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Pragmatism versus economics ideology in the post-socialist transition: China versus Russia

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Introduction

Over a decade has passed since the hey-day of Western assistance to the post-socialist transition countries. We can now look back and clearly see the role that the ideology of conventional economics played in the transition. Again and again, pragmatic alternatives were ignored in favor of an institutional blitzkrieg or shock therapy to quickly "install" textbook/cartoon models of legal and economic institutions with extensive negative consequences. This history is critically reviewed but, more importantly, we also outline the intellectual basis for pragmatic approaches to social learning.

Philosophical Pragmatism

The American Pragmatist Tradition

In America, philosophical Pragmatism is usually associated with John Dewey (1859-1952), William James (1842-1910), and Charles Saunders Peirce (1839-1914).¹ For our purposes, John Dewey is perhaps the best guide since James wrote mainly about psychology and Peirce about the philosophy of science. In more recent legal thought, the revival of Pragmatist themes is mainly associated with the work of Charles Sabel [1994, 1995] and his associates such as William H. Simon [Simon 2003; Sabel and Simon 2003] and Michael Dorf [Dorf and Sabel 1998] all at the Columbia Law School.

The Social Engineering Vision of Scientism and Modernism

Pragmatism may be best seen as a reaction to the Enlightenment vision of modernity inspired largely by the triumphs of Newtonian physics and by the advances in technology and engineering associated with the Industrial Revolution. This technical engineering vision of the

¹ For representative writings, see Dewey [1927, 1960], James [1963], and Peirce [1958]. Westbrook [1991] gives an excellent treatment of Dewey's social and political thought.

world is variously called "modernism" or "scientism."² The controversy is not about mathematics or physics; it is about the extension of that engineering vision of the physical world to the social world. Just as science and engineering can enable us to solve physical problems—to dam rivers to control floods or to irrigate deserts to make them bountiful—so, according to this vision, the social sciences will eventually allow us to engineer solutions to social problems. This is the vision of social engineering (whether or not that particular phrase is used).

What are the primary characteristics of the social engineering view of the social world? Just as a mathematics problem has one correct solution, so a social problem has a best or "optimal" solution. For instance, Frederick Taylor applied this mentality to the workplace as "scientific management" [1911], now known as "Taylorism." He was so obsessed with finding the "One Best Way" that this phrase was used as the title for a recent biography of Taylor [Kanigel 1997].

Regardless of other differences, both neoclassical economics and socialist economics (e.g., in the former Soviet Union) agreed on modeling problems mathematically as the maximization of some objective function subject to various constraints so that problems would have an "optimal solution" (not necessarily unique). Both the Soviet and the orthodox neoclassical literature of economics is replete with "optimal solutions" in terms of certain assumed models.

Now that economics has been applied to the law—the "economic analysis of law" [Posner 1972; 1983]—the law and economic journals even have "optimal" solutions to this or that legal problem based on the maximization of the objective function of social wealth.³

But the One Best Way mentality predates the invasion of economics into legal studies. There has always been the analogy between the laws of physics on the one hand and moral or legal laws on the other hand. In physics, there might be gravitational and electromagnetic forces both operating on a body but there could never be a "contradiction" between those laws; both the gravitational and electromagnetic laws would be obeyed. Almost unconsciously, we find the attitude carried over into moral and legal philosophy that there can be no inherent contradictions between the most basic laws or norms. Once everyone's rights are fully articulated, every hard case will have a "correct solution" if only we could find it. There is no tragedy in the Greek sense of an irreconcilable conflict between basic norms.

Another characteristic of the social engineering vision is the minimal or non-existent role of any human agency on the part of the beneficiaries of the projects. Human agency plays no role in the laws of (classical) physics. Scientism carries over a similar viewpoint to the social world. For instance, the basic normative concept in neoclassical economics is that of allocative efficiency or "Pareto optimality." An allocation of resources between people is *Pareto optimal* if there is no reallocation that will make some better off without hurting others. The specification is completely silent on the question of how the allocation was obtained—whether by the free agency of people on a market or by the diktat of an all-seeing planner who efficiently allocates resources to passive subjects. It is a technocratic end-state vision of the solution to the social problem of resource allocation where the human agency of the people has no constitutive role.

² See Scott [1998] on modernism and Hayek [1979] on scientism particularly in the thought of Marx, Saint-Simon, and Comte.

³ See Chapter 4 "The Ethical and Political Basis of Wealth Maximization" in Posner 1983. The fatal methodological flaw in the Kaldor-Hicks principle behind the social wealth maximization approach has been recently pointed out in Ellerman [2009].

A similar viewpoint can be found in much legal thought. Where there is a social conflict, rights can be articulated to define the correct or just solution, a court may be able to find that solution, and the solution can be implemented in a manner supervised by the courts or other legal authorities—all independent of the participation of the involved parties by playing a role in determining a solution to the conflict.

The Pragmatist Alternative

The Pragmatist vision is juxtaposed to the social engineering vision of human society promoted by scientism and modernism. Pragmatism views the social world as being actively constructed by people so, at each point in time, it is radically incomplete and in a state of becoming. People's values and opinions, their preferences and beliefs, are always incomplete and in a state of changing in a process of probing values and testing beliefs. Hence the notion of there being some predefined "One Best Way" does not occur, and the notion of a "solution" to a social problem without the active involvement of the parties seems out of place. As people find out more about the possible means to their ends in a social learning process, their conception of the ends may change as well. Hence Pragmatism sees a unity of knowing and doing giving a two-way interaction between means and ends in contrast to the engineering vision of finding the optimal means to reach the ends given by some assumed moral consensus.

In view of the incompleteness of values and beliefs, a solution to a social problem or conflict is something that needs to be constructed by the active involvement of the parties, not something that can be abstractly determined (e.g., through the articulation of rights or the maximization of wealth) and then imposed on passive parties. John Dewey was best known for his active learning (or constructivist) theory of education [Dewey 1916]. His vision of social problem solving and change was essentially active learning writ large as activist or constructivist forms of social learning. A solution that arises out of the active involvement of the parties will be the "fruits of their labor" and thus they will have an "ownership" of the solution that would otherwise be lacking.

Applied to the law, Legal Pragmatism [e.g., Simon 2003] argues that the legal system should see people not as passive potential victims whose rights need to be protected but as active citizens who may need to be empowered to better defend their interests and rights. Citizens act most effectively not as isolated individuals but as active participants in organizations and associations that can bring civic power to bear on the problems of the day. When there is conflict, the priority is on constructing a solution through a process of deliberation and social experimentation. The focus is less on a backward-looking imputation of blame to some for violating the rights of others—all according to an assumed complete system of given rights and obligations.

Social Engineering v. Pragmatism in International Development

Modernization and Development as a Social Engineering Project

Prior to the twentieth century, economic development in Europe and North America was seen as the outcome of a natural process of growth rather than as the result of a massive social engineering project. But when the lagging countries envisaged their "late industrialization," engineering and even military images came to the foreground. Karl Marx had earlier seen socialism and eventually communism as the final scientific rationalization of society coming *after* the irrationality, waste, and chaos of capitalism. But real-existing socialism after the

revolution in a Russia barely emerging from feudalism had quite a different goal. Socialism was then seen as a socially-engineered short-cut directly to modernity and an industrial society—a means of forced draft industrialization bypassing capitalism to arrive at what Marx had seen as a post-capitalist society.

