

CSES Working Paper Series

Victor Nee

**MIDDLE-RANGE THEORIES OF
INSTITUTIONAL CHANGE**

September 28, 2018

MIDDLE-RANGE THEORIES OF INSTITUTIONAL CHANGE

Victor Nee¹

This article is based on my presidential address delivered in Baltimore at the 2018 annual meeting of the Eastern Sociological Society. In it, I explore the ways in which theories of the middle-range help us advance sociology as a social science at a time when many express concern about the fragmentation of the discipline.

Keywords: middle-range theory; institutions; stability; punctuated equilibrium; China; economic sociology.

INTRODUCTION

From its founding, sociology identified its mission as the social science that studies institutions, explaining their emergence, equilibrium and effects on social behavior. The classical writings of the founders—Weber, Durkheim, Marx and others—carry on through new interpretations, although as a social science we have largely subsumed the ideas into empirical research programs. Economics has its classical writings—Smith, Ricardo, Marshall and others—but reinterpretations of them are uncommon. There are fewer books by economists, fewer still that purport to distill timeless ideas of the classical texts. This is due in part to the expansive consensus in economics around their neoclassical theory. To be sure, behavioral economists have challenged the narrow rationality assumption of microeconomics. The aim was not to abandon *homo economicus*, but to infuse neoclassical theory with greater behavioral realism. By contrast, sociologists have long been disinterested in devising a neoclassical sociology, especially after the collapse of Talcott Parsons's attempt to build a general theory of the social

¹ Department of Sociology, 323 Uris Hall, Cornell University, Ithaca, New York 14853; email: victor.nee@cornell.edu. I gratefully acknowledge the helpful reading and comments from Brett de Bary and Rachel Davis on earlier drafts.

systems. Economics has made notable advances guided by its neoclassical paradigm. Does the absence of a disciplinary equivalent pose an incorrigible limitation on sociological science? As Alfred Whitehead (1917:82) quipped, “A science which hesitates to forget its founders is lost.”

It is common for colleagues to worry aloud about the appearance of fragmentation in sociology. But what may appear as a motley and untidy assembly may, upon closer scrutiny, be appropriately valued as evidence of important disciplinary advances guided by sociological theories of the middle range. In *Social Theory and Social Structure*, Robert Merton (1968: 39-45) defined these as “theories that lie between the minor but necessary working hypotheses that guide day-to-day research and the all-inclusive systematic efforts to develop a unified theory that will explain all the observed uniformities of social behavior, social organization and social change.” Merton noted that the seminal ideas of theories in the physical sciences are characteristically unassuming. They involve ideas that literally point to *testable* hypotheses. Consider, for instance, Boyle’s “simple idea that the atmosphere may be conceived as a ‘sea of air,’” which suggests that “there should be less air pressure on a mountain top than at its base.” We should emphasize that what Merton called middle-range theories are more than empirical generalizations. Although they are not logically derived from a general theory, they are “logically interconnected and empirically confirmed propositions about the structure of society and its changes.”

USING MIDDLE-RANGE THEORY TODAY

How can such theories help us advance sociology today, at a time when many express concern about the fragmentation of the discipline? Merton drew important lessons for sociological theory from the physical sciences. He proposed that the remarkable advances of

science were achieved through accumulation of theories of the middle range, and he argued that sociology should adopt a similar strategy to motivate and guide empirical research. For him, middle-range theory was the essential element for an analytic sociology that can furnish the tool-kit needed to solve “the general but definite problem of identifying the social mechanisms—that is, the social processes having designated consequences for designated parts of the social structure” (Merton 1968:43). Such theory is “developed wholly in terms of the elements of social structure rather than in terms of providing concrete historical descriptions of particular social systems” (Merton 1968:44). Importantly, sociological theory of the middle-range generates a sequence of follow-up questions about how the social mechanisms identified come into being and become self-reinforcing social dynamics enabling change or equilibrium in social structures.

We should note that sociological theories of the middle range are more context-bound and less obviously universal than theories of the physical world. After all, human beings are purposive actors. Through social learning and mimicking behavior they are highly adaptable to varying environments. As Duncan Watts, who came to sociology from physics, put it (2011: 262), “The social world, in other words, is far messier than the physical world, and the more we learn about it, the messier it is likely to seem. The result is that we will probably never have a science of sociology that will resemble physics. But that’s OK.”

