Corporations As Cities: Targeting the Nodes in Overlapping Networks,

Claire Moore Dickerson, Rutgers Law School - Newark
Corporations As Cities: Targeting the Nodes in Overlapping Networks

Claire Moore Dickerson*

I. INTRODUCTION

Two modes of analysis dominate our understanding of corporate behavior today. The first takes as given that profit-maximization is the purpose of corporate entities and focuses internally on the conflict between the corporation’s managers and its owners. This perspective, transaction-cost economics, is particularly central to law scholarship in the United States. The second, perhaps a more traditional understanding of the

* Professor of Law and Arthur L. Dickson Scholar, Rutgers Law School-Newark; thanks to G. Mitu Gulati, Gregory A. Mark, Lawrence E. Mitchell, Marleen A. O’Connor, LatCrit VIII conference in May, 2003: Carmen G. Gonzales, Margaret E. Montoya, Marc Ponier; Benjamin Lewis, Rutgers Law School-Newark, 2004, and Andrew Johns, Rutgers Law School-Newark, 2005.
corporation,\(^1\) concentrates on the external manifestations of the corporation, and thus concerns itself only with corporations’ benefit or harm to society. This social-responsibility perspective seeks to modulate the corporations’ unfettered profit-maximizing in favor of competing social ends.

There is a discontinuity between these two visions, not just in the basic assumptions, but also in the consequences. Transaction-cost economics is a highly technical analysis of one small aspect of the corporate structure: the relationship between managers and shareholders. Because of this perspective’s faith in the markets, its primary concern is to ensure that the managers satisfy their duty of profit maximization for the benefit of the shareholders. The salutary nature of a corporation’s impact on society depends on managers’ proper execution of that duty.\(^2\) When, instead of benefitting society, the sharehoders. The salutary nature of a corporation’s impact on society depends on its components, to see whether the failure of any part could affect the entire mechanism. Instead, it assumes that the construction of an equal but opposite force is the most effective mode of influencing a corporation. In this vein, we have seen activists who prepare to challenge a multinational by building a combatant large and impressive as the multinational itself. They have organized customers,\(^5\) mobilized institutional investors,\(^6\) and even called on the United Nations and other supranational organizations.\(^7\)

---

1. Gregory A. Mark, *Some Observations on Writing the Legal History of the Corporation in the Age of Theory*, in *PROGRESSIVE CORPORATE LAW* 67 (Lawrence E. Mitchell ed., 1995) (examining the existing literature, suggesting areas in which corporate law needs further study, analyzing the traditional approach to corporate legal history, and noting the relatively new influence of economics).

2. See infra note 19 (discussing Kaldor-Hicks efficiency).


The transaction-cost perspective peers inside the corporation and does not dwell on social impacts; the social-responsibility scholarship focuses on these impacts and sees only the corporation’s outside boundaries.

A few social actors have sought to exert influence over corporations by a method that presupposes a very different conception of the corporation. These actors have targeted particularly well-connected individuals within the corporation, persons that the transaction-cost and social-responsibility perspectives fail to identify. By targeting these persons, the social actors have affected the entire enterprise, just as surely as an event that affected the electrical grid near Cleveland, Ohio for less than a second pulled the plug on fifty million people from Detroit to Toronto to New York City. The social actors’ success illustrates a new understanding of the corporation—one that integrates and expands the traditional perspectives. The success of these few social actors supports the view that a corporation is a community. Like other communities, the corporation is both an organization and an institution; it is embedded in and composed of the larger environment.

8. See, e.g., James Glanz, *Its Coils Tighten, and the Grid Bites Back*, N.Y. Times, Aug. 17, 2003, at 4:1 (describing the August 14, 2003 blackout in the northeastern United States and eastern Canada believed to have been triggered by a “glitch” lasting two tenths of a second). Finding the essential node in a social network can be expressed in many ways. For example, Joan Williams and Cynthia Calvert describe a top-level manager as, in effect, a node. See, e.g., Joan Williams & Cynthia Thomas Calvert, *Balanced Hours: Effective Part-Time Policies for Washington Law Firms*, 8 WM. & MARY J. WOMEN & L. REV. 357, 396-99, 405-09 (2002) (discussing the importance of buy-in at the top of the hierarchy when seeking to convince the entire body politic of the law firm that part-time lawyering can be economically beneficial, and then institutionally supporting the part-time policy). Starting from the top always works, but the difficult task is to identify the lowest possible person in the hierarchy who has significant influence.

9. For the distinction between an organization and an institution from an economist’s perspective, see DOUGLAS C. NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE 3-5 (1990) reasoning:

[[Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction . . . . Organizations . . . . are groups of individuals bound by some common purpose to achieve objectives. Both what organizations come into existence and how they evolve are fundamentally influenced by the institutional framework. In turn they influence how the institutional framework evolves.

Id. In the sociological literature see ANTHONY GIDDENS, SOCIOLOGY: A BRIEF BUT CRITICAL INTRODUCTION 11 (2d ed. 1987) (explaining “we create society at the same time as we are created by it. Institutions . . . . are patterns of social activity reproduced across time and space.”); MARY DOUGLAS, HOW INSTITUTIONS THINK 46 (1986). Douglas states:

[minimally, an institution is a convention. . . . For a convention to turn into a legitimate social institution it needs a parallel cognitive convention to sustain it. . . . What is excluded from the idea of institution in these pages is any purely instrumental or provisional practical arrangement that is
of interrelated networks operating at multiple levels. This is the intuition that I explore here.

From the social-responsibility scholars, I adopt the notion that the corporation’s impact on society is important, and that despite the markets’ constraints, we still must monitor the consequences of corporate action. From the transaction-cost economists, I accept the recommendation that we look within the corporation, but I expand the concept to study more than managers and their relationships to shareholders. Having bridged the dichotomy between these two schools, I use sociology and network theory to show how and why social actors can be so effective.

The integrated view has important consequences for our understanding of the corporate form. If network-nodes within the corporation’s internal community can be hugely effective targets, the legal literature must recognize that reality. It must prepare corporate form. If network-nodes within the corporation’s internal community can be and why social actors can be so effective.

The integrated view has important consequences for our understanding of the corporate form. If network-nodes within the corporation’s internal community can be hugely effective targets, the legal literature must recognize that reality. It must prepare to balance the interests of the corporation’s various constituencies with those of the social actors. It will have to consider the duties of all those with power, including the nodes and the social actors who target them, and will have to reconsider the duties of corporate management whose powers are less than the standard theories presume. While exploring all these effects is beyond the scope of this Article, I describe here the integrated theory and what it teaches us about strategies to influence corporate behavior.

Part II describes in more detail the cost of the boundary between the social-responsibility and transaction-cost perspectives. To prepare to peer anew within the corporate black box, Part III describes cities, and how their inhabitants interrelate and form communities. Part IV is a discussion of network theory, and Part V applies to corporations what we have learned about cities and networks. Specifically, Part V focuses

---

**Id.:** Neil Fligstein & Robert Freeland, *Theoretical and Comparative Perspectives of Corporate Organization*, 21 ANN. REV. SOC. 21, 32 (1995). Fligstein and Freeland state:

> [i]nstitutional theories [posit that as . . .] firms interact with each other and their environments, formal or informal rules emerge to govern interaction, and organizational fields are formed . . .

Once socially defined institutional environments are in place, changes in organizational form are driven more by considerations of legitimacy than by concern for rational adaptation or efficiency.

**Id.:** Ronald L. Jepperson, *Institutional Effects, and Institutionalism, in The New Institutionalism in Organizational Analysis* 143-63 (Walter W. Powell & Paul DiMaggio eds.) (1991), at 143 (stating “the core denotation of institution in general sociology, that is, an institution as an organized, established, procedure. These special procedures are often represented as the constituent rules of society (the ‘rules of the game’). They are then experienced and analyzable as external to the consciousness of individuals.”) (footnotes omitted; see generally Lawrence E. Mitchell, *Structural Holes, CEOs, and Informational Monopolies: The Missing Link in Corporate Governance* (Oct. 31, 2001), unpublished manuscript, on file with author).

10. Note that the outside-focused analysis offered in this Article does not seek to define what are acceptable corporate impacts. This point is discussed elsewhere in the literature. See, e.g., Dickerson, *Transnational Codes, supra note 7*. The current Article, instead, assumes that these impacts exist and emphasizes that an integrated view of the corporation reveals strategies for influencing the behavior that causes those impacts.

11. I am not arguing that no boundaries exist for any purpose. A corporation’s legal structure and juridical existence encourages us to anthropomorphize the corporation. Most of us have done so. See, e.g., Michael Klausner, *Corporations, Corporate Law and Networks of Contracts*, 81 Va. L. Rev. 757 (1995) (discussing externality resulting from the “nexus of contracts” on which a corporate reality arguably is metaphorically built). This discussion could not occur unless there were an “outside” to the corporation on which to impose externalities, although, the very concept of a nexus of contracts among the corporation’s various constituents blurs at least any boundary between the corporation and those constituent parts.
Corporations as Cities

on corporations at three different levels. The smallest scale reveals a network familiar to those who have studied virtual corporations: the core is a heavily linked node; suppliers and customers are part of the network. Drilling down to the next level reveals the corporation much as transaction-cost scholars see it, but with added complexity: not only are the directors and senior management, and to some degree shareholders, part of a network, but so are mid-level managers. Finally, at the lowest level are the workers who are at the bottom of the hierarchical pyramid; these, too, operate within networks. Each of the levels unveils potential points of pressure—targets that social actors, whatever their definition of appropriate norms, could pin-point. Network analysis confirms that, despite the focus of transaction-cost economics, the major power conflicts in a corporation are not necessarily at the level of senior management and shareholders.

Finally, Part VI illustrates how social actors have in fact brought pressure to bear on corporations, and how these experiences are consistent with network theory. The examples provide anecdotal evidence that corporations are indeed like cities—that they are composed of networks. The examples confirm that the integrated reconceptualization offered here does describe how social actors can (and do) affect an entire corporation by focusing on nodes. The examples also describe practical strategies that, being based on network theory, enable the social actors to be more effective more cheaply than the traditional social-responsibility literature suggests.

II. THE BOUNDARY BETWEEN TRADITIONAL CORPORATE-GOVERNANCE PERSPECTIVES IS ARTIFICIAL AND MASKS REALITY

There is indeed a discontinuity—a boundary—between the spaces theorized by the two major corporate-governance perspectives. While the social-responsibility scholars look at the consequences of the multinational enterprises’ power but not at their inner workings, transaction-cost scholars focus on only one aspect of the enterprises’ internal operations and pay only the most oblique attention to social responsibility.12 Eliminating that border reveals a category of potentially effective responses to corporate power.13

A review of social-responsibility writings confirms that an entire literature focuses on the consequences of corporate action, and not on the method by which the corporation’s human actors decide on a particular action.14 This type of analysis tends to

12. In a slightly different way, the management literature has noted the incompleteness of existing studies. See, e.g., Bryan W. Husted, A Contingency Theory of Corporate Social Performance, 39 BUS. & SOC. 24 (2000) (noting that some analyze corporate social performance by reviewing “process,” and others, “outcomes,” the author then discusses specific strategies of internal management to respond to specific social issues, only some of which are legal obligations rather than “merely” norms).

13. As noted in the Introduction, this Article affects a link between the social-responsibility and transaction-cost perspectives. It does look at the inner workings of the corporation, and it does so for the articulated purpose of facilitating influence over the corporation’s actions. That does not mean that this Article must identify appropriate norms for corporate behavior: what is important for purposes of the current analysis is that the corporation’s inner mechanism helps determine corporate action, although I have elsewhere considered how to identify appropriate corporate behavior. See Claire Moore Dickerson, Ozymandias as Community Project: Managerial/Corporate Social Responsibility and the Failure of Transparency, 35 CONN. L. REV. 1035 (2003) [hereinafter Dickerson, Ozymandias]; Claire Moore Dickerson, Human Rights: The Emerging Norm of Corporate Social Responsibility, 76 TUL. L. REV. 1431 (2002); Dickerson, Transnational Codes, supra note 7.

be relatively broad-brush, sometimes philosophical, sometimes grounded more in the social sciences; it is not uniformly either pro- or anti-multinational. Some of the social-responsibility discussion has reflected an extraordinarily negative view of corporations’ exercise of power. Other commentary on corporations’ social responsibility is far more positive. Jagdish Bhagwati, for example, asserts that multinationals do not select a particular location in order to take advantage of lax environmental or labor regulations, and that on a macro level free trade not only increases wages in less-developed countries, but even decelerates declines in developed-country wages. According to Bhagwati, as he operates on the highest level of transnational economic policy, to give multinationals the freest possible rein by eliminating trade-based restrictions not only creates no harm, but actually raises all boats. Nevertheless, whether or not the social-responsibility literature is favorably disposed to corporations, it does not focus on the corporation’s inner workings. As a consequence, it does not offer a theoretical basis on which to construct a strategic template for influencing multinationals and other corporations.