In the West, socially engineered visions of development did not take hold until after World War II. The Marshall Plan was seen as an enormously successful "project" for the reconstruction of western Europe.⁴ With the liberation of the many former European colonies in the Third World and the advent of the Cold War, the West quickly realized that it needed to offer a non-communist path to rapid modernization and industrialization. With the newly created World Bank and International Monetary Fund (IMF) as the lead organizations and with the Marshall Plan as the mental model, economic development was reconceptualized as a social engineering megaproject rather than as an evolutionary historical process. The Soviet Bloc countries were not members of the World Bank or IMF (unlike the United Nations)—in spite of the adjectives "World" and "International"—so the race was on between the West and Soviet Bloc to offer the best model to the "Third World." The West and the Soviet Bloc offered alternative socially-engineered models to the developing world to make a historical jump to an industrial society.

With the dissolution of the Soviet Bloc and the Soviet Union in the early 1990s, the western development assistance institutions triumphed as offering the One Best Way. And the Second World, the formerly socialist countries, became new clients of the international development agencies. International development is now a huge "industry" in itself. The World Bank and the IMF are joined by development organizations associated with the UN (e.g., the UN Development Program and the UN Industrial Development Organization), by the World Trade Organization, by regional development banks in Africa, East Europe, Latin America, and Asia, by bilateral foreign aid agencies (such as the US Agency for International Development), by a panoply of operating foundations working on development issues (e.g., the Ford, Rockefeller, Carnegie, and Soros foundations), and finally by swarms of non-governmental organizations (NGOs) from both the North (developed countries) and South (developing countries).

Over the decades, the major development assistance institutions have run through a number of development foci (or fads). Initially, the focus was on provision of physical infrastructure: roads, seaports, airports, dams, and power plants. After much expensive disappointment, the emphasis shifted to education (formation of "human capital"), health, and the satisfaction of basic necessities.

Under a doctrine called "basic necessities" the bank turned to making low-interest loans and no-interest loans to poor countries for these purposes. Meanwhile, in some unspecified way, these basic necessities were supposed to pay off in development and the ability of development to expand wealth.... In the event, the loans are not repayable. The policy has converted client countries into vast charity wards. While this may or may not be justifiable as philanthropy, it is not my definition of meaningful economic development. Nor is it what was ostensibly offered to poor countries, told as they were that

⁴ Nota bene, it was the "reconstruction" of an already developed Europe, not the development of Europe. Thus the application of the Marshall Plan idea to the Third World was problematic from the beginning.

money they borrowed to carry out World Bank programs was money to buy development of their economies. [Jacobs 1984, 91-2]

These programs represented a swing of the pendulum away from the engineering-oriented physical infrastructure programs (the latter being increasingly financed by the private sector anyway). But as these charity-oriented programs yielded neither the desired developmental results nor loan repayments, the pendulum swung back to social engineering in the form of structural adjustment programs. Here the social engineering came more from economics than civil engineering, and the slogan was "Get the prices right." But since markets require a reasonably well-functioning set of institutions, the focus on prices and structural adjustment soon broadened to governance issues including corruption, business climate, and a legal system to protect property rights and to adjudicate and enforce contracts. The legal system emerged more into the foreground with the slogan "Get the institutions right." The institutional focus was particularly prominent in the assistance to the post-socialist transitional countries (more on this below).

Today the pendulum in the World Bank and many of the other international and bilateral agencies is starting to swing back in the direction of charitable disaster relief. Development, where it has occurred, has been a relatively gradual process rather independent of social engineering projects and programs. Where assistance has been genuinely helpful, it has been more indirect and enabling rather than direct and controlling. As John Dewey argued long ago:

The best kind of help to others, whenever possible, is indirect, and consists in such modifications of the conditions of life, of the general level of subsistence, as enables them independently to help themselves. [Dewey and Tufts 1908, 390]⁵

But regardless of whether the development assistance programs are a success or failure, the major assistance bureaucracies will in either case need to reinvent reasons for their continued existence. The crisis of AIDS and other diseases such as malaria threaten to undo many of the meager developmental accomplishments of the past. It is likened to a "silent tsunami" that calls for the development assistance agencies to shift into disaster relief mode to meet the crisis.

The other major factor today came forcefully into the foreground with the events of September 11, 2001. The War on Terror may eventually replace the Cold War in the rationalization of the major agencies. Their role is twofold. There is the "camp-following" role of post-conflict "nation-building" in Afghanistan (and perhaps someday in Iraq) that builds upon earlier post-conflict experience in the Balkans and East Timor. And there is the longer term "draining the swamp" role of fighting the poverty and desperation that supposedly bred terrorism.

After six decades of attempts to socially engineer development, the various efforts cannot be judged a success. Where development has been most successful in the East Asian countries, the standard model (e.g., "Washington Consensus") has not been followed and outside observers do not credit the development agencies with a key role [e.g., Wade 1990]. Where the international agencies have had the freest hand to try to impose solutions, e.g., in Africa and Latin America, there has been the least success [e.g., Van de Walle 2001 on Africa]. This was the conclusion of even the World Bank's own respected researcher William

⁵ This philosophy of help is developed at book length elsewhere [Ellerman 2005].

Easterly [2001].⁶ Thomas Dichter [2003] came to similar conclusions after a lifetime working in some of the large development agencies and NGOs.

The Challenge of the Transition

The transition from communism to a private property market economy presented a unique challenge to the major development assistance agencies. A new regional development bank, the European Bank for Reconstruction and Development (EBRD), was also established to help meet the challenge. It was a new challenge since prior history did not provide examples of this systemic transition. Since Russia and most of the countries in the Soviet Bloc were industrialized, the countries were more mis-developed than underdeveloped. China was less industrialized so it faced the dual challenges of industrialization and systemic transition.

The transition is a wonderful case study for our theme of social engineering versus pragmatism for two reasons. One reason is that the transition and the role of the major development agencies in it took place largely in the decade of the 1990s so that we have a little perspective of history. The other reason is that there was a remarkable natural experiment in the transition; the two major countries, Russia and China, each used opposite philosophies. Russia chose the social engineering model of institutional shock therapy offered by the international development agencies and the most prominent academic advisors. China chose pragmatism after "learning the hard way" the lessons from using bolshevik methods to try to engineer social change (e.g., the Great Leap Forward and the Cultural Revolution).

The difference in results could hardly be more striking. Since the Chinese reforms started with government support in the early 1980s, China has had around 8 percent per capita annual growth [McMillan 2002, 204], perhaps the largest growth episode in history.

Russia using the shock therapy strategy went the other way. In the first year of shock therapy (1992), production fell by 19 percent with a further 12 percent and 15 percent in the ensuing two years [McMillan 2002, 202]. In all, the country bottomed out at about a 50 percent drop in GDP. Experts can argue about the interpretation of the economic statistics, but the demographic trends tell an even more worrisome story. The population has actually declined over the 1990s in such a precipitous manner—now for every 100 babies born, 170 Russians die—that the government projects a 30 to 40 percent drop by 2050 [Feshbach 2003b]. In her preface to Feshbach [2003a], Laurie Garrett noted that:

There have been few times in human history when a vast region, encompassing a militarily, if not economically, powerful nation has been depopulated to the extent Russia has—and will. It is difficult to find a precedent from which to draw a comparative reckoning about Russia's future.

The causality behind these trends is very hard to disentangle—which is why the side-by-side comparison with China is so revealing.

⁶ Easterly was charged with an "ethical" violation on a technicality (failing to get prior approval from the Bank's public relations department before publishing an op-ed piece about the book's conclusions) and was forced out of his tenured position in the World Bank shortly thereafter.

Shock Therapy versus Pragmatic Social Learning

Since the systemic transition from plan to market had never happened before in history, it surely called out for a non-dogmatic approach of trial-and-error and experimentalism, i.e., for pragmatism. Two earlier attempts to socially engineer revolutionary changes in social, political, and legal institutions—the French Revolution and the Russian Revolution—had led to disastrous results. The names "Jacobins" and "Bolsheviks" entered history as labels to describe those who eschew pragmatism and moderation to try to force historical change.