Merton’s middle-range theories of the "Matthew effect" and "self-fulfilling prophecy" continue to be cited in sociological research. However, many middle-range theories of structural functionalism—e.g, theories of institutional interdependence, anomie, role sets, bureaucracy, occupational mobility, deviant behavior and crime—have long been subsumed in empirical research programs or have been simply forgotten, suggesting that sociological middle-range theories have relatively short half-lives.

This year's Eastern Sociological Society annual meeting theme directs our attention to the challenges of explaining social and institutional change. Understanding institutions as stable social structures provides a starting point for theories of social and institutional change. In my address this afternoon, I will first highlight some recent sociological theories of the middle range that explain social change within stable equilibrium. I will then explore middle-range theories of institutional change involving protracted punctuated equilibrium. In the latter cases, institutional change at the societal level encompasses change in the underlying informal and formal rules of cooperation and competition, including reworking of the constitutional framework.

Middle-Range Theories of Social Change Within Stable Equilibrium

Consider, initially, Paul DiMaggio and Woody Powell's (1983) extension of Weber's "iron cage" metaphor. The theory laid out in "The Iron Cage Revisited" explains why, in advanced capitalist economies, organizations come to be steadily homogeneous without gains in efficiency. The theory asserts that competition mechanisms Weber identified in the rise of rational capitalism have been replaced by isomorphic mechanisms wherein organizations evolve to become more similar. DiMaggio and Powell identified the social mechanisms—*coercive, mimetic, and normative*—of isomorphism and derived testable hypotheses. Their theory has gone on to stimulate empirical research on organizations within the stable equilibrium of advanced capitalism.

Among other middle-range theories that address the question of change in stable equilibrium are some notable examples concerning the assimilation of immigrant minorities in American society. Alejandro Portes and Min Zhou's (1993) "segmented assimilation theory" identified ethnic solidarity and enforceable trust as social mechanisms that come together in

immigrant communities, enabling upward mobility and eventual assimilation for immigrant minorities. At the same time, their theory predicted downward assimilation for children of especially poorer immigrant minorities outside of the ethnic enclave. Subsequently, Alba and Nee's (2003) neo-assimilation theory focussed on other social mechanisms: purposive action, network effects and coercive and normative compliance with civil rights era legislation by mainstream organizations and institutions (Dobbin 2009; Edelman 1990, 1992). Their theory asserts that immigrants follow rule-of-thumb heuristics in solving problems. The unintended consequences of practical strategies in pursuit of familiar goals—a good education, a good job, a good place to live—lead to assimilation of immigrant minorities into the American mainstream. These competitive, overlapping middle-range theories have gone on to motivate and guide productive debate and empirical research on the socioeconomic mobility of immigrant minorities (Kasinitz et al. 2008; Waters and Jiménez 2005; Keister, Vallejo and Borelli 2014; Drouhot and Nee forthcoming).

Middle-Range Theories of Institutional Change Involving Protracted Punctuated Equilibrium

Beyond social change in stable equilibrium, however, sociological research must also address episodes of transformative institutional change involving an extended punctuated equilibrium. Theda Skocpol (1978), for example, focused on how mechanisms of interstate competition and war precipitated the collapse of state power, unleashing the bottom-up social upheavals of the French, Russian, and Chinese revolutions. Her theory stimulated a cross-disciplinary program "bringing the state back in" to research on institutional change (Evans, Rueschemeyer and Skocpol 1985).

But the late twentieth century witnessed other episodes of punctuated equilibrium on a scale as significant as the rise of capitalism in the West. In China, the former Soviet Union and Eastern Europe, socialist reformers sought market solutions to inefficient allocation and shortage in state socialism. Like alchemists bewitched with the challenge of turning lead into gold, these reformers dreamed of harnessing the power of the market to remedy the failures of the plan. The goal of reformers was to stimulate growth by combining plan and market. State initiatives in the direction of capitalism punctuated the stable equilibrium of centrally planned economies.

