The Last Instance: Are Institutions the Primary Cause of Economic Development?

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Abstract

Following North, neo-institutionalists claim that institutions are the "primary" cause of economic development, "deeper" than the supply of factors and methods for their use, what marxists would call "forces of production." Yet while the conclusion is different, the historical narratives differ little accross these perspectives. How, then, are such conclusions derived? Can anything be said to be "primary"? I conclude that "causal primacy" is an answer to an incorrectly posed question. Institutions and development are mutually endogenous and the most we can hope for is to identify their reciprocal impacts.

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> "That institutions affect the performance of economies is hardly controversial. That the differential performance of economies over time is fundamentally influenced by the way institutions evolve is also not controversial." (North 1990: 3)

1 The new institutionalism

The new institutionalism is founded on two propositions: (1) Institutions matter, (2) Institutions are endogenous.

The central claim of "new institutionalism" is that institutions are a "deeper," "primary" cause of economic development. The theoretical program has been laid out by North (1997: 224; italics supplied): "To make sense out of historical and contemporary evidence, we must rethink the whole process of economic growth.... The *primary source* of economic growth is the institutional/organizational structure of a political economy...." Specifically, we learn that "Third World countries are poor because the institutional constraints define a set of payoffs to political/economic activity that do not encourage productive activity." (1990: 110).

The quest for the last instance pervades economics. Thus, in a paper entitled, "Institutions Rule: The Primacy of Institutions ....," Rodrik, Subramanian, and Trebbi (2002: 2; italics supplied) observe that "Growth theory has traditionally focused on physical or human capital accumulation, and, in its endogenous growth variant, on technological change. But accumulation and technological change are at best *proximate causes* of economic growth." Acemoglou (2003a; italics supplied) repeats: "poor countries ... often lack functioning markets, their populations are poorly educated, and their machinery and technology are outdated or nonexistent. But these are only *proximate causes* of poverty...."

This theoretical claim has practical, policy, consequences: it licences institutional engineering. If different institutions generate different outcomes, then one can stick any institutions into any historical conditions and expect that they would function in the same way as they have functioned elsewhere. Install independent judiciary, establish clear property rights, create independent central banks, and manna will fall from heaven. In the language of Washington Consensus, this is the "third stage of reforms." As Kindleberger (1952: 391-2) observed some fifty years ago, "These [World Bank country reports] are essays in comparative statics. The missions bring to the underdeveloped country a notion of what a developed country is like. They observe the underdeveloped country. They subtract the former from the latter. The difference is a program."[1]

Yet the new institutionalism also recognizes that institutions are endogenous. As already North and Thomas (1973: 6) observed, "new institutional arrangements will not be set up unless the private benefits of their creation promise to exceed the costs."[2] And the embarrassingly obvious thought is that if endogeneity is sufficiently strong, institutions cannot have a causal efficacy of their own. Imagine that only those institutions that generate some specific outcomes, say those that perpetuate the power of the otherwise powerful, are viable under the given conditions. Then institutions have no autonomous role to play. Conditions shape institutions and institutions only transmit the causal effects of these conditions.

Imagine a text on the same topic that we would have read some thirty years ago. "Institutions are epiphenomenal," we would have read. They are a phenomenon that, in a dictionary (Webster) definition, 'occurs with and seems to result from another." Political institutions can at most organize power that lies elsewhere: in the relations of military force, in the economy, in the control over mass media. "One cannot stop a coup d'etat by an article in the constitution," any article in the constitution, Guillermo O'Donnell once remarked to me.

Suppose we are playing basketball. There are two teams, some perfectly universalistic rules, and an impartial referee to administer them. But one team consists of players who are seven feet tall and the other of people like me, who barely exceed five. The outcome of the game is predetermined. The rules of the game treat everyone equally, but this only means that the outcome depends of the resources participants bring to it, "brute," extra-institutional, power. This was Lenin's (1919) understanding of democracy: "if the rich can buy elections, democracy will serve the rich," we would have read.

You may retort "We could change the rules, say lower the height of one of the baskets, and equalize the chances." But if tall people are the ones who decide what the rules should be, if the people who have brute power are the ones who mold the institutions, they will not agree to it. After all – we can go back to Rousseau for this observation – institutions function in societies that have definite power relations and they must

[1]For evidence that little has changed since then, see Carothers (2002).

[2]There is nothing new about the claim that institutions are endogenous. Montesquieu as well as Rousseau, the latter in his folkloric description of Poland, claimed that particular institutions can function only if they correspond to cultures, mores, religions, or geographic conditions. J.S. Mill considered the issue of endogeneity in the first chapter of *Considerations*, entitled "To What Extent Forms of Government are a Matter of Choice."

reflect the distribution of this power.[3] Otherwise, they will not last. In the political science jargon, they will not be "self-enforcing."[4]

If this is true, if institutions are endogenous, it may be that the "institutional constraints define a set of payoffs to political/economic activity that do not encourage productive activity" precisely in those countries where returns to productive activity are relatively low. When returns to producing are low, those who populate political institutions prefer to engage in rent seeking (Acemoglou 1995, Murphy, Shleifer, and Vishny 1993). North's explanation of the poverty of the Third World is then circular.

Moreover, the institutional reforms program may be doomed to failure. For example, one of the main items on the agenda of institutional reforms is making the judiciary independent of political control. Yet if judges receive low salaries, making them independent just lowers the cost of bribes: when the judiciary depends on political control, politicians have to share bribes with judges and perhaps with fellow politicians who provide the cover, while independent judges can be bribed one by one. At least one systematic review of attempts to promote the rule of law abroad concludes that, "simplistic assertions ... to the effect that 'the rule of law' gross modo is necessary for development are at best badly oversimplified and probably misleading in many specific ways" (Carothers 2002: 5). Berkovitz, Pistor, and Richard (2003) found that transplanted legal systems do not take roots and have weaker effects than home-grown ones. Even communists could not reform their institutions: the Polish Communist regime desperately tried one institutional reform after another and nothing would budge. The cemetery of institutional reforms must be enormous. After all, the idea of imposing democracy on Afghanistan or Iraq does sound ludicrous.

As one reads this literature, the sentiment of *deja vu* overwhelms: "In the last instance, the forces of production are primary, etc."[5] Then comes the surprise: the data are the same, yet the conclusion differs. Natural endowments (material conditions) determine economic and political institutions (relations of production, superstructure), which reproduce themselves, and generate particular patterns of development: the

[3] For a discussion of this theme in Rousseau, see Holmes (2003).

[4] While the requirement that institutions be self-enforcing is generally shared (Hurwicz 1994, Diermeier and Krehbiel 2001: 11, Greif 2002), this notion is far from self-evident. I like to think about "self-enforcing" institutions as follows: Suppose a game theorist writes down a model of institutions (say of separation of powers) and solves for the equilibrium. If we observe that people regularly behave in a way consistent with the equilibrium, the institution is self-enforcing.

