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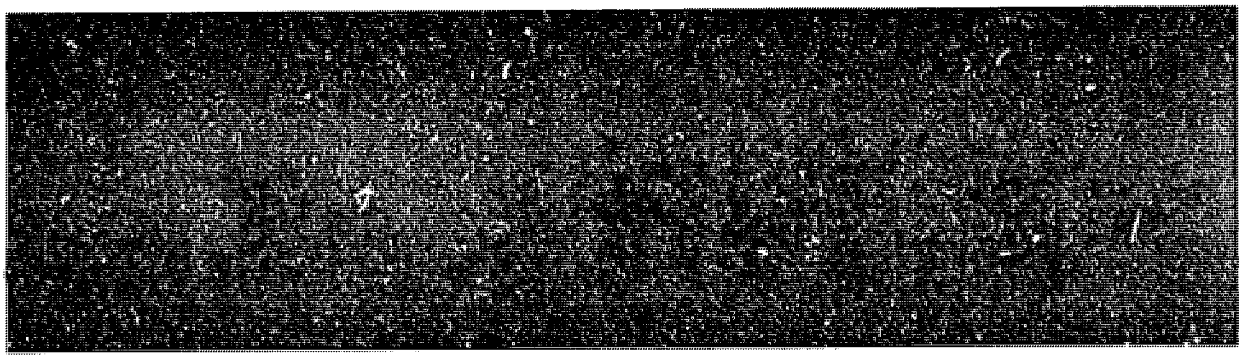

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Social Dilemmas and Rational Individuals: an Essay on the New Institutionalism

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According to the "new institutionalism," institutions enable rational individuals to engage in transactions that are welfare enhancing. They enable people to transcend the impact of perverse incentives that arise in situations of market failure. Variations in the efficiency and growth of economies can thus be attributed to differences in their institutional endowments.

Tracing the origins of the "new institutionalism" to intellectual crises arising in economics, this article documents its impact on the field of development. The approach, it argues, has gained currency not only because it provides a critique of neo-classical approaches to government, a justification for a return to state intervention, and a defense for the role of NGOs in the development process.

The article locates two major flaws in the new institutionalism. The first is the failure to engage in comparative evaluations of the economic role of non-market institutions; this failure results in a bias in favor of the retention of forms of market intervention that may be inefficient. The second is the failure to realize that economic institutions are the product of politics. The failure to look at the macro-political environment leads to an overestimation of the significance of institutions and to a failure to account for variations in their structure and impact upon economic performance.

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Executive Summary

"Social Dilemmas and Rational Individuals: An Essay on the New Instituionalism"

The new institutionalism represents an attempt to build a coherent account of institutions from micro-foundations. It attempts to apply to non-market institutions the same form of reasoning that neo-classical economists have applied to the analysis of markets. This paper examines the origins of this approach, critiques it, and assesses its utility for the study of development.

Origins: The paper traces the origins of the new institutionalism to two crises in modern economics. The first is a crisis of embarrassment. The second is a crisis resulting from a triumph: the proof of the fundamental theorems of welfare economics. The first led to the study of the theory of the family and the firm; the second to the search for new intellectual challenges, and in particular to the analysis of economic behavior in imperfect markets.

The literature on the new institutionalism grew out of the research arising from these two crises. While having important roots in the study of agrarian institutions in the developing world, the new institutionalism entered development economics through the route of economic history. Nonetheless, it has now "taken off," in part because it offers a rebuttal to the "neo-classical" development economics and offers new justifications for government intervention; in part because it offers a middle ground between "the miracle of the market" and "state led growth" and in part because it offers a rational for basing development initiatives on non-governmental organizations.

Critique: The article looks at the basic arguments of the theory and finds them to be logically inconsistent. Rather than completing the "neo-classical paradigm" by deriving the properties of collectivizes from neo-classical axioms, the new institutionalism instead violates those axioms. The article shows that the theory, as often used, is biased toward prescriptions of government intervention; it gives greater weight to the benefits of non-market forms of organization than to the costs. Lastly, the approach lacks a theory of politics. It provides a theory of the demand for organization rather than of supply. The result is low predictive power, as organizations that in some political environments support welfare enhancing transactions in others are used for redistribute purposes, at great cost to society.

The development field: The arguments of the paper are supported by analyses of the literature on marketing boards in Africa, on tariffs and protectionism in the developing world, on village institutions and peasant communities, on informal markets, and on the politics of government intervention in markets in the developing world.

Social Dilemmas and Rational Individuals: An Assessment of the New Institutionalism[1]

by

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The new institutionalism represents an attempt to build a coherent account of institutions from micro-foundations. It seeks to apply to non-market institutions the same forms of reasoning that neoclassical economics has applied to the analysis of markets. Focusing on the law, property rights, bureaucracies, and other non-market structures, the new institutionalism seeks to demonstrate how rational individuals might employ non-market institutions to secure (in equilibrium) collective levels of welfare that they otherwise might not be able to attain, given their responses to market incentives. When applied to the study of development, the new institutionalism focuses on sources of growth hitherto ignored by market-oriented forms of economic reasoning: those arising from the institutional setting within which economic activity takes place.

By the 1980s neoclassical theories had become the new orthodoxy in the study of economic development. They stressed the central importance of markets and counseled against an activist role for government.[2] While development specialists made early, critical contributions to the new institutionalism,[3] the approach first conquered the field of economic history[4] before re-entering the field of development. There it has been welcomed as an antidote to the prescriptions flowing from the prevailing orthodoxy.[5] An older generation, who had emphasized the importance of market failure in development economics, finds in the new institutionalism new justification for their interventionist beliefs. And a new generation, seeking a middle ground between the champions of the market and the defenders of the state, finds in the new institutionalism a justification for basing development efforts on community action and civic engagement.

The new institutionalism has reinvigorated old debates and animated new departures in the field of development. It is therefore important to subject the approach to close scrutiny. This paper attempts to do so by examining its origins, isolating its core arguments, and assessing their logic and significance for the study of development.

