

WORKING PAPER

The Political Nature of The Firm

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Abstract

Political economy holds that firms adapt to institutional environments. The question is when firms produce them. At regional scale, institutional environments are not always settled—new industries lack governing arrangements, declining communities face collapsed order, abandoned places have lost the coordination that once sustained them. Under conditions of vacuum, capability, and agency, firms extend their coordinating capacity beyond their boundaries to produce institutional order directly. This is corporate statecraft. The concept extends the Coase-Williamson-North tradition: firms produce governance not only through internal hierarchy but by building infrastructure, setting standards, convening actors, and transferring legitimacy beyond their boundaries—accepting reduced control in exchange for extended coordination. Four cases drawn from fieldwork ground the concept: Terman’s Stanford, Miller’s Cummins, the Allegheny Conference’s Pittsburgh, Long’s American Woolen. They confront different forms of institutional vacuum and vary in orientation—open statecraft enabling broad participation versus closed statecraft entrenching incumbents—with consequences for regional outcomes. The firm is a governance source, not only governance structure.

Keywords: corporate statecraft, institutional production, transaction cost economics, regional governance, theory of the firm

1. Introduction

Political economy holds that firms adapt to institutional environments. But what happens when those environments are not settled? The question is when firms produce institutional order.

At national scale, the premise holds. No single firm authors the institutional architecture of a nation. But shift the scale to regions, communities, or emerging industries, and the picture changes. National economies may have settled institutional orders while regions within them face vacuum: new industries without governing arrangements, declining communities where order has collapsed, territories where coordination never developed. In these spaces, firms are not takers because there is nothing yet to take.

Under specifiable conditions, firms extend their coordinating capacity beyond their boundaries to produce institutional order directly. This is corporate statecraft.

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When Frederick Terman built the Stanford Industrial Park and the Honors Cooperative Program, he was not adapting Stanford to the Santa Clara Valley. He was producing the institutional infrastructure that made Silicon Valley possible.

The conceptual foundation builds on Coase while departing from him. Coase defined the firm by mechanism: the suppression of the price system and its replacement by administrative coordination (Coase 1937). His insight was that firms produce governance—internal hierarchy—when market coordination proves too costly. But Coase assumed the firm’s alternative to markets was something it could keep completely under its control. Hierarchy was valued precisely because it substituted administrative command for market uncertainty.

“The Nature of the Firm” established that firms are governance mechanisms. The political nature of the firm is the political dimension of that insight: governance involves authority over others, the distribution of resources, and the constitution of order. These are political functions in the constitutive sense—not partisan, but structural. Firms that produce governance produce politics. The question is where.

Corporate statecraft extends the insight while relaxing the assumption. Firms can produce governance beyond their boundaries—infrastructure, standards, coordinating arrangements—even when they cannot fully control what they produce. The logic remains Coasean: comparative institutional choice, governance as a production problem. The scope is post-Coasean: institutions the firm influences but does not command.

The concept is developed here, its conditions specified, and its operation grounded in four cases drawn from fieldwork—interviews with executives and civic leaders, archival research, and site visits—across seven decades of American economic history: Terman’s Stanford, Miller’s Cummins, the Allegheny Conference’s Pittsburgh, Jacob Long’s American Woolen. They confront different vacuums—absence, thinness, failure, abandonment—and vary in orientation and outcome. A conjecture runs through: open statecraft tends toward different outcomes than closed statecraft. The conjecture is posed as a question worth investigation.

1.1 Firms as Institutional Takers: The Limits of Existing Accounts

The political nature of the firm has been visible for decades, but the conversation that makes it legible has not yet happened. Several literatures have illuminated parts of it—comparative political economy, economic sociology, institutional theory, management studies—each recognizing some dimension of the firm’s governance-producing capacity without naming what unified their observations. This section reconstructs that dialogue. Taken together, it makes corporate statecraft thinkable.

Begin with comparative political economy, which placed the firm at the center of institutional analysis—and then held it there. Hall and Soskice operationalized for comparative capitalism what North had established as foundational: institutions are the “rules of the game,” organizations are the “players,” and the players adapt to rules they did not write (North 1990; Hall and Soskice 2001). Structure conditions strategy. Firms develop competencies that complement the environments they inhabit. At the national scale, this is surely right. No single firm authored the German vocational training system. But Hall and Soskice themselves noted that at “the sectoral or regional level, of course, large firms may be able to exercise substantial influence over the development of these institutions.” Shift scale from nations to regions, and the premise may not hold. Terman’s Stanford did not merely adapt to Silicon Valley—it was among the most intentional founding forces. Hancké, also in *Varieties of Capitalism*, comes closest to the production question, showing how large French firms redirected state-created policies for their own restructuring after 1983—though this is redirection, closer to capture than statecraft (Hancké 2001).

Streeck complicated the relationship between firms and constraints. His concept of beneficial constraints showed that what firms resist can become what firms need: institutions that simultane-

ously “force and facilitate” (Matzner and Streeck 1991), imposing limits on short-term rationality while opening opportunities for adaptation. But the mechanism requires captivity. Societies succeed in improving their capitalists only if they keep them captive. If firms can exit to more permissive environments, the pressure to learn dissipates. What if firms sometimes choose captivity? Streeck analyzed firms as beneficiaries of constraints imposed by others. Corporate statecraft examines firms as agents choosing constraints. Patient capital bound the Irwin-Sweeney-Miller family to Columbus, Indiana. Because they could not leave, they had reason to build the institutional environment that would determine whether the firm survived. Call this embeddedness by design: if captivity enables learning, chosen captivity enables governance.

Thelen, working with both Hall (Hall and Thelen 2009) and Streeck (Streeck and Thelen 2005), showed that institutions change not only through crisis but through continuous adaptation—displacement, layering, drift, conversion, exhaustion. Institutions “do not survive by standing still.” But these mechanisms assume something to work with. Layering requires a base. Conversion requires existing arrangements. Drift presupposes institutions that can erode. In conditions of vacuum—new industries, collapsing regions, abandoned places—the problem is not institutional change but institutional genesis. Corporate statecraft addresses this prior question. Thelen’s mechanisms may describe how corporate statecraft consolidates; the concept addresses how it begins.

Economic sociology sharpened the puzzle. Granovetter insisted that economic action is embedded in ongoing social relations—neither the atomized individual of neoclassical economics nor the scripted automaton of functionalist sociology, but actors operating within “concrete, ongoing systems of social relations” (Granovetter 1985). His later work moved further, analyzing institutional interpenetration and “robust action”—actors who straddle multiple institutional frames without committing to anyone (Granovetter 2017; cf. Padgett and Ansell 1993). Terman assembled resources from academic, industrial, military, and financial domains simultaneously, never clearly labeling which logic governed. But even in Granovetter’s mature analysis, embeddedness is found rather than made. Actors navigate among existing institutions. The prior question remains: who builds the institutional options that pragmatic actors choose among? In established regions, the answer may be history. In vacuums, embeddedness cannot be inherited. It must be produced. Embeddedness by design is the deliberate construction of the relational infrastructure that Granovetter took as given.

Saxenian showed what produced embeddedness looks like without naming it as such. Silicon Valley’s dynamism derived from a decentralized industrial system—firms specializing, competing intensely, yet collaborating through informal exchange and formal partnerships (Saxenian 1996). But where did that social structure come from? The Industrial Park did not appear through market forces. The Honors Co-op was not a natural outgrowth of regional culture. The Affiliates Program required deliberate construction. Saxenian herself names the source: Terman’s technical community has proven remarkably resilient (Saxenian 1995). What Saxenian analyzed as regional culture, corporate statecraft reframes as produced institutional order.

