2002 Award Winner

Charles F. Sabel's Contributions to Entrepreneurship and Small Business Research

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Introduction

Together with Giacomo Beccatini, Charles F. Sabel received the *International Award for Entrepreneurship and Small Business Research* in 2002. Over three decades of entrepreneurially vital research testify to how Sabel radically changed our understanding of entrepreneurship, small business firms, industrial organization, industrial economics, and industrial sociology.

Most researchers in the field try to document the importance of entrepreneurship and small business *per se*. Sabel, however, looks beyond the role of innovative and entrepreneurial activities in modern communities, choosing instead to identify how entrepreneurship actually changes patterns of economic and societal organization. Real-life conditions provide his data; he formulates theoretical patterns of industrial organization based on actual observations. Sabel then uses these patterns to heuristic search for novel empirical phenomena that prove (or disprove) the emergence of the very patterns in question. In doing so, he gains an understanding of their inner logic and the alternative dynamic that entrepreneurial action has brought to pass. Over and over again, he has used this method to describe how and to what extent the world is changing its figuration.

Yet his interests are not restricted to just business; he also examines the differences inherent in the larger landscape of nations' global creative constructions and epochal changes. Sabel's writings combine detailed empirical studies of entrepreneurial activities with broader generalizations and syntheses, enabling social scientists to see the changing patterns that emerge from the constant entrepreneurial vitality of many countries.

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An Explosive Beginning of a Research Career

Sabel's influence on our changing understanding of industrial organization and related fields must be seen against the background of the 1980s. In the previous decade, a number of grand books codified our thinking about the crux of modern industrial organization. For instance, Braverman (1974) explained how Taylorism drove the rationalization that divided planning and execution between head and hand and degraded work itself. Following in the wake of numerous observers, Chandler (1962; 1977) explicated the origins of the modern mass producing enterprise, describing its technological *raison d'être* and the managerial revolution that enabled corporations to expand. Williamson (1975) took Coase's transaction cost approach to explain why U-form and M-form enterprises solved a number of problems with opportunism and shirking. Finally, Freeman (1974) described how large R&D laboratories had become dominant by combining the many scientific disciplines necessary for producing innovations, thereby concentrating them in large corporations. Schumpeter's (1942) vision of how the entrepreneurial vitality of capitalism would move from the gifted individual to routine engineering departments in large companies appeared to have materialized. Taken together, these books seemed to provide a comprehensive view of the dominant industrial pattern, including how it operated and its core dynamic.

The irony was that the industrial, entrepreneurial, and business dynamic was in deep crisis at the same time as these books were published. The trouble hit at multiple levels. On a political plane, the modern corporation was criticized for degrading work and creating a schizophrenic divide within people as kings of consumption and as slaves in production. Economically, the rigidity of mass production was said to lead to stagflation, while ecological criticisms centered on the waste that arose in consumer society because cost structures failed to include externalities. Finally, with globalization eroding the self-fuelling mechanisms between Fordism and Keyne-

sianism, regulatory templates were called into question.

Whereas some scholars defended mass production by creating myths about the old order, others criticized its shortcomings. Sabel, on the contrary, sought to understand what was actually happening in societies under such strains and contradictions. In his first 1982 book, *Work and Politics: The Division of Labor in Industry*, he mounted an imaginative search for how capitalism might change itself. Sabel took the waves of strikes in the 1960s as his starting point, aiming to understand why the workers went for the streets in the first place and what caused them to return to their jobs shortly after. He realized that "under the right circumstances, the clash of worker strategy and management counterstrategy could lead to transformations that neither foresaw" (Sabel 1982, p. xii). In other words, Sabel localized a source of entrepreneurial vitality in the politics and strategic interplay between workers and managers under the guise of class conflicts.

