. Big farmers and local chambers of commerce, landowners and local politicians were all “coopted” to realize the decentralized yet autonomous national authority Lilienthal sought for TVA. The cooperation of these “administrative constituencies” meant a concomitant exclusion from influence of sharecroppers, small farmers and businesses, African Americans, communities located in the catchment areas of planned dams, and others not part of the new, decentralized power structure Lilienthal termed “grassroots democracy.”³⁰

By 1938, Lilienthal fancied himself “a new kind of [public] businessman,” and crowed to his private journal that “there was a new power trust now, in the Tennessee Valley Region.”³¹ His

³⁰ The term “cooptation” was coined by Selznick, *TVA and the Grassroots: A Study of Politics and Organization*. See 85-116, 217-247, and esp. Table 7 on 104. See also Lilienthal, “The T.V.A.: An Experiment in the ‘Grass Roots’ Administration” and “TVA: A Step Toward Decentralization.”

³¹ Lilienthal Journal 2:120; Neuse, *Lilienthal*, 123.

defeat of fellow director Arthur A. Morgan gave him undisputed internal control over the TVA, and his victory over Commonwealth & Southern (C&S) had ceded him an unchecked monopoly over electrical power within his jurisdiction, which sprawled across portions of seven states by the end of the decade. Yet even then, it was still possible that public ends toward which the TVA remained devoted could be recaptured in the watershed; a rising standard of living, access to modern amenities, and the TVA's ostensibly democratic mission might still have facilitated the formation of democratic publics that could have pressured the agency for change.

The war effort amplified and locked in all of the trends that had emerged toward the end of the Depression decade. The TVA's emphasis shifted even further toward electrical power, which had always been central to Lilienthal's portfolio as director. Between 1939 and 1945 its generating capacity roughly tripled, from less than a million to 2.5 million kilowatt hours, thanks to seven new dams and eleven new generating units built for the mobilization. Where the TVA's cheap electricity (and large subsidies of new industrial plant coming from military procurement officers) had boosted Alcoa's early dominance of the aluminum industry, now aluminum's centrality to American air power, amplified by air power's new strategic emphasis for the US, provided an insatiable demand for TVA to scale its generation upwards, and established an indefinite, long-term foundation for US global power and TVA staying power. The TVA would never get back to its original plan of producing most of its electricity for municipal distribution networks financed by New Deal agencies and governed by grassroots democracy. During WWII, three-fourths of the electricity it generated went to defense purposes, while 42 percent of all of its phosphate was sent to the Allies via Lend-Lease, and 60 percent of the phosphorus it produced was used to produce incendiary bombs, tracers, smoke screens, and the like. As late as

the end of the 1950s the TVA still sold over half of its electricity to other parts of the government, now feeding electricity to the power-hungry AEC among other state enterprises.³²

As the TVA transformed itself to mobilize for total war from 1940 onward, a new criterion of national security replaced that of economic security to redefine the ends and means of the concept of public utility. In the process of retooling the TVA for this task (and further vanquishing his enemies), Lilienthal played a central role in transforming the TVA into something closely resembling his old adversaries the holding companies—only vastly more powerful because of its immunity to competitive pressures from state, federal, or corporate sources. By relying on war contractors like Alcoa who could help him balance his budgets (TVA had to operate like a business, and cover its own expenses), he made TVA dependent on the logic of exponential production—what Charles Maier once called “the politics of productivity”—rather than other, less militaristic sources of demand within the region.³³ Defense contracting also placed much of the TVA’s decision-making under a top-secret shroud, further undermining any public accountability it might otherwise have exercised. Indeed, Lilienthal himself did not know the purposes to which a vast portion of TVA’s wartime electrical generation were put until the news of Hiroshima made it clear what the engineers in Oak Ridge were up to.

In the process of expanding the TVA’s national role and cementing it into the burgeoning defense economy, Lilienthal evaded precisely the kinds of democratic pressures that public utility was supposed to guarantee, while also foreclosing the competitive pressures antitrust might have imposed. Yet his confidence in his own high public purpose blinded him to the full

³² Neuse, *David E. Lilienthal*, ch.8.