The other major perspective applied to corporations is the neoclassical approach in its various permutations. Transaction-cost economics, for example, asks why firms are formed and answers that, in specified circumstances, an organization is more efficient than a web of contractual relationships. Although the fundamental question about corporations’ reason-for-being could lead to inquiries about social policy, this literature does not focus on the corporation’s obligations to the larger society, that is, on its corporate social responsibility. Instead, it urges an “efficient” outcome. To be sure, implicit is the conclusion that an efficient outcome will benefit society—that is what efficiency means—but this benefit remains the byproduct of markets’ normal operation, not the target of intentional human action.


16. JAGDISH BHAGWATI, FREE TRADE TODAY 59-60, 79-80 (2002) (suggesting that there should be both mandatory and voluntary standards because (a) multinationals comply with them anyway, and (b) it would assuage the activists’ fears; further, he recommends that the standards, to the extent mandatory, be enforced by non-trade methods).

17. Id. at 85-86 (asserting that semi-poor countries absorb the very poor countries’ production of labor-intensive goods, thus sheltering the highly industrialized economics, including the United States, from the pressure on wages that would be exerted if those goods were imported).


19. The precise definition of efficiency, whichever flavor is adopted, thus assumes that—at minimum—no
Instead of focusing on social responsibility, this governance literature focuses on one aspect of the corporation’s inner workings—the relationship between owners and management. There are many ways to explain this, an easy one being that, as Berle and Means famously asserted seven decades ago, the relationship between shareholders and management is central to an understanding of the modern corporation. Another way of understanding the obsession with management-owner conflicts is to appreciate the importance of contract to transaction-cost economics. Under the rubric of transaction-cost economics, Oliver Williamson emphasized the contractual and contract-like transactions that determine what form of governance is efficient, and studied the relationship between shareholders and boards. In their turn, scholars cited by Williamson deeply considered the relationship between shareholders and management.

Because, as we have seen, transaction-cost economists assume that the market determines the efficient result, as the economists study corporate interiors they can further assume not only that the corporate form can be an efficient response to market realities, but also that corporate impacts are, on balance, beneficial to society. This kind of analysis continues to this day, and certainly is very different from questioning how to influence a corporation through its inner mechanisms. As a practical matter, the...

---

22. See id. at 1199 (citing BERLE & MEANS, supra note 20) and 1210 n.43 (citing Michael C. Jensen & William H. Meckling, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, 3 J. FIN. ECON. 305 (1976)). Of course, Williamson is not alone in focusing on the relationship between directors and shareholders.
23. See, e.g., BERLE & MEANS, supra note 20, at 275 (discussing duty of management to shareholders); Jensen & Meckling, supra note 22, at 323 (discussing the relationship between managers who also are owners and other equity holders). Jensen & Meckling propose a property theory that focuses on agency costs rather than transaction costs; however, because agency costs will have to be negotiated, they will determine at least certain transaction costs. Jensen & Meckling, supra note 22, at 323-24 (discussing the discount that potential equity holders will demand to compensate them for the cost of monitoring; the cost of the negotiation is a transaction cost).
24. See COLEMAN, supra note 19, at 84 (discussing Kaldor-Hicks efficiency: the “winner” has gained more in value than the “loser” has lost).
outcome of the focus in the United States on shareholder-management relations has been the further assumption that the owners (the shareholders) are the primary constituency to whom managers owe a duty, and that a fundamental aspect of that duty is profit-maximization for the shareholders’ benefit. 26

Importantly, the U.S. focus on shareholder primacy has allowed governance scholars to create an image that tends to shelter the corporation from the larger society. On the one hand, the scholars concentrate on management behavior within the corporation. On the other, they simultaneously accentuate the perception that, viewed from the outside, managers are running a kind of black box. Further, it is a self-referential black box (or fortress), since the benefit belongs to a loosely connected constituent part—the shareholders.

This corporation-as-fortress conception is a powerful image that, interestingly, is reflected in the social-responsibility perspective, and drives the behavior even of activists outside the legal academy. Protesters have latched onto the concept of the black box, but not onto the transaction-cost economists’ interest in the box’s interior. Instead, protesters with very different techniques have experienced the corporation as a monolith, and have sought either to become as big as the target, or to enlist the support of entities as big as the corporations they were targeting. The Reverend Sullivan aimed his anti-apartheid Principles at institutional shareholders because they possess the size and gravitas to attract attention. 27 In this way, the social actors anthropomorphize the corporation, and although with very different techniques have experienced the corporation as a monolith, and have reflected in the social-responsibility perspective, and drives the behavior even of activists outside the legal academy. Protesters have latched onto the concept of the black box, but not onto the transaction-cost economists’ interest in the box’s interior. Instead, protesters with very different techniques have experienced the corporation as a monolith, and have sought either to become as big as the target, or to enlist the support of entities as big as the corporations they were targeting. The Reverend Sullivan aimed his anti-apartheid Principles at institutional shareholders because they possess the size and gravitas to pressure corporations not to invest in South Africa, and promoters of consumer boycotts work to build grass-roots support significant enough to catch the multinationals’ attention. 28 In this way, the social actors anthropomorphize the corporation, and although their real goal is to influence the managers of the multinationals either directly or through the managers of the institutional shareholders, they do not consider that tinkering with a corporation’s inner structure may reveal a cheaper, more effective point of pressure. 29

The advantage of the social-responsibility and transaction-cost perspectives is their transaction-cost analysis is much more concerned purely on the interior of the corporation; that is another way of not being focused on “corporate social responsibility.” See, e.g., George G. Triantis, Financial Slack Policy and the Laws of Secured Transactions, 29 J. LEGAL STUD. 35 (2000) (discussing managerial discretion in connection with availability of cash).


28. Protesters necessarily challenge the concept of shareholder primacy, since they assert that non-shareholder constituencies, too, can have rights against the corporation. They thus deny the legitimacy of one of the fortress’s foundations. Nevertheless, the activists still interact with the corporation as though it were a monolithic black box.
Corporations as Cities

clarity. The disadvantage is incompleteness. Put differently, the corporate governance literature that considers social responsibility masks the corporation’s inner workings; the literature that does pry open the black box looks only at the relationship between management and shareholders.

Of course, the distinction between the two forms is sometimes difficult to draw, and there are scholars who have moved beyond the traditional transaction-cost perspective to consider at least some aspects of a corporation’s inner workings in the context of corporate social responsibility. For example, Lawrence Mitchell’s discussion of “corporate irresponsibility” certainly speaks of the corporation’s impact on society and also contemplates the role of senior management within the corporate hierarchy. Similarly, Lynne Dallas’ assertion that managerial primacy causes corporations to inflict broad impacts, well beyond their shareholders, does link at least senior management to a corporation’s social responsibility. These authors thus consider, to some degree, both perspectives are not always crisp, to a greater or lesser extent one legal tradition still looks at the outside, and the other looks at the inside, or at least at part of the inside.

More than legal scholars, sociologists have formed a bridge between what happens within an enterprise and the enterprise’s role in society. Neil Fligstein and Robert Freeman, for example, discuss resource-dependence among managers at various levels, but also consider the role of the corporation in society, at least insofar as to suggest that organizations have an incentive to foster a stable political, economic and social environment. The dichotomy between the perspectives are not always crisp, to a greater or lesser extent one legal tradition still looks at the outside, and the other looks at the inside, or at least at part of the inside.

29. LAWRENCE MITCHELL, CORPORATE IRRESPONSIBILITY: AMERICA’S NEWEST EXPORT (2001); See also William W. Bratton, Never Trust a Corporation, 70 GEO. WASH. L. REV. 867 (2002) (discussing the Mitchell book and asserting the difference between a corporation’s, and therefore managers’, sense of morality on the one hand, and that of non-business humans on the other). Progressive corporate scholars who advocate stakeholder rights tend both to look within the corporation (at least as far as shareholders and senior management are concerned), and to consider impacts on society. See generally PROGRESSIVE CORPORATE LAW, supra note 1. Some do make a particular point of considering more than senior management and shareholders. See, e.g., Marleen A. O’Connor, The Human Capital Era: Reconceptualizing Corporate Law to Facilitate Labor-Management Cooperation, 78 CORNELL L. REV. 899 (1993) (advocating expansion of the directors’ fiduciary duties in favor of employees).

30. See Lynne L. Dallas, The New Managerialism and Diversity on Corporate Boards of Directors, 76 TUL. L. REV. 1363 (2002) (discussion, from a perspective that is not purely neoclassical, of managerial primacy in U.S. corporations as a vehicle for considering the impact of corporations on more than their shareholders); see also Dallas’s monumental work on the socio-economics of corporations, LYNN L. DALLAS, LAW AND PUBLIC POLICY: A SOCIO-ECONOMIC APPROACH (forthcoming 2004) [hereinafter DALLAS, LAW AND PUBLIC POLICY] (analyzing the relationship between economic and social processes and the law).

31. Especially in her forthcoming text, Dallas writes extensively about the social context in which corporations operate, and she directly challenges the shareholder-manager model that assumes shareholder primacy. She nonetheless acknowledges the dominance of the shareholder-primacy model, and the analysis focuses on the shareholder-manager level. See DALLAS, LAW AND PUBLIC POLICY, supra note 30.

32. Fligstein & Freeland, supra note 9, at 29 (discussing resource-dependency theory); id. at 31 (asserting that organizations seek a stable state where “state” means nation).
The legal literature needs an accurate and nuanced description of the corporations’ inner mechanism and the outside realities, with a particular focus on the bridge between them. Such an understanding prepares us to consider corporate social responsibility because it enables us to identify the cheapest, most effective strategy to encourage multinational enterprises’ conformity to specified norms. Influencing the multinational enterprises toward these norms is the social-responsibility component; the “cheaply and effectively” part requires us to follow the transaction-cost scholars into the corporation’s inner mechanism and the outside realities, with a particular focus on the bridge between them. We integrate the outside and inside perspectives by acknowledging that the social institutions have norms; that organizations, including multinational corporations, are embedded in these institutions; and that people acting with and within the multinational enterprises experience these both as organizations and as institutions. For these purposes we cannot stop at the level of the shareholders and senior management, the highest stratum of the hierarchy.

To pursue this analysis, I start the study of the corporation’s inner mechanism by using an analogy based on a special kind of community: the city. I will concentrate on New York City, and on a squatter settlement on the outskirts of Rio de Janeiro. The first illustrates the prerequisites to connections that create a community, while the latter assumes those connections and has evolved into a sophisticated institution wholly outside the law’s shadow.

III. TALE OF TWO CITIES: CONNECTEDNESS AND THE EVOLUTION OF INSTITUTIONS

A. The City and the Prerequisites to Connectedness

For over four decades, Jane Jacobs has been a prescient student of cities. In the early 1960s, she described her own beloved Greenwich Village in New York City. She wanted to understand why certain areas were vibrant and others were not. She studied the physical configuration the city. She also explicitly considered the inhabitants’ personalities and relationships.