The world that Sabel opened was not full of simple causalities. Instead of a united working class, he introduced us to a world of different groups with disparate worldviews and careers (including craftsmen, workers with plant-specific skills, unskilled workers, peasant [or immigrant] workers, would-be craftsmen and ghetto workers). Because these groups normally stood divided in terms of interests and dignity, managers had great liberty in playing them off one another. But during the large-scale strikes of the late 1960—and in particular at Fiat in Italy—different groups of workers began to act jointly. They learned about each other's worldviews in the process, ultimately transforming their political identities and interests. In Italy, this joint action accorded so much power to the unions that they could claim participatory influence on the organization of production, including what should be produced. In other words, politics could undermine the technological and competitive determinism that we would expect from Braverman's account of Taylorism.

I wish to stress in passing that Sabel's first book makes us see a diverse set of worldviews, career prospects, and aspirations found among these various work groups. His analysis of joint action's subsequent effect on these dimensions is in itself an exemplary form of *dynamic* social analysis; a major contribution to social science, which normally tend to employ comparative static and equilibrium analysis.

Yet he did not stop there. Following his heuristic search hypothesis—that new worker strategies would be met with new forms of management strategies—his next question became which counterstrategies these managers would invent. To make a complex story simple, managers realized that the codified union rights of representation and participation were restricted to large firms; and therefore managers could undermine union influence by simply outsourcing as much work as possible to non-unionized small business firms. In Italy, new jobs flowed to the "industrial districts" of SMEs in Third Italy in response. Whereas many of these small enterprises had functioned as sweatshops with an irregular, shifting workforce, they now received opportunities for new prosperity. This led to yet another question: how would the SMEs react to the new opportunities?

It was easy to imagine that the SMEs of Third Italy would fall victim to the dubious strategies of the large outsourcing firms from the North, trading their independence for a numerical increase in turnover. Without doubt, the big players would enact "divide and conquer" policies toward SMEs in order to mitigate potential transaction costs. But the "situation" was never normal nor defined in pure market terms—politics played a role here too. Many entrepreneurs of Third Italy shared a historical legacy as craft workers in Northern Italy. By the late 1950s they had been expelled and blacklisted as communist by the large firms in which they had been in opposition to the introduction of Tayloristic methods. Accordingly, their experiences taught them to never become too dependent on large firms. Therefore, they used the increased turnover from their deals with the North to modernize their plants by investing in flexible technologies, erecting therewith a bulwark to protect their businesses if their predictions should prove true. Organized in union-like craft organizations such as CNA while boasting collective membership of the Communist Party, the industrial districts of Third Italy was not only a weak representative of Marshall's clusters of small firms. It was in fact a negation of the very principles of industrial organization that the grand books of the 1970s had enshrined. The lessons of Braverman, Chandler, Freeman and Williamson were being tested; it would soon become clear that entirely new groupings that did not consist of managers and engineers would participate in shaping the future.

Sabel informed his search for new patterns by considering a number of studies of industrial organizations in a variety of countries. In each case he showed how politics interacted with the principles of industrial organization to create circumstances that deviated from the patterns catalogued by the mainstream books of the 1970s. Historical legacies, social positions, and political actions marked the organization of mass production differently across countries, affecting both large companies and the division of labor between large and small businesses. Sabel had made it clear that the world was a set of very divergent societies in which entrepreneurial activities would lead to very different mutations. Instead of subscribing to a single path of industrial and economic progress, researchers should try to identify the emerging avenues that might redefine the rules of competition, the division of labor among enterprises, and the organization of work within them.

Imagining an Alternative Future: The Coming of Flexible Specialization

Although *Work and Politics* worked toward a new synthesis by including alternatives to mainstream literature on mass production, it did not confront the dominant view of the 1970s directly. Yet this was accomplished with *The Second Industrial Divide: Possibilities for Prosperity*, which Sabel co-authored with Michael Piore in 1984. In place of defining a singular evolution of the mass producing model, the book held that two forms of technological development competed with one another throughout the 19th century. The first was craft production, in which "machines and processes could augment the craftsman's skill, allowing the worker to embody his or her knowledge in ever more varied products: the more flexible the machine, the more widely applicable the process, the more it expanded the craftsman's capacity for productive expression." The other was mass production, in which the guiding principle of technological development "was that the cost of making any particular good could be dramatically reduced if only machinery could be substituted for the human skill to produce it. Its aim was to decompose every handwork task into simple steps, each of which could be performed faster and more accurately by a machine dedicated to that

purpose than by a human hand" (Piore and Sabel 1984, p. 19).