³³ Charles Maier, “The Politics of Productivity: Foundations of American International Economic Policy after World War II,” *International Organization* 31.4 (October 1977): 607-33.

implications of that fact. Of his reliance on Alcoa, he observed ebulliently that it placed “TVA virtually into partnership with a huge private concern,” even as he fought efforts to use war contracting to foster competition in the aluminum sector.³⁴

The militarization was not only economic, though kilowatt hours and dollars spoke loudly in the “Arsenal of Democracy.” It was also political. During the war Tennessee’s Senator Kenneth McKellar organized a counter-constituency of the state’s citizens whose ire was sparked by the TVA’s ability to site dams and pursue projects without state or local review. Although his motive was political vendetta—Lilienthal was becoming more powerful than him—McKellar threw the language and sensibilities of democracy right back at him during a conflict over the building of the Douglas Dam. He pushed to require Congress’s line-item approval of TVA’s operating expenses (as was the case for virtually all other federal agencies), and called for local citizen panels to approve the condemnation of sites for dam and other kinds of construction. What saved Lilienthal and the vaunted independence of his TVA was the decisive intervention of dollar-a-year men who marched to Congress to testify on behalf of the TVA’s indispensable role in the war mobilization. Even Senator Harry Truman, who spent most of his time interrogating those high-profile businessmen working pro bono as civilian officials, agreed and came to Lilienthal’s defense.³⁵ By 1944 McKellar had lost the patience of his colleagues in the Senate, and Lilienthal had secured the TVA’s place within the defense economy.

The TVA’s reversion to its origins in war contracting entailed a conceptual shift that was just as important as the economic and political changes that attended it. That shift had to do with

³⁴ Neuse, *David E. Lilienthal*, 154.

³⁵ Neuse, *David E. Lilienthal*, 157-9.

the nature of public enterprise. Lilienthal viewed himself as a pioneer of state enterprise, and went out of his way to articulate what it meant to build a government agency that operated as if it were a business—the exact inverse of a private holding company that effectively ruled like a sovereign. In his last published law review article, an ironic bookend to his early pioneering work blazing the path of public utility law, he reviewed the state of the field for state capitalism.³⁶ The proliferation of government businesses since World War I, he argued, amounted to “the most far-reaching economic and political transformation in any comparable period of time in our history.” (545) It was a universal form appearing worldwide, regardless of a nation’s economic constitution or frame of government.

Despite this cosmopolitan opening, most of the article marched through a national teleology that ran from the Post Office, the Bank of North America, and the canal companies of the early republic, to the twentieth century, with most attention devoted to the agencies of the First World War and the New Deal. The great bulk of public enterprise in 1941, they observed, flowed from loans to business to finance war industry and Lend-Lease aid, public works, housing, and agriculture. (549-551)

The article understandably devoted special attention to the TVA, whose distinctiveness it argued, derived from its “freedom from political control,” which in turn was grounded in the fundamental quality of “managerial autonomy,” which private firms exercised to guarantee efficiency. (560-67) While this autonomy was essential, it was made accountable by Congressional regulation and appropriations, the disciplining influence of bond issues, administrative oversight by other agencies (such as the Federal Power Commission or the

³⁶ David Lilienthal and Robert Marquis, “The Conduct of Business Enterprises by the Federal Government,” *Harvard Law Review* LIV.4 (February 1941): 545-601.