Based on her observations, she concluded that long blocks with few shortcuts from

33. See supra note 9 (discussing the difference between an institution and an organization).
34. More than twenty years ago, Gerald Frug pointed out that already in the colonial period cities were treated as corporations. Gerald Frug, The City as a Legal Concept, 93 HARV. L. REV. 1057, 1095-96 (1980). I am asserting that corporations are like cities, specifically in their network structure.
35. See JANE JACOBS, THE DEATH AND LIFE OF GREAT AMERICAN CITIES (1961) (describing neighborhoods in New York City and other cities in the United States); BOAVENTURA DE SOUSA SANTOS, TOWARD A NEW COMMON SENSE: LAW, SCIENCE AND POLITICS IN THE PARADIGMATIC TRANSITION 124-58 (1995) (describing a composite squatter settlement or “favela” outside Rio de Janeiro, Brazil). That one city is in the first world and the other in the third is an artifact of my choice of studies. That fact should not, however, be relevant. As Boaventura de Sousa Santos’ study amply confirms, the conditions described in Jane Jacobs’s analysis of New York neighborhoods exist elsewhere. See infra note 45 and accompanying text (referring to narrow streets & byways). Similarly, the extralegal institutions described by Sousa Santos are apparent also in those corners of the first world wherever the law fails to penetrate. See, e.g., ROBERT JACKALL, WILD COWBOYS: URBAN MARAUDERS & THE FORCES OF ORDER 156-73 (1997) (describing the emergence and operation of a drug business in the Bronx, NY; obviously, this enterprise is extra legal).
one street to another promote dead spaces.37 Structurally, therefore, a multiplicity of paths help create an environment that is alive, with people congregating on sidewalks. But paths, while necessary, are not sufficient. People have to be willing to mill about and linger. Thus, a park which, by eliminating buildings and similar obstacles in effect provides an infinite number of paths, can be an absolute dead zone.38 Shops, Jacobs found, are critical to a neighborhood’s vibrancy precisely because they draw people outside their homes and then encourage them to linger.39 She also noticed that certain “hop-skip” people are central to the life of a community.40 The owner of the delicatessen on the corner, for example, knows everyone’s business because everyone stops to chat.41

When Jacobs contemplated her observations, she concluded that a city would be alive only if the relevant area possessed both significant density in population, and sufficient pathways to create meeting places.42 Once established, a neighborhood maintained its vibrancy through points of interest that served as people-magnets.43

### B. The Connected City As Institution

Boaventura de Sousa Santos, the noted Portuguese sociologist, published a rich, composite description of a Brazilian squatter settlement.44 Given the sheer number of people living cheek by jowl, certainly density exists. Given the narrow streets and plentiful byways, there is a plethora of shortcuts. There is a thriving commercial center.45 There also are recreational sports teams, parishes and a Residents’ Association.46 Through and within these vehicles there are indeed people who know everyone’s business, and to whom everyone turns for advice and help. In their own jurisdictions, the president of the Residents’ Association and the parish priest, for example, are central figures—“hop-skip” people.47 Connectedness is everywhere. This environment proves to be fertile ground for a highly complex and sophisticated institution that has emerged outside the reach of the law.48

---

37. See id. at 178 (asserting the advantages of short blocks).

38. See id. at 266 (discussing effort required to ensure that both the park and its surroundings act as magnets rather than barriers).

39. See id. at 56, 63 (commenting on the importance of stores to bring people out, and on the sterility of a street without stores).

40. JACOBS, supra note 35, at 60 (examining the delicatessen owner); see also id. at 134-37 (defining “hop-skip” people); id. at 272 (referring to Herbert Gans’s seminal study of the strong extra-legal controls that “unshammed” Boston’s West End). The Gans article to which Jacobs refers is Herbert J. Gans, Human Implications of Current Redevelopment and Relocation Planning, 25 J. AM. INST. PLANNERS 15 (1959), which Gans used as the basis for HERBERT J. GANS, THE URBAN VILLAGERS: GROUP AND CLASS IN THE LIFE OF ITALIAN-AMERICANS 347, 37 (1982) (carefully distinguishing a low-rent area with functioning stores, well-kept apartments, and a basically stable population from a slum that should be destroyed).

41. People also may request small services such as receipt of packages or dry cleaning. See JACOBS, supra note 35, at 60.

42. See also id. at 150-51 (stating the importance of pathways); id. at 205, 207 (mentioning the importance of concentration of people, with reference to diversity).

43. See id. at 218 (discussing the importance of diversity of uses within a neighborhood).

44. See SOUSA SANTOS, supra note 35, at 158.

45. See id. at 238.

46. See id. at 158, 160.

47. See id. at 164 (Residents’ Association); id. at 160 (priest).

48. See also Larry Rohter, Out of the Slums of Rio, an Author Finds Fame, N.Y. TIMES, Apr. 26, 2003, at
Consider the effect of living in a wholly extralegal environment. The land on which the settlement grew belongs to the state; dwellings are rough shacks constructed of brick and cement; sanitation is highly questionable, although most shacks have electricity and running water. Because the inhabitants are squatters, they obviously have no official ownership title to their homes; nor do they have any official right to rent out unused rooms. The law stops at the edge of the settlement; if rent is unpaid, the landlord will not find redress in the Brazilian court system. On the other hand, the complainant does have available an extralegal forum, well-respected in the community. The Residents’ Association has a president whose role is semi-official: official because he is acknowledged in the community, semi because his position is extralegal. Within the community, he not only authenticates extralegal documents relating to housing, but also settles disputes. The settlement contains organizations and possesses many of the attributes of an organization. Being extra legal and self-generating, it also is an institution.

The president and his Residents’ Association, like priests and other leaders of the community, have another important role, too. To be sure, they serve their own community by creating the pathways that have allowed a sophisticated institution to emerge. However, these leaders also are a link to the larger world, including a link to the official police: they are the bridges between the settlement, and the other communities. They are the means by which the settlement is itself part of the larger, Brazilian institution.

The form that has evolved both in New York and especially in Rio de Janeiro is an institution that has to some degree coalesced into an organization. The source of the institution’s unarticulated norms, and of the resultant organization, is a framework of relationships. As we shall see, this framework is a network linked to other networks.

IV. THE THEORY AND PRACTICE OF NETWORKS

Network theory is a powerful tool; it famously explains how to find a job. The least helpful contact for the purpose is the applicant’s closest friend: most friends and acquaintances will be overlaps, that is, persons already in the same cluster as the applicant. To meet new prospects, the applicant should instead seek out a more distant connection who can introduce the applicant to an entirely new cluster of potential employers. But network theory has far broader application; it provides the enhanced view within the corporation that transaction-cost economics has begun.

---

49. See SOUSA SANTOS, supra note 35, at 158.
50. See id. at 194.
51. See Jepperson, supra note 9 (discussing the difference between institutions and organizations).
52. See SOUSA SANTOS, supra note 35, at 164 (discussing the interaction amongst the Residents’ Association president, and other leaders such as priests).
53. I am focusing on the aristocratic (hierarchic), rather than egalitarian form of network. See generally MARK BUCHANAN, NEXUS: SMALL WORLDS AND THE GROUNDBREAKING SCIENCE OF NETWORKS 119-20 (2002) (describing the difference between aristocratic networks (nodes having a wide disparity in numbers of links) and egalitarian networks (nodes having roughly the same number of links)).
A. The Power of Networks: How They Operate

The power of the network form depends on the kind of cluster that the applicant can access; the bridge between clusters is critical. If the bridge to the new cluster possesses a disproportionately large number of close connections—other bridges—and maybe a few looser ones to yet other clusters, the applicant is well on the way to locating the dream job. In a negative vein, that is exactly how an epidemic progresses. The World Health Organization (“WHO”) has surmised that in early 2003 Severe Acute Respiratory Syndrome (SARS) was spread principally by a very few people, each of whom infected a large number of people. Even if most people will infect only very few (if any) other people, the presence of a handful of “super spreaders” can launch an epidemic: as a practical matter, it is inevitable that someone with a huge number of contacts will infect more than a single other person. This certainly is the way sexually transmitted diseases are propagated. As the public-health experts know, a few very active people can cause the great majority of STD cases.

Consider the consequences if the virus to be communicated is information, including commands. Although there are methodological problems with his study, that was what Stanley Milgram set out to analyze when he asked a few people in Nebraska to forward a letter to a Boston stockbroker identified by name and city, but otherwise unknown to the Nebraska participants. Milgram instructed the initial recipients to channel the letter only through people they themselves knew well. This was the genesis of the famous “six-degrees of separation” mantra, because Milgram reported not only that most of the letters reached the stockbroker, but also that, typically, the letters passed through the hands of only five people (six “jumps”) before arriving to destination. Serious questions about Milgram’s study have recently surfaced: he may have placed a thumb on the scale to drive the high percentage of transactions completed within the “six degrees” of separation. Nevertheless, the process he outlined certainly describes a small-world phenomenon.

55. See World Health Organization, Severe Acute Respiratory Syndrome (SARS)—Multi-Country Outbreak—Update 25 (2003) (describing “super spreaders”), at http://www.who.int/csr/don/2003_04_09/en/ (last visited Feb. 11, 2004); but see Nicholas Thompson, The Myth of the Superspreader [sic], BOSTON SUNDAY GLOBE, May 4, 2003, at H1 (indicating that the propagation of SARS may not be scale-free but, instead may, be a normal bell-curve distribution, and that the few SARS patients who infected many others may have done so only because of medical ignorance and bad luck rather than hyper-contagion). For a discussion of scale-free networks see for example, DUNCAN J. WATTS, SIX DEGREES: THE SCIENCE OF A CONNECTED AGE 104-07 (2003) (describing scale-free networks as lacking a natural cut-off in number of links, meaning that most nodes will have few links, but a very few will have a vast amount of links).

56. BUCHANAN, supra note 53, at 183 (noting that the highly connected can cause spread of STDs).

57. See STANLEY MILGRAM, THE INDIVIDUAL IN A SOCIAL WORLD: ESSAYS AND EXPERIMENTS 259-75 (John Sahini & Maury Silver eds., 2d ed. 1992) (describing, inter alia, the Nebraska experiment).

58. See BUCHANAN, supra note 53, at 25-27 (discussing the Milgram letter experiment, and noting that the results were in fact less stunning than originally reported); see also Judith S. Kleinfeld, The Small World Problem, 39 SOC’Y 61 (2002) (discussing the methodological problems in Milgram’s letter experiment, and suggesting that the Nebraska study’s results may have been affected by the very formal appearance of the “letters”—perhaps making them more likely to be passed on by recipients, and noting that the senders were recruited from purchased mailing lists, which might privilege wealthier, and thus better-connected, people; in an earlier, Kansas-based experiment, the target had received only five percent of the letters originally sent, and these had passed through an average of eight persons); MILGRAM, supra note 57, at 264, 266-67 (Milgram’s
To put Milgram’s experiment in more classic “network” language, each letter-handler sought to deliver the letter to a person whose social context was yet closer to the broker. Each letter-handler thus was a bridge to a network different from the handler’s own. In New York City, Jane Jacobs’s shortcuts are bridges between networks, and her delicatessen owner is a node and potentially a super spreader. Similarly, the priest and the Residents’ Association president in the Brazilian settlement are high-contact nodes.

B. How to Launch a Network

The Brazilian settlement was analytically interesting not only for the existence of these nodes, but also for the remarkable emergence of a full-fledged, extra legal governance system. In other words, it is not enough to consider how a network operates once it has launched; it also is important to consider how it starts in the first place. With an epidemic, the answer seems simple: a virus, perhaps a new strain, attacks one victim, and that victim infects more than one other person, and so forth. There is, however, an even more powerful story of networks and nodes.

The classic network creates order out of chaos. More accurately, perhaps, it creates order from randomness as predicted by the so-called “power law.” The power law describes the probability that a naturally occurring network will develop. It applies to all such networks, from those that develop without human interference such as a cell’s molecules, to those with a human impetus such as the World Wide Web—or a corporation. To determine whether the power law accurately describes a network, we look within the network and count the number of participants with one link to another, and then the number with two links, and so forth, until we determine how many nodes have the maximum number of links within the relevant network. As we move from the participant with one link, to the node with two, and then double again to a node with four links, the number of those nodes within the network will decrease by the same factor at each doubling. Assume, for example, a network that has a factor of five, and that has 10,000 nodes having one or more links each. The power law predicts that the network would have over 7,000 nodes with one link, and one node with 64 links. While the description of his experiment does not reflect that the official-looking document was sent only to the Nebraska participants; instead it indicates that both the Kansas and the Nebraska participants received that type of document; infra note 69 for a discussion of what the Milgram Nebraska experiment underscores about so-called “aristocratic” networks (“rich get richer”); Kenneth Chang, With E-Mail, It’s Not Easy to Navigate 6 Degrees of Separation, N.Y. TIMES, Aug. 12, 2003, at F3 (reporting on Columbia University’s Small World Project: when 24,613 sent email messages to eighteen people in thirteen countries, the successful communications required only four steps; however, only 384 email were forwarded to the destination, representing two percent of the original messages sent).

59. Indeed, Milgram explicitly recognized that Jacobs understood urban development to include small-world issues. MILGRAM, supra note 57, at 260 (discussing Jacobs’s description of a childhood game she played, trying to guess what would be the shortest chain between two individuals from very different backgrounds and locals). See JACOBS, supra note 35, at 134-35 (describing the childhood game).