These efforts raise some puzzling and intriguing questions. In his *Capitalism, Socialism and Democracy*, Joseph Schumpeter (1947 [1942]) argued with seeming conviction that the "superiority of the socialist blueprint" was destined to triumph over entrepreneurial capitalism. In light of such pessimism for the future of capitalism, why did communist elites initiate sweeping reforms that would challenge the legitimacy of centrally planned economies? Why did dynamic capitalism emerge in China, where the Communist Party is still in command of the state, but not in postcommunist Russia, which dutifully sought to institute free-market capitalism and democracy according to a "big bang" approach prescribed by the World Bank and International Monetary Fund economists? Neoclassical economics does not have answers to these questions.

Economic Reform in China

I began studying this process in the 1980s, and today I would like to offer some reflections derived from my experience. In 1985, when I traveled to China to start my research, the economic reforms launched in 1978 were still at an early stage. At that time, my field research in the southeastern coastal province of Fujian posed questions that the existing theories of social equilibrium were unable to answer.

Observing the economic reform in China, I noted obvious parallels with earlier reform efforts in Eastern Europe. Studying the early economic reforms in Hungary, Ivan Szelenyi (1983) had uncovered a crucial social fact: that markets benefit direct producers and, as a result, the expansion of markets reduces social inequalities between the political class and ordinary citizens. This counterintuitive insight about the consequences of markets on stratification suggested to me a research program on institutional change using China as a strategic research site. In the course of my fieldwork, it became clear that I had the uncommon opportunity to conduct research on transformative institutional change in real time, exploring the bottom-up social dynamics that appeared to be driving the emergence of a market society in China. As I look back over my years studying these momentous and far-reaching societal transformations, I can see the role middle-range theory played in helping to understand them.

An unintended consequence of economic reforms was to unleash market forces, which opened up new structures of opportunity, including niches where non-state economic actors could thrive. This altered incentives for economic actors, which in turn drove further expansion of markets. Here was the basis for a theory of market transition. I proposed that as markets grow in scope and volume of transactions, control over resources—power—shifts from politicians to economic actors. There are several reasons for this. First of all, direct producers retain a greater share of the economic surplus than in a planned economy. Second, relational exchange in markets pulls in social networks, thus enabling information flows, the working of social norms, and enforceable trust. As a result, markets as social structures enable self-enforcing exchange, not only in close-knit communities but also across large clusters of networks. Economic actors devise informal institutional arrangements needed to capture gains of cooperation and

competition. This explains the bottom-up emergence of conditions driving transformative institutional change.

Empirical confirmation of market transition theory would require evidence of three different outcomes: 1) a decline in the significance of political capital for economic gain; 2) higher returns to human capital for performance and gains in productivity; and 3) the rise of entrepreneurship and innovative activity as pathways of socioeconomic mobility. The decline in utility of political capital predicted by the theory, I argued, would depend on the decisiveness of the shift to reliance on markets.

“A Theory of Market Transition” (Nee 1989) confirmed with survey data various hypotheses derived from the theory. It was fortuitous in retrospect that the theory sparked a heated debate and many empirical tests. Especially intensely debated was the hypothesis of declining significance of political capital, which to many scholars seemed highly implausible, not only in post-communist Eastern Europe and Russia, but especially in China where the Communist Party is still in charge of the commanding heights of the polity and economy. Initial replication studies, carried out immediately after the collapse of state socialism in Eastern Europe and Russia, and early in the Chinese economic reform, produced mixed results (Cao and Nee 2000).

In 2005, I traveled to the Yangzi River Delta region to launch a follow-up study, a large-scale field study of the private enterprise economy. I was struck by the extent of societal change. By the first decade of the twenty-first century, a dynamic capitalism had transformed the Chinese economy from a poor agrarian society to the manufacturing workshop of the world. China became the second largest market economy and the largest market society in terms of the sheer size of its population. It had settled into a new equilibrium of sustained capitalist economic

development. Within that quarter century, the Chinese masses had experienced the most rapid decline of absolute poverty in history, linked with the rise of a newly affluent urban middle class and rapid accumulation of great wealth privately held by entrepreneurs. In many cases, these nouveau riche entrepreneurs had grown up in poor farming communities.