In the first industrial divide, they argued, mass production evolved as the dominant form of production not only because of competitive advantages, but also because societies had learned to master its shortcomings—often from deep crises like that of the 1930s. Social phenomena such as Keynesian demand management and its institutionalization in New Deal programs and bureaucracies, and the emergence of centralized wage negotiations had enabled the expansion of mass production at the expense of craft production. Craft production and small firms had not entirely disappeared under this regime, but their role had been confined to supply mass producers with specialized machinery or augment supply during booms when the capacity of mass producers was too low to meet demand.

But the 1980s witnessed the emergence of a second industrial divide. Keynesianism had evolved into a fiscal crisis in many countries, meaning that mass producers could not run a profit as reduction in supply came with high fixed costs. Markets had become volatile; the effects of state-induced demand on domestic enterprises had become limited as economies became more open; centralized bargaining had evolved into a toxic drink that undermined profitability, price stability, and national competitiveness. Mass production could only stabilize and later resume a robust route to prosperity if Keynesianism could be globally managed. But in the world of the early 1980s, this option looked very bleak. An escalating cold war between communism and capitalism, the exploits of the OPEC cartel, and the breakdown of stable currency-regimes all pointed towards very different routes. Moreover, the old industrial countries were confronted with fierce competition from newly industrialized economies.

But a number of developed economic regions—including Third Italy, Southern Germany and Japan—were showing surprising signs of prosperity in the midst of the stagnation occurring in many economies, especially the United States. Piore and Sabel showed how all of these regions had organized production in alternative ways—both in terms of internal work organization and the structuring of industry across enterprises. In all of them, small businesses played a prominent role, specializing in certain segments of the value chain rather than trying to control the production of an entire product. This organization made it possible to customize production, introduce novel products faster, and combine and recombine the industrial capabilities of an array of firms to meet volatile markets. Japan in particular had developed alternative methods of coordinating and improving production by quality circles, high skill levels, and other factors that facilitated flexibility and low costs. In other words, some economies had developed an alternative form of organization, which Piore and Sabel named *flexible specialization*. In this mode of production, firms could stabilize by being flexible and using technology according to the craft model. Obviously, this could develop from a variety of beginnings along a variety of routes. Equally obvious, however, was that flexible specialization gained momentum with the introduction of new CNC-based technologies; the breakdown in demand for mass produced goods and a move toward more differentiated consumption patterns; frequent shifts in macro-economic conditions; and shortened product life-cycles. Entrepreneurship and small businesses were poised to assume a new role in the patterns of economic dynamics, a development that the mass producing model was unable to predict. Rather, this new direction seemed to run against all what Braverman, Chandler, Freeman and Williamson had taught us.