[5] For the most careful analysis of this thesis, see Cohen (1973).

givens differ only in the language in which they are described. So what is then the "deeper" cause: institutions or material conditions? How are such conclusions derived? Is anything "primary"? This is the topic of what follows.

The paper begins with the description of the data as they are presented by the neo-institutionalist economic historians. I continue by observing that the institutionalist narrative is essentially the same as those provided by writers inspired by marxism and that both end in the same impasse. I conclude that something is wrong with the question to which the primacy of anything is the answer. Everything, and thus nothing, is "primary." The only motor of history is endogeneity. And this is not a pleasant conclusion, since it implies that testing alternative theories of development is difficult.

2 Institutionalism and economic history

2.1 Geography vs. Institutions

Institutionalists take as their rival the view that patterns of development are shaped by exogenously given natural environment, "geography." Hence, to understand where institutions come in, this is a good place to begin.

While the view that geography plays an important role in shaping the patterns and the rhythm of development dates back to Montesquieu (1748), this perspective has been recently revitalized under the influence of Diamond (1997) and applied to explain long-term patterns of economic growth by Sachs and his collaborators. According to Sachs (2001): (1) Technologies, particularly in food production, health, and energy are ecologically specific. They do not diffuse easily across ecological zones. (2) By the start of modern economic growth, if not much earlier, temperate zone technologies were more productive than tropical-zone technologies. (3) Technological innovation is an increasing-returns-to-scale activity. It amplified the original differences. (4) Societal dynamics – especially the processes of urbanization and demographic transition – are two further amplifiers of the development process. (5) Geopolitical factors – temperate-zone imperial domination of tropical regions and rich-country control of the institutions of globalization – amplify the initial differences even further.

The fact which Sachs adduces to support these hypotheses is that while in 1820 average per capita income in the tropical zone amounted to 70 percent of that in the non-tropical zone, by 1992 this proportion fell to 25 percent. According to Gallup, Sachs, and Mellinger (1998), the African income in 1992 was same as Western European income in

1820. Even though colonialism had negative effects on the colonies, colonialization does not explain these patterns: (1) Countries in the tropical areas that were never colonized do not differ from those that were. (2) Performance did not improve after decolonialization.

While Sachs (2001) says next to nothing about institutions, Gallup, Sachs, and Mellinger (1998: 29) claim that some effects geography are mediated by policies and institutions: "Good policy and good geography may have a tendency to go together.... The result is that natural differences in growth potential tend to be amplified by the choice of economic policies." Yet their central claim remains that geography matters, even when controlled for policies and institutions.

The main fact cited against the geography perspective is what Acemoglou, Johnson, and Robinson (2002; henceforth AJR) term "the reversal of fortunes." Thus, AJR (2002: 1233) observe: "The simplest version of the geography hypothesis emphasized the time-invariant effects of geographic variables, such as climate and disease, on work and productivity, and therefore predicts that nations and areas that were relatively rich in 1500 should also be relatively prosperous today. The reversal in relative incomes weighs against this simple version of the geography hypothesis." According to AJR, countries that were wealthier in 1500 (as measured by population density or urbanization rates) are the ones which are less developed now. This view is supported by Engerman and Sokoloff (1997, 2001; also Sokoloff 2000) with regard to the Americas, where the initial date is mid-eighteenth century. Finally, Banerjee and Iyer (2002), having gone back to mid-nineteenth century, found a reversal among districts within India.

The reversal motivates the institutional perspective. Note that the geography perspective is committed to the fact that initial income differences are at least preserved, if not amplified, across time. As Banerjee and Iyer (2002: 1) put it, "In the new institutionalist view, history matters because history shapes institutions and institutions shape the economy. By contrast, in what one might call the 'increasing returns' view, historical accidents put one country ahead in terms of aggregate wealth or human capital ... and this turns into bigger and bigger differences over time because of the increasing returns." Hence, the reversal, if it is a fact,[6] is mortal to this perspective.

[6] Since this paper deals with epistemological issues, I do not want to get mired in facts. If one takes Maddison's (2003) data on development, one will discover that the Caribbean islands which were wealthy around 1700 were eventually passed by other countries in the Americas. But the only spectacular reversal was that the four British offshoots (Australia, Canada, New Zealand, and the United States) passed their mother country and the rest of Europe. Tropical countries were poorer as far

2.2 The institutionalist narrative

AJR and Engerman and Sokoloff offer a similar historical account:

(1) The choice of commodities to produce, the form of the productive units (plantations, *latifundia*, family farms) and the initial institutions were determined by the conditions Europeans encountered during colonialization. When Europeans colonized the world, they found natural endowments differing in terms of climate, quality of soil, availability of mineral resources, and the size of native populations. Those areas which had humid climate and appropriate soil as well as a small native labor force were best for and ended up with plantations operated by imported slaves. Those areas which had a large native population or mineral resources were best for and ended up with latifundia operated by enslaved indigenous population, *encomiendas*. Finally, those areas which had a moderate climate, small native population, and the soil appropriate for intensive agriculture became populated by family farms. Slavery and encomienda were forms of legal inequality, while family firms were associated with legal equality. These choices were locally optimal, in the sense that "equilibrium institutions are likely to have been designed to maximize the rents to European colonists, not to maximize long-run growth" (AJR: 1263).

(2) The initial institutions shaped the evolution of the conditions under which subsequent development would occur, so that some conditions became endogenous with regard to institutions. Even when legal inequality was abolished, it left as a legacy a high degree of income inequality. Institutions were reproducing the conditions which originally gave rise to them and, in turn, were reproducing themselves under these conditions: "Not only were certain fundamental characteristics of the New World economies and their factor endowments difficult to change, but government policies and other institutions tended to reproduce the conditions that gave rise to them" (Sokoloff 2000: 5). "The organization of society and institutions also persist...." (AJR: 1263)

(3) Inequality was adverse to development. The reason was that the poor did not have the access to productive resources: "the greater inequality in wealth contributed to the evolution of institutions that commonly protected the privileges and restricted opportunities for the mass of the population to participate fully in the commercial economy even after the abolition of slavery" (Sokoloff 2000: 4). Moreover, "greater equality provides support, if not impetus, to self-sustaining processes whereby expanding markets induce, and in turn are induced by, more effective or intensified use of resources, the realization of scale economies,

back as the data go. See Przeworski (2004a).

higher rates of inventive activity and other forms of human capital accumulation, as well as increased specialization by factors of production" (Engerman and Sokoloff 2001: 35).