One of the most influential critiques of the Jacobin methods used in the French Revolution was Edmund Burke's *Reflections on the French Revolution: In a letter intended to have been sent to a gentleman in Paris* [1937 (orig. 1790)]. At the beginning of the decade of the transition (1990s), Ralf Dahrendorf (a political sociologist and head of the London School of Economics), wrote a book, *Reflections on the Revolution in Europe: In a letter intended to have been sent to a gentleman in Warsaw* [1990], updating Burke's message for the coming post-socialist transition. Dahrendorf argued for the transition "to work by trial and error within institutions" [1990, 41; quoted in: Sachs 1993, 4]. Neoclassical economics (in contrast, say, to neo-Austrian economics) has become the primary intellectual framework of today's social engineering. In the early debates about the transition, a prominent economist and gifted self-publicist, Jeffrey Sachs (then of Harvard and now at Columbia University), argued that he and other economists already had the answers. After quoting Dahrendorf, Sachs argued to the contrary in favor of an economics-inspired crash program of institutional shock therapy. "If instead the philosophy were one of open experimentation, I doubt that the transformation would be possible at all, at least without costly and dangerous wrong turns." [Sachs 1993, 5]

The French Revolution was not the only relevant historical example. John Maynard Keynes described the Russian Revolution and its aftermath in terms that are surprisingly apt to describe Russia in the 1990s.

We have a fearful example in Russia today of the evils of insane and unnecessary haste. The sacrifices and losses of transition will be vastly greater if the pace is forced....For it is of the nature of economic processes to be rooted in time. A rapid transition will involve so much pure destruction of wealth that the new state of affairs will be, at first, far worse than the old, and the grand experiment will be discredited. [Keynes 1933, 245]

Instead of taking these lessons to heart, the Russian reformers of the 1990s became "market bolsheviks" [Reddaway and Glinski 2001] in their attempt to use the "window of opportunity" to make the opposite transition from plan to market.

There are a number of factors that combine to yield this view of engineered revolutionary change. The question is not whether or not to make systemic change. The question is: given a commitment to basic change—to get to the "other side of an institutional chasm"—how best to get there? A pragmatic approach would emphasize incremental step-by-step change starting from where people are. Sachs often used the metaphor "you can't jump over a chasm in two leaps" but even rather radical pragmatists would argue that people "need a bridge to cross from their own experience to a new way." [Alinsky 1971, xxi]. The Japanese have another metaphor to describe how to handle the shock of change.

It is a time-honored Japanese gardening technique to prepare a tree for transplanting by slowly and carefully binding the roots over a period of time,

bit by bit, to prepare the tree for the shock of the change it is about to experience. This process, called *nemawashi*, takes time and patience, but it rewards you, if it is done properly, with a healthy transplanted tree. [Morita 1986, 158]

Rather than try to shake off all the old dirt (thus damaging the microstructure of the roots), the *nemawashi* technique keeps some of the old dirt on the roots to make a healthy transplant into new earth.

Perhaps the *nemawashi* metaphor is particularly apt to illustrate the role of moral fervor in bolshevik-style social change. The Jacobins, the original Bolsheviks, and the market bolsheviks all saw themselves as eradicating "evil" so they felt they had to "wipe the slate clean" and begin anew. All "old dirt" had to be removed regardless of the short-term consequences in terms of social disorganization and collapse.⁷ In the case of the market bolsheviks in the international agencies, in academia, and in some of the post-socialist governments, the moral fervor of the cold-warrior pushed to take advantage of the "window of opportunity" offered by the "fog of transition" to "wipe the slate clean" and to push through the new laws that would define the *novus ordo seclorum*.

Another factor leading to social engineering schemes is the use of simplified abstract models and a lack of experience in the give and take of practical political experience. James Scott's book *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* [1998] argues persuasively that states use simplified pictures of static reality to administer their affairs (e.g., to collect taxes and to staff the army) but that these simplified pictures lead to disaster when they are the basis for large-scale social engineering schemes to change societies.⁸ Academic economists and global development bureaucrats have little contact with local realities and thus they tend to be driven by stereotypes or cartoon models. Exiles who have not participated in the give and take of politics in a country for years if not decades also tend to have cartoon models. It is the combination of power and highly simplified models of complex social realities that is particularly lethal. In our case, the power of the international agencies together with the bureaucratic/academic cartoon models—all fueled by cold war triumphalism and its good-guy/bad-guy simplicities—led to the debacles of shock therapy in the former Soviet Union.⁹

There is a side-theme that might be explored. Youthful prodigies are typically in activities based on abstract symbol manipulation (e.g., mathematics, music, and chess) where subtle and often tacit background knowledge obtained from years of human experience is not so relevant (see Scott's 1998 wonderfully relevant discussion of pragmatic knowledge or "metis"). As economic theory has become more mathematical, there is now the phenomenon of *wunderkind* professors in economics (e.g., Jeffrey Sachs, Larry Summers, and Andrei

⁷ More recent examples of these methods were the decisions of the Coalition Provisional Authority in Iraq to "cleanse" the government bureaucracies of the Baath Party members and to dismantle the Iraqi Army—decisions with similar results in terms of social disorganization, dislocation, and collapse.

⁸ A tree, unlike a fence post, has an elaborate system of roots out of sight beneath the ground. But either a tree or a fence post could serve as a static support for a wire fence that borders a field. But if one decides to move the boundary and treats a tree like a fence post that can simply be ripped out of one hole and stuck into another (and one has the power to do so), then the transplantation of the tree will have adverse consequences.

⁹ Another cartoon model of academic and bureaucratic economists is seeing the ownership of shares on a stock market as the "private ownership of productive assets" and the trading of shares as the "restructuring of private capital." These cartoons lead to voucher privatization and the cargo-cult legal reforms considered below.

Shleifer were all prodigy-professors at Harvard) who are then unleashed—with the compounded arrogance of youth, academic credentials, and elite associations—into the real world as ersatz "policy experts." Paul Starobin [1999] contrasts the *wunderkinder* of "Big Bangery" with the mature pragmatists behind the Marshall Plan, and notes the striking difference in results. When *wunderkinder* cast long shadows in the development agencies that are supposed to represent decades of mature experience, then it must be late in the day for those agencies.

De Facto Property Rights

The notion of *de facto* property rights helps to understand why grand social engineering schemes lead to such social disorganization and dislocation. Even when a legal system (e.g., a socialist system) does not recognize classical private property rights, people still act on the world to create certain "fruits of their labor" and they have socially recognized capabilities and use rights—all of which might be seen as *de facto* property rights. It is these *de facto* rights that define their competences, their ability to make a living, provide for their family, and perhaps to realize some of their aspirations. But because these *de facto* rights are not formally recognized and enforced by the legal system, people cannot protect them from arbitrary interference and cannot build upon them (e.g., as security for a loan) in the sense that one cannot construct a tall building without a sure foundation. It is only a rudimentary foundation so further development is stunted.

How in such a situation might one make the transition to a private property market economy? The key to such a transition is start where people are, namely, with their *de facto* property rights and to formalize them (or some close approximation to them) in a private property system. Then the foundation that people have already created would be strengthened and vouchsafed by the legal system so that people could then build on top of that stabilized foundation.

These ideas have been forcefully developed recently in Hernando de Soto's book *The Mystery of Capital* [2000]. In the developing world, there is much rural land occupied and farmed by peasants or urban land occupied and used by slum dwellers all without formal title. The idea is that by using and improving these assets (formally but absentee owned by others), people have created (as the fruits of their labor) certain *de facto* property rights (like "easements") which give them the capability to sow and reap. Any so-called "reform" that would take away those *de facto* property rights (and the capabilities they represent) to assert absentee formal property rights would in fact be disempowering and anti-development. To promote market-driven development, the reforms should find out ways to formalize some socially acceptable approximation to those *de facto* rights so that the people then encounter the market and the private property system as something that empowers them—rather than the opposite.