The Origins

Neo-classical economics seeks to explain collective outcomes in terms of the choices made by rational individuals. Radical individualism constitutes a defining premise for the field. It informs its methodology: market demand, for example, is built up from the choices of individuals who seek to maximize their utility, subject to the constraint of their budgets and in the face of market prices. It also provides its normative core: because Pareto optimality respects the inviolability of the individual's judgment of his or her own welfare, it constitutes the sole ethical criterion that wins broad support among neo-classical economists.

A Crisis of Embarrassment: Given the centrality of radical individualism, it was profoundly embarrassing to modern economics that in its models market forces did not rest on the choices of individuals.

On the side of demand, households made consumer choices; on the supply side, production decisions were made by firms. Neo-classical models analyzed the choices of these entities as if they were made by individuals. But even Milton Friedman's spirited defense of "as if" explanations[6] served only to paper over the basic reality: that the social science most profoundly committed to radical individualism rested on "collective" foundations.

Despite its unconventional assumptions, Gary Becker's theory of the family therefore won rapid and widespread recognition as a major contribution to neo-classical economics.[7] The reason was obvious: it offered the possibility at last of resting the theory of demand upon the foundations of individual choice. Oliver Williamson also made notoriously idiosyncratic and unconventional assumptions; but his work, too, rapidly won recognition as a contribution to knowledge, for it too promoted the completion of the neo-classical program.[8] Through the work of Williamson and others, economists thus have begun to build up a theory of the firm, and thus of supply, from the rational choices of individuals.

Embarrassment may not be the mother of invention. But the fundamental embarrassment of neo-classical economics -- that of having collectivities where individuals should be -- does help to express why the contributions of Williamson, Coase, Becker and others so quickly became established within the discipline, despite what for mainstream economists were important limitations: their tendency to make unconventional assumptions and, in the cases of Coase and Williamson, their lack of rigorous mathematical foundations.

A Crisis Arising from Triumph: A theoretical deficiency in the existing structure of economics thus provided one source for the new institutional economics. A theoretical triumph provided a second: the codification of the necessary and sufficient conditions for the existence of an equilibrium in a market economy.

The work of Arrow, Debreu and others proved the conditions under which it would be feasible for prices in markets to shape the decisions of consumers and firms such that all consumers would maximize their utility and all firms would maximize their profits.[9] As this allocation enables all agents simultaneously to maximize, it constitutes an equilibrium; no agent could make herself better off by unilaterally varying her consumption or production decisions. In addition, the allocation would be efficient (i.e. Pareto optimal); under the conditions that generate market equilibrium, it would be impossible to improve the utility of any consumer or the profits of any firms without reducing the welfare of another. Insofar as Pareto optimality constitutes a defensible criterion of the social welfare, the Arrow/Debreu conditions thus render the choices of rational individuals consistent with the social welfare.

On the one hand, the proof of the fundamental theorems represented a triumph; it represented the culmination of the quest to substantiate Adam Smith's claims about the properties of markets. On the other hand, it posed a powerful challenge; with the proof of the fundamental theorems, market economics no longer was interesting. Economists were compelled to turn from the study of perfect markets to other subjects -- ones whose core properties had not yet been formalized and whose characteristics had not yet been explored using economic reasoning. The study of the conduct of rational individuals under various forms of market failure quickly became a major branch of economics. And the new institutional economics represents an outgrowth of this research.

In the sections that follow, I focus on a series of market failures and trace the arguments that attribute to each impetus for the creation of new institutions. The sketches impart a sense of the structure of the reasoning deployed in this literature. In particular, they highlight the central role played by social dilemmas. A social dilemma arises when radical individualism becomes inconsistent with the social welfare, i.e. when the choices made by rational individuals yield outcomes that are socially irrational. The core argument of the new institutionalism is that institutions provide the mechanisms whereby rational individuals can transcend social dilemmas. Non-market institutions enable individuals to escape the tensions between individual and social rationality created by the perverse incentives that produce the failure of markets. Market failures yield social dilemmas and elicit the innovation of non-market institutions.

Sources of the New Institutionalism[10]

Market failures arise when the necessary and sufficient conditions for market equilibrium fail to hold. In the section that follows, I discuss several such failures and relate them to the creation of institutions other than markets, such as property rights, contracts, revolutionary parties, and labor movements.

Production Externalities: An externality represents a direct, physical link between the production functions of two or more agents. The activities of one may impose costs on another; the impact of water use by an upstream agent upon the production possibilities of one living downstream furnishes an example. Alternatively, the activities of one agent could confer benefits upon another; firms that provide generalized training increase the productivity of the labor force for all other firms in the industry. Such externalities constitute one source of market failure.

In the presence of production externalities, the private decisions of rationally maximizing agents will fail to promote socially rational outcomes; the outcomes will be inefficient. Firms will engage to too great an extent in the activities that generate negative externalities; they will undertake to too little an extent the activities that generate positive ones. There will be too much water use by upstream users and too little job training, in terms of the above examples.

As analyzed in the new institutional economics, the creation of property rights represents a response to the problem of external effects.[11] The assignment of property rights enables exchange to span the links created by the physical interdependence of production functions; it thereby strengthens the role of economic incentives, making it in the private interests of maximizing individuals to make socially appropriate production decisions.

When there are negative externalities, for example, the creation of property rights enables the agent incurring the damage to elicit compensation; the resultant economic costs to the producer of the externality provide an incentive for that agent to engage in less of the undesirable activity. In the case of positive externalities, when property rights exist, the beneficiary would have financially to reward the provider of external benefits; and those rewards would create an incentive for the latter to undertake more of the socially desirable activity. As a result of the creation of property rights, then, producers incur financial costs or reap financial benefits; the social effects of their behavior are thereby internalized; and the overlaying of exchange relationships on top of the physical relationships provides incentives for the agents to take into private account the external (or social) impact of their production decisions.[12]

Public Goods: Public goods constitute a second source of market failure. In the case of public goods, interdependence exists not between the production functions of firms but rather between the utility functions of individuals. A good is a public good, as opposed to a commodity, if its consumption by one individual does not diminish the utility derived from its consumption by another: the consumption of the good is non-rivalrous and its provision non-excludable.