(4) The role of institutions became crucial when new forms of production, namely industry, emerged on the historical horizon, rendering the traditional activities less profitable. "The institutions hypothesis also suggests that institutional differences should matter more when new technologies that require investments from a broad cross section of the society become available" (AJR 1236). When new opportunities emerged, the effect of institutions was to *block* industrialization.[7] "The elites may want to *block* investments in new industrial activities, because it may be that these outside groups, not the elites themselves, will benefit from these activities.... they may want to block these new activities, fearing political turbulence and the threat to their political power that new technologies will bring" (AJR: 1273).

In the end, the reversal occurred because areas that were originally wealthier adopted worse institutions. These institutions persisted ("reproduced themselves"), blocking the opportunity that was offered by industrialization. As a result, the initially wealthier areas "fell behind," to use the phrase of Haber (1997).

2.3 "Blocking" and "reproduction"

Engerman and Sokoloff never specify any institutional alternatives. All they can muster as a counterfactual is that "New World economies might have been able to realize growth in much the same way as the United States if not for their initial factor endowments and the governmental policies that upheld their influence" (1997: 291), but note that the counterfactual entertained here includes the initial factor endowments. I cannot find any alternatives in North (1990) either. Once "institutions" become populated by "organizations," their response to any exogenous change is uniquely determined: "Path dependence means that history matters." (p. 100) and "Because the bargaining power of groups in one society will clearly differ from that in another, the marginal adjustments in each society will typically be different as well." (p.101) Hence, time paths are determined by the initial conditions. Indeed, I cannot find an

[7] It is not quite clear who was there to "block". When first countries were undergoing the industrial revolution, the Caribbean islands, except for Haiti, remained under colonial rule: there were local elites but the institutional framework was controlled by the metropolia. In turn, Latin America was fighting for independence from 1810 to 1824 and in no country were stable political institutions established until the 1830s. Hence, as the United States took off to surpass England, institutions in other countries were either controlled by colonial powers or simply did not exist.

explicit specification of alternative paths in any of the institutionalist writings.

This silence is not an omission. Once institutions are in place, they reproduce themselves, and block any change. To develop new activities, the argument goes, political, educational, and legal institutions would have to had changed so as to allow access of poor people to productive assets. Yet the established elite needed inegalitarian institutions to defend its privileges. Hence, this elite was unwilling to change the institutions and without the institutional change the new development path could not be pursued. Questions such as "When and how were the political institutions of Cuba transformable? "Why would the Cuban elite extend suffrage and public education to former slaves?" cannot even be posed.

How do institutions "block"? A recent paper by Acemoglou (2003b) goes some way to clarify this mechanism. But before we get to it, we need to clear some underbrush.

Note first that the institutions that matter for development in the neo-institutionalist perspective are always those institutions that "safeguard property rights." AJR's definition goes as follows: "We take a good organization of society to correspond to a cluster of (political, economic, and social) institutions ensuring that a broad section of society has effective property rights" (AJR 2000: 1262). Operationally, almost everyone uses as measures of institutional quality assessments of protection against the risk of expropriation, as measured by a Washington consulting firm, Political Risk Services and/or "constraints on the chief executive," from the Polity data set (AJR, Easterly 2002, Hall and Jones 1999, Kaufmann, Kraay, and Zoido-Lóbaton 1999, Rodrik, Subramanian, and Trebbi 2002). This idea goes back to North and Thomas (1973; see also North and Weingast 1989) and has become the New Testament ever since.[8] But we also have the Old Testament, drafted by Rosenstein-Rodan (1943; for a formal model see Murphy, Shleifer, and Vishny 1989) which says that institutions that matter are those that coordinate development. The main point of Bardhan (2004) is that the new institutionalists got their institutions wrong. Hence, even if institutions are the primary cause, North and company may be looking at wrong institutions. But, to follow the literature, let us stick with protection of property rights.

As invoked by this literature, the idea that secure property *rights* are

[8]In fact, this reasoning can be found already in Machiavelli: "For everybody is eager to acquire such things and to obtain property, provided that he be convinced that he will enjoy it when it has been acquired." (Discourses on Livy. II.2, cited after Holmes 2003)

the secret of development is pure fluff. For one, property can be secured by might, without any rights.[9] What the neo-institutionalists mean by "secure property rights" is indeed protection against the risk of expropriation (of alienable productive assets or income) via the political process. Yet, here we are approaching Acemglou (2003b), institutions can also protect property without protecting rights, by creating barriers to entry. Acemoglou's example is access to credit, but one can cite many more. For example, controlled by wealthy landowners, the Chilean state financed between 1855 and 1885 the development of the railroad to the latifundia located in the South of the country, while neglecting the copper and nitrate rich North, rendering the costs of transport exorbitant, and copper mining unprofitable for small producers (Fox-Przeworski 1981). Indeed, according to Stigler (1975) almost everything governments do creates barriers to entry: licensing doctors or issuing taxi medallions, prohibiting hazardous products, zoning, etc. And protecting property by erecting barriers to entry is highly inefficient. As we will see below, it can be worse than the risk of expropriation.

According to Acemoglou, blocking operates as follows. If the initial institutions grant political rights only to owners of property (such a regime is called "oligarchy"), these will use their power to erect barriers to entry and to prevent redistribution. If the institutions grant political rights to everyone ("democracy"), then there will be no barriers to entry but incomes or assets will be equalized to some degree. Both barriers to entry and redistribution are distortionary, so that both reduce efficiency. But, Acemoglou shows, while oligarchy initially generates higher aggregate income, it prevents talented potential entrepreneurs from entering as such into productive activities, and over time the income generated by oligarchy may fall below that of democracy. Hence, "blocking" consists of using political power to defend monopoly profits by maintaining barriers to entry and to prevent redistribution. And blocking creates a reversal: inegalitarian institutions generate higher income at the initial stage but then fall behind egalitarian ones.

The particular assumptions of Acemoglou's model – one person can own only one firm and cannot hire managers, there is no market in firms – leave several questions unanswered. Why the producers of crops that became less profitable did not or would not move to other activities, rather than just passively witness the reversal of their fortunes, *if they could*, that is if natural endowments allowed it?[10] If slaves imported

[9] See, for example, Hafer (2003) for an account in which those who end up with property are those who are better at defending it physically.

[10] As Safford (1972) points out with regard to Colombia during the first half of the nineteenth century, the same individual was often landowner, mechant, and lawyer

from Africa could cut sugar or enslaved Indians could mine silver, why could not these same slaves be used to produce textiles? If for some reason the landed elite could not shift to a new activity, why would it not merge with the emergent bourgeoisie rather than maintain barriers to entry into activities it would not undertake? After all, this was an influential explanation of the English success.[11] And if the established elite obstinately clings to obsolete activities, why would it not be politically displaced by an aspiring new elite? Yet, in spite of all these questions, by emphasizing the role of barriers to entry, Acemoglou does offer a clear and plausible mechanism of blocking

How then does a country change institutions? In Acemoglou's story, if a country begins as a democracy, it never changes its institutions. In turn, those countries that begin as oligarchies can remain as such, transit to democracy only temporarily, or transit to democracy permanently. Yet the mechanism of this escape remains mysterious: all we are told that the change from oligarchy to democracy happens with some probability that depends on income inequality.