Now transpose this argument over to the transition economies. In the decentralizing socialist reforms over the years and decades before 1990, the workers, managers, and local communities had developed a range of *de facto* property rights over their enterprises. There was a self-management system in Yugoslavia, goulash communism with the enterprise councils in Hungary, Solidarity with the self-management councils in Poland, and *perestroika* with the decentralized management, cooperatives, and lease buy-outs in Gorbachev's Soviet Union. Central planning never worked well and, as it got worse, forms of decentralization took hold in varying degrees across much of the socialist world. One way or another, in often bizarre ways, people learned to do things in a twilight half-centralized and half-decentralized

system. They developed *de facto* property rights that represented their capabilities to actually get a few things done and to squeak by.

When the dam finally broke in 1989-90, there was the commitment to systemic change but what was the best path to the market? The pragmatic route would "start where people are" and build incrementally on the previous reforms by formalizing the nearest approximation to the *de facto* property rights that would be accepted as socially fair. Thus it would continue the decentralizing thrust going "straight to the market." For instance, that might have taken the form of transforming the quasi-ownership of the workers embodied in the various self-management councils into German-style works councils (co-determination) or into management and employee buy-outs (MEBOs) perhaps as in the employee stock ownership plans (ESOPs) of the US and UK or as in the Mondragon cooperatives of the Basque region in Spain.¹⁰

These points are perhaps easier to understand when applied to dwellings. Here pragmatism fortunately prevailed over market bolshevik ideology. People also acquired various *de facto* property rights over their flats in the socialist countries (analogous to "squatters' rights" in de Soto's work). Since the distribution of housing also partially reflected the power relationships under communism, one might pursue the same logic to suggest that the slate should be wiped clean of the communist past and all apartments should be put on the market and auctioned off to the highest bidder. Just think of the efficiency gains by jump-starting the housing market! Instead most of the post-socialist countries figured out ways to arrive at formal rights that were the closest socially fair approximation to the *de facto* rights.

But in the economic sphere, the market bolsheviks designed the so-called "market reforms" with the exact opposite purpose to deny the *de facto* property rights accumulated during the "communist past," to righteously wipe the slate clean by re-nationalizing all companies of any size, and to start afresh with formal property rights deliberately unrelated to the previous "vestiges of communism."¹¹ Sometimes these "ideal reforms" were compromised in getting legislation passed but, by and large, the "reforms" were successful in sabotaging the *de facto* property rights acquired during the earlier decentralizing reforms. For instance, outside of a small elite, most Russians encountered the market not as something that strengthened their capabilities and empowered them to build upon a sure foundation but as something that took away what little self-efficacy they might have had. Thus the "market reforms" created social dislocation on a massive scale—particularly for middle-aged and older people who had well-developed "root systems"—and left people in a position where the rational choice was to grab what they could in the face of a very uncertain and uncontrollable future.

"Cargo Cult" Legal Reforms

There is a certain self-reinforcing vicious circle that leads to attempts to "install" inappropriate "advanced" institutions in developing and transitional post-socialist countries. Let us begin with the supply side of this unhappy transaction.

¹⁰ See Oakeshott 2000 or Whyte and Whyte 1991.

¹¹ The principal method was voucher privatization [see Ellerman 2001; 2003] where people in effect gave up their *de facto* rights in return for one or more vouchers (in Russia, worth in the end a few bottles of vodka) that could be traded for shares on the "stock market" (see next section).

People from advanced developed countries are, in effect, "born on third base and think they hit a triple."¹² Often such "natural-born development experts" are graciously disposed to teach developing countries how to "hit a triple." The developing country should redraft its laws to describe the institutions seen from the vantage-point of "third base" [e.g., "like in America"] and then after passing these new laws, everyone should wake up next morning as if they too were born on third base.

Societies, however, tend to operate on the basis of their *de facto* institutions, norms, and social habits, not their formal laws—and particularly not the formal laws "pulled out of the air" with little relation to past experience. When such a gap between formal and *de facto* institutions is introduced, then the bulk of the population can rarely "jump over the chasm" to suddenly start living according to the new formal laws—so the rule of law is weakened. Semi-legal ("gray") and illegal ("black") activities become more prominent as the connection between legal and actual behavior is strained to and beyond the breaking point. The advice from the natural-born development experts thus becomes more part of the problem than part of the solution. More relevant institutional information could be provided by people who were only on first or second base since they might actually know how to hit a single or a double.

Now consider the demand side—the demand for impossible "overnight" jumps to institutions copied from technologically advanced developed countries. The people and the politicians of the developing and the transition economies are constantly bombarded by the mass media with images of life in the "First World." They want to get there "tomorrow" (if not "yesterday"). Consultants and academics from elite universities with no real development experience badger the government officials to have the political courage and will to undertake a shock-therapy-style change in institutions, to jump over the chasm in one leap (i.e., jump directly to third base)—as if such institutional change were actually possible. Those locals who caution against radical leaps are dismissed as only trying to protect their privileges and "rents" from the past regime. "How dare you think you know better than professors from Harvard!"¹³ The idea is to "escape the past," not to study the past to better develop incremental change strategies. If the scientific experts from the First World give this advice, how can the benighted officials from the Third World or the post-socialist countries resist? All people have to do when they wake up the next morning is to start behaving according to the new laws drafted by the experts!

For instance in a southeast European post-socialist country that had been particularly isolated in the past, government officials wanted to jump to modern corporations "like in Europe." This was an example of an "iceberg" institutional reform; the "above the water-line" laws could be quickly changed but the problem was the "below the water-line" long-term changes in behavior.¹⁴ They located a European foundation that was willing to fund an "adaptation" of the corporate laws of a west European country. The new draft laws were quickly passed by

¹² The baseball metaphor was used by the Texan populist and political commentator Jim Hightower to describe the first President George Bush.

¹³ See Wedel [1998] and Ellerman [2001, 2003] for more on the role of the Harvard *wunderkinder* in Eastern Europe and in Yeltsin's Russia. Jeffrey Sachs was the first young Harvard economics professor to gain notoriety in this regard, but he was soon eclipsed by his colleagues Lawrence Summers (who during the early 1990s become Chief Economist of the World Bank and later Secretary of the Treasury in the U.S. government) and, his protégé, Andrei Shleifer (born in Russia but emigrated to America as a teenager).

¹⁴ The difference was noted by the British economic historian, Richard Tawney, after visiting China in 1930. "To lift the load of the past, China required, not merely new technical devices and new political forms, but new conceptions of law, administration and political obligations, and new standards of conduct in governments, administrators, and the society which produced them. The former could be, and were, borrowed. The latter had to be grown." [Tawney 1966 (orig. 1932), 166]

the Parliament so that the government officials and legislators could brag that they now had "European corporate statutes." All they needed now was a few lawyers, a few judges, a few accountants, a few regulators, a few business people, and a few decades of institution-building experience so that the new statutes could actually be used. Any attempt to get the country to adopt laws similar to those in neighboring countries that had incrementally evolved towards a market economy for several decades was angrily rejected. "Why do you try to get us to use these second-best or third-best laws when we can adopt the *best* European statutes?" Surely the natural-born development experts from the First World want to provide the *best* laws for their clients?