The aim of this study was to extend market transition theory and to submit it to more rigorous empirical tests two decades after its initial publication. This time the location was in the epicenter of domestic capitalism: Shanghai and adjacent provinces Zhejiang and Jiangsu. Historically, the Yangzi delta region had been the cultural and commercial center of China. After a brief interlude of revolutionary Maoism, it swiftly regained its status as China's most dynamic regional economy. My field study would employ a multilevel survey in seven cities involving 700 private manufacturing firms and also in-depth interviews with a subsample of the industrial entrepreneurs.² My plan was to follow the same group of industrial entrepreneurs and their firms over time, resurveying them at three- to four-year intervals from 2006 onwards. A fourth and final survey wave was completed in 2017.

As my field research deepened, my focus began shifting from the question of what were the consequences of market transition on stratification to the question of endogenous institutional change. How and why did self-reinforcing social processes enabling a bottom-up emergence of economic institutions of capitalism evolve? How were initially illegitimate institutional innovations able to emerge and diffuse to such a great extent in spite of prohibitions by the state?

²For a detailed empirical account exploring this endogenous emergence of the economic institutions of capitalism in the Yangzi delta region, see *Capitalism from Below* (Nee and Oppen 2012).

I found a starting point for exploring endogenous institutional change in Karl Schelling's (1978) idea that interests shaping individual behavior depend on observing the social behavior of others. With this in mind, along with my earlier market transition research, I was able to identify four distinct social mechanisms at work in the economic transformation. First, at the initial stage, the existence of markets induced competition, providing incentives for economic actors to come up with informal arrangements that would ensure their gains from emergent opportunity structures (Nee 1996).³ Second, entrepreneurial action generated chance organizational innovations (Nee 1992). These innovations—hit on as solutions to problems—were tested and proven successful through a process of trial and error, and then diffused through the larger regional economy (Nee and Cao 1999). Third, mutual monitoring and enforcement by networks of economic actors served to reinforce what were initially informal norms and novel institutional arrangements (Nee 1996). Finally, as swarms of mimicking followers piled in, a self-reinforcing social dynamic was established among them (DellaPosta, Nee and Opper 2012). This led to the formation of tipping points that over time resulted in the endogenous emergence of economic institutions enabling the development of a dynamic capitalist economy.

Thus, from small clusters of dissident entrepreneurs who started illegal and semi-legal businesses in rural townships, the evolving bottom-up dynamic quickly became a social movement and an irresistible economic force. The state eventually responded to these bottom-up innovations by changing formal rules to accommodate and regulate emerging economic realities. That is, the political elite eventually made institutional changes legitimizing what already had

³ A previous study of market transition and the firm in Guangzhou and Shanghai showed that higher marginal productivity of a private enterprise economy relative to state-owned enterprises, competition by firms for skilled labor following the emergence of labor markets, and the end of state allocation of labor led to increasing economic returns to direct producers (Nee and Cao 2005).

taken place on the ground and thereby channeling the gains in productivity into taxable revenue. However, despite the rapid emergence of a private enterprise economy in coastal provinces, it took more than two decades for the state to respond with a comprehensive regulatory and property rights framework.

This middle-range theory, with its emphasis on bottom-up social dynamics, turned on its head the new institutional economics, with its antithetical top-down focus on the role of the state: the argument that the state first has to have formal rules in place before there can be economic growth. Ironically, while purporting to provide an economic analysis of China's transition to a market economy, Ronald Coase's book *How China Became Capitalist* maintains that it was Deng Xiaoping and the policies he pursued that explain China's remarkable successes in economic reform (Coase and Wang 2012). This was also the core narrative in Ezra Vogel's (2011) influential book *Deng Xiaoping and the Transformation of China*. In contrast, my approach relies on middle-range theory to identify social mechanisms, rather than focusing on historic personalities or historical description.

What lessons do we draw from the Yangzi Delta region study of the rise of capitalism in China? Significantly, the bottom-up narrative resembles accounts of the rise of capitalism in the West (Mokyr 2012; Padgett 2012). As in Weber's (1930) classic sociological study of nineteenth-century England and Germany, the mechanisms of endogenous institutional change giving rise to the economic institutions of capitalism came from outside the established economic order. Entrepreneurs who started capitalist enterprises were not part of the political or economic elite, but came from modest socioeconomic backgrounds. We should also observe that the endogenous emergence of economic institutions turns on mechanisms that are general to human social behavior. In this account, entrepreneurs are the central agents driving institutional

innovations enabling capitalist economic development. Once established, the emergent economic institutions motivate and guide self-reinforcing bursts of new entrepreneurial action that lead to tipping points in the expansion of the private enterprise economy. Such “bottom-up institutional innovations followed by top-down accommodative change of formal rules by the state [are] a more common pattern than has been acknowledged” (Nee and Opper 2012: 263).