I am not saying that institutional change is inconceivable. Acemoglou and Robinson (2000) offer a story in which there are conditions when elites extend suffrage to thwart the threat of revolution. According to Galor and Moav (2001), capitalists supported public education to increase the rate of return to physical capital. I am certain one can find other similar stories. But they cannot be couched in the language of "reproduction" and "blocking."

3 The same quandary: New institutionalism and marxism

Having slipped into the marxist language, one rediscovers old debates. Indeed, Elster (1985: 268) began his discussion of the primacy of productive forces in an exactly the same way as I did here:

> If Marx believed in this primacy of the productive forces, he faced the following dilemma. On the one hand, he was then committed to the view that (1) The level of development of the productive forces in a society explains its economic structure. On the other hand there is abundant evidence that he also believed that (2) The economic structure of a society promotes the development of its productive forces.

at the same time, and if he was not, he had family members engaged in all these activities.

[11] This issue is important and controversial in the Chilean historiography. The classical study is Edwards (1928), a recent one is Contreras (2002).

Moreover, marxism and institutionalism have undergone the same evolution. "Early" North maintained that only those institutions that are optimal for development can survive. The same was true in Cohen's (1973) reconstruction of marxism: when social relations fetter the development of productive forces, they "burst asunder." Yet both institutionalists and marxists were forced to admit that suboptimal institutions can survive if they protect interests of the powerful.

Consider a summary, even more schematic than that of Engerman and Sokoloff, of Cardoso and Faletto (1969): (1) Natural endowments determine the "modes of insertion" of particular countries into the world economy, as plantations, mineral enclaves, or population colonies. (2) Economic structure shapes interests that become politically organized as classes or fractions thereof. (3) These organized groups enter into conflicts and form political alliances. (4) Institutions – the state – are but a "pact of domination" of the victorious alliance; they are endogenous. (5) The state reproduces the economic structure in the interest of the dominant classes. (6) The results is "associated dependent development."

I do not want to claim that these theories are identical. For one, dependency theory places emphasis on the international division of labor, arguing that those countries that were early exporters (countries that adopted the pattern of development oriented "to the outside," *desarrollo hacia afuera*), fared less well than those that were inward oriented. If a reversal did occur, dependency theory would claim that countries that exported less should pass those which exported more.[12]

More importantly for the issues at hand, Cardoso and Faletto abandon the peculiar fiction of the "elite" in singular that haunts the neo-institutionalist literature (but see Acemoglou 2003b). Assuming conflicts among competing interests is not only historically more accurate, but it points to the potential mechanisms of institutional change. I return to conflicts below.

Cardoso and Faletto were ambivalent about alternatives, but the issue was raised by Weffort (1972) and led to an acrimonious debate. One counterfactual mentioned by Cardoso and Faletto (138) is socialism: public ownership of the means of production with state management of the economy. The other is national economic independence (148): expropriation of foreign monopolies and economic independence. But

[12] The issue of openness to trade does appear in most recent institutionalist writings but the findings appear inconclusive. Hall and Jones (1999) find that the longer a country was open to trade the faster it grows, but Easterly (2002) as well as Rodrik, Subramanian, and Trebbi (2002) find that trade does not matter once geography and institutions are considered.

whichever it is, how does one get to it? Cardoso and Faletto wanted to allow for indeterminacy, but then quickly closed the gate to alternative paths. The relevant passage merits citing in extenso, since the difficulty it reveals is generic:

> clearly, the conflicts or agreements among these different forces do not obey a deterministic mechanic. The result of their interactions in specific situations could enable historical events completely distinct from those analyzed here, for example in the Cuban case. But to the extent that the system of social relations expresses itself in the system of power, it historically instates a set of specific structural possibilities. This framework of structural possibilities, itself a consequence of anterior social actions, defines specific trajectories and excludes other alternatives (1969: 136).

The notion of causality used in this passage was formulated by Poulantzas (1973) under the term of "double articulation." Poulantzas argued that the current historical conditions determine the limits within which actions can alter these conditions. Applied to the role of institutions, this principle would assert that the state of the development of forces of production determines the limits within which institutions can alter these forces. Yet, as Wright, Levine, and Sober (1992: 130)[13] observe, this notion of causality does not take us very far: If the limits are tight, institutions are impotent; if they are wide, institutions are omnipotent. Hence, we are back where we started: when do historical conditions permit institutions to alter these conditions?

The causal relations between "forces of production" and the "relations of production" that together constitute the "base," and between the "base" and the "superstructure" are the cornerstone of marxist theory. Marxism offers a magnifying glass for detecting the difficulty facing the new institutional economics. Let us, therefore, step back.

Marx thought that capitalist social relations reproduce themselves spontaneously. At each repetition, this process of reproduction consists of three stages: (1) At the level of production, "capitalist production ... produces not only commodities ... but it also produces and reproduces the capitalist relation: on the one side the capitalist, on the other the

[13] Wright, Levine, and Sobell (1992: 130) do not invoke Poulantzas. Indeed, their own notion of "structural limitation," according to which "class structure determines the limits of *possible* variation in state policies, while political institutions and practices only *select* policy outcomes within these limits," does not include the dynamic aspect of "double articulation."

wage labourer" (Capital, vol I: 578). (2) Competition assures that the rate of profit is equalized across sectors and that all productive activities are undertaken (vol. III: 244ff). (3) The institutional, legal and ideological conditions necessary for a continued functioning of the capitalist system also spontaneously reproduce themselves: "it is in the interest of the ruling section of society to sanction the existing order as law and to legally establish its limits given through usage and tradition. Apart from all else, this, by the way, comes of itself as soon as the constant reproduction of the basis of the existing order and its fundamental relations assumes a regulated and orderly form in the course of time." (vol III: 793).

The marxist theory of the state that emerged in the 1970s began by denying that capitalism ever (Poulantzas) or at least in its recent stage (Habermas 1975, Offe 1974) reproduces itself spontaneously. Indeed, Balibar (1971) and Poulantzas (1973) developed an arcane conceptual apparatus for analyzing the "relative autonomy of instances ": economic, political, ideological, etc. The general idea was that power can be organized only within the state, yet the state can organize only that power which exists elsewhere, specifically, in the economic realm. In Poulantzas's rendering of "relative autonomy of the state," the state is needed to coerce the competing bourgeois to act on their common interest against their class enemy: the state organizes the bourgeoisie as a class. But under capitalism the state can organize only the bourgeoisie because this is the class that holds economic power. The economically powerful cannot pass laws; only a parliament can do this. Hence, the economically powerful must become organized within the parliament. This organization has consequences in that, to be effective as a group, the economically powerful must discipline their individual interests. But, organized within the political institutions, the economically powerful hold political power. And once this power is organized, institutions necessarily reproduce power relations that gave rise to them.