Sabel and his collaborators showed how coordination without hierarchy works: flexible specialization in Italian industrial districts (Piore and Sabel 1984), experimentalist governance through benchmarking and mutual monitoring (Sabel and Zeitlin 2012). Firms in districts experimented, adapted through iterative problem-solving. But who creates the conditions that make experimentation possible? As Piore and Sabel recognized, “Craft workers are bred, not born,” and the systems that breed them require prior construction. Terman built the institutional infrastructure; experimentalist learning followed. The two are sequential. Writing with Gilson, Sabel directly engaged the Coasean framework: collaborative arrangements for innovation “blur the distinction between contract and organization” at the core of firm theory since Coase, creating hybrid forms that are neither hierarchy nor market (Gilson and Sabel 2009). This dissolution of the Coasean binary for inter-firm production is the theoretical foundation on which corporate statecraft builds.

Institutional theory named the puzzle of agency. Battilana and D’Aunno identified the paradox of embedded agency: if institutions shape embedded actors, how can embedded actors change institutions (Battilana and D’Aunno 2009)? DiMaggio’s answer was institutional entrepreneurship: actors with sufficient resources and positional advantage who reform existing rules (DiMaggio 1988; Battilana 2006). The insight illuminates agency under constraint. But the distinction from corporate statecraft is precise. Institutional entrepreneurship presupposes an institutional field—the embedded agent is embedded in something, and reforms from within. Corporate statecraft addresses the prior condition: institutional production where no field yet exists. Terman was not reforming Silicon Valley’s institutions. There were none to reform. And institutional entrepreneurship does not require firms specifically—any positioned actor can play the role. Corporate statecraft explains why firms in particular: because firms are governance structures, and what they extend outward is the coordinating capacity they already exercise internally.

Management studies glimpsed this before political economy did. Bower and Weinberg argued that “it is useful in examining top executive work to regard all firms as political economies” and introduced “statecraft” to describe the executive work of mobilizing coalitions and aligning competing interests (Bower and Weinberg 1988). But Bower’s statecraft was internal. Corporate statecraft extends the insight outward: the skills of coalition-building, persuasion, and informal authority are precisely those firms deploy when producing institutional order beyond their boundaries.

Three further literatures round out the picture. Economic geography explains why activity clusters—Krugman’s agglomeration economies (Krugman 1991), Arthur and David’s path dependence (Arthur 1994; David 1985)—but not who originates the path. Paths have origins. The first semiconductor firm in Santa Clara County, the first university-industry connections, the first patterns of cooperation were constructed, not given. Business history provides the empirical foundation: Chandler showed the modern corporation as a coordinating mechanism—the “visible hand” replacing market coordination with managerial hierarchy (Chandler 1977)—though still oriented toward production and exchange. O’Mara extended this to places, documenting how universities became anchors of regional economies through land development, neighborhood revitalization, and coalition-building—“a force for economic and social change” (O’Mara 2012) that exceeded their educational mission. She analyzed what universities did. Corporate statecraft asks why they did it, and under what conditions other firms do the same. Corporate governance scholars have recognized the political dimensions (Bebchuk and Jackson 2010; Zingales 2017), but primarily as pathology to constrain rather than capacity to understand.

Table 1. Positioning Corporate Statecraft in the Literature

Tradition	Unit of analysis	Firm’s role	Institutions are...	What it misses
Coase / Williamson	Transaction	Governance producer (internal)	Alternatives to hierarchy	Governance production beyond the firm
North	Nation	Player within rules	Rules of the game	Firms as rule-makers
Hall & Soskice (VoC)	National economy	Taker of institutional complementarities	Constraints shaping strategy	Firm-level institutional production
Granovetter	Network	Embedded actor	Social structures hosting action	Deliberate creation of embedding structures
Zingales	Polity	Political actor seeking influence	Arena for lobbying and capture	Constructive institutional production
Corporate statecraft	Region	Governance producer (beyond boundaries)	Producible by firms	—

What emerges from this dialogue is not a gap to fill but a question that was always latent in the literatures themselves. Each tradition illuminated something real. None posed the integrating question: under what conditions do firms become producers of institutional order rather than takers of it?

The answer requires three analytical moves. First, a shift in unit of analysis—from nations to

regions, where firm influence becomes tractable. Second, a shift in the direction of causality—from institutions shaping firms to firms shaping institutions. Third, a specification of mechanism—not firm “influence” in the diffuse sense, but the deliberate production of rules, norms, and coordination arrangements that constitute economic life in a place. Corporate statecraft names this phenomenon. What remains is to specify its conditions.

2. Corporate Statecraft: A Post-Coasean Theory

2.1 The Post-Coasean Foundation

Coase’s enduring contribution was to recognize firms as governance producers. Before Coase, economic theory treated the firm as a production function—a black box transforming inputs into outputs. Coase asked a different question: why do firms exist at all? His answer was that coordination is costly, and firms emerge when coordinating through hierarchy costs less than coordinating through markets (Coase 1937). The insight was profound: the firm is not primarily a technological entity but an institutional one. It exists because of comparative advantage in governance.

But Coase’s framework rested on a binary that subsequent scholarship has dissolved. The choice between hierarchy and market seemed exhaustive because the pair embodied the two canonical modes of coordination: centralized command and decentralized exchange. If markets failed, firms internalized. If hierarchy grew too costly, firms returned to markets. The boundary of the firm marked the frontier between these worlds.

This binary no longer holds. Holmström and Roberts demonstrated that the relationship between governance problems and governance instruments is not one-to-one but “many-to-many”: multiple instruments can address any given problem, and each instrument can address multiple problems (Holmström and Roberts 1998). Hold-up risks can be managed through vertical integration, but also through long-term contracting, relational norms, or hybrid arrangements combining elements of each. There is no governance task performed only by firms, none performed only by markets. The firm, in this view, “does not have an essence or nature: it bundles governance instruments as the calculus of advantage in particular contexts suggests” (Gilson and Sabel 2009).

Empirical developments confirmed the theoretical revision. Japanese subcontracting—the paradigm case for a generation of organizational economists—showed firms making substantial relationship-specific investments without vertical integration. The contracts governing these relationships were “short and remarkably imprecise, essentially committing the parties only to work together to resolve difficulties as they emerge” (Holmström and Roberts 1998). Governance rested not on unified ownership but on long-term interaction, shared expectations, and continuous mutual monitoring. Suppliers and assemblers coordinated extensively while remaining legally separate—neither hierarchy nor market, but something third.

Gilson and Sabel theorized this third form as “contracting for innovation”: collaborative arrangements that blur the distinction between contract and organization at the core of efforts to construct a theory of the firm since Coase (Gilson and Sabel 2009). These arrangements create “a single, novel regime that fuses and transforms elements of contract, bi-lateral governance and hierarchical management.” They coordinate investment, manage agency problems, and direct information flows across organizational boundaries—tasks Coase assumed required hierarchy. The key innovation is governance through mutual learning: regular exchanges of information about each party’s capacities and intentions teach the parties how to collaborate effectively, binding them through accumulated understanding rather than unified command.

Helper, MacDuffie, and Sabel generalized these observations into a theory of “pragmatic collaboration” (Helper, MacDuffie, and Sabel 2000). Firms increasingly collaborate with suppliers even as they reduce vertical integration—a paradox for standard theory, which holds that collaboration

requires integration to prevent hold-ups. The resolution lies in what they call “learning by monitoring”: pragmatist mechanisms such as benchmarking, simultaneous engineering, and error detection that enable parties to coordinate without unified ownership. These mechanisms create information symmetry—each party learns enough about the other’s capabilities and intentions to detect defection before it becomes catastrophic. Assets become “de-specified” through collaboration, losing the relationship-specificity that creates hold-up risks in the first place (Helper, MacDuffie, and Sabel 2000). The result is coordination without hierarchy, governance without complete control.

The logic extends one level further. If firms can coordinate beyond their boundaries to produce goods, can they also coordinate beyond their boundaries to produce the institutional conditions that make production possible? Sabel’s pragmatist firm coordinates with suppliers to improve products and processes. Corporate statecraft coordinates with universities, governments, and civic associations to produce infrastructure, standards, and skilled labor—the substrate on which production rests. The shift is from inter-firm coordination to firm-polity coordination, from the governance of production to the production of governance.