Thus the government officials demand that they do not want some second-best model; they want the "very best" for their people—like in the advanced countries. The third-basers in the international aid bureaucracies then can reap the seeds they have sown by "listening to the clients" and "responding to the clients' desires" by trying to set up "public joint stock companies" in Albania, a "stock market" in Mongolia, "defined contribution pension plans" in Kazakhstan, and "modern self-enforcing corporate laws" in Russia.¹⁵ Thus the circle is completed; supply responds to demand in a self-reinforcing vicious circle to waste untold aid resources on the attempted instant gratification of a non-evolutionary "Great Leap Forward" to First World institutions.¹⁶

The failed attempts at utopian social engineering might be usefully viewed from an anthropological perspective. Many of the First World institutions such as "The Stock Market" have a certain totemic or 'religious' significance. The Wall Street mentality found in the post-socialist world is reminiscent of the cargo cults that sprung up in the South Pacific after World War II.¹⁷ During the war, many of the glories of civilization were brought to the people in the southern Pacific by "great birds from Heaven" that landed at the new airbases and refueling stations in the region. After the war, the great birds flew back to Heaven. The people started "cargo cults" to build mock runways and wooden airplanes in an attempt to coax the great birds full of cargo to return from Heaven.

Peter Berger has pointed out the cargo cult mentality in development that promises a great magical leap to modernity.¹⁸

¹⁵ See "Corporate Law from Scratch" [Black, Kraakman, and Hay 1996] for a remarkable example of trying to etch first-best laws as if on a blank slate in Russia. Even more remarkable is that after much bitter experience with corporate governance in Russia, Black and Kraakman reversed themselves [Black et al. 2000] and argued for a more pragmatic "staged" approach to legal and institutional development. The third author of "Corporate Law from Scratch", Jonathan Hay, was a legal specialist from the Harvard Law School who worked with Shleifer in Russia on USAID contracts through Harvard. Shleifer and Harvard were later indicted by the US Department of Justice for alleged corrupt practices in that work—and later settled by paying fines.

¹⁶ Again Tawney put it well. "What makes modern industry is ultimately not the machine, but the brains which use it, and the institutional framework which enables it to be used. It is a social product, which owes as much to the jurist as to the inventor. To regard it as an ingenious contrivance, like a mechanical toy, or the gilded clocks in the museum at Peiping made by London jewellers for the amusement of Chinese emperors, which a country can import to suit its fancy, irrespective of the character of the environment in which the new technique is to function, is naïve to the point of absurdity. It is like supposing that, in order to acclimatise Chinese script in the West, it would be sufficient to introduce Chinese brushes and ink." [Tawney 1966 (orig. 1932), 130]

¹⁷ See the chapter on "Cargo Cult Science" in Feynman 1985.

¹⁸ See the Foreword by J. K. McCarthy in Lawrence 1979 for the cargo cult formulation of the question of development assistance: "Where is the road that leads to cargo?" Jan Knippers Black also uses the cargo cult metaphor for some recent development thinking [2000, 137 or 280].

Indeed, one recurrent assertion of revolutionary propaganda is that its program can deliver the "cargo" more surely or more swiftly than the gradualistic development models. [Berger 1976, 21]

Post-communist countries, with hardly a banking system worthy of the name, nonetheless opened up Hollywood storefront "stock exchanges" which were kickstarted by the listing of shares in almost all companies in a voucher privatization program. Government officials in East Europe, the former Soviet Union, and even Mongolia proudly showed the mock stock exchanges, complete with computers screens and "Big Boards," to western delegations (with enthusiastic coverage from the western business press) in the hope that finally the glories of a private enterprise economy will descend upon them from Heaven. An earlier generation of misguided development efforts left Africa dotted with silent "white elephant" factories, and the present generation of revolutionary reforms in the post-socialist world left the region dotted with dysfunctional "cargo cult" institutions—the foremost among them being the largely totemic stock markets.

The Pragmatic Alternative in China

What was the alternative strategy? The reform experience in China—which has never had an IMF program and which largely ignored the World Bank's advice to transition economies (such as voucher privatization, shock-therapy price liberalization, and the opening of capital account)—represents something like a pragmatic approach in practice. Deng Xiaoping used a variety of metaphors; it is not important if the cat is black or white, but that it catches the mice or that one should cross the river groping for the stepping stones (rather than trying to jump over the river in one last "great leap forward"). As Deng put it in 1986: "We are engaged in an experiment. For us, it [reform] is something new, and we have to grope around to find our way. ...Our method is to sum up experience from time to time and correct mistakes whenever they are discovered, so that small errors will not grow into big ones." [see Harding 1987, 87] When experiments had positive results, the idea was to then catalyze the process so that small successes will "grow into big ones." As Chinese reformer Hu Qili put it at the same time: "We allow the little streams to flow. We simply watch in which direction the water flows. When the water flows in the right direction we build channels through which these streams can lead to the river of socialism."¹⁹

One of the important mis-formulations of the transition question was "Fast versus slow?" "Incremental" and "pragmatic" might be misleading if they are construed as "gradual" or "slow." The Chinese reforms were neither gradual nor slow, and the Russians will not soon climb out of the chasm they failed to jump over in one leap. The point is to find and build step-by-step upon the reform efforts of the past (which requires taking into account past conditions) rather than trying to wipe the slate clean and legislate ideal institutions in one fell swoop.

In Joseph Stiglitz's *Whither Reform?* [2001], the two "ideal types" were compared in a table as a "battle of metaphors."

¹⁹ Quoted in: Harding 1987, 318. Thus do Chinese socialists instruct market bolsheviks on the non-bolshevik methods of institutional transformation. A related "pave the paths" metaphor is used by Christopher Williams [1981, 112]. In a complex of new buildings, let grass grow between them, see where footpaths develop, and then pave the paths. This illustrates the pragmatic strategy of formalizing the best approximation to the *de facto* "paths."

Table 1: "Battle of Metaphors" [Based on: Stiglitz 2001, 155]

	Social Engineering	Pragmatism
Continuity vs. Break	Discontinuous break or shock—razing the old social structure in order to build the new.	Continuous change—trying to preserve social capital that cannot be easily reconstructed.
Role of Initial Conditions	The first-best socially engineered solution that is not "distorted" by the initial conditions.	Piecemeal changes (continuous improvements) taking into account initial conditions.
Role of Knowledge	Emphasizes explicit or technical knowledge of end-state blueprint of the One Best Way.	Emphasizes local practical knowledge that only yields local predictability and does not apply to large or global changes.
Attitude towards variety	Why not do everything in the One Best Way?	"Three cheers for the dogged persistence and mysterious vitality of diversity." [Jacobs 1980, 115]
Knowledge Attitude	Knowing what you are doing. ²⁰	Knowing that you don't know what you are doing.
Chasm Metaphor	Jump across the chasm in one leap.	Build a bridge across the chasm.
Repairing the Ship Metaphor	Rebuilding the ship in dry dock. The dry dock provides the Archimedean point outside the water so the ship can be engineered to blueprint without being disturbed by the conditions at sea.	Repairing the ship at sea. There is no "dry dock" or Archimedean fulcrum for changing social institutions from outside of society. Change always starts with the given historical institutions. ²¹
Transplanting the Tree Metaphor	All at once transplantation in a decisive manner to seize the benefits and get over the shock as quickly as possible. Almost like moving fence posts.	Preparing and wrapping the major roots one at a time (<i>nemawashi</i>) to prevent shock to the whole system and improve chances of successful transplantation.

Another part of the pragmatic approach, also evident in China, is the willingness to allow parallel experiments in different parts of the country and then foster horizontal learning and the propagation of the successful experiments. This is an important part of the alternative to the bolshevik/jacobin approach of legislating the brave new world from the capital city to be applied uniformly across the country. Indeed, parallel experimentation schemes are so important to pragmatic social learning that we will close the case study on the transition and turn to that topic.

The final word on the transition case study will be given to Gregory Mankiw, a Harvard economics professor not involved with advice to Russia and who was head of George W. Bush's Council of Economic Advisors in the White House.