61. See BUCHANAN, supra note 53, at 100.

62. See id. at 86-87; see also Réka Albert, et al., Internet: Diameter of the World-Wide Web, 401 NATURE 130 (1999) (describing the Web as a “small-world” phenomenon but, in the process, discussing the documents’ links as following the power law).

63. The following example assumes a factor of 5, as exists in fact for the Internet. See Michalis Faloutsos,
factor will be different for different networks, the consequence is the same: a very few massive nodes, such as super spreaders, will have an impact hugely disproportionate to their number. 64

Yes, you may say, but how is it that the first participants find each other to become nodes? For a disease-super spreader, perhaps there are “Typhoid Marys” who display very few symptoms, if at all, but nevertheless shed virus. 65 Thus, they make scores of contacts daily, many of them random. Similarly, if a molecule sits at random, and another molecule is sent into the same environment also at random, it may or may not hit the first; assume that if it hits the first, it will stick. As millions of molecules are introduced, each from a random direction and on a random path, some will stick and will begin to pile on in the form of branches. 66 Just as rain will first hit the outside of a fir tree, and only much less frequently penetrate to the trunk, the tips of the branches will tend to catch these randomly moving molecules and thus to grow, while at the same time sheltering the center. Thus, based on random movement, a delicate, branch-like figure can emerge, based on the principle that it is more likely that another molecule will adhere where many others have already settled. 67

In other circumstances, the scenario is not based on purely random actions because, for example, psychology intrudes. There are certain law review articles that are disproportionately cited. 68 At the very beginning, the number of citations may be a combination of randomness and the quality of the article, but later, a different kind of intentionality intervenes; we know that our own articles will have more gravitas if we refer to frequently cited articles and authors. Thus, more and more of us cite the famous article. Each of us in our own disciplines could probably count on the fingers of one hand—two at most—the number of articles that regularly appear in our own writings as truly seminal. Even Pareto noted that, both literally and figuratively, the rich get richer. 69


<table>
<thead>
<tr>
<th>No. links per node (x, doubles)</th>
<th>1</th>
<th>2</th>
<th>4</th>
<th>8</th>
<th>16</th>
<th>32</th>
<th>64</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob. frequency of nodes (1/10^2.2)*</td>
<td>1</td>
<td>2.176</td>
<td>.0474</td>
<td>.0103</td>
<td>.0022</td>
<td>.0005</td>
<td>.0001</td>
</tr>
<tr>
<td>No. nodes, if 10K- node universe</td>
<td>7.174*</td>
<td>2.200</td>
<td>500</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

*Factor between freq. (5)

#The number of nodes with one link is the balance of the 10K nodes since applying the formula results in 1/10^2.2 = 1, which would mean a probability that all the nodes have only one link.

We can say that there is a node with a maximum number of links even though the network is scale free because, as a practical matter, networks in real life are finite in size. See WATTS, supra note 55, at 111-12.

64. See BUCHANAN, supra note 53, at 82-83.

65. “Typhoid Mary” can, of course, shed bacteria too (that’s what *salmonella typhi* is). For more on Mary Mallon, a.k.a. “Typhoid Mary,” see, for example, JUDITH WALZER LEAVITT, *TYPHOID MARY* (1996).

66. See BUCHANAN, supra note 53, at 104.

67. See id. at 104-05 (depicting fractals).

68. See id. at 112 (noting that new scientific articles are more likely to cite well-known papers).

69. See WATTS, supra note 55, at 106 (noting that Pareto had recognized that, across nations, the distribution of wealth follows the power law); id. at 108-11 (noting that larger cities grow faster); BUCHANAN, supra note 53 at 111-13 (describing the Barabási and Albert computer-generated experiment, and noting that the same principle applies to rivers and their tributaries). Consider also Milgram’s Nebraska-letters experiment compared to the earlier experiment, and the methodological flaws identified by Kleinfield. See generally
Psychology intrudes in a different way when speaking of social contagion. Consider each person who encounters someone infected with a virus and fortunately does not get ill; the next time this person meets someone infected, the chance of becoming ill is the same as it was the first time. In other words, each meeting is independent of the other.\(^{70}\) In contrast, every time I hear the same opinion asserted by someone, it gains influence, especially the first few times. That emphasizes two points: (a) although we must have some connections to others in order to hear their opinions, the fewer people who express an opinion, the more important each person’s opinion will be, and (b) we tend to be influenced disproportionately by those who are in our immediate social neighborhood.\(^{71}\)

The important, overarching concept is precisely that each next encounter is not independent of the prior one: neighborhood, broadly defined, matters.

In the Brazilian settlement, once the first seed of self-governance was dropped in the super-connected soil, the Residents’ Association captured more and more business. Initially, the contacts may have been largely random as the population chose among the various nodes, from priest, to Residents’ Association, to, perhaps, gang leader. But soon, at least for subject matter relating to housing, the Residents’ Association became the primary node with the largest number of links and the most influence.

Any system that can launch a network can also launch its destruction. As foreshadowing: the power law does not speak only of growth. It also announces the potential for disproportionate destruction if the appropriate node is successfully targeted. Assume that a famous article to which I have cited is later debunked. Not only is the mechanism on which public-health experts develop their strategies: the one sure way to cure or remove, those few people who have a disproportionately high number of contacts.\(^{72}\)

In the Brazilian slum, removal of the “hop-skip” people would place the entire contacts.\(^{72}\) In the Brazilian slum, removal of the “hop-skip” people would place the entire network, a small fraction of the population, in an extremely vulnerable position. This is the power law foreshadowing: the power law does not speak only of growth. It also announces the potential for disproportionate destruction if the appropriate node is successfully targeted.

Any system that can launch a network can also launch its destruction. As foreshadowing: the power law does not speak only of growth. It also announces the potential for disproportionate destruction if the appropriate node is successfully targeted. Assume that a famous article to which I have cited is later debunked. Not only is the mechanism on which public-health experts develop their strategies: the one sure way to cure or remove, those few people who have a disproportionately high number of contacts.\(^{72}\)

In the Brazilian slum, removal of the “hop-skip” people would place the entire

---

70. WATTS, supra note 55, at 230 (explaining that the spreading of a virus is an independent event).
71. Id. at 230, 235, 240-41 (stating that to spread social contagion, the early adopter must be connected to a few groups vulnerable to change that are in turn connected to other such groups). Watts emphasizes that his findings are consistent with Solomon Asch’s famous experiments in social influence. For example, the subject is shown a line clearly shorter than the other, but there are other people in the room, all or some of whom have been introduced as fellow subjects, but have, in fact, been instructed to give the wrong answer. The likelihood that the true subject’s answer will be correct depends on what percentage of the others gives the correct answer, too. Id. at 221-22; see also Solomon E. Asch, Effects of Group Pressure upon the Modification and Distortion of Judgments, in GROUP DYNAMICS: RESEARCH AND THEORY 151 (D. Cartwright & A. Zander eds., 1953).
72. See BUCHANAN, supra note 53, at 180-83 (stating that, in order to be able to push the STD network below the tipping point, the network’s aristocratic (hierarchical) nature must first be destroyed by eliminating the highly connected nodes). People with a high number of contacts can be bridges to other clusters and thus increase the spread of AIDS. See WATTS, supra note 55, at 180-81 (noting that dirty needles are particularly dangerous because strangers can pick them up; thus, clean needles help break the epidemic). Network theory also predicted the vulnerability of the electrical grid; the prediction was yet again confirmed on August 14-15, 2003, by the rapid, cascading collapse of the grid, triggered by a small event. See BUCHANAN, supra note 53, at 14-15, 22, 57 (citing, inter alia, the work of Duncan Watts and discussing the weakness of the electrical grid); GLANZ, supra note 8 (describing the August 14, 2003 collapse of the electric-power grid in the northeastern...
Corporations as Cities

institution’s fabric at risk, unless and until replacement nodes step up.73

V. CORPORATIONS AS NETWORKS

As we begin to apply to corporations what cities have taught us about networks, remember the goal. By more accurately describing how a corporation works, we are seeking the tool with which to apply more targeted (cheaper, more effective) pressure. Network theory permits a technical analysis that expands on transaction-cost economics’ study of the corporation’s interior by delving deeper in the hierarchy and by recognizing that the corporation is simultaneously composed of and part of various communities. That is the first step to integrating the interior look with the social-responsibility perspective’s focus on the corporation’s social impacts.

A. Network Theory Focuses on Aspects of Corporate Operations Previously Ignored by the Legal Literature

Even if cities are networks, how much can we learn about corporations from a study of cities? Both corporations and cities are organizations with governance hierarchies; however, the portions of the city that I have chosen as illustrations are at best institutions in the sociological sense, but not formal organizations. Even if New York City is a formal hierarchy with a mayor, a city council and a serious civil service, Jane Jacobs’s neighborhood is a spontaneously emerging institution—the backdrop against which people interact. Similarly, Sousa Santos’s Brazilian settlement is by definition an extralegal institution with unarticulated norms, and is only fragilely an organization.74 The Residents’ Association may mimic an organization, complete with a president and lesser officials, but it nevertheless is self-organized and firmly outside the official legal system.

What the network analysis offers is an opportunity to view the corporation both as composed of mini-institutions, and as a component of a larger institution. Unlike legal-scholarship’s standard perspectives discussed in Part II, above, this analysis considers both the corporation’s larger societal impact and its inner workings simultaneously. Or, at least, it studies the inner workings while recognizing, for the purpose of understanding and influencing the corporation, its impact on the larger stage.

As we saw in Part II, this is vastly different from the traditional corporate-governance literature’s understanding of the firm not as an extra legal institution, but as an organization designed to be efficient, in the sense that it is structured, typically hierarchically, to reduce transaction costs.75 Because of our study of the city, we are now
prepared to understand the consequences of failing to consider a fuller, more complex picture of the corporation’s inner workings, including its extra-legal structures. Most legal analysis of corporations, for example, does not actually focus even on the legal relationships of the corporation’s non-management employees; we leave that to the employment and labor law specialists. Instead, corporate lawyers who discuss governance train their sights on the relationship between management and the various constituencies that allege claims on the corporation. As we saw, in the United States, the mainstream assumption is shareholder primacy as the expression of managerial duty. Since the second quarter of the last century, U.S. law-scholars have spent much energy considering how to encourage managers to maximize shareholders’ wealth to the exclusion of other constituencies. It is these other constituencies that the perspective of corporation-as-city empowers.

A substantial portion of the excitement over the Enron and similar scandals, in the academy, in the government and even in the public at large, has been focused on reassuring investors—that is, the once and future shareholders. To be sure, both Congress and the public have expressed concern for Enron’s employees and the lost pensions, and the Sarbanes-Oxley Act contains a couple of provisions that would have reduced the employees’ helplessness had it existed a year earlier. Nevertheless, as of this writing, there is no act that serves employees as Sarbanes-Oxley serves shareholders.

If we reject the image of corporation-as-fortress and, instead, recognize the corporation as a series of networks bounded by structure, we can begin to see how employees interact within the corporation and with third parties, but still for the corporation’s business. Indeed, there are at least three levels at which networks operate in the corporation as a series of networks bounded by structure, we can begin to see how employees interact within the corporation and with third parties, but still for the corporation’s business. Indeed, there are at least three levels at which networks operate in the extra-legal space that exists within the interstices of formal corporate structures. For example, if we look at the corporation from thirty-five thousand feet, the scale is so small that the corporation takes up only a small portion of the map. At this level, especially today, we see the corporation as itself part of a larger network of suppliers, customers and

also supra note 19 (discussing “efficiency”).

76. See supra Part II. However, there has been extensive scholarly writing about the retirement benefits lost by Enron’s non-executive employees. See, e.g., David Millon, Workers Ownership Through 401(k) Retirement Plans: Enron’s Cautionary Tale, 76 St. John’s L. Rev. 835 (2002) (arguing that disastrous results, such as with Enron, outweigh any benefits to investing in an employer’s securities through a 401(k) plan); Susan J. Stabile, Another Look at 401(k) Plan Investments in Employer Securities, 35 J. Marshall L. Rev. 539 (2002) (examining, post-Enron, the risks of investing in an employer’s securities in a 401(k) retirement program).