While Piore and Sabel were writing *The Second Industrial Divide*, Sabel told me in a conversation that he saw the coming book setting a new research agenda for the coming 10–15 years, arguing that we would have to look in radically new directions if we wanted to understand industrial development and national prosperity. He and Piore drafted an alternative approach to the study of industrial organization to the then dominant rather teleological and deterministic view; an approach that asked for a much broader view as to what processes were in play in shaping industrial organization. If *flexible specialization* was to become a new paradigm, it would require penetrating analyses of different forms and different countries. And he was optimistic about this happening. However, participants in research seminars at MIT, where the first drafts of chapters were presented, were both critical and skeptical—especially those who spent their academic career criticizing capitalism and blaming it for the evils of mass production. That capitalism might harbor a route to an optimistic future—where progress would not go hand in hand with the degradation of work, where economic power would not accumulate in still more giant corporations, where many instead of a handful of firms would compete to bring new products to the market, and where the effects of state efforts would not be primarily assessed for their ability to stimulate mass demand—triggered strong reactions among almost all critical social scientists. On the other hand the proponents of the mainstream were very self-assured about the survival of the mass production paradigm. Their questions were obvious yet challenging: could planning and execution be integrated without managers losing grip on the corporation? Would not a decentralized production system lead to holdups and opportunistic games, ultimately becoming undermined by radically increasing transaction costs? Would not decentralization only be possible in quite traditional sectors, independent of highly concentrated, centralized R&D departments? Were not the advantages of economies of scale obvious in the long term, reserving flexible production for the margins of the economy? Would it not be possible for large corporations to take over small businesses in the industrial districts, thereby undermining the competitive challenge of the suffering, yet still powerful large corporations?

A New Divide in Industry Studies but Perhaps Less in Industry?

Such questions were, in a way, indicators of the radical ideas that Piore and Sabel's 1984 book would force people to contemplate. On the one hand, dominant mainstreamers were obliged to reconsider their premises and arguments; on the other, critics of mass production had to find novel ways of pillorying capitalism as such. The book was translated into German, Spanish, French, Italian, and Japanese, and moved beyond the narrow academic community to impact public debate.

How to organize for flexibility became in turn a major concern in economics, sociology, and policy science alike. The New Competition—which involves products made in many different variants instead of just one—also inspired debate. Thirdly, alternative ways of organizing product development entered discussions. Economic geographers discovered that most countries housed previously neglected clusters of SME based industries that they had considered old-fashioned or premature until Piore's and Sabel's book appeared.

Suddenly, these SMEs had become attractive objects to study; indeed, they might be the harbingers of a new industrial future. In response, a variety of different industrial districts garnered new attention. Rather than relying on pure economic reasoning, academics began examining the process by which social relations became embedded in economic activities, trust was created making it possible to minimize transaction costs, networks of firms and universities combined to create entrepreneurial drive and scientific novelty that could compete with large R&D labs. Researchers discovered that workers had been fighting for maintaining and extending skill levels in many places. In addition, it became clear that informal methods of craft organization often coexisted with Taylorist managerial practices, leading workers to play a more creative role than expected. In fact, extensive data analysis revealed that SMEs drove growth in employment in many countries (Sengenberger et al. 1990). Many of these SMEs were created by craftworkers whose entrepreneurship grew from previous careers in industry and society's influence; these entrepreneurs meshed with neither the highly individualized vision of Schumpeter's entrepreneur nor the routine behavior of corporate R&D. Existing forms of work organization often produced only small differences between workers, middle-managers, and entrepreneurs; as a result, the entrepreneurial function could to a certain extent be carried out by blue collar workers. *The Second Industrial Divide* opened our eyes, leading us to doubt the former mainstream and start searching for alternative ways of understanding industrial change and its relation to larger societal evolution.

But the new discoveries also tempted Sabel and his closest colleagues to reconsider their own positions. Perhaps *The Second Industrial Divide* was actually something that happened to the research community rather than to the history of industrialization and modernization. Researchers suddenly began finding complex, heterogeneous forms of industrial and work organization everywhere they looked. Hybrids of mass and craft production seemed more normal than pure forms of either. While Piore and Sabel (1984), based on the work of Sabel and Zeitlin (published in 1985), had seen the battle between the craftsman and mass production, a new set of historical studies concluded that the single-mindedness of industrial organization had rather been an attribute of academic observers but had not characterized practitioners, whose survival depended on their ability to strategize and find new forms of economic organization in a risky and unpredictable world. In the introduction of a 1997 book co-edited with Jonathan Zeitlin—a book that took many years to produce because their views readily changed throughout the writing process—they described the new view as follows:

> The central theme of this book is that the experience of fragility and mutability which seemed so novel and disorienting today has been, in fact, the definitive experience of the economic actors in many sectors, countries and epochs in the history of industrial capitalism. Precisely because they have been aware of the complex dependence of every form of economic organization on multiple and shifting background conditions, they have constantly experimented with institutional designs that until recently would have been judged economic solecism. […] To anticipate, where many observers in the post-war period saw the economy as steadily increasing in efficiency through the ever more specialized use of resources, and therefore paying an acceptable price in increased rigidity for previously unimaginable increases in well-being, throughout most of the history of industrial capitalism, and again today, the economic actors have tried with considerable success to increase efficiency without jeopardizing and indeed sometimes even increase flexibility. (Sabel and Zeitlin 1997, p. 3)

Coming to this conclusion was not easy. It involved reinterpreting the industrialization process in countries outside the UK and the US, which had in many ways delivered the historical material for the dominant mainstream view. Novel research revealed that industrial districts could be studied in places both within and outside Italy, despite their differing characteristics (Pyke et al. 1990; Pyke and Sengenberger 1992). Thus, disparate historical construction, varying relations with large firms, and differences from the dominant logic of mass production became topics for research. Sabel and his closest associates initiated an entirely new set of studies, focusing in part on how firms were organized, how they entered into cooperation and competition under a variety of underlying institutional conditions, and how divergent forms of industrial relations influenced work organization. As a result, economic geographers, business sociologists and political economists changed their research agendas, initiating comparative studies of capitalism in response. These studies led to such notions as *national business systems and varieties of capitalism*, whose idea lay in the attempt to explicate the processes of reproduction and change occurring in different nations, and to understand the comparative differences in their entrepreneurial vitality and competitiveness. In many ways, academics developed a new humility toward the variety of creative powers that drive different societies, and began looking to identify how these might be boosted or stymied.

Turning to New Research Frontiers: The Pragmatist Revolution in Industry

While many researchers continued to study how industrial organization stimulates SMEs and entrepreneurship in regional settings of local districts or clusters, Sabel turned toward a new focus: could the flexibility and maneuverability, and simultaneous cost reduction methods of large Japanese companies be used to rejuvenate large industrial corporations more generally? In the 1990s, companies in both the US and the UK tried to alleviate their manufacturing crises by adopting Japanese principles such as U-formed cells, quality control, just-in-time, and so forth. What made Japanese corporations different from the American ideals that they had originally tried to imitate? And could large corporations use these principles to rectify the challenges posed by districts and clusters of SMEs—in terms of innovative speed, ability to recombine industrial processes, and costs?

Concluding differently than the dominant "lean-production" debate, Sabel discovered that the Japanese companies' secret was the ability to organize *learning by monitoring* (Sabel 1994). By avoiding buffer-stocks in favor of running production above capacity limits (in opposition to their American competitors), shortcomings and defects of the system would reveal themselves. The American system, on the other hand, relied on managerial action to prevent failures from being disclosed. Furthermore, because quality circles and the promotion system almost created a contest to find explanations for failures, the Japanese enjoyed a horizontal ability to continuously diagnose and improve the system. Herein lay the probable reason for why they could introduce more varied products and yet quickly reach cost reductions comparable to economies of scale. But it also pointed toward the unification of management principles with organizations, in which conception and execution were decentralized to operative levels and where planning and execution beca-

me reintegrated.

By reformulating the Japanese lesson in this fashion, Sabel identified a set of principles and patterns that define the constitutional ordering of corporations (Sabel 1993; 1996). His were not simply variations over "hierarchy" (as is the case in Williamson 1975) and the usual principal-agent relations in economic theory. Rather, Sabel's notion of *learning by monitoring* is a heuristically formulated, theoretical pattern with which to search for devices—called "pragmatist" organizational changes—that a firm can use to delegate responsibility for continuous improvements and innovation. This allows, for instance, autonomous teams (either internal or external to the firm studied [Sabel 1991]) to search for better alternatives, continuous improvement in a highly experimentalist manner rather than protect existing routines without jeopardizing the unity of the corporation. These pragmatist organizational forms, as Sabel writes, make it possible to develop "revolutionary routines" (Sabel 2006).