That final phrase requires emphasis. The production of governance is not a technical or managerial act. Governance constitutes order: it determines who may participate, on what terms, with what distribution of costs and benefits. These are political functions in the fundamental sense—not partisan but constitutive. When firms produce governance internally, they exercise authority that Coase recognized but did not name as political. When they produce governance beyond their boundaries—infrastructure others depend on, standards others follow, arrangements others must navigate—they exercise the same authority over non-participants. The political nature of the firm is not acquired through corporate statecraft. It is revealed by it. What vacuum, capability, and agency do is create conditions under which the firm’s governance-producing nature extends outward and becomes visible as institutional production.

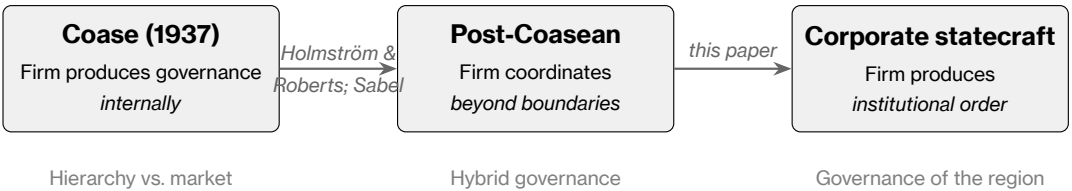


Figure 1. Theoretical progression from Coase to corporate statecraft. Each step extends the domain in which firms produce governance: from internal hierarchy, to inter-firm coordination, to the production of institutional order beyond the firm’s boundaries.

2.2 Why Firms Accept Reduced Control

A challenge remains. Coase valued hierarchy precisely because it offered complete control. The entrepreneur-coordinator who “directs production” replaces the uncertainty of market exchange with administrative command (Coase 1937). Within the firm, the manager can reassign workers, redirect resources, and reorganize operations without renegotiating contracts. This is hierarchy’s appeal: not merely lower transaction costs, but the capacity to adapt without bargaining. Corporate statecraft, by contrast, produces governance the firm cannot fully control. If Coase’s firm builds hierarchy to escape market uncertainty, why would a firm build institutions it cannot command?

The answer lies in the difference between control and effectiveness. Hierarchy offers control over governance, but control over inadequate governance may be worth less than influence over effective governance. When the institutional environment is absent or dysfunctional—when skilled labor is scarce, infrastructure unreliable, and norms of cooperation weak—a firm with perfect internal coordination will still underperform. It can direct its employees with precision, but it cannot

conjure the trained workforce, the functioning infrastructure, or the regional reputation that effective operation requires. Under these conditions, the relevant comparison is not between hierarchy and market, but between building institutions the firm can influence and operating in an environment the firm cannot escape.

Consider the alternatives. A firm facing institutional absence can exit to a region with better institutions, wait for the state or other actors to provide them, or help produce them itself. Exit may be foreclosed by sunk investments, by patient capital that binds owners to place, or by the absence of better alternatives. Waiting may prove costly if competitors act first, or indefinite if the state lacks capacity or will. Building institutions—even institutions the firm cannot fully control—may dominate both alternatives. The returns to extended coordination can exceed the returns to complete control when the institutional deficit is severe enough and the alternatives costly enough.

This calculus explains a pattern that pure Coasean logic cannot. Terman's Stanford did not need to control the firms it incubated; it needed those firms to exist, to employ Stanford graduates, to fund Stanford research, to make the region attractive to the talent Stanford sought to recruit. The Industrial Park welcomed competitors because competitors thickened the labor market, attracted suppliers, and signaled that this was a place where electronics happened. Reduced control was not a cost reluctantly borne but a feature of the strategy: open institutions attracted participation; participation generated agglomeration effects; agglomeration effects benefited Stanford along with everyone else. Miller's Columbus architecture program did not reserve world-class design for Cummins facilities; it offered Saarinen and Pei to any public building. The point was not to control the built environment but to transform it—to make Columbus a place where talented engineers would consent to live. Shared benefits were the mechanism, not the compromise.

The Coasean insight survives this extension; the Coasean binary does not. Firms still compare institutional alternatives and choose based on relative costs and benefits. They still produce governance when existing arrangements prove inadequate. But the governance they produce need not be hierarchy, and the control they exercise need not be complete. What Coase discovered was that firms are governance producers, not merely production functions. He thought the only governance firms could produce was internal hierarchy. Corporate statecraft generalizes the insight: firms can produce governance at multiple levels, internal and external, controlled and collaborative, depending on where the marginal returns are greatest.

Granovetter's economic sociology illuminates why this extension works. He observes that economic costs are often reduced when actors pursue economic goals through noneconomic institutions "to whose costs they made little or no contribution" (Granovetter 2017). The trust that makes labor market matching efficient results from how societies pattern kinship and friendship, not from employer investment. Corporate statecraft reverses this relationship: firms investing in institutional production for collective benefit, accepting that others will free-ride, because the institutional fabric itself is the scarce resource. Terman built the programs; competitors' employees enrolled. The free-riding was the point—it thickened the institutional environment on which Stanford's own strategy depended.

One further consideration. Coase assumed the comparison was between hierarchy and market—between producing internally and buying externally. But for the institutional conditions of production, there is often no market to buy from. A firm cannot purchase a skilled regional labor force, a reputation for innovation, or norms of inter-firm cooperation on the open market. These are not commodities with prices but collective goods that emerge from sustained coordination among multiple actors. When markets cannot provide and hierarchy cannot reach, the firm faces a different choice: contribute to collective production or do without. Corporate statecraft is the organizational form this choice generates—neither hierarchy nor market, but coordinated institution-building among actors who share an interest in outcomes none can produce alone.

2.3 Definitions

Each term in “corporate statecraft” now requires precision.

The firm, in this post-Coasean sense, is defined by mechanism rather than legal form. What distinguishes a firm is the suppression of the price system and its replacement by administrative coordination—Coase’s original criterion. But the extension developed here broadens the question: not only what the firm coordinates internally, but what it can produce externally. A private university coordinates through hierarchy rather than exchange—it is a firm. A consortium of corporations that suppresses competition among members and substitutes collective planning is a firm. Stanford, Cummins Engine, the Allegheny Conference, and American Woolen are all firms in this sense. The question is not their legal status but how they coordinate—and what they produce through coordination.

Institutional order is the structure of rules, norms, and arrangements governing economic and political life in a place. It includes formal rules—who may transact, under what terms—but also informal patterns: how labor markets function, how knowledge circulates, how conflicts are resolved. The distinction from institutional environment matters. Environment is what firms encounter. Order is what is produced. Firms adapting to Silicon Valley’s culture are responding to environment. Terman creating that culture was producing order.

Production means bringing into existence through purposive action. Firms produce institutional order when their decisions create arrangements that would not otherwise exist. This distinguishes corporate statecraft from adjacent phenomena. Lobbying seeks to influence rules made by others. Regulatory capture colonizes existing governance. Corporate social responsibility involves philanthropy peripheral to core business. Corporate statecraft is different. Terman did not lobby California to create an innovation economy. He built one.

A conceptual implication follows. North distinguished institutions (rules of the game) from organizations (players). The distinction has been analytically productive: it prevents confusion about cause and effect. But North himself recognized that organizations have internal rules, procedures, and hierarchies. For their members, organizations function as institutions—the employee inhabits the firm as the citizen inhabits the state. The question is whether the firm can be an institution for those outside it: whether it can produce order that non-participants must navigate. Corporate statecraft is the claim that, under specifiable conditions, it can. A firm engaged in corporate statecraft is not merely an organization operating within institutions. It is an institution nested within other institutions—adapting to orders it did not create while producing order that others must inhabit.