General Accounting Office), and taxes paid to other government entities such as the states and localities. (598) The ultimate goal was to produce “agencies which possess a degree of autonomy and flexibility typical of successful types of private business organization” (601) The accountability that justified public enterprises could be effective “only if they are concerned with honesty and business efficiency rather than political considerations or the mechanical enforcement of routine regulations.” (601)

In short, Lilienthal had developed his own theory of the (public) firm to naturalize the new form of economic sovereignty TVA represented. But instead of the transaction costs Coase had made central to his theory of the firm a few years earlier, it was the prospect of political (i.e., electoral) costs and “mechanical regulations” that delimited the boundaries of the enterprise in the name of “efficiency,” which he equated with the unrestricted discretion of expert authority.³⁷

§4. The Evacuation of the Public from Economic Sovereignty

How had the notion of public power turned so far inward on itself? As Rexford Tugwell and Edward Banfield put it in their review of David Selznick’s classic critique of the TVA, although Lilienthal touted “the grass-roots approach” as “a technique for differentiating the mass and securing citizen participation,” in operation the pretensions of decentralization to democracy were “only a make-believe” that served the contrary objective: “dealing with the mass” by reducing citizens to administrative objects, “rather than transforming [the citizenry] into publics.” The review concluded by invoking the Deweyan conception of a democratic state:

³⁷ Ronald Coase, “The Nature of the Firm,” *Economica* 4.16 (November 1937): 386-405.

A public exists when people are confronted by an issue which causes them to engage in interaction and to form an opinion... The public, then, cannot become an appendage of the agency or it ceases to be a public.³⁸

In massing public power to a institutional scope commensurate with that of the holding companies and quasi-cartels he had aimed to smash, Lilienthal and the other mid-century practitioners of New Deal public administration had managed to attract large and loyal constituencies. The TVA would remain an unassailable poster child of New Deal success for decades to come. But in doing so TVA made compromises that systematically precluded the self-organization of publics so necessary to the democratic state. These compromises were not merely matters of political pragmatism or institutional survival, although it mattered very much how the TVA survived as a model of public enterprise. They redefined both the purposes and practices of public utility, in the process altering what it was capable of maximizing, and for whom. By selling most of its electricity to heavy industry, private utilities, and war contractors; forging alliances with the USDA's extension services; and adopting the Army's heavy reliance on private contractors and accommodating the near-total blanket of secrecy demanded of "national security" for the Manhattan Project, the TVA became the ultimate cartel, capable of summoning all the social power of a democratic society and liberal political economy without providing any of the accountability necessary to convene a genuine public.

What made the capitulation permanent and fateful was that it was also, at root conceptual. Poor farmers pushed off their land, Negro colleges shut out of the fertilizer program, the villagers of Clinton dispossessed by eminent domain in the atomic moment, atomic scientists ushered out

³⁸ Rexford G. Tugwell and Edward C. Banfield, "Grass roots Democracy—Myth or Reality?," *Public Administration Review* 10.1 (Winter 1950): 47–55, quotation on 55. For the original, see John Dewey, "The Discovery of the State," and "The Democratic State," in *The Public and Its Problems* (Holt, 1927), chs. 2 and 3.

of government service under the mere suspicion of “un-American” loyalties—not only were these publics severed from the regional experiment in reorganizing sovereignty (“who rules”) domestically, but their excision coincided with a “co-optation” that recast prosperous farmers, local chambers of commerce, myriad private contracts and other pressure groups as grassroots democrats, ostensibly because they proved an absence of “totalitarian” government.

The unprecedented authority accorded to the TVA allowed it to reassemble itself into a hypostasized version of what it had been originally: an Army Corps of Engineers vehicle supplying explosives and electricity for war production. Tugwell and Banfield did not exaggerate too much when they wrote in 1950, “the TVA should have been called the Tennessee Valley Power Production and Flood Control Corporation.”³⁹

Lilienthal’s decade practicing public utility law after WWI had uniquely prepared him to reverse-engineer the public utility holding company; his failure to integrate the operation of democratic publics into his conception of public utility allowed his pursuit of public enterprise as a “yardstick” and counterweight to private power to devolve into an American version of the very cartelism the United States was then attempting to smash in WWII. This was not a coincidence. Everywhere in WWII the exceptional militarization induced by total war fused public and private power into shockingly similar forms of unchecked power.