This entire apparatus, whether in Marx's original or state-modified versions, hurls itself against the impossibility of conceiving change in terms other than a *breakdown* of the extant system. The difficulty goes back to Parsonian functionalism and haunts marxism. If "every act of production is an act of reproduction of the social relations under which it takes place" (Marx), how can social relations be changed? A social system can either reproduce itself or break down, *tercerum non datum*.[14] The "breakdown" is not even a unique path: we can under-

[14] Attempts to cope with this difficulty within marxism consisted of introducing a concept of "expanded reproduction" but no such processes were ever specified. The same concept reappears in Greif (2002: 1-20) under the name of "self-reinforcing

stand the emergence of a new system only retrospectively, by studying the "genealogy" of its elements (Balibar 1971). And, to return where we began, this is exactly the same impasse where institutionalists end up. If "institutions tend to reproduce the conditions that gave rise to them" (Sokoloff), no alternative institutions can emerge from the existing system.

4 Primacy vs Endogeneity

If institutions constitute a primary cause, they cannot be caused by something else. This is why the two central axioms of new institutionalism do not easily cohabit the same theory.

Now, that "something else" comes in two varieties. Some features of particular countries – climate, soil, susceptibility to diseases – are invariant or at least can change only very slowly. They constitute the "geography" with which we began. Geography is temporally and logically prior to everything else. If geography uniquely determines the initial institutions, which subsequently shapes development, geography is still primary. Reversal is not enough: even if those endowments that made the particular areas originally wealthy led to the establishment of institutions that hindered subsequent development, as long as institutions were uniquely determined by the endowments, they cannot constitute the primary cause of development. To be a primary cause, institutions must arise at least to some extent independently of the antecedent conditions. If they are perfectly endogenous, then they are "epiphenomenal."

Endogeneity, however, also arises when consequences feed back the original causes. If institutions shape development but development affects institutions, then institutions are endogenous with regard to their consequences. The feedback mechanism need not be functionalist: it need not be that institutions are chosen with a view toward their consequences, nor that only those institutions that promote development survive. For example, political regimes in which rulers are selected through elections invariably survive in wealthy countries regardless of their consequences for economic development.[15]

Consider a schematic representation of the possible directions of causality:

Geography —> Institutions —> Development
↑_________|

institutions": institutions that evolve gradually in response to the outcomes they generate.

[15] For an explanation of why this would be true, see Przeworski (2004b) and the references therein.

The invariant background conditions, "geography," determine the initial institutions, which give rise to a particular patterns and rhythms of development, which in turn shapes the evolution of institutions. To return to the primacy claim with which we began, let us complicate this picture by introducing what in the marxist language would be "forces of production" and in the neoclassical language "physical or human capital accumulation and technological change" (see the quote from Rodrik, Subramanian, and Trebbi at the beginning of the paper). Now we have

Geography —> Institutions —> Forces —> Growth

Institutions now determine the supply of factors and the technologies that exploit them, so that these are only the "proximate" cause. But institutions are still caused by something else, not only by the invariant background conditions but also by the wealth they generate.

To see what is entailed, consider an example of purely exogenous institutions, provided by Banerjee and Iyer (2002). When the British were conquering India, they set different tributary systems as the conquest advanced: during one period they delegated tax collection to landlords, during another they either charged tax collection to the village as a community or collected taxes themselves from individual peasants. Since the tributary systems depended on the date of conquest, rather than on the characteristics of particular districts, these institutions were exogenous with regard to geography, endowments, and unobserved characteristics of the particular districts. The identification strategy adopted by Banerjee and Iyer was to: (1) Construct a restricted sample of districts that are geographical neighbors, but which happened to have different tax systems. (2) Use the date of being conquered by the British as an instrument for the tributary system. They observe that "Our strategy might give biased results if the British decision of which land tenure system to adopt depended on other characteristics of the area in systematic ways." (p.10-11). But using this strategy allowed them to assume that "there is no reason to think that the choice of land tenure system at the district level was closely tied to the characteristics of the district.... It is therefore probably reasonable to assume that when two districts lying directly across from each other on either side of the boundary between two settlement regions ended up with different types of tenure systems, it was for reasons mostly unrelated to their innate differences." Since institutions were exogenous with regard to background conditions and since (until independence) they remained the same regardless of the consequences they generated, the observed differences in development can be attributed to institutions.

Given that in India history generously produced a natural experiment, we can entertain propositions of the form "If institutions were different under the same conditions, so would be the pace of development." Hence, we can attribute causality to institutions.[16] But what can we say about causality when institutions are endogenous? The issue concerns the status of subjunctive conditionals in which the antecedent cannot or at least is unlikely to be realized.[17] I will refer to such counterfactuals as being in "modus irrealis."[18] Another way of saying that the counterfactual premise cannot be realized, is that the potential causes cannot be manipulated. But to qualify as causes the particular variables must be capable of assuming different values under the same conditions (Holland 1986). What distinguishes causality from correlation is manipulability. "Associational inference involves the joint or conditional distributions of values of Y and A, and causal inference concerns the values $Y|x, u - Y|x\prime, u$ on individual units." (Holland 1986: 948; A stands for factors that cannot be manipulated, "attributes"; u stands for background conditions.) In the end, "causes are only those things that could, in principle, be treatments in experiments" (1986: 954).

Now, if institutions reproduce themselves, if need be by blocking exogenously arising opportunities for development, then they can change only as a result of "breakdown," only when the conditions change. Hence, they are not "manipulable": manipulability would require that different institutions could exist under the same conditions. If institutions reproduce themselves, then given the conditions generated conjointly by "geography" and previous development, they are fixed. This is why the language of reproduction drives both neo-classical and marxist economic historians to the same impasse. Causality cannot be ascertained in this language.

[16] Note that under the *regularity* conception of causality no reference to counterfactuals is necessary. It is sufficient that some outcome Y regularly follows some event X given background conditions U. For Hume, X is the cause of Y if (1) X and Y are contiguous in space and time, (2) Y follows X, and (3) Y and X always occur (or do not) together. This conception runs into all kinds of problems. Correlation, even with temporal asymmetry, is not sufficient to ascertain causality.

[17] On causality in a probabilistic framework, see Rubin (1974), Rosenberg (2001), and Heckman (2004).

[18] There are several terminologies to distinguish conditional propositions. One distinction is between those in the indicative and subjunctive mood. Another is between propositions that are "open," meaning that they do not specify whether or not the conditional state will occur, and those that pose an antecedent that cannot be realized. On these distinctions, see Edgington (2001: 385), who concludes that "It is controversial how to best classify conditionals."