2.4 Conditions

Three conditions appear necessary for corporate statecraft to emerge.

The first is vacuum—not the absence of all institutions, but the absence of the particular institutional fabric that coordinates economic activity in a domain or place. Property rights persist; contract enforcement continues; basic governance functions. What is missing, failing, or collapsed is the connective tissue: labor market institutions, training systems, knowledge networks, financing mechanisms. Vacuum takes different forms. Sometimes nothing relevant existed—the condition Terman faced when the Bay Area had almost no technology industry. Sometimes institutions exist but prove insufficient for the firm’s requirements—the condition Miller faced in a small Indiana town lacking the civic infrastructure a global manufacturer needed. Sometimes prior order has collapsed—Pittsburgh in 1945, its steel-era coordination mechanisms failing. Sometimes order has withered as actors departed—Stafford Springs, designated a distressed municipality after decades of disinvestment. These forms differ, but each creates space for institutional production.

The second condition is capability. Corporate statecraft requires resources, reputation, and coordinating capacity sufficient to produce institutional order. Not every firm can engage in it.

The corner grocery cannot construct regional labor market institutions. What capability looks like varies. For Stanford, it included research excellence, land holdings, educational programs, and leadership willing to deploy these for institution-building. For Cummins, it was patient capital—family wealth deployed for decades before profitability—combined with willingness to bind the firm to place. For the Allegheny Conference, it was the combined wealth and coordinating capacity of Pittsburgh’s corporations acting in concert. For American Woolen, more modestly, it is capital, supplier relationships, and commitment to sustain investment through difficult years.

The third condition is agency—actors within the firm who recognize the possibility of institutional production and choose to pursue it. Terman saw what Stanford could produce, not merely what it could become. Miller understood that Cummins’ fate was inseparable from Columbus’s fate and acted on that understanding for six decades. Mellon mobilized Pittsburgh’s elite toward regional reconstruction. Long chose to rebuild a community rather than merely operate a business. The agency these actors exercised is neither the atomized rationality that neoliberal theory assumes nor the rule-following that strong institutionalism describes. Granovetter, engaging Herigel’s comparative study of postwar industrial development in the United States, Germany, and Japan, advances a position he calls “softer” than the Varieties of Capitalism school: institutions shape how actors think about their situations and create normative pressures, but they do not determine outcomes (Granovetter 2017; cf. Herrigel 2010). In conditions of vacuum, this softness matters. Where institutional guidance is weak or absent, the space for purposive construction widens. Agency is irreducibly individual. But individual vision requires organizational capacity to achieve institutional effect. Terman without Stanford, Miller without Cummins, would have been visionaries without vehicles.

Table 2. Vacuum Types and the Conditions for Corporate Statecraft

Vacuum type	Definition	What is missing	Case
Absence	No relevant institutional fabric exists	Everything: norms, networks, infrastructure	Terman: no innovation economy in Bay Area
Thinness	Institutional fabric exists but is insufficient	Depth, density, coordination	Miller: Columbus had basic institutions but lacked civic infrastructure matching Cummins’s ambitions
Failure	Existing institutions have ceased to function	Replacement for collapsed order	Pittsburgh: steel economy’s institutional order disintegrated
Collapse	Prior institutional order destroyed by external shock	Reconstitution of an entire ecosystem	Long: New England textile ecosystem eliminated by deindustrialization

2.5 Mechanism

How does corporate statecraft produce institutional order? The mechanism is extension of coordination. Firms that coordinate internally—organizing production, managing employees, allocating resources through administrative direction rather than market exchange—can extend that coordinating capacity outward. They build infrastructure that others use: industrial parks, training programs, supplier networks. They establish standards that others adopt: quality requirements, employment practices, norms of cooperation. They convene actors who would otherwise remain uncoordinated: competitors who share training costs, universities that align curricula with indus-

try needs, governments that invest in complementary public goods. What begins as firm initiative becomes regional infrastructure. What starts as private coordination becomes public order.

This extension operates through four interconnected functions.

A firm builds infrastructure: facilities, platforms, programs, networks. What was private investment becomes public substrate. Terman's Industrial Park provided physical space; the Honors Cooperative Program provided human capital formation; the Industrial Affiliates Program provided knowledge circulation channels. Other actors came to depend on these. When dependence becomes general, private provision has produced public order.

A firm establishes standards: specifications, practices, norms of quality or conduct. What was one firm's way becomes the rule others follow—because deviation is costly or because cooperation requires conformity. Cummins's architectural standards, imposed through its foundation's offer to fund design fees, became Columbus's building norms. The firm did not mandate; it structured incentives such that adoption was rational.

A firm convenes: it gathers suppliers, collaborators, competitors, civic actors into durable coordinating relationships. What was bilateral becomes multilateral. What was transaction becomes arrangement. Cummins's Community Education Coalition brought together school superintendents, college chancellors, business leaders, and county officials into a forum that coordinated education and workforce development across institutional boundaries no single actor could have bridged.

A firm transfers legitimacy: it lends credibility to ventures, places, and practices through association. Reputation flows from where it is abundant to where it is scarce. Stanford's prestige attracted Varian, Hewlett-Packard, and others to the Industrial Park. Their presence attracted others. The firm's reputation became the region's credential.

These functions are mutually reinforcing. Infrastructure attracts actors; convening connects them; standards govern their interactions; legitimacy encourages commitment. Each act of coordination creates conditions for the next. The process is iterative, not designed. Terman did not plan Silicon Valley. He built the Industrial Park, which attracted firms, which created demand for trained engineers, which justified the Co-op, which bound more firms to place, which deepened the ecosystem. The order emerged through cumulative coordination, not comprehensive planning.

Which mechanisms are available depends on conditions. Vacuum type determines the space for action. In conditions of absence—Terman's Bay Area—all four functions are open; the firm builds without displacing existing arrangements. In conditions of thinness—Miller's Columbus—the firm supplements rather than replaces; existing institutions persist but prove insufficient, creating space for additional infrastructure and standard-setting. In conditions of failure—Pittsburgh—the firm must actively displace or repurpose what exists; convening requires assembling actors who had operated under different rules. In conditions of abandonment—Long's Stafford Springs—the challenge is most severe: reconstituting the social fabric that makes coordination possible before coordination itself can begin.

Capability determines which functions are feasible. Infrastructure provision requires resources—capital, land, organizational capacity. Standard-setting requires reputation—the standing to establish norms others will follow. Convening requires network position—relationships with diverse actors and credibility to bring them together. Legitimacy transfer requires accumulated prestige that can be shared. Not every firm possesses all four. Stanford had research prestige, land, and federal relationships—all four functions were available. American Woolen has capital and craft expertise—it can provide infrastructure and set standards but has limited convening capacity and less legitimacy to transfer. The mechanisms a firm deploys reflect not only what the situation demands but what the firm can supply.

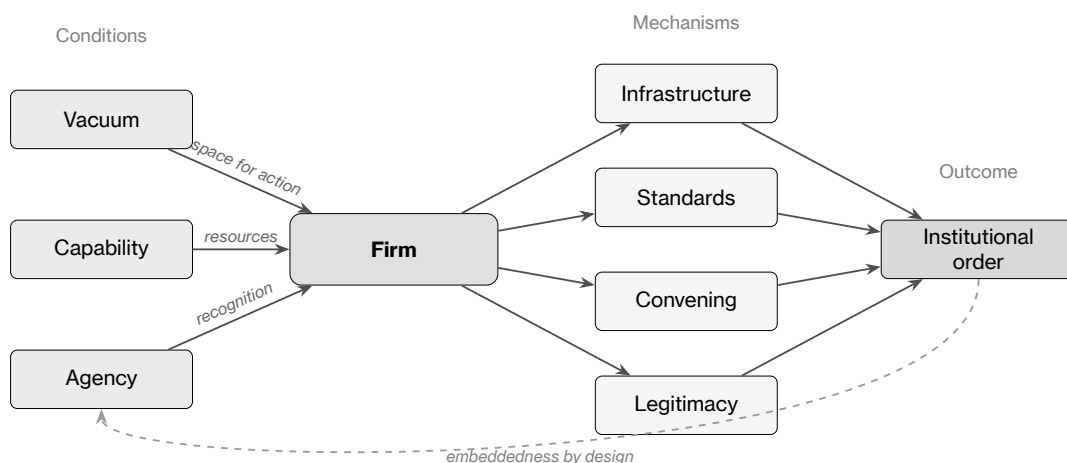


Figure 2. The corporate statecraft framework. Conditions enable the firm's extension of coordination beyond its boundaries through four mechanisms, producing institutional order. The dashed line represents the reinforcing logic of embeddedness by design.