Though TVA was distinctive, it was not unique. From the USSR’s Magnitogorsk to Germany’s Autobahn to the draining of Italy’s Pontine marshes to France’s Maginot Line to Japan’s remaking of Manchukuo, all of the participants in the total war engulfing the world found such hypostasized statist reconstructions of marginal regions to be essential for

³⁹ Tugwell and Banfield, “Grass-Roots Democracy—Myth or Reality?,” 50.

organizational as well as ideological and symbolic purposes. The TVA's redefinition of "public utility" may have ensured that the US had the generating capacity it needed to provide sufficient fertilizer and food to Allies under Lend-Lease, produce enough aluminum airframes to firebomb Germany and Japan into submission, and refine radioactive isotopes on an industrial scale commensurate with the assembly of the first atomic bombs. But that brought with it a fateful militarization and nationalization of the concept that would allow the AEC to completely capture any residual meaning of public power within an institution devoted to inscrutable and implacable security, secrecy, and science.

The legacy of the TVA turned out to be more capillary and infrastructural than grass roots.⁴⁰ Lilienthal and his technocrats viewed the river valley as a catchment area or watershed whose formerly untapped democratic social power no longer washed away uselessly in populist enthusiasms or rotten-borough compromises, but harnessed the energies of the remotest tributaries at the headwaters of the Appalachians.

Observers quickly picked up on Lilienthal's ambition to build a great watershed of democratic social power. "You can't see power, though you can sense it," wrote a New York Times reporter who delivered a big feature on the Western Hemisphere's largest utility for the Sunday Magazine in 1940. "The whole valley," he related, "is enlisted for the duration"—not just the Rangers and Guardsmen newly streaming about, or the workers in the Alcoa plant producing aluminum for FDR's 60,000 planes, but the very infrastructure itself, producing phosphorus, nitrates, and other war materiel.

⁴⁰ By capillary and infrastructural I mean to reference the conceptions of power articulated by Michel Foucault and Michael Mann, respectively.

The great pools, the inland lakes set in the lovely land of the mid-South, the myriads of little running streams that feed tributaries and main rivers, the rain that falls gently in the mountains: these things are not war; they are high explosives, tanks, airplanes, guns. When the little automatic radio stream gauges, far in the remote highlands, tap out in Morse code, as they miraculously do, the news of rising water, they whisper death.⁴¹

In attempting to capture the underlying feeling he brought away from his visit to the Authority, the reporter concluded: “One does not think this is public power. One thinks, private or public, this is American power.” But it was a power newly oriented toward warfare rather than welfare. After cutting out C&S and cutting deals with local businesses, farmers, Alcoa, and other vested powers, and discovering that TVA’s main product was electricity for war industry, not democratic participation for benighted Southerners looking to be lifted into modernity, Lilienthal had achieved his ambitions, but only at the cost of substituting a militarized notion of the national interest for the more participatory dimensions of the public welfare that had originally inspired watershed planning. The TVA’s freshly engineered landscape amounted, the reporter concluded, to a “river of power flowing to war.”⁴²

§5. Conclusion

If the TVA evolved into a kind of Frankensteinian war contractor, subsequent Lilienthal enterprises only drove the transformation of public enterprise further.⁴³ Consider his role in founding and serving as the first Director of the Atomic Energy Commission (AEC), the civilian agency that exercised sole jurisdiction over the new form of coercive power on which

⁴¹ R.L. Duffus, “Our River of Power Flowing to War,” *New York Times* (March 28, 1943): SM7–8, SM23.

⁴² R.L. Duffus, “Our River of Power Flowing to War,” *New York Times* (March 28, 1943): SM7–8, SM23.