This new search for pragmatist organizational changes has proven to be very successful. Together with Helper and MacDuffie (2000), Sabel has identified such managerial techniques as "root cause analysis" and "simultaneous engineering." In addition, he has described organizational procedures by which opportunism can be controlled, especially that which arises when agents are more informed than their principals and have to transcend the confines of principals' preconceptions in their experimentalist search for improvements and innovation. Most recently, a parallel search for new contractual arrangements between firms allowing for innovative inter-firm collaboration has been successful as well. Such novel contractual forms have emerged though the outcome of the collaborating actors cannot be specified from the start—which makes the problems of opportunism, holdups and moral hazards almost impossible to overcome. Together with Gilson and Scott, Sabel (2009) has identified contractual arrangements that lawyers thought impossible to write.

At their core, the new pragmatist organizational changes emphasize the search for improvements and innovation by decentralized actors informed about best practices. To both cope with opportunism and coordinate a search by many decentralized or external units, experimentalist firms institutionalize "deliberative democracy" rather than a command and control system. ("Deliberative democracy" specifies a set of procedures by which participants negotiate over benchmarks, evaluate performance, diagnose deviancies, publicly justify acts, and reformulate benchmarks.) Thus, Sabel has transformed a whole set of actions that formerly languished under the umbrella of informal organization and tacit knowledge into a much more systematic and communicative process, making it possible to learn faster and more efficiently across departments, divisions—and even organizations.

Sabel's new search has been so successful that he thinks that pragmatist organizational changes happen with a speed similar to the mutation of finches.

For students of entrepreneurship and small businesses, Sabel's new observations are very interesting. First, they point to a novel wave of entrepreneurship in industry as such. Not only are firms detecting and creating pragmatic organizational practices in highly entrepreneurial ways, but entirely new groupings both within and outside the firm are assuming the entrepreneurial role as well. These practices can underlie the growing interest in user-driven and employee-driven innovation and open global innovation processes. Seen from a transaction cost or principal-agent position, these new phenomena should be impossible in principle; but pragmatist organizational changes explain their emergence and why they might become robust new organizational forms. Yet it should be mentioned that large firms have developed these new pragmatist organizational changes mostly in response to the crisis of mass production and the challenges arising from flexible specialization and industrial districts and NICs. As a result, these changes could exert growing pressure on small firms; their advantage always lay in their ability to contend with decentralized improvements and innovation without being undermined by the opportunism simply because of personal bonds and close mutual monitoring. Sabel (2003) raises the question whether SMEs in industrial districts will be able to institutionalize the new pragmatist principles and invent new ones, thereby regaining some of the entrepreneurial drive they lost to larger firms in the meantime. These are very serious questions for students of entrepreneurship and small businesses—questions that Sabel also addressed in his Prize Lecture for the *International Award for Entrepreneurship and Small Business Research*.

The Pragmatist Revolution Writ Large: Transforming Welfare States and Development Dynamics

It is easy to imagine that the spread of pragmatist organizational practices in business will allow societies to engage in dynamic, global innovative networks. Instead of falling victims to failed attempts to defend past comparative advantages, societies will benefit from the innovations and learning dynamic that these networks offer. Before the current crisis, much of the economic prosperity of diverse economies such as Ireland, Taiwan, India, and South American countries could be traced to the mutual learning processes such networks encourage, especially as these countries shifted away from more protective industrialization strategies. In a number of recent studies—in particular of South Africa and Argentina—Sabel explores how the new organizational forms influence the formation of novel development mechanisms in NICs by which they may offensively explore and detect future comparative advantages.