2.6 Embeddedness by Design

A puzzle cuts across the framework. Firms can exit. Why produce institutional order when relocation to an environment that already provides it may be cheaper?

The cases suggest embeddedness by design: the deliberate choice to bind oneself to a place in exchange for the capacity to shape it. The concept inverts Williamson's treatment of asset specificity. In transaction cost economics, specific assets create dependence that must be governed—typically through hierarchical integration (Williamson 1985). In corporate statecraft, specificity is chosen as strategy. Patient capital binds the firm to place; because it cannot leave, it invests in the environment determining whether it will thrive.

The logic extends the Streeckian insight introduced in Section II. Beneficial constraints require captivity: “societies succeed in improving their capitalists only if they keep them captive” (Streeck 1997). Embeddedness by design makes captivity deliberate. The firm that binds itself to place does not merely benefit from constraints others impose; it gains the standing to produce constraints of its own. Where Streeck's mechanism works through imposed pressure—regulation forcing learning—corporate statecraft works through chosen immobility converting Williamsonian vulnerability into governance capacity.

Embeddedness by design is explicit in the cases. Long has invested “essentially all of my family's resources” in American Woolen: “It's not just a business project—it's become a life mission” (Long 2025). Because he cannot leave, he builds. Miller's family capital was bound to Columbus for decades before Cummins became profitable. Terman's Stanford could not relocate; it could only transform where it was. In each case, immobility produced not vulnerability but agency—the agency to build institutions that voluntary actors, retaining exit options, would have insufficient incentive to create.

Hirschman's framework illuminates the pattern. Exit and voice are not simply alternatives. Foreclosing exit enables a particular kind of voice—the voice that builds institutions rather than merely protesting inadequate ones. Loyalty to place, whether chosen or inherited, is what makes institutional production rational. The firm that can leave has little reason to build. The firm that cannot leave has every reason.

2.7 Variation

Corporate statecraft varies in ways that matter for outcomes.

Orientation distinguishes open from closed statecraft. Open statecraft builds institutions enabling broad participation, competition, and entry—empowering others, including potential competitors. Terman’s Silicon Valley is the paradigm. The Industrial Park welcomed competing firms. The Honors Co-op trained engineers who could work for any employer. The system Terman built did not entrench Stanford’s dominance; it created a competitive ecosystem in which Stanford was one participant among many. Miller’s Columbus followed a similar logic: schools and libraries designed by world-class architects served all residents, not just Cummins employees—though decisions remained with Miller and the Foundation. Closed statecraft builds institutions entrenching incumbents and restricting entry. The Allegheny Conference tilted toward this pole. Membership was by invitation. Projects prioritized member interests. Outsiders were not excluded from all benefits—everyone breathed cleaner air—but the coalition’s orientation was inward.

The distinction resonates with Acemoglu and Robinson’s contrast between inclusive and extractive institutions but shifts the analytical focus from state action at national scale to firm action at regional scale (Acemoglu and Robinson 2012). The parallel is suggestive: open statecraft, like inclusive institutions, tends toward broadly shared prosperity; closed statecraft, like extractive institutions, tends toward concentrated benefits. The logic runs through the mechanisms. Open statecraft deploys them in ways that empower broad participation: infrastructure is accessible, standards enable entry, convening is inclusive, legitimacy is transferable. The result is a competitive polity—entry is possible because barriers are low, adaptation is continuous because diverse actors generate diverse experiments, and power is dispersed because no single actor controls access to coordination. Closed statecraft deploys the same mechanisms differently: infrastructure serves members, standards protect incumbents, convening is restricted, legitimacy is hoarded. The result is an oligarchic order—entry is difficult, adaptation is constrained because homogeneity reduces experimentation, and power concentrates among those who control the mechanisms. But the mechanisms differ. Acemoglu and Robinson ask how states shape the rules constraining economic actors. Corporate statecraft asks how economic actors produce the rules themselves.

Tools further distinguish engagement from extraction. Engagement builds coalitions, provides public goods, creates infrastructure serving broad constituencies. Extraction directs resources toward privately determined ends. The Allegheny Conference deployed both: smoke control was engagement; directing urban renewal funds toward corporate headquarters was extraction. The conjecture is that orientation and tools interact: open statecraft using engagement tends to produce competitive polities; closed statecraft using extraction tends to produce oligarchic orders. Silicon Valley and Pittsburgh illustrate the contrast. Whether the patterns hold beyond these cases is a question Section V develops as testable propositions.

3. Four Cases

Four cases illustrate the concept. They vary in vacuum type, agent form, orientation, and outcome. Terman faced absence: no innovation economy existed in postwar California. Miller faced thinness: Columbus had institutions, but not the civic infrastructure a global manufacturer required. The Allegheny Conference faced failure: the steel-era order was collapsing. Long faces abandonment: prior owners departed, leaving institutional wreckage. What unites them is instructive. In each case, an actor recognized that the institutional environment would not provide what was needed—and chose to build it.

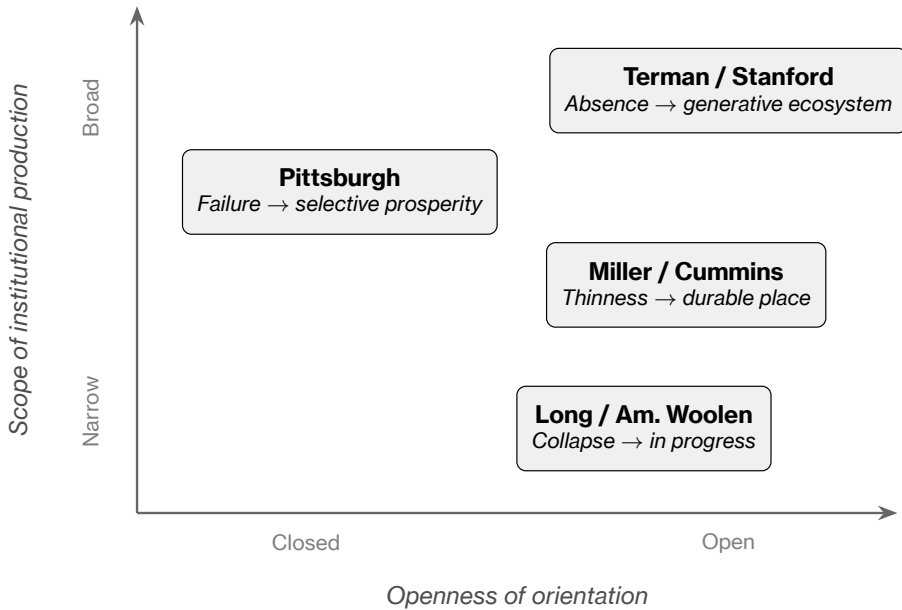


Figure 3. Variation in corporate statecraft across cases. Horizontal axis: openness of orientation (closed to open). Vertical axis: scope of institutional production (narrow to broad). Terman's open, broad statecraft produced the most generative outcomes; Pittsburgh's closed orientation produced selective benefits despite broad scope.