⁴³ I will have to pass quickly over these, given limitations of space for the purposes of this paper.

sovereignty would be based in the Cold War. The AEC exceeded even its trust-like qualities to become an atomic cartel presiding monopsonistically over an entire new sector of the economy that was comparable to that of the United States's automobile industry. Lilienthal's biographer, Steven Neuse, notes that the AEC was far less hospitable to either Lilienthal's concern with the corrosive effects of secrecy on public accountability, or his desire to balance scientific expertise against democratic scrutiny. Furthermore, the AEC inherited from Leslie Groves's Manhattan Project a military pattern of contracting and outsourcing that only grew more pronounced with time, as the firms with the necessary expertise and experience only grew more essential within the hyper-monopsony that was the atomic sector (an entirely new sector of the economy, roughly the size of Detroit, that was driven by the procurement decisions of a small number of secretive scientists and officials). Although one of the drafters of the Atomic Energy Act referred to the field of atomic energy as "an island of socialism in the midst of a free enterprise economy," it would be more accurate to view the AEC as the ultimate cartel, invulnerable to regulation or even review.⁴⁴

In his own defense, Lilienthal pointed to the hard-fought civilian control he had secured over the ultimate source of sovereign power in the atomic age. And he vigorously denied abandoning public service on resigning from the AEC in 1950. Rather, he viewed his subsequent work at Lazard-Frères and later D&R, the private multinational firm he founded to "export" the TVA to potential Third World allies such as Iran, as disseminating best practices for public enterprise across a wider global field than even the biggest national bureaucracy in the US could implement.

⁴⁴ James R. Newman and Byron S. Miller, *The Control of Atomic Energy* (New York: Whittlesey House, 1948), 4.

Why did Lilienthal turn away from public service, and the progressive conception of public utility? While there is no need here to diminish the accomplishments of Lilienthal, it is also clear that he had given up the game well before he left public service and finally made some money in private industry after 1950.

What Lilienthal had given up was conceptual, not moral or political. Through a sequence of confluences—low utility prices and explosive growth with a democratized political economy expert stewardship and nonpartisan, disinterested policymaking with public administration; decentralized administration and contracting with “grassroots” democracy; the national with the public interest—he progressively unspooled the “democratic” from the “state.” This left only a gargantuan state capitalism justified by national security unchecked by democratic constraints. And it was not a particularly liberal form of public enterprise that he presented as a model to the “Free World” and its aspirants; indeed, it proved all too amenable to the undemocratic clients who raked in US foreign aid in the name of holding back the red tide of global communism.

By the 1950s, then, Lilienthal had helped concentrate public power in towering institutions that bestrode the nation and the world. But by doing so he had privatized much of that structural clout to make capital investments and market expansion less bound by national restraints. He had done much to create the conditions under which public utility became emptied of meaning and, within a generation, drained of political force. Little wonder that the exponents of Law and Economics found it so easy to replace public utility with public choice.

This path of development had fateful consequences for the subsequent development of the political economy. Public utility and its cousin anti-monopoly remained robust as legal practices for years, living on decades into the postwar period. There were, of course, periodic

outbursts of antitrust enthusiasm, such as the revival sought by Estes Kefauver around the time that Lilienthal left public service in 1950. Public service commissions continued to follow Wisconsin's example in form if not in spirit throughout the twentieth century. They remained quite powerful within the electric utility world in particular, and played a central shaping role even in the deregulation that ultimately limited the nature of their oversight by the end of the century. A similar point could be made about industrial regulation more generally after 1940: it certainly grew more expansive, intensive, and well-staffed, but with important exceptions (notably consumer and environmental regulation in the 1970s), did not facilitate public involvement or democratic accountability. Indeed, where glimmers of such public involvement did occur they made it harder, not easier, for public servants to define a public interest, as debate fragmented around clusters of diverging scientific expertise and interest group pressure.⁴⁵

Indeed, as the role of public agencies in deregulation following PURPA in 1978 might indicate, the instrumental power of public utility could grow yet serve only to aggrandize the interests of private power once its democratic foundations became conceptually detached from its practice.⁴⁶ Just as the TVA had provided electricity on a scale that Alcoa needed to meet the production requirements of American air power, and the AEC had provided the capitalization, security of contract, and even labor pliability that Union Carbide and General Electric required to build a new atomic industrial sector, so too did US foreign aid to its client states provide a global market for Lilienthal's private enterprise, while the river valley modernization projects it created fostered the rising levels of production, consumption, and trade on which multinational firms like

⁴⁵ Brian Balogh, *Chain Reaction: Expert Debate and Public Participation in American Commercial Nuclear Power, 1945–75* (Cambridge: Cambridge University Press, 1993).