The revival of the Nordic welfare states from the crisis of 1990 can also be explained by firms' successful global integration—they began offering services based on manufacturing products that underpin their customers' advances along pragmatist organizational practices (Kristensen and Lilja 2009). Nordic firms, themselves organized in novel ways allowing for operational routines to be frequently recombined in new projects, makes it in turn possible to question these very routines, enabling firms to learn quickly on a broad scale.

The distinct variety of pragmatist organizational forms in Nordic countries depends on the participation of employee groups that harbor a willingness to engage in an unknown and unpredictable (in terms of content, space and time) working life. In this context, employees will often encounter situations that test the limits of their proficiencies; some will have to engage in activities that help them transcend their professional identities. In most societies, only the economically and hierarchically privileged groups have the possibility of participating in such a working life of constant job and personal transition.

Sabel (2005) was among the first to recognize that including wider parts of a population in the new organizations depends on public service institutions' ability to enable people to participate actively

and equally in new forms of organizations. Creating such a capable public implies a farewell to the standardized provision of services provided by rigid bureaucracies such as New Deal organizations. Yet new public management and neo-liberal reforms of public organizations have been largely unsuccessful in fostering innovative services to enable people to take on still more demanding challenges in work. Together with Dorf (1998), Sabel has suggested *A Constitution of Democratic Experimentalism*, in which public organizations form polyarchies across public sector domains and private firms to provide novel, innovative services that meet the complex demands of civil society. And just as decentralized firms and networks among firms can be run by deliberative democracy and pragmatist forms of organization, they imagine that such practices can enable the quick diffusion of best practices in the public sector. Indeed, adopting pragmatist organizational principles would help make the public sector as industrious and innovative as the private sector. It is possible to imagine that the mutual interplay of the public and the private sector in the future would constitute experimentalist economies of a yet unsurpassed entrepreneurial vitality.

Again, with the sketch for a novel pattern of public governance, largely based on his concepts of learning by monitoring, deliberative democracy and pragmatist organizational practices, Sabel has embarked on studying, whether such phenomena are emerging in the public sector. By doing so, he has steered our understanding of their dynamics and impact. First done in a study of school reform in the United States (with Liebman 2003), and then in a study of child welfare reform (Noonan, Sabel and Simon 2009). These detailed studies reveal once more a pattern of structured procedures by which continuous improvement and innovation can be attained and assessed, failure diagnosed, and justifications produced—the lessons learned in one place can assist the search for better alternatives in other places.

Sabel has recently engaged himself in a collaborative search for whether pragmatist organizational changes can be detected on a broad scale. Working from the fact that the Nordic welfare states fund expansive access to higher education and further training, and allocate a large share of GNP to family-centered social services of a broader scope than any other country so far, Sabel is examining whether this allows larger proportions of these societies to engage in revolutionary routines and global interaction. If he finds what he is looking for, novel patterns for discerning a new figuration of an entrepreneurial society may begin to take shape.

References

Braverman, Harry (1974), *Labor and Monopoly Capital. The Degradation of Work in the Twentieth Century.* New York and London: Monthly Review Press.

Chandler, Alfred D., Jr. (1962), *Strategy and Structure. Chapters in the History of the American Industrial Enterprise.* Cambridge, MA: MIT Press.

Chandler, Alfred D., Jr. (1977), *The Visible Hand. The Managerial Revolution in American Business.* Cambridge, MA: The Belknap Press of the Harvard University Press.

Dorf, Michael C. and Charles F. Sabel (1998), "A Constitution of Democratic Experimentalism." *Columbia Law Review* 98(2), 267–473.

Freeman, Christopher (1974), *The Economics of Industrial Innovation*. Harmondsworth: Penguin Books.

Gilson, Ronald J., Charles F. Sabel and Robert Scott (2009), "Contracting for Innovation, Vertical Disintegration and Interfirm Collaboration." *Columbia Law Review* 109(3), 431–502.