3.1 Fred Terman at Stanford

Frederick Terman inherited a problem. In the 1930s, Stanford electrical engineering students left California for jobs in the East. “Most of them never came back,” Terman recalled. He judged this “richly wrong.” The goal became “making it possible for our graduates to stay in this area.”

The starting condition was vacuum—not crisis but absence. No innovation economy existed. The West Coast had agriculture, extraction, and branch plants. It lacked the institutional infrastructure that sustained technical industries in the East: networks among firms, labor markets for engineers, mechanisms connecting research to commercialization.

Terman's capability was Stanford itself: research excellence, physical assets, federal relationships cultivated during wartime. His agency was positional—executive authority over engineering, later the university—combined with a vision of what the region could become. That vision had a name: a “community of technical scholars,” which Terman defined as “a great university which has a strong program in engineering and science surrounded by companies emphasizing research and development toward useful goals, under conditions in which there is interaction among all the components, some formal, some informal, some organized, other unorganized” (Terman 1973).

The strategy for building this community rejected mediocrity in favor of concentration. Terman's “steeples of excellence” philosophy held that institutions should “build up great faculty strength in a few important but very narrow areas at the expense of broad but modestly productive coverage” (Terman 1967). “The most expensive faculty member,” he warned, “is the one who is merely adequate.” Excellence attracted excellence; mediocrity compounded itself. The same logic applied to regional institution-building: create density in specific capabilities rather than diffuse resources across many. Terman's agency was not merely institutional. As Gibbons documents, Terman served as the angel investor for Hewlett-Packard, providing \$500 in seed capital in addition to technical mentorship and financial facilitation (Gibbons 2000).

The mechanisms built institutional infrastructure directly. The Honors Cooperative Program allowed engineers at local firms to pursue Stanford degrees part-time. Companies paid tuition; Stanford delivered instruction via closed-circuit television. The arrangement embedded regional firms in Stanford's technical community while generating revenue for the university. Terman called it "a mechanism that would provide continuing stimulation to industry and at the same time give Stanford roots in the local industrial community."

The Stanford Industrial Park leased university land to technology firms under restrictive covenants governing use, aesthetics, and integration with university activities. Varian Associates, Hewlett-Packard, Lockheed, and General Electric located operations there. Physical proximity created density; density enabled the knowledge spillovers that cluster theory later described.

The Stanford Research Institute and the Industrial Affiliates Program extended the pattern: research services, technical consultation, regular forums connecting faculty and industry personnel. Terman described his approach: "The idea was to have people here always exposed to enough different things so that they can make correlations that other people don't see because they're off in one small area."

Saxenian captured the result: "There is a different feel in the two regions. In Silicon Valley there's a sense of energy, vitality, a culture of risk-taking and entrepreneurship that isn't at all present in Route 128" (Saxenian 1996). Terman crafted the institutions that constituted it. The institutional portfolio was deliberately diversified. Gibbons observes that Stanford's contributions differ by industry sector: technology licensing for pharmaceuticals, company formation for computing, graduate and continuing education for established manufacturers (Gibbons 2000).

The orientation was open. Terman trained engineers who could work anywhere—including for competitors. He welcomed firms that might hire Stanford graduates away from existing employers. He built infrastructure that benefited the region, not just Stanford. The Industrial Park succeeded precisely because it created a labor market: engineers could change employers without changing neighborhoods.

Why open? Terman needed regional density to keep graduates in California. A closed system—training only Stanford-affiliated firms, restricting knowledge flows—would have defeated the purpose. Openness was strategy, not altruism. The openness proved self-reinforcing. Gibbons documents that Fairchild Semiconductor's significance lay not only in its technological contributions but in demonstrating that employees could leave and start a competing firm (Gibbons 2000). According to Gordon Moore, this set the stage for the repeated spin-outs that have characterized Silicon Valley ever since. The institutional infrastructure Terman built—a labor market thick enough to absorb job changes, a region dense enough that engineers could switch employers without switching neighborhoods—was completed by actors who used it, creating precedents that made the next departure easier. Open statecraft begets openness.

The outcome has persisted for seven decades. Silicon Valley continues to exhibit the characteristics Terman cultivated: interfirm mobility, knowledge spillovers, new venture formation. The institutional order outlasted its producer—Terman died in 1982—and proved self-reinforcing.

3.2 Cummins Engine

Cummins Engine Company should not exist. "By most conventional reckonings," the company's historians note, "an improbable company" (Cruikshank 1997). A diesel engine manufacturer headquartered in a small Indiana town, forty miles from Indianapolis, competing against vertically integrated giants. Yet Cummins not only survived—it transformed Columbus, Indiana into what architecture critics call a showcase of twentieth-century American design.

The starting condition was vacuum of a different kind—not absence but thinness. When Cummins was founded in 1919, Columbus had fewer than 9,000 residents. It was "one of the state's

industrially marginal regions,” lacking “giant manufacturing complexes comparable to the Studebaker plant at South Bend, the Haynes auto plant at Kokomo, the GE factory at Fort Wayne, or U.S. Steel’s behemoth Gary works” (Cruikshank 1997). Bartholomew County “ranked last in the state in manufacturing.” Some institutions existed—a bank, small manufacturers, civic associations. But the institutional fabric that sustained industrial communities elsewhere—training systems, supplier networks, civic infrastructure capable of attracting talent to a provincial town—was thin or insufficient.

The capability was patient capital. William G. Irwin, “one of the community’s leading businessmen and the source of nearly all of the company’s \$50,000 starting capital,” backed Clessie Cummins, “a mechanic-inventor whose idea it had been to build and sell engines.” The Irwin-Sweeney-Miller family “infused money into the business continuously for twenty years (including the most trying years of the Great Depression) before their diesel-making venture finally managed to turn a profit.” As recently as the 1960s, J. Irwin Miller and his sister “owned more than half of the capital stock.” This was “the patient-capital tradition”—family wealth deployed for institution-building rather than extraction (Cruikshank 1997).

The agency was Miller himself. Born in 1909, educated at Yale and Oxford, he joined Cummins in 1934 and shaped it for six decades. In 1968, *Esquire* put him on its cover: “This man should be the next president of the United States” (Roberts 1967). Miller was a lifelong Republican who earned “the trust of the Kennedy and Johnson administrations and the enmity of the Nixon White House.” He served as the first lay president of the National Council of Churches. He understood that a company’s fate was inseparable from its community’s fate—and that in Columbus, the company was the community. Jim Henderson, a later CEO, distilled the logic: the company acts in “its self-interest, not its selfish interest” (Bower and Norris 2014).

The mechanisms extended firm capability into civic governance. Beginning in the 1950s, Cummins allocated “5 percent of its pretax domestic profits to charitable causes—the highest allowable rate, and one that was matched consistently by only one other American company” (Cruikshank 1997). The Cummins Engine Foundation paid architectural fees for public buildings—schools, libraries, fire stations, churches—on condition that Columbus select architects from a list Miller approved. The list included Eero Saarinen, I.M. Pei, Robert Venturi, Richard Meier, Cesar Pelli, Harry Weese. By the 1970s, Columbus had earned the nickname “the Athens of the prairie” (Cruikshank 1997).

But the firm’s commitments extended beyond architecture. When offered a 20 percent share of the South African diesel market in the late 1970s, Cummins demanded integrated workplaces. The authorities refused. “We lost all the business,” Henry Schacht recalled. “Our view was that you don’t need to have all the business in the world. You have certain fundamental principles—and if they can’t be followed, then it’s not business you want.” When Japanese competitors threatened Cummins’ market position in the 1980s, the company cut prices by 30–40 percent rather than cede ground—accepting years of losses to preserve its position and its workforce. These were principled constraints: the firm binding itself to place and workforce rather than maximizing short-term returns.