Behaving as rational individuals, consumers do not take into private account the benefits that their choices create for others; they fail to take into account the social benefit of their decisions. The private choices of individuals create allocations of resources between private and public goods that are inefficient because, in the presence of public goods, individuals, behaving rationally, will free ride. Rather than incurring the costs of contributing to the creation of a public good, individuals might instead seek to exploit its "non-rivalrousness" and "non-excludability." They might seek to enjoy the benefits for free. When people behave this way, they fail to contribute to the costs of creating public goods. While they might place a high value on the public good, then, they might nonetheless fail to finance as much of it as they truly desire. The equilibrium generated by the private choices of rational individuals thus would be inefficient, given that all might feel better off were each to contribute more of their private wealth to the creation of greater amounts of the public good.

The dilemma created by the perverse incentives that undermine the creation of public goods promotes, theorists argue, a demand for the creation of non-market institutions. Confronted with unrealized collective gains, they assert, rational individuals create institutions that make it in the private interests of individuals to make socially correct decisions. Political leaders, or political entrepreneurs,[13] create organizations that provide selective incentives, rewarding with private benefits those who contribute to the provision of public goods -- and targeting with sanctions those who do not. The tax power of the state replaces decentralized exchange, as people voluntarily submit to the Leviathan in order to transcend the limits of individual rationality.

Imperfect Information: Information constitutes a third source of market failure. The acquisition of information is costly; individuals might therefore rationally chose to be imperfectly informed. Several implications follow.

For the fundamental theorems to hold, all economic agents in a market must confront the same set of prices. Only in this way will utility and profit maximizing choices lead to similar ratios of marginal utility across all consumers and similar ratios of marginal value products across all factors of production. Without these equalizations, Pareto optimality can not hold. When agents are imperfectly informed, however, then their estimates of prices will differ. Poorly informed consumers will pay higher prices than will those with better information, for example. In the presence of higher prices, the poorly informed consumers may cease consumption at a point where the marginal valuation of his or her expenditure is higher than that of the better informed consumer. The result is a failure to achieve Pareto optimality.

Leadership, persuasion, influence: these phenomena represent social processes whose origins may lie in efforts by people to compensate for the imperfection of information. For given imperfect information, economic actors may not know their best choices. In seeking to determine where their interests lie, they may seek to acquire information from persons whose tastes could be presumed to resemble their own, but who for a variety of reasons could be expected to be more knowledgeable. The possession of (slightly) greater amounts of education,[14] superior exposure to specialized media and sources of information, or greater experience becomes sufficient, in environments of imperfect information, to render a person influential: an "opinion leader," in the jargon of studies of the phenomenon.[15] Social processes thus replace individual maximization in environments of costly information, as people seek to economize on the costs of searching.

The literature distinguishes between several kinds of costly information. It focuses in particular on information concerning actions, whose costs give rise to moral hazard; and information about type, whose costs give rise to adverse selection. Organizations and institutions, economists argue, enable agents seeking gains from trade to transcend the imperfections market introduced into decentralized environments by the costs of information.

<u>Hidden Action</u>: High information costs limit the ability of people to monitor the choices of others. An example is provided someone with

land and capital who seeks to secure labor services. Were the land owner able to monitor labor effort and output, then the landlord could simply pay the laborer the value of the marginal product of labor. But when it is costly to gauge effort accurately or to monitor the relation between effort and output, then it is also difficult to reward labor in a way that maximizes the returns to both parties. The result is the substitution of contracts for spot exchanges of money for effort. One contract might be a wages contract: paying the laborer a fixed wage, with the landlord securing all the surplus -- but also absorbing all the risk. This form of contract provides weak incentives for altering the intensity of effort, however, as in response to changes in the weather or to the incursion of pests. A rental contract provides an alternative option: the laborer could pay the landlord a fixed amount for the use of the land and capital, and retain all the surplus -- and accept all the risk. Where variability in output arises from the use of land and capital equipment, however, this form of contract will provide insufficient incentive; not being the residual claimant, the landlord possesses few incentives to increase the quality of land or to vary the use of capital so as to increase total profits. Under these circumstances, then, the best form of organization -- given the high costs of monitoring -- might be one in which the landlord and the laborer reward themselves for their inputs of land, capital and labor by dividing the total output. Neither accepts a fixed payment; nor does either become the sole residual claimant; rather, they share the total output -- and thus the risk -- of rural production.

Incentives arising from the costs of information thus can lead to the substitution of contractual relationships for spot markets in rural societies, structuring institutional arrangements that combine land, capital and labor into productive arrangements in rural societies.[16]

<u>Hidden Type</u>: Uncertainty about prices or choices is not the sole source of non-market organization; so too is costly information and the resultant uncertainty about "type:" the quality of a good or the capabilities or intentions of another. This information is often asymmetrically held; an agent may know his or her own type, even when others cannot. The magnitude and structure of such uncertainty may make it costly for maximizing agents to make valuable transactions. The resultant losses of welfare, it is argued, motivate the creation of non-market institutions.

Labor markets once again provide an example. Consider the problems of an employer facing a pool of potential employees. To secure the services of able workers, the employer could offer a high wage. But ability is difficult to measure. One response might be to offer a wage that represents the average ability of the pool of applicants. The job applicants know their own abilities, however; and those with above average abilities will find the wage too low while those with low abilities will find it attractive. The result then is a shift downward in the average quality of the applicant pool. And should the employer respond by revising downward his or her assessment of the average quality of the job applicants and adjust the wage offer accordingly, the process will simply repeat itself. In Akerloff's famous phrase, the result is the creation of a "market for lemons:" a market in which workers of high quality fail to offer themselves, even though employers desire their services and would be willing to reward them for their superior skills.[17]

In such a situation, people possess incentives to engage in "non-market" activities. One way of transcending the dilemma is for employees to invest in signals that reveal their hidden type. If the costs of the signal is less for those who possess higher abilities,[18] then employers could select for ability by choosing those who emit strong signals. Education constitutes an obvious illustration. Insofar as ability lowers the costs of academic attainment, then employers, by paying a higher wage to those with more schooling, can transcend the dilemma generated by costly information, asymmetrically distributed in the labor market.