The reason for this impasse is that neither perspective offers a theory of institutional change that would treat this process as endogenous, that is, as responding to conditions, yet not uniquely determined by these conditions. Note that reproduction is always a conclusion from some premises. In Marx's theory of capitalism, these premises were that the system operates on an auto-pilot: there are capitalists and workers, competition among workers drives wages down to subsistence, capitalists realize profits, workers consume wages, and the story repeats itself. Class conflict plays no role in the development of capitalism: while at one point (in vol. II) Marx observes that workers in Shefield succeeded in raising their wages, conflicts are just temporary deviations from general laws and theories are about laws, not about deviations.[19] In turn, when Marx analyzes class conflicts, his conclusions are about revolution (or counterrevolution, as in France in 1851), not about reproduction. Marxist theory of the state fares even worse: since capitalism is still around, it must have been reproduced, and since there are conflicts, they must somehow invariably end in the state reproducing capitalism.

Since marxist theory of the state was not given to micro-level strategic analyses, these difficulties are not surprising. Yet neo-classical economists seem to have fallen into the same trap. The standard story is that institutions "reproduce" themselves, "persist," and the like because maintaining them is in the interest of the institutional incumbents. Even Acemoglou (2003b) does not draw sufficient conclusions from his correct observation that "political regimes matter preciely because they regulate conflicts of interests between different groups."[20] If there are conflicts, why should we expect the same side to always win? Those currently powerful may be more likely to prevail and maintain the institutions that serve their interests. But they do not win always and sometimes, as in Acemoglou and Robinson (2000), they may have to transform institutions to thwart the threat of losing.

The assumption that institutions persist was used in a novel way by AJR and reapplied in numerous statistical studies to control for the endogeneity of the current institutions. Following AJR, statistical studies of the impact of institutions adopt the following procedure: (1) Regress current incomes for a recent date (or an average of recent dates) on

[19] As Elster (1985: 300) observes, "Marx does not specify any *mechanism* whereby optimal relations of production come to be realized. In particular, he does not suggest any link between this process and the class struggle."

[20] In the Acemoglou (2003b) model, which I use repeatedly because I find it best in its *genre*, while individuals are strategic when they decide whether to become entrepreneurs and when they vote on policies, institutions either do not change or their change comes by a throw of dice.

recent institutions and some control variables, (2) Instrument recent institutions by instrumenting institutions at some time immemorial. Yet this assumption is patently false. Here is a crosstab of institutional quality as measured by the variable used by AJR ("constraints on the chief executive"), of exit-year institutions (when countries ceased to exist or information is last available) by entry-year institutions (the year of independence or soon after) for all countries that appear in the Polity IV data set (including those that were never colonies).

Table 1: Quality of Institutions By Entry and Exit Years

Entry/Exit	1	2	3	4	5	6	7	*All*
1	10	5	14	3	5	6	15	58
2	1	3	2	1	0	1	0	8
3	6	5	11	3	8	11	7	51
4	1	0	0	1	1	0	0	3
5	0	2	6	0	6	1	3	18
6	0	0	0	0	0	0	2	2
7	3	3	5	1	4	1	29	46
All	21	18	38	9	24	20	56	186

Note: Higher numbers indicate better institutions.

The crosstab shows a lot of volatility. Of the fifty-eight countries that entered the world with worst possible institutions, twenty-six ended up with good institutions (5 or more), while eleven out of forty-six countries went from best possible to bad institutions (3 or less). The correlation between entry and exist institutions is only 0.26.

I do not want these observations to be interpreted as implying that institutions do not persist. Przeworski et al. (2000) found that among 135 countries they studied between 1950 and 1990, 100 had the same regime, either dictatorship or democracy throughout the period. Moreover, the systems of democratic separation of powers – presidentialism, semi-presidentialism, and parliamentarism – are almost perfectly stable. Hence, big institutional changes may be rare. But they occur. And if the relevant feature of institutions are indeed the constraints on the chief executive, they occur frequently.[21]

Endogeneity cannot mean that, once installed, institutions invariably persist. At most it can mean that institutions are a contigent outcome of conflicts that occur under given historical conditions and are more or less likely to persist given these conditions. The point of departure must

[21] I must admit that I have no idea why the constraints on the chief executive indicate the quality of protection of property rights.

be conflicts and, while the potential outcomes of conflicts depend on the conditions and institutions under which they occur, these outcomes are not predetermined.

Indeed, we know that some strategic situations can generate any of several outcomes, multiple equilibria. Even if history is path-dependent, it may exhibit sensitive dependence on infinitely small, that is, unobservable, initial conditions. Here is a story. A scion of a prominent, wealthy, conservative, Catholic family in Costa Rica was sent in the 1920s to study abroad, just as his family background dictated. Only that, instead of going to Paris, he landed at the University of Louvain, at the time when it was the hotbed of social-christian ideology. Permeated with these ideas, he returned to his country, became its President, allied with the Communist Party, legalized unions, and introduced extensive social legislation. Alarmed at his alliance with communists, the United States engineered a coup, led by an anti-communist Social Democrat. From then on, Costa Rica alternated between social christians and social democrats, all respectful of democracy and all committed to equality. So, if this story is true, a tiny perturbation had large and lasting consequences. More generally, there are now several models in which countries can take off in different directions from the same observable conditions.[22] Hence, even if we cannot determine ex ante whether particular institutions would succeed under the observable conditions, we should be prepared to observe ex post that identically looking conditions give rise to different futures. Imperceptible shocks, whether to background conditions or directly to institutions, can affect outcomes of conflicts in ways that have qualitatively discernible effects.

Yet endogeneity means that nothing is the primary cause. Institutions are not a deeper cause than the supply of factors or the technology: institutions, to repeat, may determine the supply of factors and their use, but these factors, in turn, affect growth and future wealth, which affect the evolution of institutions. Consider the recent literature on the impact of inequality on growth. In the first studies of the impact of inequality on redistribution and growth, inequality was taken to be exogenous and the institutional assumption was that the agent with median income was decisive regardless of the form of the political regimes (Persson and Tabelini 1991, Perotti 1993). Benabou (1997, 2000) endogenized the decisive voter by assuming that her income is higher in more unequal societies. Bourgignon and Verdier (2000) and Benhabib and Przeworski (2004) made yet another step by endogenizing the mechanisms – voting as against force – by which incomes are redistributed.

[22] A heuristic exposition of what is involved is by Krugman (1991). Applications to development theory include Benhabib and Gali (1995) and Ray (2000).

Thus, as the theory now stands, inequality affects growth and thus future income, income and its distribution affect the political mechanism by which redistribution decisions are made, and these decisions, in turn, shape future inequality, thus future income, etc. And this circularity emerges even without considering the direct impact of growth on inequality, say by changing the demand for different skills (the Kuznets mechanism).