²⁰ Albert Hirschman has often noted the problems created in developing countries by the tendency that Flaubert ridiculed as *la rage de vouloir conclure* or the rage to conclude [see Hirschman 1973, 238-40]. Advisors from elite institutions or universities are particularly under pressure to "have the answers" rather than display Socratic ignorance or a pragmatic bent for multiple experiments. After all, what are "experts" for?

²¹ See Benziger 1996 on the Chinese knowing they didn't know "what they were doing" and Elster et al. 1998 for the use of Otto Neurath's "rebuilding the ship at sea" metaphor in this context.

According to the 2002 World Development Report, from 1990 to 2000, China's real GDP grew at an amazing 10.3 percent per year. Meanwhile, Russia's output fell at a rate of 4.8 percent per year. Such a shocking contrast cries out for an explanation. [Mankiw 2003, 256-7]

The explanation given here, like the explanation given in the book by John McMillan [2002] being reviewed by Mankiw, is based on the different philosophies, institutional shock therapy and market bolshevism in the case of Russia in contrast to pragmatism and incrementalism in the case of China. The international development agencies and the neoclassical economic advisors lined up behind the Russian strategy; the Chinese went their own way—having already learned the hard way about bolshevik-style social engineering.

Russia leaned on lawyers, economists, and bankers from the West for advice on how to privatize state firms, develop capital markets, and reform the legal system... China by contrast called little on foreign consultants. [McMillan 2002, 207-8; quoted in Mankiw 2003, 257]

Professor Mankiw spells out the stakes in this natural experiment.

If McMillan is right that shock therapy was the problem, then the economics profession must accept some of the blame. Our profession lent some of its best and brightest to the transition effort, such as my former colleague Jeffrey Sachs.²² Most of these advisors pushed Russia to embrace a rapid transition to capitalism. If this was a mistake, as McMillan suggests, its enormity makes it one of the greatest blunders in world history. [Mankiw 2003, 257]

The greatest *institutional* responsibility must lie with the major development agencies, the World Bank and the IMF, which gave the advice and funds that underwrote the Russian debacle.

McMillan doesn't come right out and tell foreign governments to ignore the experts from the IMF and other first-world institutions, but it would be an easy inference to draw. [Mankiw 2003, 257]

And our case study indicates that the inference would be correct.

Parallel Experimentation as Pragmatic Social Learning

The Duality Between Series-Oriented and Parallel-Oriented Strategies

There is a duality—series-parallel duality²³—that runs throughout mathematics, engineering, and human affairs. Many problems can be conceptualized as searching over a tree (starting at the root). At each point, we have two options: to continue searching to greater depth along a branch of the tree, or to broaden the search to include one or more other branches of the tree. For instance, Albert Hirschman explored this duality in his treatment of exit-voice

²² The other two Harvard *wunderkinder*, Larry Summers and Andrei Shleifer, made more direct contributions to the Russian debacle than Jeffrey Sachs (now with a reinvented persona at Columbia University) but Shleifer was still a colleague of Mankiw's at Harvard and Summers was then the President of Harvard University.

²³ See chapter 12 "Parallel Addition, Series-Parallel Duality, and Financial Mathematics" in Ellerman 1995.

dynamics [Hirschman 1970]. If you are dissatisfied with your position on a branch of a search tree, then you have the basic choice to exit the branch to try other branches (e.g., buy products from another company) or to stay loyal to the branch and exercise voice to try to improve your position along the branch.

Suppose one is facing a search tree in trying to find a solution to a problem. If one is quite sure that the solution lies along the branch that one is on, then a strategy of series experimentation is appropriate. Test the current proposed solution and then move along that branch, as it were, by improving that proposal. But if there is genuine uncertainty as to which branch may contain "the" solution or even "a" solution, then a strategy of parallel experimentation would be more appropriate. Try several options, prototype quickly to test the options, and communicate between the experiments since improvements in one option might also benefit other options. Eventually a clear winner might emerge so that resources could then be concentrated on that option.

One might imagine a "series advocate" and a "parallel advocate" giving arguments for and against each strategy. For the series proponent, a multiplicity of experiments is wasteful duplication. Isn't it rational to put one's resources on the best option? Why not do everything in the One Best Way? Large prideful organizations tend to favor this reasoning. The organization's experts will decide on the best experiment or approach—otherwise the organization would appear "not to know what it's doing." It is safer to put one's resources on the knowledgeable choice rather than waste anything on what the authorities do not support. Scattering our resources among less-promising options will detract from our best chance of getting the breakthrough by putting all our resources on the most promising option. Applied to the social world, this is the viewpoint of the social engineer. As Jeffrey Sachs put it, why undertake "open experimentation" which could lead to "costly and dangerous wrong turns" when the experts already knew the One Best Path?

Parallel experimentation is based on the opposite knowledge, the pragmatic or Socratic knowledge that one does not know—acknowledged ignorance. There is an old distinction between risk, where rough probabilities are known, and genuine uncertainty, where the probabilities are unknown and where one has only conflicting hunches. Parallel experimentation is based on genuine uncertainty.

The use of a parallel-path strategy for the solution of difficult development problems is standard practice in several of our outstanding industrial laboratories. It is extremely common in agricultural and medical research. And in the atomic-bomb project, one of the most spectacularly successful military projects the United States has ever undertaken, the parallel-path strategy was employed. [Nelson 1961, 353]

A sober reading of the history of science and engineering shows that experts are often rather myopic; they see only a few steps ahead on the usual path. But the disruptive paradigm-shifting discoveries tend to come "out of left field"—from outside the conventional framework that is the stock in trade of the experts. This sort of known-ignorance pushes for the "waste and duplication" of a parallel approach.

Development work is a messy, time-, and energy-consuming business of trial, error and failure. The only certainties in it are trial and error.... Indeed, development work is inherently so chancy that by the law of averages,

chances of success are greatly improved if there is much duplication of effort....Just so, when Pasteur, that wise old man, begged for enlarged support of the biological sciences, he begged for multiplication of laboratories. [Jacobs 1969, 90-1]

The Wright Stuff

A certain schema—parallel experimentation—has emerged from a remarkable variety of sources as the best means of learning and development under conditions of genuine uncertainty. But one of the most basic examples is the process of biological evolution itself. Evolutionary change involves the interplay between two processes: variation and selection (along with the transmission of the selected variants to the next generation). Variation expands the range of possibilities and selection narrows it. Charles Darwin's theory of evolution was a theory about selection, the theory of natural selection. Darwin and Darwinism have had relatively little to say about the structure of variation aside from the fundamental contra-Lamarckian point that variation is "blind" in the sense of being independent of learning during the lifetime of an organism.

Sewall Wright (1889-1988) together with Ronald A. Fisher and J. B. S. Haldane were the three progenitors of one of the revolutions in modern biology, the mathematical theory of population genetics [see Provine 1971; 1986]. In the recent complexity science literature, Wright is more often mentioned as the inventor of the "fitness landscape" to represent optimization on a very rugged and cloudy landscape. Yet the fitness landscape was only a tool Wright used to expound his shifting balance theory of evolution.²⁴

Natural selection is a mechanism to push a population up a fitness hill—but it may be a very low hill. "The problem of evolution as I see it is that of a mechanism by which the species may continually find its way from lower to higher peaks in such a field." [Wright 1932; reprinted in Wright 1986, 163-4] How does evolution ever get the population back down a hill and across a valley of low fitness to climb a much higher hill? If selection operates to cut down variety to the survival of the fittest, what is the mechanism to increase variety in order to find a path from low to higher hills?