Institution-building proper came in the 1990s. Cummins employees led the creation of the Community Education Coalition—a forum bringing together school superintendents, college chancellors, business leaders, and local government to systematically improve the regional education system. The coalition applied Cummins’s own management tools to problems like dropout rates and kindergarten readiness. Private capital funded pilots; public funding sustained what worked. When Cummins evaluated sites for a new engine line in 2010, the company made community investment a condition of expansion. “If the state does not agree to help improve the local schools,” the president stated, “Cummins will not be able to expand in Seymour” (Bower and Norris 2014). Embeddedness was not sentiment—it was strategy.

The orientation was open. Miller built institutions serving the broader community, not just Cummins employees. Schools designed by world-class architects benefited all residents. Decisions about what to build remained with Miller and the Foundation—not because participation was unwelcome, but because someone had to hold the responsibility that initiative demands. “We never pushed it,” Miller insisted. “We waited to be asked” (Cruikshank 1997). When the local school board once rejected foundation-sponsored architects, preferring to “just once try a building on our own,” Miller accepted the decision.

The outcome has proven durable. Columbus remains architecturally distinctive decades after Miller’s death in 2004. Cummins remains headquartered there, the only surviving independent American diesel manufacturer. The company’s historians conclude: “Values are fragile, especially when they must be defended by hundreds or thousands of people. Like core competencies, they are hard to build and easy to destroy” (Cruikshank 1997). In Columbus, they have not been destroyed.

3.3 Pittsburgh

Pittsburgh presents a different configuration. The vacuum was failure, not absence—the collapse of institutional order sustaining the steel economy. The agent was a coalition of corporations, not a university. The orientation was more closed.

The starting condition was crisis within a paternalistic system. The steel companies had created comprehensive dependency: in some communities, “the municipal water system was operated by the steel mill, or the electrical plant was operated by the steel mill” (Flanagan and Heuck 2025). When the bottom fell out in the 1980s, everything collapsed together. “We lost about 300,000 mainly young people who went elsewhere for better prospects.” The exodus was selective: “those 300,000 people who left, they were, in big proportion, the risk-takers.” Pittsburgh was left with “a relatively more risk-averse population” (Flanagan and Heuck 2025).

The Allegheny Conference on Community Development, founded in the late 1940s, had functioned as a firm in the Coasean sense: suppressing competition among members and substituting collective planning. David Roger, President of the Hillman Foundation, provides the frame: “Richard King Mellon working with Mayor Lawrence to put together what was really a public-private partnership before anybody called it that” (Roger and Gonzalez 2025). The coalition was explicit. Bill Flanagan, Chief Corporate Relations Officer of the Allegheny Conference on Community Development, describes the starting point: “This was the most polluted place on the planet.” The response was deliberate: “The business leaders and the mayor would clean this up, they would create a park, they would create kind of a front for the city. This was all done strategically and on purpose.”

The achievements were real. “U.S. Steel and Pittsburgh Plate Glass and Mellon Bank all built new headquarters. But even the union came—the United Steelworkers put their headquarters here as a commitment to the community” (Flanagan and Heuck 2025). Smoke control transformed air quality. Flood control projects proceeded. These were public goods.

But the orientation was more closed than Terman’s. The Conference was invitation-only. Its projects prioritized member interests. Patrick Vitale’s critical history captures the dynamic: Renaissance “has consistently been an uneven process of investing in some sectors, spaces, and people at the expense of others,” privileging “medical researchers, bankers, and engineers at the expense of steelworkers and miners” (Vitale 2015; Armstrong 2021).

The transition to university-led development came later—and required external pressure. “I would say in the 60s... I don’t think that we leaned on the university partnership to the degree that we started to in the 80s,” David Roger observes. The Richard King Mellon Foundation’s 1960s investment in computer science at Carnegie Mellon—“nobody knew computer science, nobody knew what that was”—proved prescient. “And that’s what really now we’ve got CMU as the premier technology institute” (Roger and Gonzalez 2025).

The outcome was selective prosperity. Pittsburgh transformed—universities world-class, healthcare thriving. But benefits concentrated. The exodus that began with steel’s collapse was never reversed. Those who left were disproportionately risk-takers; those who remained were not. The entrepreneurial capacity drained along with the population. Those who remained entered what Flanagan calls “the decade of denial”—pressure on politicians to restore the mills, dismissal of technology and healthcare as distractions, disbelief that anything could replace steel. The culture that had sustained a century of steel production now impeded adaptation (Flanagan and Heuck 2025).

What filled the vacuum was not new enterprise but inherited wealth. Pittsburgh “had philanthropic wealth that was the highest per capita in this country”—legacy fortunes from the steel era. “The philanthropic groups created a social safety net to deal with this just terrible bottom falling out economically” (Flanagan and Heuck 2025; Vitale 2015). The paternalistic structure that sustained the steel economy was replaced by a different paternalism: foundations substituting for firms.

The region now “leads all 387 metro areas in what’s called natural population loss, more deaths than births” (Flanagan and Heuck 2025). The contrast with Terman is suggestive. Open statecraft produced competitive polity. Closed statecraft produced stability and concentrated benefits. Both were corporate statecraft. The character of statecraft shaped the character of order.

3.4 American Woolen

Jacob Long’s American Woolen represents the attempted reconstitution of institutional order where it has collapsed.

Long purchased the mill in 2014 from Loro Piana, which had closed the facility after acquisition by LVMH. The mill dates to 1841—one of only a handful of integrated woolen operations remaining in the United States (Kurutz 2025). Stafford Springs is vacuum through abandonment. The state has designated it a “distressed municipality.” Long’s diagnosis is explicit: “When someone buys fabric or a blanket from American Woolen, they’re not just buying wool cloth—they’re buying into the revival of a small town in Connecticut” (Long 2025).

The mechanisms extend firm capability into community governance. Workforce development replaces absent institutions: “There isn’t any pipeline—we are the pipeline. We’re basically rebuilding an industry that had vanished in this region” (Long 2025). Long trains workers through apprenticeship: “You start as a mill hand, you learn how to run one machine, then multiple machines, then maybe you become a specialist. It’s old-school, but it’s how the craft skills sink in” (Long 2025). He frames this as obligation: “I don’t mind training newbies—I see it as part of investing in the community. Companies should be willing to cultivate their own workforce. It’s part of the social contract of doing business in a community” (Long 2025).

Beyond workforce, Long is reconstructing a regional production ecosystem. “The traditional textile-apparel ecosystem in New England disappeared along with the mills. So we’re essentially reconstructing a regional supply chain from scratch” (Long 2025). He describes conversations with the Small Business Administration about “how to repopulate” the Connecticut-Massachusetts-New York corridor with small manufacturers. The vision: “a constellation of boutique manufacturers—maybe one makes outerwear, another does denim, another does knitwear—all within a few hours’ drive” (Long 2025).

Community identity reconstruction addresses the social dimension: “We are the only industrial-scale manufacturer left in Stafford Springs. That economic identity rubs off on the community—it builds pride and recognition” (Long 2025). Long connects economic activity to social fabric: “If we provide steady jobs that you can raise a family on, that actually helps rebuild the social fabric. Work, especially craft work, isn’t just a paycheck; it’s a source of identity and dignity” (Long 2025).

Long’s embeddedness by design is explicit: “I’ve invested essentially all of my family’s resources into this. It’s not just a business project—it’s become a life mission” (Long 2025; Kurutz 2025). Be-

cause he cannot leave, he has every incentive to invest in the institutional environment determining whether the mill survives. His ten-year vision: “I’d like to see a revival where the mill isn’t an isolated island but the anchor of a broader creative ecosystem here” (Long 2025).

Analysis of American Community Survey data (2012–2023) for Stafford shows unemployment among less-educated workers fell by half after Long’s acquisition. The poverty rate, which had been rising, began to decline. These are signals, not proof—the town is small, the period short, the factors many.

The case remains open. Long is attempting to build a firm and a district. Whether American Woolen generates durable institutional change cannot yet be determined.