77. This is less true in jurisdictions that have a more stakeholder-based jurisprudence, as have France and Germany, for example. See generally Fantoz, supra note 26. France, for example, has the concept of “intérêt social,” which means that the board of directors’ is to focus on the general corporate interest, not just on the shareholders’ interest. See Le Conseil d’Administration des Sociétés Cotées (1995), Part I, § 1, at http://www.worldbank.org/html/ldap/privatesector/cg/docs/vienot1-fr.pdf (last visited Apr. 14, 2004) (see also Dickinson, Ozymandias, supra note 13, at 1059-60).

Corporations as Cities

even spectators. If we zoom in to a slightly larger scale, we see the board, the senior managers, and perhaps middle managers: because we can see more definition, this network appears less horizontal than the first and, to some degree at least, it will track the formal hierarchical structure. This medium scale, as we will see, reveals a special class of employees: not only the oft-discussed corporate senior executives, but also some mid-level executives. Network analysis emphasizes an informal, not purely hierarchical relationship among even the most structure-dependent hierarchies. We no longer see directors rigidly commanding senior executives—or vice versa, we no longer ignore mid-level bureaucrats.

Zeroing in on the (relatively) microscopic level, we find networks of classic employees. This large-scale world exists below the radar of traditional governance analysis, but it also extends beyond the formal borders of any corporation, and even of any nation. The workers at Nike have their own networks within the corporation, but some are bridges to employees of far-flung suppliers. Each supplier is itself composed of networks of employees, with some workers serving as bridges to the local community.

This de-anthropomorphized and contextualized image of the corporation as a multilayered set of networks is entirely consistent with social scientists’ understanding of urban neighborhoods. The small scale could describe that part of a city covered by a particular newspaper; the medium scale could be the smallest segment that both insiders and outsiders recognize as having a “corporate identity;” the large scale layer is the “face block”—where face-to-face relationships predominate. As Sousa Santos describes it, the Brazilian settlement is probably somewhere between the small and medium scales—it appears composed of neighborhoods but still potentially the object of a single news-source. By contrast, Jane Jacobs’s neighborhood constructed of cross-streets and shortcuts possesses at least a corporate identity (“Greenwich Village”), while the neighborhood that the owners of small shops monitor probably is on the large end of the face block. Thus, her neighborhoods lie within the corporate-identity (medium-scale) and face-to-face (large-scale) brackets.

B. Corporations Are Networks: Illustrations

Having laid out the concept, illustrations supply the anecdotal evidence that

79. See Claire Moore Dickerson, Spinning Out of Control: The Virtual Organization and Conflicting Governance Vectors, 59 U. PITT. L. REV. 759, 762 (1998) [hereinafter Dickerson, Spinning] (discussing how the virtual organization may allow for reallocation of costs, but its structure is “unsuited for effective governance”).

80. See, e.g., Melvin A. Eisenberg, The Board of Directors and Internal Control, 19 CARDozo L. REV. 237, 237 (1997) (noting that, despite contrary statutory structure, management of public corporations is in the hands of senior executives, not the board); see also Millon, supra note 76, at 844 (asserting that wide share dispersal leaves senior management in effective control).

81. See Dickerson, Transnational Codes, supra note 7, at 617-18 (2001) (discussing Nike as a virtual organization).

82. See GERALD D. SUTTLES, THE SOCIAL CONSTRUCTION OF COMMUNITIES 54-64 (1972) (discussing “levels in the sociocultural integration of residential groups”); see also MILGRAM, supra note 57, at 65 (discussing Suttles’s findings).

83. In fact, Jacobs is describing an even smaller self-identified community, viz., the West Village, since she is referring to the part of Greenwich Village just south of Chelsea. JACOBS, supra note 35, at 183 (referring to Chelsea). She also discusses Rockefeller Center. Id. at 182.

84. Id. at 61 (describing “an incidental forum” provided by a local candy store).
corporations are indeed both part of and composed of networks mapped using various scales.

1. Small-Scale Image

To start at the smallest-scale image: today, multinationals outsource all but their core competencies. That is, the actual corporation is the hub, with contractual spokes joining it to other business entities, some of which are suppliers, and others of which are customers. The only principal function that the hub typically retains is quality control. Manufacturing, purchasing and selling are performed by other entities, linked to the hub by contract.\(^85\) In the classic transaction-cost governance analysis of Oliver Williamson, the flexibility gained from this arrangement may, in appropriate circumstances, be more efficient than pure vertical integration.\(^86\) This conclusion is consistent with traditional assumptions about the efficiency of the firm structure: the firms within the network still can organize without explicitly reducing each relationship to contract, while the whole can simultaneously preserve flexibility. Informal systems, backed by contract, allow for quicker response than do traditional, hierarchic business forms.\(^87\)

This flexibility is particularly valuable in industries marked by significant uncertainty of demand. The fashion industry, for example, typically has supply certainty, but significant uncertainty as to demand.\(^88\) Nike fits that industry category, and demand uncertainty makes the higher capital investments of vertical integration with suppliers relatively unattractive. On the other hand, a pure, arms-length, contractual relationship with suppliers will be inadequate as well if, in order to try to meet customer demand, products have to be customized in real time. For those functions to be performed satisfactorily, the hub’s relationship with suppliers, while flexible, will have to be close and cooperative.\(^89\)

Similarly, Nike will extend its network down the food chain to its customers, the retailers, in order to maximize its flexibility. The customers may be satisfied with this arrangement because they, too, have uncertainty of demand, but they also have no choice:

\(^{85}\) See, e.g., Dickerson, *Spinning*, supra note 79, at 764 (discussing hubs); Dickerson, *Transnational Codes*, supra note 7, at 517-18 (discussing core competencies).

\(^{86}\) See, e.g., Williamson, *Corporate Control*, supra note 19, at 15-16.

\(^{87}\) See Candace Jones et al., A General Theory of Network Governance: Exchange Conditions and Social Mechanisms, 22 ACAD. OF MGMT. REV. 911 (1997) (discussing informal systems and flexibility within network governance); Joel M. Podolny & Karen L. Page, Network Forms of Organization, 24 ANN. REV. SOC. 57, 60-61 (1998) (examining the Japanese relationship with suppliers and the U.S. garment manufacturer and U.S. suppliers’ (subcontractors’) relationship); see also Dickerson, *Spinning*, supra note 79 (discussing the strengths of the virtual corporation utilizing relational contracts); Ronald S. Burt, Corporate Profits and Co-optation 184 (1983) (examining resource-dependency theory, if a business has relatively many suppliers, power shifts from suppliers to customers: if a business has relatively many customers, power shifts to suppliers). If there are very few of each, they will be hugely interdependent, of course. Id. at 225.

\(^{88}\) See Jones et al., supra note 87, at 919.

\(^{89}\) Id. at 919-23 (explaining such relations should be high in human asset specificity, in time pressure, and in frequency of exchanges). These are characteristics that make network rather than pure contract essential. The cynical would add that the hub, for its own protection, will enter into these arrangements only if it has market dominance vis-à-vis its suppliers. See Dickerson, *Spinning*, supra note 79, at 778; id. at 796-97 (discussing the fact that the relationship is not a partnership; the use of that word is at best a misstatement, at worst a ruse).
either they buy from Nike, or they do not purchase Nike products for resale. In this case, the alternative is not between a network and a bureaucratic hierarchy; rather, it is between a pure, arms-length, commercial contract on the one hand, and a network (which may include a contractual relationship) on the other.

Thus, this small-scale picture of the multinational describes a network. The multinational hub is, presumably, one of the nodes richest in links. It is the shortcut between suppliers and customers. Further, depending on each supplier’s and each customer’s own situation, the hub may be a multi-link node to other manufacturers, or perhaps to other interested parties, including host-country governments. For the suppliers, the host country often is outside the United States. For the hub, the host country may include not only the United States itself, but also the state in which the hub is incorporated and, if different, the state in which the hub has located its headquarters. County and local governments may be included, too, as may be the community of residence of the hub’s employees. The network’s boundary is difficult to draw, but for purposes of this small-scale snap-shot, I am focusing on links with entities that would be identifiable from thirty-five thousand feet.

This picture is analogous to, for example, the Brazilian settlement as part of a network that includes the official community. The Residents’ Association is a bridge, a link, between smaller networks—for example, between the settlement and the official criminal justice system—although it is only a cautious link as the Association’s leaders do not wish the settlement’s inhabitants to perceive the Association as co-opted. The Roman Catholic Church, perhaps even more blatantly, is a network bridging networks through its myriad links woven into the social fabric of the settlement and beyond. The Association and the Church are functionally similar to the connectors between various networks that flourish within the neighborhoods of Jacobs’s New York City; workers and residents, for example, contact each other through those links.

2. Medium-Scale Image

Zooming in on the multinational’s hub, we see the classic image endlessly discussed in the corporate governance literature. The multinational is embedded in its community, that is, in its commercial community, and we ask ourselves whether the managers of the corporation are behaving in conformity with their obligations. The network suggested here is closely tied to the traditional corporate hierarchy: shareholders link to the board of directors, which links to the managers. Continuing in a less classic but similar vein: these, in their turn link to division heads or to middle managers, depending on the nature of the hierarchy.

90. See Dickerson, Transnational Codes, supra note 7, at 612-14, 617-20 (discussing Wal-Mart and Nike); see also GREIDER, supra note 15, at 338, 341-45 (describing a Thai supplier of toys to U.S. companies, itself part of a Thai-owned multinational, and its connection, through its executives and other workers, to the Thai government and society).
91. See SOUSA SANTOS, supra note 35, at 164.
92. See id. at 246.
93. Id. at 379-80, 385-87 (referring to a settlement outside Recife, Brazil).
95. For these purposes, we are excluding the employment relationship. See Podolny & Page, supra note
Instead of focusing on whether the board’s duty reflects shareholder primacy, let us consider how the guts of the black box actually function. Based on the intuition of the children’s game, “Telephone,” we can expect that management will have decreasing authority in inverse proportion to the increase in number of hierarchical levels that intervene between senior management and the ultimate worker. A person far down in the hierarchy may, ironically, be particularly capable of avoiding a command. That is, after all, the reason for the board’s duty to monitor. However, despite any post-hoc, ad-terrorem value in monitoring, it is different from obtaining compliance based on the inherent persuasiveness of the command. Consider that when the corporate structure, whether explicitly or merely by social influence, creates shortcuts that reinforce the authority of the immediate superior, the dissipation of authority down the line is materially reduced. It is thus unsurprising that, even in a bureaucratic corporate structure that formally is vertically integrated, there often exist additional network links to supplement the official, vertical ones.

For instance, imagine that each manager on a particular level not only answers to that manager’s own immediate superior, but also must take into account the perceptions of the superior’s peers, and so on up the line. This structure is a form of network through which authority is relatively less degraded as it passes down through successive levels, and thus the effective point of pressure will be relatively high in the hierarchy. If, on the other hand, each person at each level responds rigidly only to the immediate superior, communications degrade down the line. Another way of phrasing this reality is that the persons lower in the hierarchy are more autonomous than in the other configuration, and that more points of pressure open, albeit lower in the hierarchy.

A law firm divided into functional departments is a business, maybe even a corporation, and does offer a familiar example of this phenomenon. Suppose that the firm’s executive committee promulgates a written policy describing how each lawyer is to bill time: by the tenth-of-hour actually spent on a client’s business. Assume that the corporate and tax practices both bill only time when actively engaged, that is, not the trip to the water-cooler and so forth. The more influence that the tax partners have over the corporate associates’ promotion, the greater will be the corporate associates’ compliance with the corporate partners’ interpretation of the billing directive. Conversely, if as a practical matter only the corporate partners’ opinions are relevant to the corporate associates’ future, it is relatively likely that these associates will consider that their slow walks to and from the water-cooler include billable meditations on the client’s matters. Since it is difficult to prove whether an associate has been aggressive or conservative in reporting billable hours, it is particularly useful for the firm—if it truly desires compliance with its billing norm—to broaden the connections, and thus to support and enhance the firm’s norms.

87. at 59 (1998).
96. Noah E. Friedkin & Eugene C. Johnsen, Control Loss and Fayol’s Gangplanks, 24 SOC. NETWORKS 395, 396 (2002) (citing WILLIAMSON, CORPORATE CONTROL, supra note 19); see also WILLIAMSON, CORPORATE CONTROL, supra note 19, at 25-26 (discussing distortion in “serial reproduction” and relating it to “authority leakage” through sequential hierarchical levels).
98. See Friedkin & Johnsen, supra note 96, at 403 (explaining Fayol’s gangplanks).
99. Id. at 402 (describing the chain-of-command).
Where should a person seeking to influence norms apply pressure as a practical matter? In the example where each associate must answer both to corporate and tax partners, effective pressure can be brought to bear at the partner level; the relevant nodes are fairly high in the hierarchy. That is the traditional paradigm. In contrast, if the corporate associates answer only to the corporate partners, these associates, because they are subject to less social influence from above, will more fruitfully be pressured directly. The relevant nodes are relatively low in the hierarchy.100

The Residents’ Association is a complex kind of network, mapped on the medium scale; it is an ostensibly hierarchical structure that provides various non-hierarchical points of entry, depending on the topic at issue.