Hence, in the end, the motor of history is endogeneity. From some initial circumstances and under some invariant conditions, wealth, its distribution, and the institutions that allocate factors and distribute incomes are mutually interdependent and evolve together. Since we can never completely specify this process, we observe some randomness. Indeed, we exploit this randomness to identify the particular models of this process: for identification, we need to observe different values of causes under the same observable conditions. And here we face a paradox. The better we specify our models, the more endogenous loops we consider, the more difficult it becomes to identify their causal structure. As Mariscal and Sokoloff (2000: 198) correctly lament, "When variables are mutually reinforcing or simultaneously determined, discerning what is exogenous and what is endogenous is not transparent."

Lest this paper should appear overly critical, let me emphasize that I agree with Haber (1997) that neo-classical economics made great strides forward in studying economic history. It is only the quest for causal primacy that I find futile. Institutions and development are mutually endogenous and the most we can hope for is to identify their reciprocal impacts.

5 References

Acemoglou, Daron. 1995. " Reward structures and the allocation of talent." *European Economic Review 39:* 17-33.

Acemoglou, Daron. 2003a. "Root Causes: A historical approach to assessing the role of institutions in economic development." *Finance and Development*: 27-30.

Acemoglou, Daron. 2003b. "The Form of Property Rights: Oligarchic vs. Democratic Societies." Working Paper. Department of Economics. MIT.

Acemoglou, Daron, and James A. Robinson. 2000. " Why did the West Extend the Franchise? Democracy, Inequality and Growth in Historical Perspective." *Quarterly Journal of Economics 115: 1167-1200.*

Acemoglou, Daron, Simon Johnson, and James A. Robinson. 2002. "Reversal of Fortune: Georgraphy and Institutions in the Making of the Moden World Income Distribution." *The Quarterly Journal of Economics 117:* 1231-1294.

Atkinson, A.B. 2002. "Top Incomes in the United Kingdom over the Twentieth Century." Unpublished.

Balibar, Etienne. 1970. "Fundamental Concepts of Historical Materialism." In Luis Althusser and Etienne Balibar, *Reading Capital*. New York: Pantheon Books.

Banerjee, Abhijit, and Lakshmi Iyer. 2002. "History, Institutions and Economic Performance: The Legacy of Colonial Land Tenure Systems in India." Ms. Department of Economics, MIT.

Banerjee, Abhijit and Thomas Piketty. 2003. "Top Indian Incomes, 1922-2000." Unpublished.

Bardhan, Pranab. 2004. "History, Institutions and Underdevelopment". Ms. Department of Economics. University of California, Berkeley.

Bénabou, Roland. 1997. "Inequality and Growth." *NBER Macro-Economics Annual*.

Bénabou, Roland. 2000. "Unequal Societies: Income Distribution and the Social Contract." *American Economic Review 90:* 96-129.

Benhabib, Jess, and Jordi Gali. 1995. "On growth and indeterminacy: some theory and evidence." *Carnegie-Rochester Conference Series on Public Policy 43:* 163-211.

Benhabib, Jess, and Adam Przeworski. 2004. "The political economy of redistribution under democracy." Working paper. Department of Economics, New York University.

Bourgignon, François, and Thierry Verdier. 2000. "Oligarchy, democracy, inequality, and growth." *Journal of Development Economics 62*: 285-313.

Berkowitz, Daniel, Katharina Pistor, and Jean-Francois Richard. 2003. " Economic development, legality, and the transplant effect." *European Economic Review 47:* 165-195.

Cardoso, Fernando Henrique, and Enzo Faletto. 1969. *Dependencia y desarrollo en América Latina*. Mexico: Singlo XXI.

Carothers, Tom. 2002. "Promoting the Rule of Law Abroad: The Problem of Knowledge." Paper presented at the Colloquium on Law, Economics, and Politics, New York University Law School.

Cohen, G.A. 1978. *Karl Marx's Theory of History: A Defence.* Princeton: Princeton University Press.

Contreras, Rodrigo. 2002. "La actualidad de viejas temáticas: familias, riqueza y poder en América Latina. Algunas consideraciones a partir del caso de Chile." *Revista Mexicana de Sociologia 64:* 3-52.

Dell, Fabien. 2003. "Top Incomes in Germany over the Twentieth

Century: 1891-1995." Unpublished.

Diamond, Jarred. 1997. *Guns, Germs, and Steel.* New York: W.W. Norton.

Diermeier, Daniel, and Keith Krehbiel. 2001. "Institutionalism as a Methodology." Research Paper No. 1699, Graduate School of Business, Stanford University.

Easterly, William. 2002. "Inequality does Cause Underdevelopment: New evidence." Ms. Center for Global Development. Institute for International Economics. Washington, D.C.

Easterly, William, and Ross Levine. 2002. "Tropics, Germs, Crops: How Endowments Influence Economic Development." Working Paper 9106. Cambride, MA: National Bureau of Economic Research.

Edgington, Dorothy. 2001. "Conditionals." In Lou Goble (ed.), *The Blackwell Guide to Philosophical Logic.* Oxford: Blackwell. Pages 385-414.

Edwards Vives, Alberto. 1928. *La Fronda Artistocratica.* Santiago: Editorial del Pacifico.

Elster, Jon. 1985. *Making Sense of Marx.* Cambridge: Cambridge University Press.

Engerman, Stanley L., and Kenneth L. Sokoloff. 1997. "Factor Endowments, Institutions, and Differential Paths of Growth Among New World Economies: A View from Economic Historians of the United States," in Stephen Haber (ed), *How Latin America Fell Behind: Essays on the Economic Histories of Brazil and Mexico, 1800-1914.* Palo Alto: Stanford University Press.

Engerman, Stanley L., and Kenneth L. Sokoloff. 2001. "Inequality, Institutions, and Differential Paths of Growth Among New World Economies." Paper presented at the meeting of the MacArthur Research Network on Inequality and Economic Performance, Boston.

Fox-Przeworski, Joanne. 1981. *The Decline of the Copper Industry in Chile and the Entrance of North American Capital, 1870-1916.* Boulder, Co.: Lynn Reiner.

Galor, Oded, and Omer Moav. 2001. " Das Human Kapital." Discussion Paper Series No. 2701. http://www.cepr.org/pubs/dps/DP2701.asp

Gallup, John Luke, Jeffrey D. Sachs, and Andrew D. Mellinger. 1998. "Geography and Economic Development." *NBER Working Paper 6849.* http://www.nber.org/papers/w6849.

Greif, Avner. 2002. "The Game-Theoretic Revolution in Comparative and Historical Institutional Analysis." Ms.

Haber, Stephen, ed.. 1997. *How Latin America Fell Behind: Essays on the Economic Histories of Brazil and Mexico, 1800-1914.* Stanford: Stanford University Press.

Habermas, Jürgen. 1975. *Legitimation Crisis*. Boston: Beacon Press.

Hafer, Catherine. 2003. "On the Origins of Property Rights: Conflict and Production in the State of Nature." Working Paper, Department of Politics, New York University.