3.5 What the Cases Show

Four cases illustrate a concept and suggest patterns, showing how corporate statecraft exists.

Firms sometimes produce institutional order. The phenomenon emerges where vacuum, capability, and agency align. It varies in orientation and outcome.

Vacuum is not absolute—it is relative to what the firm requires. It takes forms: absence (nothing relevant existed), thinness (something existed but proved insufficient), failure (prior order collapsed), abandonment (order withered as actors departed). The form shapes the task: building from absence differs from rebuilding after collapse.

Orientation and openness vary. Terman built institutions that benefited the region, not just Stanford. Miller built schools serving all residents, not just Cummins employees. Pittsburgh’s Conference was invitation-only; benefits concentrated. Long speaks of dignity and workers left behind.

Three cases are complete; one is ongoing. Terman’s Stanford, Miller’s Columbus, and Pittsburgh’s Renaissance can be assessed across decades. Long’s American Woolen cannot yet be evaluated. Including an unfinished case is deliberate: corporate statecraft is not merely historical. It is occurring now, available for observation rather than only retrospective analysis.

The phenomenon is visible once named. What follows is the work of understanding it.

Table 3. Corporate Statecraft Across Four Cases

	Terman / Stanford	Miller / Cummins	Pittsburgh	Long / Am. Woolen
<i>Period</i>	1940s–1970s	1950s–2000s	1940s–present	2014–present
<i>Vacuum type</i>	Absence	Thinness	Failure	Collapse
<i>Agent</i>	University leader	Corporate CEO	Corporate coalition	Entrepreneur
<i>Capability source</i>	Research excellence, federal ties, land	Patient capital, civic reputation	Concentrated corporate wealth	Family capital, craft knowledge
<i>Key mechanisms</i>	Industrial Park, Honors Co-op, Research Institute	Architecture program, education coalition, civic investment	Allegheny Conference, corporate-led urban renewal	Workforce development, supply chain reconstruction
<i>Orientation</i>	Open	Open	Closed	Open
<i>Outcome</i>	Silicon Valley: durable, generative	Columbus: durable, place-bound	Selective prosperity, demographic decline	In progress

4. What follows

Firms sometimes produce institutional order, and the capacity is rooted in what firms are. Four cases—three complete, one ongoing—ground the concept. What follows are implications for institutional economics, propositions for investigation, and normative questions the framework opens.

4.1 Implications for Institutional Economics

Corporate statecraft extends the Coase-Williamson-North tradition in a specific direction. Coase showed that firms produce governance internally when market coordination proves costly. Williamson specified the conditions—asset specificity, opportunism, bounded rationality—under which transactions migrate from markets to hierarchies, and identified hybrid arrangements occupying middle ground (Williamson 1985). North distinguished the institutional environment (North 1990) (the underlying rules of the game) from institutional arrangements (the specific structures through which actors organize activity within those rules). Each contributed an essential element. None anticipated that firms might produce not only the governance arrangements governing their own transactions but the institutional environment others operate within.

That is what the cases show. Terman did not produce a governance arrangement for Stanford's transactions with local firms; he produced the institutional environment—the labor market, the knowledge networks, the norms of interfirm cooperation—within which an entire regional economy came to transact. Miller did not produce a hybrid contract governing Cummins's relationship with Columbus; he produced the civic infrastructure—schools, workforce systems, architectural standards—that constituted the community's institutional order. The distinction matters analytically. In North's terms, corporate statecraft produces institutional environments, not merely institutional arrangements. In Williamson's terms, the firm is not only a governance structure but a governance source—an entity capable of producing the institutional conditions under which other governance structures operate.

This is a genuine extension, not a rejection. The logic remains comparative and institutional: firms compare alternatives, choose based on relative costs, and produce governance where existing alternatives prove inadequate. What changes is the scope of what firms can produce. The Coasean firm produces internal hierarchy. The Williamsonian firm selects among governance structures. The firm engaged in corporate statecraft produces the institutional substrate on which the selection itself depends.

4.2 Propositions

The framework generates propositions amenable to systematic investigation.

First, firms with higher asset specificity to a region—patient capital, immovable facilities, place-bound reputation—should be more likely to engage in corporate statecraft than mobile firms. Embeddedness by design inverts Williamson's logic: specificity becomes not a vulnerability requiring governance but a resource enabling it. This is testable across firms within the same industry facing similar institutional environments but differing in asset mobility.

Second, corporate statecraft should be more probable where state institutional capacity is low relative to the governance demands of the economic activity. Where the state provides adequate institutional infrastructure—training systems, knowledge networks, regulatory frameworks—firms have less reason to produce it. The relationship implies that corporate statecraft is not a universal feature of firm behavior but a response to a specifiable mismatch between governance demand and governance supply.

Third, the severity of institutional vacuum may relate non-linearly to the probability of corporate statecraft. Moderate vacuum—thinness, partial failure—may be more productive than extreme vacuum, where even capable firms lack the institutional substrate on which to build. Terman had Stanford; Miller had patient capital and a functioning town. Long's more extreme vacuum—abandonment, designated distress—may prove harder to reverse. The proposition is that corporate statecraft requires a minimum institutional threshold below which even capable agents cannot produce order.

Fourth, open-orientation statecraft should produce more durable institutional orders than

closed-orientation statecraft, because open institutions generate self-reinforcing dynamics—entry, competition, knowledge spillovers—that sustain the order beyond its producer’s tenure. Terman’s Silicon Valley has outlasted Terman by four decades and continues to regenerate. Pittsburgh’s Conference-era achievements required continuous philanthropic subsidy to maintain. The proposition connects orientation to institutional resilience and is testable through longitudinal comparison of regional economies shaped by identifiable episodes of corporate statecraft.

4.3 Normative Questions

Corporate statecraft raises questions it does not resolve. Firms produce institutional order without formal consent—without elections, deliberation, or democratic mandate. They distribute gains unequally: selective prosperity is prosperity for some. The orders they produce may resist change, foreclosing future choices that affected communities might otherwise make.

These are not accusations but analytical observations. The question is whether effectiveness and welfare improvement provide alternative bases for legitimacy when democratic mechanisms are absent or inadequate—a question Dahl posed about private governance (Dahl 1985) and that the institutional economics tradition has largely set aside. Miller’s Columbus may be more livable because of corporate statecraft; it is not more democratic. Whether that trade-off is acceptable, and for whom, requires normative inquiry beyond this paper’s scope.

The actors in these cases understood something. Terman understood that Stanford’s fate was inseparable from California’s. Miller understood that Cummins could not thrive in a town that could not attract talent. Long understands that the mill’s survival requires the ecosystem’s reconstruction. Each recognized that firm boundaries do not contain firm interests—that institutional environments are not given but made.

4.4 Conclusion

Political economy has explained how institutions shape firms. The relationship can reverse—and the reversal is rooted in what firms are. Coase showed that firms exist because they produce governance. Governance production does not stop at the firm’s boundary. Under conditions of vacuum, capability, and agency, firms produce the institutional order that others must navigate.

This is the political nature of the firm: not an occasional behavior but an inherent capacity, visible whenever the conditions that ordinarily conceal it fall away. The firm is an institution within institutions—adapting to orders it did not create while producing order others must inhabit. Understanding when and how this capacity manifests—and with what consequences for whom—is the agenda ahead.

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Appendix 1. Archival and Case Materials

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Appendix 2. Interviews and Data

Flanagan, B. and Heuck, D. (2025) Interview by Author, Pittsburgh, PA, October 16.

Long, J. (2025) Interview by Author, Stafford Springs, CT, December 8.

Roger, D. and Gonzalez, G. (2025) Interview by Author, Pittsburgh, PA, October 16.

U.S. Census Bureau, American Community Survey 5-Year Estimates (2012–2021), Tables S1901, S1701, S2301, DP03.

U.S. Census Bureau, County Business Patterns (2012–2023).