3. Large-Scale Image

Now, we zoom in even closer. We are no longer looking at the hub as part of a larger network. We are no longer considering the network’s various officers and middle managers. Instead, on this, the largest-scale image, we are looking at the workers—the typical residents of the corporate city.

A study from the 1930s describes the interaction of workers that cannot be explained by mere obedience to hierarchical supervisors.101 Something else is at work here: social influence through networks. For example, apparently without explicit discussion, the workers agreed on an acceptable level of per-worker production. This level was below the maximum that each could have produced, and just above what they apparently conjectured to be sufficient to avoid the censure of superiors.102 The hierarchical structure determined each worker’s function, and the function tended to determine the network to which the worker belonged.103 Certain members of a job-function clique had disproportionate influence over other members of that network, and one clique had substantial influence over the other clique, although the bridges between the two networks were few. The worker with the most influence over his own group was a person on good terms with all his clique members; he had many links.104 Further, the slightly more respected, but not hierarchically superior clique influenced the other. Through its bridges to the slightly less respected clique, the more respected group apparently influenced it to greater productivity than even the industry standard (although this amount was still less than the maximum the workers could have produced).105

This experience is similar to what we saw emerge within Jane Jacobs’s neighborhood. The person with the most links, the delicatessen owner, was a person of influence.106

---

100. The pressure here is partly purely hierarchical, and partly social influence in the nature of peer pressure. Granovetter himself suggested that network flows include social influence. See Granovetter, supra note 54, at 1367 (discussing a “hysterical contagion”).
102. Id. at 180-81.
103. Id. at 178 (arguing workers with the same functions tended to be part of the same network).
104. Id. at 184-85. Another worker who regularly produced more than the unofficial ceiling lacked social influence: he was a loner. Id. at 185.
105. Friedkin, supra note 101, at 186.
106. See JACOBS, supra note 35, at 61 (stating that within this context, the delicatessen owner was a person
same force is at work at the creation of the Residents’ Association: the president of the Association was a storekeeper within the settlement. He had many links and, presumably, much influence even before being named president. 107 This story of personal links on the micro level then joins the one that describes the Association’s emergence through connections created and solidified due to the Association’s centrality to settlement-community housing. 108

VI. TARGETED INFLUENCE OVER NETWORKS: CITIES AND CORPORATIONS

We have seen that the prerequisites to networks include both density of participants so that connections are possible, and links, some of which are clustered, some of which are bridges between clusters. The obvious consequence is that removing a prerequisite will cause a network to fail.109 We are beginning to study how to influence the corporation by targeting nodes inside the corporate black box. We thus are integrating network theory’s analysis of corporate interiors with an appreciation of the strategies that the theory reveals. Network theory describes how to modify an enterprise and its behavior, and thus its social impact.

A. Targeted Destruction

Jane Jacobs was unambiguous when describing failed neighborhoods or unsuccessful urban development. The structures did not encourage people to be outdoors, so they never encouraged the density necessary to form connections. The structures also neglected to channel people along pathways that would increase the likelihood of establishing connections. Specifically, in failed environments the blocks were too long to allow easy ambling, and the storefronts were built too far from the residences to serve as impromptu meeting places.

To continue the thought, how then to destroy Jacobs’s vibrant, Greenwich Village neighborhood? Block off intermediate pathways and price delicatessen owners out of business. No one would roam the streets or stop to chat. And how to destroy the Residents’ Association? Indicate to the public that the Association’s president and other functionaries are in cahoots with the official police, or are otherwise untrustworthy. The entire extra-legal construct would collapse. This is no different from stopping an epidemic by putting a super spreader out of commission.110 In a typical hierarchical network with the number of highly linked nodes as predicted by the power law, if half of all the links are destroyed at random, the network will continue to function.111 However, targeting makes a difference—instead of destroying nodes randomly, focus only on the best-linked nodes. If eighteen percent of these are removed, the entire system
collapses. Very few nodes need be destroyed: not eighteen percent of all nodes; only eighteen percent of the few heavily linked ones.

And how does this apply to multinational corporations? Consider the network that is Toyota, mapped on the small scale. As is typical of many companies today, Toyota has long sought to operate through a network of suppliers in order to maintain maximum flexibility. In 1997, some two hundred companies worked together to supply Toyota on a just-in-time basis. One of these suppliers was the only source for a component essential to brakes; in fact, the particular part was manufactured in a single plant. That is a highly connected node. When the plant burned to the ground one Saturday night, all the Toyota to brakes; in fact, the partic ular part was manufactured in a single plant. That is a highly connected node. When the plant burned to the ground one Saturday night, all the Toyota plants, and many plants of Toyota’s suppliers, were idle by the following Wednesday.

Destruction of the Toyota network obviously was an undesired outcome of the company’s participation in a network that, on the small-scale map, included its suppliers. Sometimes, however, it is not by accident that a heavily linked node is destroyed; sometimes the goal is to attack a node precisely in order to destroy the targeted network. Consider, for example, the electricity-generation industry: there, proponents of a new, pro-centralization network purposely overwhelmed a larger, well-established network that favored decentralization; the impact lasts to the present.

Even as late as 1915, it was typical for a factory or residential building, especially in rural areas, to have its own electricity-generating plant. The supporters of this structure formed a trade association, the National Electric Light Association (NELA), dominated by a small group of industrialists opposed to Thomas Edison’s efforts to centralize electricity-generation. Meanwhile, friends and colleagues of Edison, the “Insull group,” wished to promote the creation of central-station utilities. The Insull group was a collection of twelve people, four of whom were core connections of Edison, and the other eight of whom shifted over the years. This Insull group organized the Association of Edison Illuminating Companies (AEIC), a smaller and less pervasive

112. See id. at 132 (observing that if the network is random as opposed to hierarchical, typically twenty-eight percent of all the nodes have to be destroyed before the network collapses).
113. See, e.g., Dickerson, Transnational Codes, supra note 7 (discussing Nike).
114. WATTS, supra note 55, at 254-56. The miracle that followed is instructive in a different way. All the companies whose plants had shut down had incentive to cooperate. By the Thursday after the fire—the day after most of the plants had been idled—the 200 Toyota suppliers had found a way to manufacture the brake component. They did so without significant input from either the original supplier or Toyota itself, and within one week after the fire, the Toyota group’s output of cars was at over ninety percent of pre-disaster levels. A week later, output was at pre-fire levels. Id. at 257.
115. Mark Granovetter & Patrick McGuire, The Making of an Industry: Electricity in the United States, in THE LAWS OF THE MARKETS 147, 151 (Michel Callon ed., 1998) (asserting that the “suppression of diversity” has sequelae to the present). After the Blackout of 2003, a number of articles referred to Thomas Edison’s early efforts to centralize electricity-generation, and noted that few buildings or other units in the U.S. possess generation-capacity today. See, e.g., Glanz, supra note 8 (noting that Thomas Edison established the first central station on Pearl Street in lower Manhattan on September 4, 1882).
119. Id. at 155-56. (describing the Insull group).
120. Id. at 157.
The outcome is remarkable. The Insull group’s flexible dozen destroyed NELA’s anti-Edison network and orchestrated a profound change in the electrical industry. The result is all the more remarkable given that the outcome may well have been relatively inefficient and, thus, particularly hard to achieve.\textsuperscript{122} How could so few accomplish so much?

The answer is on the medium-scale map. That the Insull group organized the AEIC as a competitor to NELA sounds like the traditional strategy of building an elephant to challenge the existing elephant. The reality, however, is more subtle: AEIC represented an urban market and thus could not directly counter NELA’s preference for isolated systems in the rural areas.\textsuperscript{123} Instead, the Insull group infiltrated NELA, joining its committees. This was not a top-down coup in the classic sense, however, because the Insull group generally did not acquire majority positions in the NELA committees.\textsuperscript{124} The Insull group also traded AEIC’s well-connected individuals for NELA’s less influential executive-committee members, thus effectively destroying NELA’s high-connection, pro-decentralization nodes; when NELA acquired from AEIC an effective, pro-centralization activist, AEIC would receive a relatively ineffective anti-centralization individual from NELA.\textsuperscript{125} In addition, the Insull group members attacked the NELA membership on the larger-scale map; they invited senior management from other companies to visit businesses managed in the Insull-group way, they lent their own connection, pro-decentralization nodes; when NELA acquired from AEIC an effective, influential executive-committee members, thus effectively destroying NELA’s high-connection, pro-centralization activist, AEIC would receive a relatively ineffective anti-centralization individual from NELA.\textsuperscript{126} By 1910, the Insull group’s network had superseded that of NELA’s founders.\textsuperscript{127} As Granovetter and McGuire describe it, the Insull group imposed a policy, and then used affiliates to monitor progress. Only if NELA was veering off the pro-centralization course that the Insull group preferred did that group have to reassert its influence. By means of targeted actions, the group had so thoroughly destroyed the anti-Edison networks that it could maintain the industry’s new commitment to the central-station model through mere tweaking.\textsuperscript{128}

\begin{enumerate}
\item[121.] NELA was broader and potentially more influential than AEIC that limited its membership. \textit{Id.} at 154, 157. NELA was more pervasive. See Chung, supra note 117, at 68-69.
\item[122.] Granovetter & McGuire, supra note 115, at 159 (observing that the inefficiency of central-station strategy is underscored by the industry’s subsequent decline); see also \textit{id.} at 160 (noting that the isolated plants could be more efficient because generation of electricity produces heat as a by-product; a central station must dissipate that heat, while an isolated plant at factory or a residential building can heat the building directly).
\item[123.] \textit{id.} at 157.
\item[124.] People loosely connected to the Insull group did hold two-thirds of the seats in seventy-five percent of NELA’s committees in the first decade of the 20th century. However, in any year from 1901 to 1910, the Insull group itself and people closely tied to it constituted a majority of the NELA committees for only six to ten of NELA’s seventy-five committees. \textit{id.} at 158.
\item[125.] Chung, supra note 117, at 82 (pointing out that influential executive committee members of AEIC and members of the Insull group went to NELA, but relatively unimportant NELA members of the executive committee went to AEIC). Granovetter & McGuire, supra, note 115, at 150 (observing that by 1929 the decentralized generation was on the wane, and a few large companies controlled centralization generation).
\item[126.] Granovetter & McGuire, supra note 115 at 159.
\item[127.] \textit{id.} at 158.
\item[128.] \textit{id.} at 150.
\end{enumerate}
Corporations as Cities

B. Targeted Influence

In other circumstances the goal is to influence, not to destroy a particular network. AIEC’s usurpation of NELA arguably represents influence rather than destruction. Instead of focusing on the collapse of the anti-Edison network, remember that the NELA trade association survives the Insull group’s machinations. The story can be told by focusing on influence rather than destruction: what the Insull group accomplished was to convince NELA’s members to revise their strategy so as to favor centralized, rather than decentralized utilities.129 NELA was not destroyed; it was only redirected.

Or consider again the experience of the Reverend Sullivan and his Principles.130 He chose to enlist the support of institutional investors because, using the smallest scale, they were substantial enough to pressure companies investing in apartheid South Africa. Elephants dancing with elephants. But before the institutional investors would dance with the major multinationals, Sullivan first had to exert influence over the institutional investors themselves. Certainly, traditional techniques of imposing an equal and opposite force remained important: the public in the United States, particularly students, demanded that institutional investors including universities comply with the Principles.131 But Sullivan had another potential lever, as well. To his advantage, he was within the networks of interlocking directorates 134 and may have had access to AIEC’s usurpation of NELA arguably represents influence rather than destruction. Instead of focusing on the collapse of the anti-Edison network, remember that the NELA

---

129. Id. at 158; see also supra note 124 (stating that from 1901-10, in any single year the Insull group was directly a majority of at most 13.3% (10 of 75) of NELA’s committees).