Within industrial clusters of private firms, cross-cutting and overlapping social networks provided the sinews of enforceable trust and the conduits of knowledge sharing and spillover enabling innovation and cumulative regional advantage in the Yangzi river delta economy. Like-minded entrepreneurs mimicked one another, which led to the development of norms of mutual help and organization in local business networks. As George Homans (1973) argued, informal norms are effectively enforced through social mechanisms as common and universal as social approval (reputation, status) and punishment (bilateral sanctions, negative gossip, ostracism). Despite the initial disjuncture between the informal institutions of the rising private enterprise economy and the legal rules, property rights, and constitutional framework of state socialism, a dynamic process starting with small numbers of marginal economic actors in peripheral locations gave rise to a social-movement-like growth and diffusion of entrepreneurship across the regional economy.

As markets expanded outside of the state-controlled economy, not only were non-state economic actors freer to pursue opportunities for profit and gain, but so were political actors with positional power in state agencies (Nee and Lian 1994). Social mechanisms embedded in markets have posed a genuine dilemma for political leaders because these same mechanisms eat away at allegiance to the Communist Party and its ideology. Whether in Eastern Europe, the Soviet Union or China, economic reform increased the payoff for opportunism and malfeasance

by political actors. Not surprisingly, in the Soviet Union and Eastern Europe, an unintended consequence of reform was the erosion of the legitimacy of established communist parties, resulting ultimately in the fall of these regimes. Shrewdly, China's party leaders recognized this risk early in their reform. Their periodic crackdowns on corruption are a significant factor enabling the continued dominance of the Communist Party in China (see Figure 1).

[Figure 1 about here]

CONCLUSION

The social sciences are still at an early stage of explaining institutional change. Numerous unanswered questions remain, and the appearance of new questions is only to be expected. Yet I believe sociology is in a good position to contribute to cross-disciplinary understanding.

Returning to Whitehead's quip that "A science which hesitates to forget its founders is lost," we may note that a middle range theory *not confirmed* tends to be forgotten, while as a theory *confirmed* is repeatedly cited, it is subsumed in new empirical research programs. In time it becomes simply part of the taken-for-granted knowledge of the discipline.

A half century ago, Merton (1968:52) proffered the following modest assessment of sociology's progress: "We have many concepts but fewer confirmed theories; many points of view, but few theorems; many 'approaches' but few arrivals." While it is still true that we have many concepts, many points of view, and few theorems, confirmed middle-range theories have surely become more numerous. I suggest that what might appear to be the messy and fragmented sociology of today has, in fact, many confirmed theories of the middle-range, which we remember and forget as they become part of the received wisdom of our discipline. While this

may lead to the perception of a discipline lacking a unifying general theory, I believe that it is in a genuine sense a measure of its successes as a sociological science.

REFERENCES

- Alba, Richard, and Victor Nee. 2003. *Remaking the American Mainstream: Assimilation and Contemporary Immigration*. Cambridge, MA: Harvard University Press.
- Cao, Yang, and Victor Nee. 2000. "Controversies and Evidence in the Market Transition Debate." *American Journal of Sociology* 105:1175-1189.
- Coase, Ronald, and Ning Wang. 2012. *How China Became Capitalist*. London: Pelgrave MacMillan.
- DellaPosta, Daniel, Victor Nee and Sonja Opper. 2017. "Endogenous Dynamics of Institutional Change." *Rationality and Society* 29: 1: 5-48.
- DiMaggio, Paul and Walter W. Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48: 2: 147–160. <https://doi.org/10.2307/2095101>.
- Dobbin, Frank. 2009. *Inventing Equal Opportunity*. Princeton, NJ: Princeton University Press.
- Drouhot, Lucas, and Victor Nee. Forthcoming. "Assimilation and the Second Generation in Europe and America: Blending and Segregating Social Dynamics between Immigrants and Natives." *Annual Review of Sociology*.
- Edelman, Lauren B. 1900. "Legal Environments and Organizational Governance: The Expansion of Due Process in the American Workplace." *American Journal of Sociology* 95: 6: 1401–1440. <https://doi.org/10.1086/229459>.
- Edelman, Lauren B. 1992. "Legal Ambiguity and Symbolic Structures: Organizational Mediation of Civil Rights Law." *American Journal of Sociology* 97: 6: 1531–1576. <https://doi.org/10.1086/229939>.