⁴⁶ Richard F. Hirsh, *Power Loss: The Origins of Deregulation and Restructuring in the American Electric Utility System* (Cambridge: MIT Press, 1999), esp. 71–131.

D&R would extend their reach beyond the regulatory grasp of the nation-state. To accomplish this maneuver required both a conceptual and institutional infrastructure than neoliberals could not themselves provide.

The infrastructure of the democratic state thus served as a kind of booster rocket for the neoliberal state that succeeded it, concentrating democratic social power for unprecedented projections at home and overseas, and then making it vulnerable to the ultimate form of appropriation in the Cold War. With public investments in the infrastructure of national defense and global security sheared off from the price mechanism as mere externalities, Neoliberal thinkers could repudiate the very possibility of a common welfare; in the denotations of Kenneth Arrow's social choice, its impossibility became an axiomatic theorem. In such a world, "the public" became merely the aggregate of all the individuals within a community or geographic area.⁴⁷ Its utility was simply a function maximizing their individual utilities, as mediated by the equilibrating and depoliticized operations of a natural price mechanism. At that point, the jump from public utility to public choice was a deceptively small one.⁴⁸ And the justification for deregulation would become all too easy, even natural, although trade associations would devote substantial efforts to push for it anyway.⁴⁹

Although the state has not grown any weaker since the New Deal, public power has

⁴⁷ Kenneth Arrow, "A Difficulty in the Concept of Social Welfare," *Journal of Political Economy* 58.4 (August 1950): 328–46; and *Social Choice and Individual Values* (New York: Wiley, 1951).

⁴⁸ Mancur Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups* (Cambridge: Harvard University Press, 1965); James Buchanan and Gordon Tullock, *The Calculus of Consent: Logical Foundations of Constitutional Democracy* (Ann Arbor: University of Michigan Press, 1962).

⁴⁹ These efforts would include paying academics to document the superiority of private power ownership. That is the only explanation for Forrest McDonald, *Let There Be Light: The Electric Utility Industry in Wisconsin, 1881–1955* (Madison: American History Research Center, 1957). On private industry's campaign to rewrite this history, see Richard John, "From Political Economy to Civil Society: Arthur W. Page, Corporate Philanthropy, and the Reframing of the Past in Post–New Deal America," in *Boundaries of the State in US History*, ch. 11.

flown from it, precisely to the extent that the public and its democratic relationship to the state has been eclipsed by the need to project power—domestically against the likes of Commonwealth and Southern, and internationally against the Soviet Union and its revolutionary partners. In this sense, the refiguration of sovereignty undertaken by the United States in the middle decades of the century to combat the collapse of market society and the global crisis of the great powers redefined the terms of the democratic state. Much like the village undergoing pacification in Vietnam a short while later, it was necessary to evacuate the democratic state of its publics in order to save it from the global threat of totalitarianism.

Try as he might to conjure a public whose interests could democratize the greatest market society in the world, Lilienthal could not build a democratic state on the sheer concentration of public power, no matter how close to the grass roots it operated. He needed other, older parts of the state, most of which was not terribly open to democratization—notably Leslie Grove’s Army Corps of Engineers, but also the cool, marble-embalmed Supreme Court, and even the increasingly insulated wartime White House. The democratic state was too evanescent, too grounded in the provisional, pragmatic, and open-ended perceptions of shared consequences and cooperation for conjoint action, to stand on its own in an age of total war. When Lilienthal had stopped at the foot of Taft’s Corinthian columns to scrawl his feverish memorandum to himself back in 1940, he had not truly recognized the ground on which he stood.