The problem of costly, asymmetric information concerning "type" reappears in a wide variety of settings and the institutional responses to it assume varied forms. Employers can encourage employees to reveal their type by offering a spectrum of contracts, in which those with high ability (or high preference for risk) will select one form of contract and those with lower abilities (or lower preferences for risk) will select another. To prevent the degeneration of markets as a result of adverse selection, people may also find other ways of signaling. They may, for example, incur costs that would reveal their type. Those seeking to convince insurers that they are good risks may, for example, chose higher deductibles. Or, in inter temporal settings, people may offer collateral or post bonds to signal their good faith. Offering "hostages" provides evidence of one's intentions; it enables one to commit credibly to a course of behavior.

Preferences are difficult to measure. Because opportunism often pays, verbal protestations provides unreliable evidence of true intentions. The consequence is that many desirable agreements can not be arrived at. In such a world, people possess incentives to engage in behavior that reveals private information. They possess incentives to engage in costly acts that reveal their type. By doing so, people provide the information needed for others to infer their type, such that they may take part in transactions that should otherwise be infeasible. People engage in these non-market forms of behavior in order to escape the imperfections of markets.

Unforeseen Contingencies: There is a third source of imperfect information: that arising from the inability of human beings to foresee future states of the world. This source of uncertainty also motivates the creation of institutions other than markets.

As noted by Arrow, were people able to foresee all possible states of the world, then they could use the market to insure themselves against risk.[19] They could trade contracts in which they promised to exchange commodities or services whose prices, quantities, or type varied according to specific circumstances. By buying or selling such contingent claims, they could optimally adjust their holdings so as to assure themselves of a level of utility that reflected their assessment of the probabilities and their preferences for risk.

In practice, of course, not all contingencies can be foreseen; it is prohibitively expensive to write contracts that completely specify actions to be undertaken under all possible states of the world. As a result, the insurance market is not complete and people therefore cannot use the market to maximize their welfare. In response, they employ other institutions.

The inability to foresee and "contract around" future contingencies affects most directly capital markets. When investors invest, they put themselves at risk; they sacrifice present consumption out of a desire for future gains. Insofar as they cannot foresee the future and trade contracts that generate rewards or incur obligations, depending upon the contingencies, they are unable to insure against losses from their investments. As argued by Williamson and others,[20] the result is the creation of non-market institutions. Williamson calls these "governance structures." Given their inability to foresee all possible contingencies, the suppliers and demanders of investments may instead form long-term relationships through which to re negotiate and adjust their obligations in response to changing circumstances. In particular, they may withdraw investment decisions from the realm of the market and instead create firms.

The Core Logic

This series of sketches outlines the multiple sources of the new institutionalism: its theories of property rights, contracts, and governance structures, for example. It also highlights the logic that underlies its reasoning. This is perhaps best summarized by Kenneth Arrow: "When the market fails to arrive at an optimum state, society will, to some extent at least, recognize the gap, and non-market social institutions will arise attempting to bridge it."[21] In situations of market failure, people acting rationally generate social dilemmas. Their individually rational choices fail to elicit allocations of resources that maximize the social welfare. By providing forms of pre-commitment, altering individual incentives, generating governance structures, and so forth, non-market institutions provide mechanisms that enable individuals to transcend these dilemmas and thereby attain higher levels of collective welfare.

This reasoning thus implies a kind of contractual behavior. Rational individuals, confronted with the limitations of individually rational behavior, create institutions that, by creating new incentives or by imposing new constraints, enable them to transcend these limitations. Institutions are demanded -- and supplied -- by rational agents who engineer solutions to social dilemmas.

The New Institutionalism and the Study of Development

The new institutionalism has entered the development field from the domain of its close cousin, economic history, where scholars, most notably North, have sought to explain the growth of economies in terms of the property of their institutions and in particular their capacity to equate social and private returns at the margin, thereby structuring incentives so that rational individuals would make choices that would lead to the efficient use of scarce resources.[22] Nonetheless, in an earlier period, research into Third World agriculture gave a strong impetus to this new approach. Thus Stiglitz otherwise puzzling choice of title -- "The New Development Economics" -- for his review of the literature on share cropping.[23] Not only has the study of development thus played a seminal role in the creation of the new institutionalism. But also the new institutionalism now plays -- and will continue to play -- a major role in the study of development.

Market failures: Micro-perspectives: Economies everywhere are characterized by market failure. Because their mass media are less developed and their governments less stable, the developing nations are likely to possess economies more subject to market failures arising from imperfect information, externalities, and the lack of public goods than are nations in the developed world. This possibility lends impetus to the use of the new institutionalism. For the new institutionalism offers a set of tools and an analytic perspective that enable those interested in the economics of development to attempt to account for a wide variety of social forms in the developing world that otherwise might appear mysterious and to appreciate their significance for the performance of economies.

One example is provided by institutions that offer "generalized reciprocity:" institutions in the developing world in which people invest resources, not in expectation of specific recompense, but rather in an effort to create a general fund of good will that can subsequently be tapped should a specific need arise. Families constitute the most striking example of such institutions. And, as argued by Posner, Binswanger, myself, and others, the structure and organization of families reflects the degree of risk, the structure of risk, and the availability of other instruments for coping with it in economies in which there do not exist market-based sources of insurance.[24] Families become larger -- blending virtually into lineages -- the greater the level of risk. For the larger and more widely situated the family, the greater its ability to diversify risk by occupying diverse ecological niches.