- Evans, Peter B., *Dietrich Rueschemeyer, and Theda Skocpol (Eds.)*. 1985. *Bringing the State Back In*. Cambridge: Cambridge University Press.
- Kasinitz, Philip and John H. Mollenkopf, Mary C. Waters, and Jennifer Holdaway. 2008. *Inheriting the City. The Children of Immigrants Come of Age*. New York: Russell Sage Foundation.
- Keister, Lisas A., Jody Agius Vallejo, and E. Paige Borelli. 2014. Mexican American Mobility: Early Life Processes and Adult Wealth Ownership.” *Social Forces* 93: 3: 1015-1046.
- Merton, Robert K. 1968. *Social Theory and Social Structure*. New York: Free Press.
- Mokyr, Joel. 2010. “Entrepreneurship and the Industrial Revolution in Britain.” Pp. 183-210 in *The Invention of Enterprise: Entrepreneurship from Ancient Mesopotamia to Modern Times*, edited by D. S. Landes, J. Mokyr, and W.J. Baumol. Princeton: Princeton University Press.
- Nee, Victor. 1989. “A Theory of Market Transition: From Redistribution to Markets in State Socialism.” *American Sociological Review* 54: 5: 663-681.
<https://doi.org/10.2307/2117747>.
- _____. 1992. “Organizational Dynamics of Market Transition: Hybrid Forms, Property Rights, and Mixed Economy in China.” *Administrative Science Quarterly* 37: 1: 1-27.
- _____. 1996. “The Emergence of a Market Society: Changing Mechanisms of Stratification in China.” *American Journal of Sociology* 101: 4: 908-949.
- Nee, Victor, and Peng Lian. 1994. “Sleeping with the Enemy: A Dynamic Model of Declining Political Commitment in State Socialism.” *Theory and Society* 23: 2: 253-297.
<https://doi.org/10.1007/BF00993817>.

- Nee, Victor, and Yang Cao. 1999. "Path Dependent Societal Transformation: Stratification in Hybrid Mixed Economies." *Theory and Society* 28:799-834.
- _____. 2005. "Market Transition and the Firm: Institutional Change and Income Inequality in Urban China." *Management and Organization Review* 1:23-56.
- Nee, Victor, and Sonja Opper. 2012. *Capitalism from Below: Markets and Institutional Change*. Cambridge, MA: Harvard University Press.
- Padgett, John F. 2012. "Transposition and Refunctionality: The Birth of Partnership Systems in Renaissance Florence." Pp. 168-207 in *The Emergence of Organizations and Markets*, edited by J.F. Padgett and W.W. Powell. Princeton: Princeton University Press.
- Portes, Alejandro, and Min Zhou. 1993. "The New Second Generation: Segmented Assimilation and its Variants." *The Annals of the American Academy of Political and Social Science* 530: 74-96.
- Schelling, Karl. 1978. *Micromotives and Macrobehavior*. New York: W.W. Norton & Co.
- Schumpeter, Joseph A. [1942] 1947. *Capitalism, Socialism and Democracy*. 2nd Ed. London: Allen Unwin.
- Skocpol, Theda. 1978. *State and Social Revolution*. Cambridge: Cambridge University Press.
- Szelenyi, Ivan. 1983. *Urban Inequality under State Socialist Redistributive Economies*. London: Oxford University Press.
- Ezra Vogel. 2011. *Deng Xiaoping and the Transformation of China*. Cambridge, MA: Harvard University Press.
- Waters, Mary C., and Tomás R. Jiménez. 2005. "Assessing Immigrant Assimilation: New Empirical and Theoretical Challenges." *Annual Review of Sociology* 31: 105-125.

Watts, Duncan J. 2011. *Everything is Obvious: Once you Know the Answer*. New York: Crown Business.

Weber, Max. [1904] 1930. *The Protestant Ethic and the Spirit of Capitalism*. Translated by Talcott Parsons. London: Allen and Unwin.