Helper, Susan, John Paul MacDuffie and Charles F. Sabel (2000), "Pragmatic Collaboration, Advancing Knowledge while Controlling Opportunism." *Industrial and Corporate Change* 10(3), 443–483.

Kristensen, Peer Hull and Kari Lilja, eds. (2009), "New Modes of Globalizing, Experimentalist forms of Economic Organization and Enabling Welfare Institutions–Lessons from the Nordic Countries and Slovenia." *Research report B-100.* Helsinki: Helsinki School of Economics.

Liebman, James and Charles F. Sabel (2003), "A Public Laboratory Dewey Barely Imagined. The Emerging Model of School Governance and Legal Reform." *NYU Journal of Law and Social Change* 23(2), 183–304

Noonan, Kathleen, Charles F. Sabel and William Simon (2009), "Legal Accountability in the Service-based Welfare State. Lessons from Child Welfare Reform." *Law and Social Inquiry* (forthcoming).

Piore, Michael J. and Charles F. Sabel (1984), *The Second Industrial Divide. Possibilities for Prosperity.* New York: Basic Books.

Pyke, Frank, Giacomo Beccatini and Werner Sengenberger, eds. (1990), *Industrial Districts and Interfirm Co-operation in Italy.* Geneva: International Institute for Labour Studies.

Pyke, Frank and Werner Sengenberger, eds. (1992), *Industrial Districts and Local Economic Regeneration.* Geneva: International Institute for Labour Studies.

Sabel, Charles F. (1982), *Work and Politics. The Division of Labor in Industry.* Cambridge, MA: Cambridge University Press.

_____ (1991), "Moebius-Strip Organizations and Open Labor Markets. Some Consequences of the Reintegration of Conception and Execution in a Volatile Economy." In James Coleman and Pierre Bourdieu, eds., *Social Theory for a Changing Society.* Boulder: Westview Press, 23–63.

_____ (1993), "Constitutional Ordering in Historical Context." In Fritz Scharf, eds., *Games in Hierarchies and Networks.* Boulder: Westview Press, 65–123.

_____ (1994), "Learning by Monitoring. The Institutions of Economic Development." In Neil Smelser and Richard Swedberg, eds., *Handbook of Economic Sociology.* Princeton: Princeton University Press and Russell Sage Foundation, 137–165.

_____ (1996), "Constitutional Orders: Trust Building and Response to Change." In Roger Hollingsworth and Robert Boyer, eds., *Contemporary Capitalism: The Embeddedness of Institutions*. Cambridge: Cambridge University Press, 154–188.

_____ (2003), "The World in a Bottle, or Window on the World? Open Questions about Industrial Districts in the Spirit of Sebastiano Brusco." Paper presented to the Conference on Clusters, Industrial Districts and Firms: The Challenge of Globalization. Modena, Italy, September 12–13.

_____ (2005), "Globalization, New Public Services, Local Democracy, What's the Connection?" In *Local Governance and the Drivers of Growth*. Paris: OECD, 111–131.

_____ (2006), "A Real Time Revolution in Routines." In Charles Heckscher and Paul Adler, eds., *The Firm as a Collaborative Community.* Oxford: Oxford University Press, 106–156.

_____ and Jonathan Zeitlin (1985), "Historical Alternatives to Mass Production." *Past and Present* 108(1), 133–176.

_____ and Jonathan Zeitlin, eds. (1997), *Worlds of Possibilities Flexibility and Mass Production in Western Industrialization.* Cambridge, MA: Cambridge University Press.

Schumpeter, Joseph A. (1942), *Capitalism, Socialism and Democracy.* New York: Harper & Row.

Sengenberger, Werner, Gary W. Loveman and Michael J. Piore (1990), *The Re-emergence of Small Enterprises. Industrial Restructuring in Industrialized Countries.* Geneva: International Institute for Labour Studies.

Williamson, Oliver E. (1975), *Markets and Hierarchies, Analysis and Antitrust Implications.* New York: Free Press.