The new institutionalism highlights the economic significance of other forms of non-market institutions in the developing world. In the absence of capital markets, for example, persons in developing nations devise "social" means for pooling savings: they form credit rings or savings societies.[25] In the absence of secure property rights, they mobilize family ties, religious groups, or ethnic associations in support of commerce and trade; the richness of information in such environments facilitates calculations of the appropriate level of trust and the density of social ties increases the costs of the loss of reputation, rendering probity of greater value than opportunism in economic transactions.[26] In the absence of effective states, capable of providing public goods, moreover, people are likely to join religious associations, fundamentalist groups, or revolutionary parties in an effort to secure them. An example is provided by Popkin's classic study of Vietnam, in which he examines the role of churches and the Communist Party in providing property rights, public works, and (ironically, perhaps) the simple decencies of life -- freedom from political predation, corruption, and the arbitrary use of force.[27]

Research into the new institutionalism not only highlights the economic significance of non-market institutions; it suggests as well new policy alternatives. As have other branches of economics, the development field has been caught between advocates of two contrasting perspectives: those who underscore the role of the state and those who advocate the primacy of the market. Viewed from the perspective of the new institutionalism, these debate appears impoverished. For the new institutionalism highlights the role of institutions that are neither fully centralized, as is the state, or fully decentralized, as is the market. In research that led to an award winning doctoral dissertation, for example, Arun Agrawal studied the role of village based institutions that provided safeguards for water, timber, and land in village communities in India.[28] He examined the manner in which villages overcame the incentives to over-utilize such resources, not by creating private property rights and promoting markets, nor by invoking the bureaucratic power of the state, but rather by mobilizing communal pressures and cultural institutions. As argued by others, most notably Ostrom, the new institutionalism thus multiplies the range of policy interventions and forms of remedy by highlighting the role of agencies other than the market or the state.[29] Such insights have strongly reinforced the claims of non-governmental organizations (NGOs) for a major role in the development programs of Third World nations and for access to the development assistance budgets of the advanced industrial nations.

The new institutionalism thus offers ways of understanding the economic significance of features of Third World societies and cultures that market-based reasoning might misunderstand or ignore. And it expands the menu of policy alternatives, offering positive guidelines for policy interventions overlooked by orthodox economists.

Market imperfections: Macro-perspectives: The discussion thus far has focused on micro-level institutions: ones that affect the behavior of individuals or the performance of specific industries or markets. The new institutionalism also addresses behavior at the level of the national economy.

Soskice, Bates, and Epstein, for example, focus on the role of institutions in providing credible commitments to safeguard investments.[30] In the absence of international markets for the diversification of country risks, capital may fail to flow to some nations, they argue, because those who govern cannot provide credible promises to refrain from expropriating the fruits of such investments. In the absence of well-developed international markets for risk, investors may therefore turn elsewhere, investing their capital in regions where it may yield a lower marginal product but a higher expected return, given the lower level of policy risk. Soskice, Bates, and Epstein construct "rules for the political game" which provide conditions sufficient to make it in the interests of ambitious politicians, who desire power as well as wealth, to credibly commit to refrain from policies of predation. In doing so, they show how political institutions can enable policy makers to increase the flow of capital to their underdeveloped regions, even in the absence of market mechanisms for spreading risks internationally.

Robert Wade, Peter Evans, and others focus on what they term "developmental bureaucracies," such as the bureaucracies of East Asia.[31] As recounted in the World Bank study, The East Asian Miracle,[32] a basic lesson of this research is that governmental intervention need not result in losses of efficiency, as the neo-classical economists would have it. Rather, disciplined bureaucracies, staffed by professional public servants and highly trained technocrats, can reduce rent seeking by private interests; curtail opportunistic behavior by economic agents; and promote investments in public goods, such as education, technological change, and research and development. Lying at the core of this position is that "developmental bureaucracies" constitute high minded and disinterested third parties, capable of enabling economic agents to transcend the social dilemmas that lead to market failure. They are capable, it would appear, of compelling private interests to abandon privately advantageous strategies that, when pursued by all, result in the attainment of payoffs that are not efficient.

Stiglitz and Newbery have shown that in the absence of complete contingent claims markets, risk averse agents might rationally prefer autarky to specialization and trade.[33] Theory and the lessons of recent history underscore, however, the costs of such a choice: over recent decades, the countries that have most successfully exploited their position of relative advantage in international markets have achieved the most rapid rates of growth. In another article, Bates, Brock, and Tiefenthaler analyze the impact upon trade policy of institutions for coping with terms of trade risk.[34] They explore the relationship between programs of social insurance, levels of protectionism, and terms of trade risk. Using measures of openness derived from studies by the World Bank, they find that increased levels of risk correlated with greater levels of protection (i.e. autarky); but they also find that, holding other variables constant, governments that invest more in programs of social insurance achieve greater levels of openness. While plagued by possible measurement and sampling errors, their results suggest that government expenditures to socialize the risks of trade achieve greater levels of openness.

In interpreting these results, Bates, Brock and Tiefenthaler treat government investments in social insurance as costly signals to those being asked to invest in specific assets -- signals of society's willingness to compensate for the assets loss of value, should relative prices shift adversely. Economic agents that, behaving rationally, would not form capital in the face of terms of trade risk now might agree to invest even in an open trading environment, given the credible signaling of society's commitment to such compensation.

Students of the new institutionalism have focused as well on monetary institutions, attempting to comprehend the manner in which banking systems and monetary authorities can be constructed such that governments can credibly commit to stable monetary policies. Research into the developing countries of Africa encounters the level of variation necessary to support systematic research into this phenomenon. There is variation over time: colonial currency boards constrained local monetary polices but were replaced by national authorities which, being sovereign, possessed the capacity for discretion. There is also regional variation; in the post-independence period, nations in French West Africa limited their discretion by linking their currencies to the French Franc, while those in British West Africa refused to tie their own hands. While still at too earlv a stage to yield definitive conclusions, the results of investigation into this variation suggest that agencies of restraint have been useful to governments. Governments that have been able to use external agencies of constraint to bind themselves have been better able to achieve the results they desire: fuller employment, greater price stability, and higher rates of growth.[35]