Hall, R.E., and C.L. Jones. 1999. "Why do some countries produce so much more output per worker than others?" *Quarterly Journal of Economics 114:* 83-116.

Heckman, James J. 2004. "The Scientific Model of Causality." Working Paper. Department of Economics, University of Chicago.

Holland, Paul W. 1986. "Statistics and Causal Inference." *Journal of the American Statistical Association 81:* 945-960.

Holmes, Steven, 2003. "Lineages of the Rule of Law." In José María Maravall and Adam Przeworski (eds.), *Democracy and the Rule of Law.* New York: Cambridge University Press. Pages 19-61.

Hurwicz, Leonid. 1994. "Economic design, adjustment processes, mechanisms, and institutions." *Economic Design 1:* 1-15.

Kaufmann, Daniel, Aaart Kraay, and Pablo Zoido-Lóbaton 1999. "Governance Matters/" World Bank Research Working Paper 2196.

Kindleberger, Charles. 1952. "Review of 'The Economy of Turkey; The Economic Development of Guatemala; Report on Cuba'." *Review of Economics and Statistics 34:* 391-392.

Krugman, Paul. 1991. " History versus Expectations." *Quarterly Journal of Economics 105:* 651-667.

Lenin, V.I. 1959 [1919]. "Letter to the Workers of Europe and America" In *Against Revisionism.* Moscow: Foreign Languages Publishing House. Pages 479-486.

Mariscal, Elisa, and Kenneth L. Sokoloff. 2000. "Schooling, Suffrage, and the Persistence of Inequality in the Americas, 1800-1945." In Stephen Haber (ed.), *Political Institutions and Economic Growth in Latin America.* Stanford: Hoover Institution. Pages 159-217.

Marx, Karl. 19*67. Capital* (3 vols.). New York: International Publishers.

Mill, John Stuart. 1991. *Considerations on Representative Government.* Cambridge: Cambridge University Press.

Montesquieu. 1995 [1748]. *De l'esprit des lois*. Paris: Gallimard.

Mukand, Sharun, and Dani Rodrik. 2002. "In search of the Holy Grail: Policy convergence, experimentation, and economic performadxnce." Ms.

Murphy Kevin M, Andrei Shleifer, and Robert W. Vishny. "Why is rent seeking so costly to growth?" *American Economic Review 83:* 409-414.

North, Douglass C. 1980. *Structure and Change in Economic History.* New York: W.W. Norton.

North, Douglass C. 1990. *Institutions, Institutional Change and Economic Performance.* Cambridge, Cambridge University Press.

North, Douglass C. 1997. " Some Fundamental Puzzles in Economic History/Development" in W. Brian Arthur, Steven N. Durlauf, and David A. Lane (eds.), *The Economy as an Evolving Complex System II.* Addison-Wesley.

North, Douglass C., and Robert Paul Thomas. 1973. *The Rise of the Western World: A New Economic History.* Cambridge, Cambridge University Press.

North, Douglass C., and Barry W. Weingast. 1989. "The Evolution of Institutions Governing Public Choice in 17th Century England." *Journal of Economic History 49:* 803-832.

Offe, Claus. 1974. "Structural Problems of the Capitalist State." *German Political Studies 1*: 31-57.

Parsons, Talcott. 1951. *The Social System.* Glencoe, Il.: Free Press.

Perotti, Roberto. 1993. "Political Equilibrium, Income Distribution, and Growth." *Review of Economic Studies 60:* 755-776.

Persson, Torsten and Guido Tabellini. 1991. "Is Inequality Harmful for Growth? Theory and Evidence." Working paper No. 91-155. Department of Economics, University of California, Berkeley.

Piketty, Thomas. 2003. "Income Inequality in France, 1901-1998." *Journal of Political Economy 111*: 1004-1042.

Piketty, Thomas and Emmanuel Saez. 2003. "Income Inequality in the United States, 1913-1998." *Quarterly Journal of Economics 118:* 1-39.

Poulantzas, Nicos. 1973. *Political Power and Social Classes.* London: New Left Books.

Przeworski, Adam. 2004a. "Were Fortunes Reversed?" Working paper. Department of Politics, New York University.

Przeworski, Adam. 2004b. "Self-sustaining Democracy." In Donald Wittman and Barry Weingast (eds,), *Oxford Handbook of Political Economy.* New York: Oxford University Press.

Przeworski, Adam, Michael R. Alvarez, José Antonio Cheibub, and Fernando Limongi. 2000. *Democracy and Development: Political Institutions and Well-being in the World, 1950-1990.* New York: Cambridge University Press.

Ray, Debraj. 2000. "What's New in Development Economics?" Working Paper, Department of Economics, New York University.

Rodrik, Dani, Arvind Subramanian, and Francesco Trebbi. 2002. "Institutions Rule: The Primacy of Institutions Over Geography and

Integration in Economic Development." Ms.

Rosenberg, Paul. 2001. *Observational Studies.* New York: Springer-Verlag.

Roseinstein-Rodan, P.N. 1943. "Problems of Industrialization of Eastern and South-Eastern Europe." *Economic Journal 53:* 202-211.

Reynolds, Lloyd G. 1983. "The Spread of Economic Growth to the Third World." *Journal of Economic Literature 21:* 941-980

Rousseau, Jean-Jacques. 1985. *The Government of Poland.* Indianapolis: Hackett.

Rubin, D.B. 1974. "Estimating Causal Effect of Treatments in Randomized and Nonrandomized Studies." *Journal of Educational Psychology 66:* 688-701.

Sachs, Jeffrey D. 2001. "Tropical Underdevelopment." *NBER Working Paper 8119.* http://www.nber.org/papers/w8119.

Saez, Emmanuel and Michael R. Veall. 2003. "The Evolution of High Incomes in Canada, 1920-2000." Working Paper 9607, National Bureau of Economic Research.

Safford, Frank. 1972. "Social Aspects of Politics in Nineteenth Century Spanish America: New Granada, 1825-1850." *Journal of Social History 5(3):* 344-370.

Saint Paul, Gilles, and Thierry Verdier. 1996. "Inequality, redistribution and growth: A challenge to the conventional political economy approach." *European Economic Review 40:* 719-728..

Sokoloff, Kenneth L. 2000. "The Institutional Foundations of a Market Economy." Villa Borsig Workshop Series.

Stigler, George. 1975. *The Citizen and the State: Essays on Regulation.* Chicago: University of Chicago Press.

Weffort, Francisco C. 1972. "Notas sobre la 'teoria de la dependencia': teoria de clase o ideologia nacional?" In FLACSO-UNESCO, *Teoria, Metodologia y Politica del Desarrollo de América Latina.* Santiago: Flacso.

Wright, Erik Olin, Andrew Levine, and Elliott Sober. 1992. *Reconstructing Marxism.* London: Verso.