130. See supra note 27 (discussing the Sullivan Principles).


132. See Cassel, supra note 27, at 1970 (stating Rev. Leon Sullivan was a director of General Motors Corporation).

133. See Leon Sullivan, Agents for Change: The Mobilization of Multinational Companies in South Africa, 15 LAW & POL’Y INT’L BUS. 427, 428 (1983) (explaining that Reverend Sullivan had first wanted the multinationals to divest, but General Motors Corporation (GMC) refused; no other director of any major corporation had proposed a similar, radical action).

134. See Gerald F. Davis & Henrich R. Greve, Corporate Elite Networks and Governance Changes in the 1980s, 103 AM. J. SOC. 1, 30-33, (1997) (stating that, even though golden parachutes, but not poison pills, were considered beneficial to shareholders, poison pills spread through U.S. corporations much faster than parachutes in part because the former were spread through interlocking directorates within the same industry, while the later were spread by geographic proximity); see also Dave Beal, 3M’s Board among the Most Linked to Other Boards, PIONEER PRESS, Dec. 01, 2002 (discussing Nell Minow and Robert A.G. Monks’s The Corporate Library and its research into interlocking boards, and Gerald Davis’s research showing that 3M directors are particularly well-connected to boards of other companies), available at http://www.twincities.com/mld/twincities/business/columnists/dave_beal/4632423.htm (last visited Feb. 11, 2004). The same is true in Canada. See Janet McFarland, Directors Travel in a Small World: Many of the Country’s Biggest Corporate Boards Have the Same People Sitting at the Table, GLOBE BELLMEDIA INTERACTIVE, INC., OCT 9, 2002 (discussing how many corporate directors in Canada’s largest corporations have very close relationships with other directors, thus making functional independence difficult to achieve), at http://www.rottman.toroonto.ca/cbe/Directors_Travel_In_Small World-20021009.pdf (last visited Feb. 11, 2004). It also is true in France. See James A. Fanto, Persuasion and Resistance: The Use of Psychology by Anglo-American Corporate Governance Advocates in France, 35 VAND. J. TRANSNAT’L L. 1041, 1090 n.314 (2002) (stating “elite” schools are the source for a larger number of board members and senior managers of French corporations).
he perceived his efforts as ineffective does not necessarily mean that he was entirely correct: a single source repeating the same mantra has its own social influence. By using links within networks on both the small- and medium-scale maps, he was able to apply his knowledge and connections as additional weapons with which to champion change.

Sullivan’s experience is also relevant from a different perspective: he not only influenced nodes, but was himself a node susceptible to pressure. In that capacity, he was targeted and activated by entrepreneurial activists. Initially, Sullivan had demanded that multinationals divest all interests in apartheid South Africa. Union leaders and other activists in South Africa convinced him, however, that the oppressed would gain more long-term advantage if, instead of quitting South Africa, the multinationals were to work for change there. In this way the South African union leaders, unable to achieve their goals by traditional means, gained leverage by persuading Sullivan, a highly linked node on the medium- and small-scale maps, to modify his strategy.

There is also a more recent anecdotal example, taken from the experiences of the gay, lesbian, bisexual and transgender (GLBT) community’s efforts to convince major corporations to offer domestic partner benefits. Raytheon Company’s story is particularly interesting because it includes an example of successful influence both when the company’s hierarchical lines were yet to be unscrambled after a major merger, and a couple of years later when the normal corporate structures were firmly in place.

Dr. Louise Young, a senior software engineer with Raytheon, formed the first GLBT employee group there, shortly after she joined the company as part of its 1997 acquisition of Texas Instruments Incorporated’s defense business (TI-defense). She

135. See Sullivan, supra note 133, at 428 (asserting that even as a member of GMC’s board, he was unable to convince his own fellow directors to withdraw the corporation from South Africa; he further says that no other director of any major corporation had proposed divestiture, at least when Sullivan first moved for GMC to divest); supra note 71 (discussing Watts’ assertion that there can be too much, as well as too little, connectedness for effective social contagion).

136. Sullivan, supra note 133, at 428 (discussing how South African union leaders convinced him to have multinationals work for change); see also Jorge F. Perez-Lopez, Promoting International Respect for Workers Rights Through Business Codes of Conduct, 17 FORDHAM INT’L L.J. 1, 6 (1993) (referring to Reverend Sullivan’s discussions with black South Africans, including union leaders). This may be an example of activists—the South African union leaders—targeting a particularly well-connected node in an entirely different network.


139. She had formed the Gay, Lesbian, Bisexual and Transgender Employee Group at Texas Instrument’s defense operations in 1993; there was no such group at Raytheon when her unit was purchased in 1997. Telephone interview with Louise Young & Vanessa Leong, Communications Officer, Raytheon (Aug. 6, 2003) [hereinafter Young, Interviewwhen referring to Young’s comments]; see also BostonWorks.com, supra note
had been an activist for over 25 years, and had started her workplace efforts in the early 1990s.\textsuperscript{140} For Raytheon, 1997 was a watershed year: in addition to the TI-defense acquisition, Raytheon merged with Hughes Electronics Corporation’s defense business. In connection with those and other activities, Raytheon effected a significant workforce reduction and restructuring.\textsuperscript{141} The inevitable turmoil obscured the lines of communication within Raytheon, especially for an employee like Young who was new to Raytheon.\textsuperscript{142}

It was in this environment that Young championed Raytheon’s adoption of a non-discrimination policy that would include protection for sexual orientation. She brought her request to the Equal Employment Opportunity\textsuperscript{143} Through contacts with Raytheon’s Human Resources (HR) specialists in Texas where she was located, Young determined that this individual (the Equal Employment Opportunity Director) located in HR at company headquarters in Massachusetts, had “visibility on the radar screen” at the decision-making level.\textsuperscript{144} Access—the ability to “carry information”—was more important than the intensity of the officer’s sympathies on the particular topic.\textsuperscript{145} In addition, Young contacted “diversity leaders” at Raytheon,\textsuperscript{146} individuals appointed by management from various levels within the corporation to be “champions of diversity.”\textsuperscript{147}

Raytheon adopted a non-discrimination policy, including sexual orientation, in the spring of 1998. Success came less than a year after the campaign’s launch; this, as Young notes, “in corporate[-]-America time is really quite rapid.”\textsuperscript{148}

So far, we are clearly operating with large- and medium-scale maps. Young, a committed individual, connects to a person whom others have identified as a well-connected node. The top equal-employment-opportunity officer had to be connected throughout the developing, post-merger hierarchy for the Texas HR specialists to have been able to identify this officer as having good contacts with the senior-most...
management. In addition, the outcome underscores that this officer was indeed amply connected to the decision-makers. It is interesting that Young sought a conduit even more than an ally; this is entirely consistent with the most basic network analysis that emphasizes the existence of a bridge between networks—in this case between Young and her affinity group on the one hand, and senior management on the other—rather than the politics of the bridge.\(^\text{149}\)

Young, moreover, emphasizes the importance not only of the networks on the large- and medium-scale maps, but also of those on the smaller-scale maps. As a member since 1997 of the Human Rights Campaign’s Business Council, and as its first co-chair, Young knew that other major companies on the U.S. industrial landscape were adopting non-discrimination policies.\(^\text{150}\) The network in this case includes the sources of information about practices at the U.S.’s largest corporate entities, which presumably includes competitors’ corporate public-relations departments, as well as the pool of GLBT employees within Raytheon’s competitors. In her communications through Raytheon’s Equal Employment Opportunity Director, Young emphasized to senior management that the company was at a competitive disadvantage for recruitment, retainment and productivity until it, too, had a non-discrimination policy.\(^\text{151}\) Young and that officer were nodes, as was the Human Rights Campaign (HRC).

By 1999, when Young began her effort to have Raytheon adopt domestic partner benefits, the lines of communication within the company were more clearly drawn. She contacted the Corporate Diversity Manager who encouraged her to state the case for those benefits. The links were straightforward: this manager reports to the Senior Vice

---

\(^\text{149}\) Granovetter speculates that the strength of the tie correlates directly to affinity. See Granovetter, supra note 54, at 1361. And then he concludes that it is weak ties that are bridges over the greatest “social distance,” Id. at 1366. Thus, a weak but well connected tie is likely to be the best bridge from an engineer in north Texas to senior managers in eastern Massachusetts.

\(^\text{150}\) Young, Interview, supra note 139 (Young notes that she was on the Human Rights Campaign’s (HRC) Business Council, and through that knew “what the more progressive and admired U.S. corporations were doing, and saw Raytheon falling behind”), Out & Equal, supra note 140 (Young’s service on HRC Business Council since 1997 and as first co-chair). Human Rights Campaign, HRC Business Council Brief (listing Louise Young and noting that the Business Council has existed since 1997, and that its members provide “advice and counsel” to HRC), available at http://www.hrc.org/Template.cfm?Sections=About_HRC&Template=TaggedPage/TaggedPageDisplay.cfm&TPLID=44&ContentID=12082 (last visited Apr. 15, 2004). In 1998, the Business Council already had direct access to corporate norms because its own members were employed by many of the major U.S. corporations. See HRC Quarterly (Spring 1998), listing the employers of the Business Council’s members as including “IBM, 3M, American Airlines, Microsoft, Bell Atlantic, Raytheon, Prudential, Wells Fargo, Walgreens and Bank of Boston”), available at http://www.hrc.org/ContentGroups/Publications/1HRC_Quarterly/1998/Spring_1998.0ndg.0ndg_HRC_Quarterly111.htm (last visited Apr. 15, 2004). Since 2002 HRC has further systematized its review of U.S. corporations: it is publishing the “Corporate Equality Index,” which rates the gay-friendliness of the top corporations’ policies. See Human Rights Campaign, HRC Corporate Equality Index, available at http://www.hrc.org/Template.cfm?Sections=Corporate_Equality_Index&Template=TaggedPage/TaggedPageDisplay.cfm&TPLID=234&ContentID=16051 (last visited Apr. 15, 2004).

\(^\text{151}\) HRC recommends these arguments, and Young concurs. Human Rights Campaign, WorkNet, How to Achieve Domestic Partner Benefits in Your Workplace, Parts I & II [hereinafter HRC, WorkNet], at http://www.hrc.org/Template.cfm?Sections=Resources1&Template=ContentManagement/ContentDisplay.cfm &ContentID=10910 (last visited Feb. 11, 2004); see also Louise Young, 08/06/03 Telcon, supra note 139 (Young notes that the non-discrimination policy is not just “one bus stop on a trip to Hollywood;” instead, she sees that such a policy creates a competitive advantage for the adherent).
President for Human Resources. The network in this case seems situated in a classic, hierarchic, small- to medium-scale map. And, again, the network on the small-scale map makes its contribution: Young was aware, once more thanks to HRC’s Business Council, that other companies of Raytheon’s stature had already adopted domestic partner benefits. In particular, Boeing, a major competitor of Raytheon, announced adoption of benefits in October 1999, effective January 2000, and Young made sure that senior Raytheon management knew this.

Particularly interesting in this part of the Raytheon story is what Young calls the “perfect storm.” A popular description of the “tipping point” flavor of network analysis. First, Young’s efforts in obtaining the non-discrimination policy in 1998 makes its contribution: Young was aware, once more thanks to HRC’s Business Council, that other companies of Raytheon’s stature had already adopted domestic partner benefits. From the perspective of the largest scale map, by early 2001, Raytheon employees had established a series of GLBT networks within the company, which enabled easy communication of information to Young. Then, in March 2001, a new Senior Vice President of Human Resources was promoted from within. The Corporate Diversity Manager was now reporting to a person who, before arriving at Raytheon in

152. Louise Young, Interview, supra note 139.
153. Id.
154. Id. (Boeing, a competitor, had previously adopted domestic-partner benefits); Comments 08J40J, supra note 143 (noting that Boeing announced in October 1999, effective January 2000); see also Paul Nyhan, Boeing Grants Same-Sex Health Care; Heterosexual Unmarried Couples Won’t Be Covered, SEATTLE POST-INTELLIGENCER, Oct. 23, 1999, at A1 (reporting announcement of new fringe benefits for domestic partners, to be implemented in 2000), available at 1999 WL 3055662.