Focusing on the macro-level, students of development have also concentrated on the impact of governmental structures. They have been joined in these investigations by their colleagues in economic history, themselves preoccupied with the relationship between the politics and economics of growth. While failing to find a general relationship between such macro-level variables as measures of democracy and economic performance,[36] the "new institutionalists" nonetheless have secured interesting insights into the links between governmental institutions and the growth of economies -- insights that suggest that more refined measures might find higher levels of confirmation in future empirical work. Weingast and North, for example, explore the reconfiguration of political institutions in Britain following the Glorious Revolution; they find that by devolving power to Parliament, the monarch was better able to signal to the owners of financial assets his commitment to use his powers in ways that were consistent with their interests. As a result of the reorganization of the structure of government, they argue, the treasury was able to secure a far greater volume of loans -- and at a <u>lower</u> rate of interest.[37] Similar research by Root, in his studies of Old Regime France, and Conklin, in his studies of 16th Century Spain, underscore the way in which the structuring of political institutions promotes -- or inhibits -- the capacity of governments to mobilize public savings.[38] Firmin, working in Africa, compares economic growth in two sub-national states in Ghana. In one, Akim Abuakwa, the traditional authorities, by empowering commoners and giving them control over an effective treasury, were able to secure higher levels of public revenues than in the other, the kingdom of the Ga, where the traditional authorities were unable to empower commoners or to construct stable public institutions.[39]

As pioneered by Romer and others, the new development economics attempts to account for lasting divergence in the rates of growth of national economies. In doing so, it focuses on fundamental market failures: non-convexities that make it impossible for rational individuals to allocate resources such that they yield the same rate of return at the margin in all uses.[40] The new institutionalism focuses on the response of rational individuals to such market failures. As illustrated above, it therefore focuses on the ways in which they construct non-market solutions to the social dilemmas engendered by market failures, creating social organizations, political institutions, and agencies of constraint that generate incentives that make it in the interests of individuals, choosing rationally, to make decisions that enhance the collective welfare.

A Critique

In the section that follows, I point out the limitations of the new institutionalism as a form of policy analysis. I criticize its theoretical arguments as well. On the one hand, I point to errors of omission and, in particular, to its failure to take political factors into account. I criticize it as well for errors of commission, arguing that it fails in its attempt to build a theory of non-market institutions on neo-classical foundations. I conclude by arguing that when fully developed the new institutionalism will become a form of political economy.

To understand is to pardon: The new institutionalism seeks to reveal the way in which non-market institutions compensate for market failures. It can properly be criticized for failing to analyze the costs of these corrections or of advocating lower cost alternatives. As a result, it provides misleading, indeed biased, analyses for use by the makers of public policy.

One illustration comes from recent re-appraisals of single-channel marketing systems in Africa. Marketing boards are frequently viewed as monopsonies designed to facilitate the shifting of relative prices against farmers. They have been criticized for promoting redistribution at the cost of efficiency. Recent treatments, drawing on the new institutionalism, view them in a different light, seeing their exclusive right to purchase crops as a way of underpinning markets for rural credit. Given poorly defined land rights, and the illegality of alienating rights over persons, rural borrowers of capital are unable to offer collateral for loans, it is argued. Farmers can only offer title to their crop. At the beginning of the crop year, the mangers of the marketing boards advance seasonal loans, as well as credit for the purchase of farm implements, and receive in return exclusive rights to purchase the farmers' production at the end of the crop cycle. The creation of monopsonistic rights over the products of farmers provides the lenders of capital assurance of repayment of their loans. The right to the crop thus constitutes a form of collateral, enabling lenders to advance credit at rates that reflect lower levels of risk.[41]

This re-interpretation of marketing boards views the creation of single channel markets as a response to market imperfections. It analyzes the behavior of government marketing boards from the same perspective as has been applied to the study of tied factor and credit markets in village India -- one of the original contributions to the literature on the new institutionalism.[42] In doing so, it highlights the danger of using the new institutionalism as the basis for policy prescriptions.

The new institutionalism underscores the benefits provided by single channel marketing systems. Earlier research, based upon neo-classical, market-based reasoning, documented their costs: the low quality and high price of their services; the misallocation of resources over time and space resulting from the inflexibility of their prices; the promotion of corruption and rent seeking; and so on. The job of the policy analyst is to design and to chose forms of government intervention. Before the analyst can decided whether to retain or disband marketing boards, the benefits they provide must first be compared to their costs. To point to the benefits, as the new institutionalists are inclined to do, is to fail to give a full appraisal. Policy advocates who draw on institutionalist arguments are basing their arguments on but one portion of the total equation -- the portion that would promote a systematic bias in favor of keeping forms of intervention in place that might in fact be inefficient.

When used in the appraisal of institutions, the proper role of the new institutionalism might instead be to provided diagnoses rather than to prescribe cures. In economic settings, the existence of non-market institutions, the new institutionalism suggests, might signal underlying market imperfections. Viewed in this light, the proper role of the new institutionalism might be to discern and to analyze the economic problem to which the institution represents an attempted response. Put another way, the new institutionalism takes but the very first step in what must be a more extended process of institutional appraisal and design.

Errors of omission: The new institutionalism seeks to provide an economic theory of non-market institutions. Left out of its account are several key problems, each of which highlights the necessity of focusing on the politics as well as the economics of the process of creating new institutions.

Figure 1 Near Here

Consider Figure 1, which portrays a space of payoffs to two players, a status quo point, and the Pareto region for that point. The new institutionalism highlights the ways in which the players could organize movements from the status quo to the Pareto frontier, even in the face of perverse incentives arising from externalities, asymmetric information, and other market imperfections. But note that there are an infinite number of points on the Pareto frontier; that the frontier is sloped; and that neither player, therefore, will be indifferent among them and that the two players will disagree as to which point should be chosen. Note too that any movement from the status quo toward the frontier creates a public good: the benefits reaped by one player are not rivalrous with those enjoyed by the other.

The diagram highlights several weaknesses in new institutionalists' account. The new institutionalists suggest that people create institutions in an effort to move toward the Pareto frontier. But that argument is not very powerful: there is an infinite number of non-equivalent points in the Pareto set, and a theory that merely accounts for movements to that set therefore fails to discriminate among an infinite number of possible outcomes. The new institutionalism, in short, provides a very blunt theory.[43] That players cannot be indifferent to the points in the Pareto set and possess conflicting preferences over them underscores a second weakness: its failure to recognize the centrality of politics. Given the properties of the Pareto set, the players will have difficulty agreeing on a solution to the problem of market failure: different solutions impose different distributional outcomes. Combining the two insights emphasizes the factors omitted from new institutionalist accounts: the political power of the players and the nature of the political setting that enables one player to gain the institutional solution she prefers and thus yields one outcome as opposed to another within the Pareto set.