Like Darwin, Wright thought it relevant to carefully observe artificial selection. Wright found that breeders do not keep all their animals together in one interbreeding herd. They deliberately break the herd up into subherds, subpopulations, "races," or 'demes' (as in demography). It is a question of balance. The subherds should be small enough so that the variety found in the subherd (through sampling error) or created through mutation, sexual reproduction, and genetic drift will be emphasized through inbreeding. But the subherd should not be so small that inbreeding leads to the quick fixation of ill-adapted genes and the deterioration or demise of the subherd. When a clearly superior example is produced in a subherd, then the seed is crossbred into the other subherds to give them the benefit of the innovation. But seeds could not be constantly crossbred between the subherds as that would defeat the benefits of their semi-isolation. Shifting balances were involved. How small to make the subherds and how much cross-breeding between the subherds?

²⁴ The tool was rather misleading if taken to imply some scalar measure of "fitness" (like altitude above sea-level) so that there would be one highest peak, a "Mount Everest of fitness."

Seeing these processes at work in artificial breeding and selection, Wright reasoned that Nature might have found some version of parallel experimentation with naturally forming subpopulations and cross-fertilization by migration.

In the shifting balance theory, a large population that is subdivided into a set of small, semi-isolated subpopulations (demes) has the best chance for the subpopulations to explore the full range of the adaptive topography and to find the highest fitness peak on a convoluted adaptive surface. If the subpopulations are sufficiently small, and the migration rate between them is sufficiently small, then the subpopulations are susceptible to random genetic drift of allele frequencies, which allows them to explore their adaptive topography more or less independently. In any subpopulation, random genetic drift can result in a temporary reduction in fitness that would be prevented by selection in a larger population, and so a subpopulation can pass through a "valley" of reduced fitness and possibly end up "climbing" a peak of fitness higher than the original. Any lucky subpopulation that reaches a higher adaptive peak on the fitness surface increases in size and sends out more migrants to nearby subpopulations, and the favorable gene combinations are gradually spread throughout the entire set of subpopulations by means of interdeme selection. [Hartl and Clark 1997, 259]

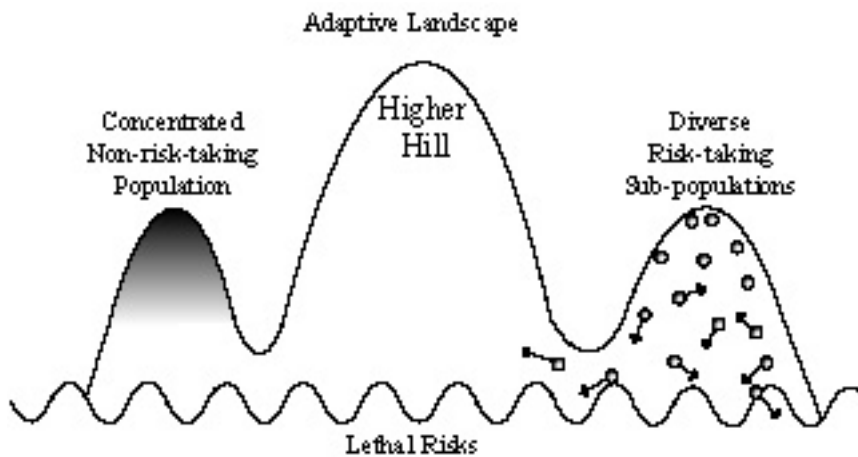


Illustration of Sewall Wright's Shifting Balance Theory

From the shifting balance theory and other examples, we might outline a general pragmatic schema—"the Wright stuff"—for experimentation and learning in the context of uncertainty and known ignorance:

- different experiments ("demes") running concurrently with some common goal,
- with some semi-isolation from immediate competitive pressures,
- with benchmarking comparisons made between the experiments, and
- with the "migration" of discoveries between experiments wherever possible to ratchet up the performance of the whole population.

Perhaps the purest example of parallel experimentation as a scheme for collective innovation and learning is provided by the communities of scientific researchers working in a field. They also work in small semi-independent groups who constantly face the same shifting balance

decisions about working in bigger or smaller groups, or closely following what others are doing versus striking off in new directions. Innovations are quickly transmitted via the scientific literature to the other groups for intersubjective verification and cross-learning. The knowledge available to all the groups is ratcheted up.

The series advocate would again like to use "what we know" to cut down on the wasteful exploration of discredited ideas. The experts should be able to broadly agree on the best path of research and then centrally controlled resources should be allocated along that path. Perhaps the most famous example in recent history in the life sciences was the Soviet experts' decision that Lysenkoism represented the path for Soviet genetics to take. The other branches on the tree were pruned away.

Another major example is the pluralism of political parties or organizations (e.g., cities or states in a federation) taking different positions and performing different experiments addressing common social problems. The rivalry between political parties is immediate and direct while the rivalry between diverse cities or states is more indirect. But in all cases, the idea is to have within the whole polity a number of positions being articulated and a number of parallel experiments going on with some form of benchmarking and cross-learning so that innovations will serve to ratchet up performance across the polity.

Here again, the series advocate is well-represented by "scientific socialism." When one has access to the "science" of the "innermost workings of history" then parallel experimentation is only a waste of resources. John Dewey quotes the English Communist John Strachey's statement that the communist parties' "refusal to tolerate the existence of incompatible opinions ... [is] simply asserting the claim that Socialism is scientific." Dewey goes on to comment that it "would be difficult, probably impossible, to find a more direct and elegantly finished denial of all the qualities that make ideas and theories either scientific or democratic than is contained in this statement." [1939, 96] With "scientific socialism" now in the dustbin of history, the spirit of the "scientific" organization and control of society lives on in the application of orthodox economics as if the communist social engineers just had the wrong textbooks.

But antipathy to parallel experimentation comes not only out of ideologies which already know One Best Way; it comes even more often from authoritarian regimes or organizations who have no interest in sponsoring a genuine alternative. It may be a low hill but they are on top of it and any parallel experimentation would be downhill for them.²⁵

Donald Schön and Everett Rogers on Decentralized Social Learning

How can a society learn to make legal and institutional reforms? The default theory of social learning is that the center makes policy innovations—series experimentation—which are then transmitted to the periphery.

[The standard approach] treats government as center, the rest of society as periphery. Central has responsibility for the formation of new policy and for its imposition on localities at the periphery. Central attempts to 'train' agencies at the periphery. In spite of the language of experimentation,

²⁵ See Sabel and Simon 2003 for a theory about using public law litigation to destabilize low-level equilibria.

government-initiated learning tends to be confined to efforts to induce localities to behave in conformity with central policy. [Schön, 1971, 177]

But social learning can take place in a decentralized bottom-up manner with centralized coordination. In large multi-plant companies, innovation may take the form of new ways of socially organizing and structuring productive processes, e.g., quality circles or self-managed work teams. Separate plants might perform pilot experiments to find out "what works and what doesn't." The headquarters office frames the experiments, detects the successes, and plays the knowledge-broker to help other plants cross-learn from the successful ones. In the Japanese system of just-in-time inventories, there is local problem-solving by teams, benchmarking between teams, and continuous improvement ratcheting up the performance of the teams.

Schön described a similar process involving the government and the periphery of local units trying to carry out a certain social reform.

Government cannot play the role of 'experimenter for the nation', seeking first to identify the correct solution, then to train society at large in its adaptation. The opportunity for learning is primarily in discovered systems at the periphery, not in the nexus of official policies at the center. Central's role is to detect significant shifts at the periphery, to pay explicit attention to the emergence of ideas in good currency, and to derive themes of policy by induction. The movement of learning is as much from periphery to periphery, or periphery to center, as from center to periphery. Central comes to function as facilitator of society's learning, rather than as society's trainer. [Schön, 1971, 177-8]

Decentralized parallel experimentation with centrally-sponsored framing and benchmarking followed by peer-to-peer cross-learning in the periphery (like deme-to-deme cross-learning in Wright's theory) is a more appropriate model than research at a central facility followed by the teaching-dissemination of the results.