155. Louise Young, Interview, supra note 139.
156. See generally Gladwell, supra note 60, at 32; see also H. Range Hutson et al., The Epidemic of Gang-Related Homicides in Los Angeles County from 1979 Through 1994, 274 J. AM. MED. ASSN’S 1031, 1033 (1995) (applying the concept to gang violence); Philip Zimbardo, The Human Choice: Individuation, Reason, and Order Versus Deindividuation, Impulse, and Chaos, in NEBRASKA SYMPOSIUM ON MOTIVATION 237, 287-93 (W. J. Arnold & D. Levine eds., 1969) (referring to a “release signal”); BUCHANAN, supra note 53, at 161-64 (suggesting that Gladwell’s application of the method of spreading a virus to the spread of ideas is “very probably right”); see also Dickerson, Transnational Codes, supra note 7, at 644 (discussing a tipping point); Claire Moore Dickerson, Cycles and Pendulums: Good Faith, Norms, and the Commons, 54 WASH. & LEE L. REV. 399, 423-25 (1997) (discussing the tipping point); but see WATTS, supra note 55, at 240-41 (asserting that social contagion obviously does not occur if there are insufficient connectors, but neither does it occur if the entire community is extremely well connected—because then no one person or group of persons has extraordinary influence since each person listens to the opinions of many others); see also supra note 71 (discussing Watts’ application of Solomon Asch’s insights to explain the difference between viral and social contagion); BUCHANAN supra note 53, at 180-81 (asserting that with aristocratic, as opposed to random networks, tipping always happens for diseases—that is why a disease’s highly connected nodes must first be destroyed before an epidemic, such as STDs, can be controlled). When this concept is applied to social contagion, we need either an aristocratic network, or sufficient connections in a random one.

157. This is part of HRC’s articulated strategy: non-discrimination policies that specifically protect sexual orientation are a logical, legal basis for domestic partner benefits. HRC, WorkNet, supra note 151. Young, however, emphasizes that a non-discrimination policy is an end in itself. See supra note 151 (not one bus stop to Hollywood). The practical foundations for both arguments are the same: both policies provide a competitive advantage in recruitment, retention and productivity. Young, Interview, supra note 139.

1993, had served as Director of Worldwide Compensation, Benefits and Human Resource Information Systems for Lotus Development Corp. Lotus was the first large U.S. company to adopt domestic partner benefits; the new Senior Vice President of Human Resources at Raytheon was not only a well-connected node on the medium-scale network, but he was sympathetic to adoption of these benefits. We may know that sympathy is not essential, but it certainly helps when the bridge is eager to serve as conduit. Still, Raytheon did not adopt domestic partner benefits; one more event, added to all the other circumstances, finally triggered that perfect storm. The earlier developments were critical, however: they contributed to the climate in which that final event was embedded.

In May 23, 2001, Raytheon held an internal Diversity Forum. This was a high-visibility event; the two first speakers were the then-president, chief executive officer and chairman of Raytheon Company, and the then-president of Raytheon Electronic Systems (who became Raytheon Company’s president and chief executive officer two years later). Among others, Young herself spoke at the conference; she described the dilemmas that GLBT people face in the workplace and emphasized the productivity-advantages that employers gain from gay-friendly policies, including domestic partner benefits. She reports that her presentation “resonated with the leaders of the entire conduit. Still, Raytheon did not adopt domestic partner benefits; one more event, added to all the other circumstances, finally triggered that perfect storm. The earlier developments were critical, however: they contributed to the climate in which that final event was embedded.


160. Young, Interview, supra note 139.

161. See, Chang, supra note 58, at F3 (reporting the results of Columbia University’s Small World Project as revealing that almost two-thirds of recipients apparently did not bother to forward the message).

162. Relevance of environment: compare Zimbardo, supra note 156, at 290 (discussing a car left for a week in Palo Alto, California), with id. at 287 (discussing a car left in the Bronx which was stripped in 26 hours); see generally supra note 156 (discussing “tipping point”).


164. Raytheon, supra note 163 (Bill Swanson and Dan Burnham were the first two speakers at the Diversity Forum; at that time, Swanson was president of Raytheon Electronic Systems); Raytheon Corporation, Biography: Daniel P. Burnham (July 2003) (chairman, president and CEO in 2001; remains as chairman after July 1, 2003), at http://www.raytheon.com/newsroom/profiles/burnham.pdf (last visited Feb. 11, 2004); Raytheon Corporation, Biography: William H. Swanson (July 2003) (by July 1, 2003, William H. Swanson was president and CEO of Raytheon Corporation), at http://www.raytheon.com/newsroom/profiles/swanson.pdf (last visited Feb. 11, 2004).

165. Young, Interview, supra note 139. Although neither Young nor Hosmer was absolutely certain, this group probably was the “Leadership Team” then in office. This team is named in the company’s annual report. Id.; Hosmer, Interview, supra note 147; see also RAYTHEON 2002 ANNUAL REPORT, supra note 139. As to the accuracy of the productivity argument, while the Human Rights Campaign concedes that there are no good data on retention, employers have been able to use domestic-partner benefits as a very effective recruiting tool during times of low unemployment. Human Rights Campaign, WorkNet, How To Achieve Domestic Partner Benefits In Your Workplace, at 4-5, at http://www.hrc.org/Template.cfm?Section=Resources&Template=ContentManagement/ContentDisplay.cfm&ContentID=10910 (last visited Feb. 11, 2004); Human Rights Campaign, Work Life, Winning Domestic Partner Benefits, at http://www.hrc.org/Template.cfm?Section=Ask_the_Experts1&CONTENTID=10790&TEMPLATE=ContentManagement/ContentDisplay.cfm (last visited Feb. 11, 2004).
2004] Corporations as Cities 565

Forum.166

C. Strategies

These examples confirm that social actors have used network strategy in the past, without necessarily articulating that fact. As the experiences of the Reverend Sullivan, the Insull group and Dr. Young reflect, well-focused social actors can indeed take on a much larger enterprise. With network theory to guide us, we know to look within the black box for networks and nodes. To implement the strategy, those actors must identify the connected nodes—the point at which to apply pressure most effectively.

The neighborhoods and settlement described by Jacobs and Sousa Santos illustrate effective targets for pressure in relatively concrete terms. The first of two techniques is to attack a well-connected node by destroying the pathways in order to take down the network. In other words, close up byways and otherwise hinder gatherings, actual or virtual. The other technique is to exert influence: to use the power of the node to communicate information or even to effect change. The delicatessen owner communicates, and the Residence Association’s president has direct power.

The Insull group took the most aggressive route: those members of AIEC apparently took no prisoners. They showed how to neutralize the opponent’s well-connected nodes by placing allies at the highest, best-connected level, and by relentlessly repeating their centralization message in as many venues as possible.

For her part, Young took the other tack. In any large organization, there obviously is more than one relatively senior manager who is well connected to the firm’s highest levels. Even while Raytheon’s formal structure was unclear, her choice among these bridges would logically have been limited by the subject matter. In preparing the initial aspects of her strategy, Young contacted people in the HR department to research who would be the most effective node. She used nodes to find a node, and the Equal Employment Opportunity Director turned out to have been a good choice.

By the time Young was promoting domestic partner benefits, Raytheon’s post-merger lines of communication had been formalized, and she had less flexibility in choosing the node to target. Thus, she went up through the ranks, starting as we saw with the Corporate Diversity Manager. Fortuitously, however, Young was able to reach highest management through more than one conduit thanks to Raytheon’s 2001 Diversity Forum. Not only did the message pass through the Diversity Manager to the Senior Vice President for Human Resources and on up the line, but Young also had direct access to the highest levels of management through the temporary but hyper-connected node that was the Forum. The timing of the Forum was ideal for Young’s purposes; what she did with the opportunity emphasizes the advantage of saying the same thing through more than one channel.167

One part of the discussion, therefore, is conduit. The other part of the discussion is the message. The networks that fed Young information were critical in both regards. Her

166. Human Rights Campaign, Defense Contractor Raytheon to Offer Domestic Partner Benefits, WORKNET NEWS 4:10 (Oct. 31, 2001) (noting that on Sept. 17, 2001, Raytheon announced domestic partner benefits, to become effective January 1, 2002) (on file with author); see also Young, Interview, supra note 139.

167. But if she goes through too many nodes, she may come to be considered routine and lose impact. See Watts, supra note 55, at 230, 235 (referring to the discussion of "social contagion").
The Journal of Corporation Law

preparatory work included helping to set up the other GLBT networks within Raytheon. These networks did generate information, and they funneled it through her.\textsuperscript{168} At minimum this gave authenticity to her statements at the Forum, when she spoke about the burden on productivity from a non-receptive environment.\textsuperscript{169} The Insull group was, in its context, creating the same multi-source support when it not only sought to influence NELA’s executive committee, but also invited NELA members to visit companies compliant with the Insull group’s desires.

To return explicitly to formulation of strategy, if social actors have the kind of organizational and financial support from which the Insull-group benefitted, a relatively scorched-earth policy focused more on destroying the opposition than on influencing it makes sense. In that case, however, it still is advisable to operate on more than one level: as high as possible in the hierarchy (infiltrating the executive committee and other committees), while seeking simultaneously to influence the rank-and-file. If, on the other hand, the activist finds her own networks on the relatively large-scale map, she should identify the best conduit, if the organization is sufficiently non-hierarchical to permit any choice. Here, too, though, she should, if possible, seek to communicate the message through more than one bridge.

Sullivan seems to have operated somewhere between the Insull-group and Young experiences. As was the case in both those examples, Sullivan sought to conserve energy by marshaling different networks. However, because the topic was apartheid and because he was more independent than an employee, he was also able to operate on the smallest-scale map, and did indeed seek to mobilize popular sentiment. Even more than the Insull-group or Young, he directly targeted reputational advantage.\textsuperscript{170} That option, the elephant-to-elephant move, remains available to all activists. Network analysis represents another arrow in the quiver.\textsuperscript{171}

\textsuperscript{168} Young, Interview, supra note 139.

\textsuperscript{169} To be sure, presenting the request as a reasonable business decision for Raytheon because of its positive correlation to recruitment, retention and productivity of employees was important, too. See supra notes 151 & 157 (describing the recruitment, retention, productivity argument). However, from the interview with Louise Young, the message that resonated particularly at the 2001 Diversity Forum was the sense of alienation that results from a non-inclusive environment (and that leads to decreased productivity). Young, Interview, supra note 139 (reporting that senior managers came up to her after the presentation to say that they had never before really understood the impact of exclusion).

\textsuperscript{170} See Polodyny & Page, supra note 87, at 73 (reputation); see also, Stewart Macaulay, Non-Contractual Relations in Business: A Preliminary Study, 28 AM. SOC. REV. 55, 63-64 (1963); Pamela M. Prah, Clinton Endorses Plan to Curt Senthshops Through Using Code of Conduct, Monitoring, Daily Lab. Rep. (BNA), Apr. 15, 1997, at A1 (quoting President Clinton expressly referring to U.S. clothing manufacturers and retailers putting “their reputations” on the line); Dickerson, Transnational Codes, supra note 7, at 652. Young is not insensitive to reputational issues, but she ties them back to the competitive advantage and the recruitment, retention and productivity of employees. See Louise Young, 080606 Telcon, supra note 139.

\textsuperscript{171} As suggested in the Introduction, independent of social actors’ embrace of network strategies, this integrated vision affects descriptions of management responsibility and has consequences for corporate-governance scholarship generally. The more that networks influence corporate behavior, the less is management truly directing the corporation. Different from the stakeholder literature that articulated the board’s duties based on stakeholder rights, this analysis would impose duties on social actors because of their powers rather than others’ rights. See supra note 29 (referring to stakeholder rights as explained in the U.S. legal literature). Consequently, if the social actors have such duties, legal scholarship will have to consider to whom these duties are owed. Candidates include those non-shareholder constituencies that classic transaction-cost economics tells management to ignore in favor of profit maximization for shareholders, and may even include society at large.
VII. CONCLUSION

The network view of multinationals thus offers us an important lever by which to influence corporate behavior. The corporation is no longer merely a free-roaming, monolithic engine of social impacts, susceptible only to an equally large and determined opponent. Instead, once we understand the corporation as a city composed of networks, we can better identify and address new points of pressure. By integrating the social-responsibility and transaction-cost perspectives, we have found that a targeted focus on a network’s richest nodes can be the cheapest way to destroy—or influence—the institution, and thus to guide the organization’s actions.

Further, consider that recognizing social actors’ very real power thanks to network-based strategies may mean recognizing that management has concomitantly less power. In that case, managers’ legal responsibility should be reduced to reflect that new understanding. In the language of transaction-cost economics, managers’ obligation to maximize profits for the shareholders would become less expansive than traditional analysis suggests.