The analysis thus far suggests the necessity of imbedding the new institutionalism within the study of politics. Recognizing that institutions promote movements toward the Pareto frontier, and that such moves constitute public goods, provides additional reasons for doing so. In the presence of public goods, people possess incentives to free ride; attempted movements toward the Pareto frontier will therefore be plagued by high transaction costs, as people attempt to reap the benefit of such movements for free. As stressed by Olson, Frohlich and Oppenheimer, and others students of collective action,[44] people who seek to organize the supply of public goods must mobilize selective incentives, such as coercion, or exploit "size effects," wherein large actors find it privately advantageous to incur the private costs of providing public benefits. The first implies the use of political power. The second implies the mobilization of large interests. The state, and persons with control over it; interest groups, seeking to use the power of the state -- both "political facts" thus lurk just beneath the surface of the new institutionalism.

As has less frequently been stressed by contributors to this field, the creation of economic institutions introduces coercion into economic life. The institutions that support the attainment of efficient outcomes create structures of power; to overcome incentive problems arising from market imperfections, they enable the liquidation of hostages, the utterance of credible threats, the implementation of trigger strategies, and so on. The new institutionalists have been slower to acknowledge that the creation of economic institutions takes place not within the "level playing field" of the market but rather within the political arena, in which some are endowed with greater power than are others. The image conveyed in the new institutionalism is that of economic actors, frustrated in their efforts to transact in markets, structuring non-market institutions that will enable them to transcend their dilemma and thereby attain welfare enhancing outcomes. The reality is that non-market institutions are often created in the legislature or the court room or by economic actors who anticipate the appeal of others within such political arenas. Property rights, contract law, the power to regulate the production and exchange of commodities -- these and other economic institutions are created by the state.

In attempting to construct an economic theory of non-market institutions, then, the new institutionalism commits major errors of omission: it underplays or ignores the importance of politics. The significance of this omission can be illustrated by turning, once again, to a discussion of marketing boards. Research in East Africa suggests that, at least under the government of Jomo Kenyatta, the first President of Kenya in the post-independence period, the Kenyan Coffee Marketing Board operated as a relatively efficient organization. It provided public goods to farmers: research into new varieties, assistance in combating pests, marketing services, technical advice, and so on. It also regulated the marketing of coffee, but not in ways that greatly distorted prices in markets. Coffee sales took place in competitive auctions. And the prices paid to farmers compared favorably with those prevailing in international markets.[45] In the same period, the Coffee Marketing Board of Tanzania behaved in a strikingly different manner. It provided little by way of services, and those that it did provide, it supplied inefficiently. It regulated the exportation of coffee. But it did so by acting as a monopsonistic purchaser of the crop, imposing non-competitive prices on producers and extracting the difference between the domestic and international prices for coffee.[46]

The two marketing boards shared a common historical origin: both were created under the guidance of the British during the colonial era. They regulated industries producing the same kind of coffee, produced in nearly identical physical environments.[47] Their statutes reveal that they shared common economic objectives: the efficient provision of services and a fair return to producers. Both were endowed by their governments with legal powers to attain these ends. But their performance strikingly differed.

This example underscores the range of possible departures from the status quo that economic institutions can provide. It also suggests the importance of politics in explaining these variations in outcome. The two boards, similar in so many ways, inhabit different political environments. In the immediate post-independence period, the coffee industry in Kenya fell within the core constituency of the Kenyatta regime, which was based in the Central Highlands. Top politicians and bureaucrats became the owners of coffee farms, thus attaching the personal fortunes to the performance of the industry.[48] In addition, the coffee sector included both plantations and peasant producers; and the plantations, many owned by top political officials, dominated the representative body that shaped the policies of the coffee board. By contrast, in Tanzania, the government's political base located in the urban areas and the semi-arid zones. It did not include the highlands, cite of the coffee producing regions; indeed, it regarded these regions as a hotbed of opposition to its socialist policies. Under the guidelines governing the behavior of public officials in Tanzania, none could own farms; and there were no plantations, only peasant farmers, in the coffee industry.

The economic institutions of the coffee industry in Kenya thus lay within a political setting that created incentives for its officials to employ their powers in ways that would promote the efficient operations of that industry and enhance the returns to producers. The economic institutions of the coffee industry in Tanzania, by contrast, lay within a political setting that created few political incentives for its officials to defend the coffee industry; and, indeed, they employed their powers in a way that extracted resources from the industry, even at the cost of reducing producers incomes.

By taking into account political factors, then, we are better able to account for the direction and magnitude of the departures from the status quo that economic institutions make possible and gain insight into the source of the variability in their performance. The new institutionalism originates in economics. To fulfill its own agenda, however, it must move into the study of politics. It needs to take into account the allocation of political power in society and the impact of the political system on the structure and performance of economic institutions.

Errors of commission: The new institutionalism seeks to complete the neo-classical program by "reducing" social organization to the choices of rational individuals. Two major failures bedevil its efforts. Taken together, they reveal that this attempt to extend the neo-classical paradigm founders on a contradiction: it fails to adhere to two of the basic axioms of neo-classical reasoning -- the commitment to the individual as the unit of analysis and to rationality in the making of decisions.

As can readily be seen in Arrow's formulation, quoted above, the new institutionalists locate the causes of non-market forms of organization in their consequences: i.e. in their ability to solve market failures. This form of reasoning suggests a deficiency in the attempt thus to extend the neo-classical paradigm; for it leaves the level of explanation at the social rather than the individual level. The approach is functionalist.[49] It is the needs of society -- deficiencies in the social welfare -- that call forth non-market organization. This form of reasoning therefore abandons the individual level of explanation and bases its explanations on the welfare of society; and the explanations advanced by the new institutionalism thus depart from the standard form of explanation used in neo-classical economics. Rather than representing an extension of the paradigm, it represents a departure from it.