In Everett Rogers' early work on the diffusion of innovations he focused on the classical hub-and-spokes or center-periphery model of diffusion.

In this classical diffusion model, an innovation originates from some expert source (often an R&D organization). This source then diffuses the innovation as a uniform package to potential adopters who accept or reject the innovation. The role of the adopter of the innovation is that of a passive acceptor. [Rogers 1983, 333]

Spurred on by Schön's work [1971], he became aware of decentralized diffusion systems with horizontal diffusion between peers (which might involve partial re-invention of the model) rather than vertical transmission from experts to adopters.

During the late 1970s I gradually became aware of diffusion systems that did not operate at all like the relatively centralized diffusion systems that I had described in my previous books. Instead of coming out of formal R&D systems, innovations often bubbled up from the operational levels of a system, with the inventing done by certain users. Then the new ideas spread

horizontally via peer networks, with a high degree of re-invention occurring as the innovations are modified by users to fit their particular conditions. ...

Gradually, I began to realize that the centralized diffusion model was not the only wheel in town. [Rogers 1983, 334]

Perhaps the best example of a parallel system of decentralized innovation and diffusion in a developing country is in China over the last quarter of a century. The Chinese recognized local reform models which could be in a region, county, commune, or even brigade, and could be in any sector or area such as administration, health, education, or industry. The center would recognize a "model" which could then be visited by groups from all over China who want to make a similar reform in their locality.

The diffusion of innovations in China is distinctive in that it is (1) more horizontal in nature, (2) less dependent upon scientific and technical expertise, and (3) more flexible in allowing re-invention of the innovation as it is implemented by local units. These aspects of decentralized diffusion are facilitated by China's use of such diffusion strategies as models and on-the-spot conferences. The "learning from others" approach to decentralized diffusion in China was adopted officially as a national policy in the national constitution in 1978. [Rogers 1983, 340-1]

The same period marks the beginning of China's historic record of growth and development at the end of the twentieth century that was considered above.

Charles Sabel and the Revival of Legal Pragmatism

The Japanese system of just-in-time inventories, local problem-solving by teams, benchmarking between teams, and continuous improvement (*kaizen*) can be seen as a system of parallel experimentation and social learning in production that induces problem-solving and ownership by the participants. Charles Sabel developed this and other examples in his theory of social learning [1994] and theory of rolling rules and ratcheting standards regimes [Dorf and Sabel 1998; Sabel et al. 2000] that, in turn, have spawned a new school of Legal Pragmatism.²⁶

Often legal and institutional development strategies are flawed by implicitly assuming that which needs to be created. This often takes the form of assuming an effective governance system is in place so that a development advisor simply has to pour some new wine into the sound bottle, e.g., design a comprehensive set of new laws to be passed in a developing country. In contrast, Sabel asks how collective action problems are solved in the small and how change does take place—without assuming an effective fiat from the center.

In Sabel's treatment of collective action problems, individuals are assumed to have some sociability, some powers of reflection and discussion, and incomplete identities always in the process of formation and change. They are often in problematic situations where some collective action would benefit the group but where each may be vulnerable to the non-cooperation of others (which could be defection or simply error). The problem being discussed is the group members' own common problem so that they would be involved in implementing any proposed solution (the "learning") and will thereby be monitoring the actions of others and hence the description "learning by monitoring." The discussion to arrive

²⁶ Hence William H. Simon gave a recent paper the provocative title "Toyota Jurisprudence" [2004].

at a collective action plan must also include discussion of how to apportion the gains from cooperation and how to adjudicate differences that will arise.

So far the description of learning by monitoring is consistent with the repeated games treatment of the evolution of "cooperation" [e.g., Axelrod 1984]. Sabel goes beyond the game-theoretic treatment by assuming that the self-definitions and identities of the participants are changed by the discussion and cooperative efforts. Part of the discussion is to reinterpret and reframe their past, to discover and clarify their interests, and to establish a group identity with which the members can start to identify so that the cooperation is based more and more on "who they are" than on a tenuous game-theoretic *modus vivendi* (cooperating today only to avoid retaliation tomorrow). The reciprocal belief that others also cooperate partly on the basis of identification (rather than strategy and guile) will lead to giving others some "benefit of the doubt" by interpreting occasional non-cooperation by members as error rather than betrayal. In such a manner, trust and the norms of reciprocity (social capital) can be developed.

Central managers or coordinators, instead of being assumed as a *deus ex machina*, can be seen as agents of the group facilitating the "government by discussion"²⁷ within the group and helping to minimize the vulnerabilities of cooperative action—while through benchmarking and other means of competitive stimulus helping to insure that the group continues to face the problems that come to light. Where a set of people have interdependent opportunities and fates, the group members through initial problem-solving discussion and action accompanied by mutual monitoring can start to "bootstrap" [Sabel 1995] a new collective identity that can help to stabilize future cooperative problem-solving and learning.

Sabel's treatment of solving collective action problems illustrates the pragmatic themes of the incompleteness of the social world (people's values and beliefs), the constructive nature of social solutions, and the constitutive role of people's active involvement. Sabel and colleagues have also elaborated a remarkable range of what we termed "parallel experimentation schemes" in legal and institutional development, e.g., regimes of rolling rules and ratcheting standards.

Since my goal is more to give background and context to this school of Legal Pragmatism with a focus on international development—rather than a comprehensive survey—I will only outline one application of importance to international development, i.e., ratcheting labor standards.

The problem is not simply "enforcing" some given set of international labor standards for multinational companies but also to foster a social learning process to improve labor conditions and ratchet up the public expectations about these companies. Putting the theory in the mold of a parallel experimentation scheme, the parallel experiments are being conducted by multinational firms who have made some minimal public commitment to socially responsible behavior on their part and on the part of their subcontractors. The firms need to spell out their own claims about humane treatment of workers in concrete terms (wages, hours, safety record, and other working conditions) that can be benchmarked between the parallel firms.

²⁷ This tradition would include the work of John Stuart Mill, Walter Bagehot, James Bryce, John Dewey, Ernest Barker, Frank Knight, James Buchanan, Bernard Crick, Charles Lindblom, Jurgen Habermas, Jon Elster, Amy Gutmann, and Dennis Thompson.

Monitoring of the companies for compliance would be performed by NGOs. As NGOs are themselves vulnerable to cooption, the accuracy and independence of their monitoring would be monitored by competing public activist groups and perhaps by a second-tier monitor. In the absence of effective international law, the principal mechanism to discipline the laggards is public shaming and the boycotts (or threats thereof) of activist groups. A company's self-esteem and pride in its public image will play a role in addition to any impact on the bottom line.

The labor standards emerging from this process are not handed down by a committee of experts in an international agency; they are set by the actual experiences of companies. Laggards have little leg to stand on since the best or even average practices are based on the practices of comparable companies. Since the best practices would be publicly documented by the monitoring companies, the laggards can learn through the monitors or directly from other companies. As companies learn, the best and average practices would improve so that the emergent standards would be ratcheted up.

Concluding Remarks

I have tried to cover too much ground to attempt a summary. The overarching theme is that legal and institutional development is not just one big dam engineering project. The philosophical alternative to social engineering is Pragmatism. Within recent memory, we have had one of the most remarkable natural experiments in the history of development, the contrast between the Russian and Chinese strategies for making the transition to the market. The contrast in outcomes is stunning and it casts grave doubt on the development institutions that try to socially engineer development. Out of the whole analysis, one grand scheme for development emerged, decentralized social learning through parallel experimentation.²⁸ Such a pragmatic experimentalist methodology does not require any global social engineering institution at the center to determine "the solution"—and given the track record of such institutions, that is for the good.

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²⁸ See Sabel and Reddy [2003] for the general application of such a learning-to-learn scheme to the "Gordian Knot of Development."

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