The new institutionalists' "account" of the origins of institutions also violates the assumption of rationality. By their reasoning, should people encounter a social dilemma, they would forge new institutions in an attempt to transcend it. But, given that the new institution would make all better off, the institution itself constitutes a public good. Would not the act of its provision also generate incentives to free ride? And why, then, would individuals, behaving rationally, be willing to pay the costs of its provision? Viewed in terms of the incentives faced by individuals, then, it appears that the demand for institutional solutions to collective dilemmas does not imply their supply; the solutions themselves pose collective dilemmas.[50] Individuals, behaving rationally, would fail to provide them. The approach thus appears to be ensnared in a basic contradiction.

Conclusion

This essay has traced the origins of the new institutionalism. It has isolated the approach's core arguments. And it has criticized the new institutionalism, stressing its weakness in policy analysis, its failure to perceive the fundamentally political nature of its arguments, and its failure to fulfill its own agenda: creating a theory of non-market institutions based upon neoclassical foundations.

As a political scientist, I find the second of these failures the most telling. I therefore conclude by re-telling a famous parable: the one introduced in one of the canonical texts of the new institutionalism, Ronald Coase's "The Problem of Social Cost."[51]

Consider a situation in which a single railway line runs through a valley populated by a multitude of small farmers. Each train run through the valley generates revenues; it also inflicts costs, in the form of soot, smoke, and noise. One of Coase's fundamental contributions to the new institutional economics was to demonstrate that absence of transaction costs property rights -- any form of property rights -- would make it in the private interests of the operators of the railroad to make efficient use of the railway. In the absence of property rights, the railways would run trains until the revenue from the next train equaled the costs to the railway of running one more train. With a system of property rights, however, the railways would then have to take into account the full social cost, including the costs imposed upon the farmers; it would run fewer trains. Should the structure of property rights favor the farmers, then the owners of the railway would have to compensate the farmers for the external costs imposed upon them. Should the structure of property rights favor the railways, then the farmers, in an effort to reduce the externalities inflicted upon them, could in effect "bribe" the railway to run fewer trains; they could compensate the railways for their loss of profits from running fewer trains. Either system of property rights would thus create incentives for the railways to reduce the number of trains out of a regard for the value of the negative externality inflicted upon agriculture.

As summarized, then, the "Coase Theorem" suggests the power of an institution -- in this instance, property rights -- to produce an efficient allocation of resources. But, in such a situation, where is the solution itself likely to come from? And which legal system is likely to prevail: that favoring the rights of firms or that favoring the rights of the railways?

As we have repeatedly stressed, the new institutionalism's answer to the first question -- where do solutions come from? -- is fundamentally flawed. There is a second possible answer, however: that their origins lie in politics. As a new institutionalist, Coase answered the second question -- which system of property rights would prevail? -- by stating: it would depend upon the costs of transacting. Once again, there is a second possible answer: that it would depend upon the structure of politics. For the origin of the legal system is the state. And the nature of the costs of guaranteeing and structuring property rights is determined in large part by the nature of political institutions. In the state, then, and in the study of politics, we can find answers to both questions.

The new institutional economics is profoundly a-political. Institutions represent agreements or conventions chosen by voluntarily transacting parties in efforts to secure mutually welfare enhancing outcomes. Each agent is assumed to be autonomous; each agreement, voluntarily entered into by mutually assenting parties. The emphasis is upon choices, not constraints; even slave "contracts" are analyzed from the framework of Pareto optimality.[52]

What is omitted from the accounts of the new institutionalists, then, is that are often imposed rather than chosen; that the choice of institutions takes place within a pre-existing set of institutions; and that, being backed by the power of the state, institutions provide means whereby agents can extract involuntary transfers of resources. The sort of marginalist choices studied by the new institutionalists take place within structures. They may yield Pareto optimal outcomes, given the constraints imposed by these structures (including the initial endowments that each actor is allowed to bring into the social arena). But when social dilemmas are solved and non-market solutions chosen, some people benefit more than others; indeed, some may benefit at the expense of others. These are key features of outcomes which the voluntaristic and marginalist approach cannot explain. Explaining them requires political, not economic, analysis.

By way of illustration, return, once again, to the discussion of the "Coase Theorem." Consider a world in which elections are banned, the state rules by decree, and laws are made by bureaucrats after consulting with major economic interests. One could easily infer that in a political system thus structured, the structure of property rights would favor the railway. Indeed, political theories based upon the very reasoning explored in this paper would predict that outcome. For the railway is the more highly concentrated interest; given its level of concentration, it stands to capture privately the full social benefits of lobbying and therefore encounters weak incentives for free riding. By comparison with the farmers, the railways would therefore be the superior lobbyist.[53] And the state, structured so as to respond to interest groups, could be expected to be biased in its favor.

Now consider another state: one in which politicians make the laws, but only after capturing a majority of the votes in competitive elections. Provisioned with additional assumptions -- about the number of rural dwellers voting in the electoral district containing the railway and the proportion of rural as opposed to urban districts in the legislature, for example -- one could easily infer an alternative outcome: one in which property rights would favor the farmers as opposed to the railway. In electoral systems, numbers count; political incentives spur efforts by politicians to secure majorities; and politicians will champion laws that favor the numerous small, even sometimes at the expense of the "big interests."

Politics involves coercion; the state, in Weberian phrasing, is the human institution that possesses a monopoly of violence. The institutions that promote social rationality are generated and put in place by the state. The structure of political institutions affect which economic institution is chosen. Behind every Pareto optimal outcome, then, arrived at by marginal adjustments among maximizing agents devising institutional solutions to problems of market failure, lies a previous act of coercion.

Using the bloodless language of the new institutionalism, Coase was right: which institution is chosen depends upon the structure of transaction costs. It is the state that determines the allocation of these costs, however. The costs of agreement among the multitude of farms are lower, for example, if vote seeking politicians help them to organize in opposition to the railway. Once politicians are seen as determining the magnitude and distribution of these transaction costs, then a different vocabulary becomes relevant: that of political science. And the problem itself acquires a different coloration. It is no longer one of pure economics. The new institutionalism thus stands as an important addition to the development literature. In my judgment, however, it will achieve its full promise when it becomes a part of a broader field: the field of political economy.

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