ANTINOMIES OF AUTONOMY:
GLOBAL MARKETS, GOVERNANCE STRUCTURES,
AND POLICY OPTIONS IN EMBEDDED AUTONOMY

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Is economic development possible in the periphery of the world economy, and if so, how and why does it (not) occur? Peter Evans claims to have a positive answer: Yes, development is possible, but it requires state industrial policy characterized by embedded autonomy. I think Evans is correct, but correct in quite limited ways, and correct partly for the wrong reasons. This paper will show why Evans has produced an argument whose scope is limited in time and space and whose major theoretical claim moves away from what I can only presume was his initial methodological bias.

Briefly, Evans has produced a fine-grained analysis of the governance regime in information technology (IT) in South Korea, India, and Brazil in the 1970s and 1980s. He shows how embedded autonomy allowed these states to overcome the problems of information asymmetries that usually hobble planning, and of rent-seeking, which he thinks neoliberal hold to be the major stumbling block to state intervention. But Evans unwittingly reveals the extent...
to which these states were constrained by their prior participation in world markets, the limits to long-term functionality of their governance structures, and the utility of older, more statist actors. Do not get me wrong: I am not saying that Evans is wrong about what he sees; what I am saying is that his choice of methods and cases limits what he can see.

Over the past forty years, debate on the question of development has moved to lower and lower levels of analysis, shifting from the world economy to the state, thence to collective social actors, and finally to the individual motivations of bureaucrats, managers, and workers. Debates that started by asking rather general questions about the nature of the world economy and offering rather absolute predictions about the (im)possibility of development, moved progressively downward and became more and more qualified. If this early debate, dependency theorists and their kin tended to adopt strongly statist positions, arguing that the global economic (or power) system impeded development, if not blocking it altogether (Wendt 1987). In contrast, liberal economists and modernization theorists tended to adopt a unit-level perspective. For them the "world economy" was simply an aggregation of what was occurring in a set of independent national markets, so the world economy could not possibly impede development.

This clash of early dependency theorists with modernization theorists incited studies of how specific national or regional economies interacted with the world economy. Confronted with evidence of economic growth in the periphery, dependency theorists used their studies to show that growth did not mean development, and that the pervasive presence of transnational corporations limited growth and, more so, development. Confronted with developmental failures, modernization theorists began asking what went wrong. Consequently, both sides began to examine the state's role in the economy more closely, asking what it was that the state was doing. Peter Evans's first book, Dependence Development, and in this sense, showed how the Brazilian state tried to spur development by influencing the behavior of both transnational and local capital, albeit with varying degrees of success (Evans 1979). Meanwhile, nascent neoliberalists were asking how state intervention hindered or damaged development through tariffs and regulation that fostered rent-seeking behavior.

Not surprisingly, both sides soon turned their attention to the sources of state behavior. Both sides saw clear policy prescriptions from their earlier work, so each believed why their actors did not immediately rush to implement these prescriptions. Both found the answer to this perplexing question in the kinds of social coalitions that supported state policy. A variety of works, for example, looked at the different developmental policies flowing from different coalitions in Latin America and East Asia (Haggard 1990; Chu 1989). A range of works on the other side used rational-actor and especially public-choice models to examine the creation of rent-seeking coalitions in society and in state bureaucracies (Krueger 1979; Lai 1983). All these works tended to ignore the question of how social groups arise in the first place. Does the state create social groups and/or coalitions through its institutions or policy, or is the reverse true (Lowi 1964)? Without any explanation of the origins of social groups or coalitions, it is impossible to say how the specific compromises that held these groups and coalitions together may or may not affect development. Ironically, neoliberal public-choice arguments seemed to have a more explicit explanation of the origins of social groups than did supposedly class-conscious dependency arguments.

Finally, a number of recent works have examined the sources of behavior and consequences of policy at the level of individual firms and workers, in order to determine what led to productivity increases and thus, ultimately, to development. The best synthetic examples were the work of Alice Amsden (1989) and Robert Wade (1990). Not surprisingly, liberals have done little of this work, as they prefer to make assumptions about micro-behavior rather than actually examine it.

In this movement downwards, both sides accommodated the claims of the other. Dependency theorists moved steadily away from statist claims, onto liberal's territory—individual behavior—as evidenced in Amsden's and Wade's work. And while neoliberalists continued to preach about the free market, the new economics of organization and institutional approaches led them steadily onto the terrain of the state both theoretically and practically, especially as the World Bank and International Monetary Fund began to sponsor state-building exercises in LDCs.

Still, some things did not change. If I may be allowed to collapse years of debate into a few sentences, dependency theorists fairly consistently asserted that without state intervention of some kind development was impossible; modernizationists and their neoliberal descendants fairly consistently asserted that it was needed to back out of markets and let the economy work on its own, even if that required some prior strengthening of the state's capacity to provide the public goods that make markets work.

Peter Evans's Embedded Autonomy now steps squarely into this gap, but at the level of state-society relations. He asks how states can successfully carry out industrial transformation. Is economic planning by the state possible, and if it is possible, what kinds of states can engage in successful economic planning? Evans's answers represent a clear continuation of the trend towards fine-grained analysis. After a set of chapters reviewing the intellectual trajectory summarized above, he claims that only states which can attain the precarious condition of "embedded autonomy" can carry out successful policy. Embedded autonomy implies a state whose structures allow highly professional bureaucracies to get close enough to social actors that they can harvest the information they need to craft a successful policy, yet distant enough to implement a policy without fear of rent-seeking by their informants. For
Evans, comparative institutional analysis of state-business relations in the Korean, Brazilian and Indian IT industries shows concretely how embedded autonomy works.

Against neoliberal claims that state intervention is counterproductive, Evans's argument is more subtle than the usual response that state intervention is pervasive. The pervasiveness argument does not disturb neoliberals, who after all argue that it is precisely such pervasiveness that makes for so much economic misery. Instead, Evans makes the strong claim that some kinds of state intervention outside the realm of traditional public goods are necessary for successful economic growth and development. By doing so he situates himself squarely in an intellectual tradition stretching from Gerschenkron to Hirschman. These scholars viewed what neoliberals call rent-seeking as a necessary evil on the way to industrialization. Without some state-provided inducement to invest, local private capital—and perhaps even transnational capital—might neglect the potential market. By carrying his argument onto a terrain so long dominated by the neoliberals, Evans intends his argument to be a clear refutation of the neoliberal argument against state intervention. He argues that Schumpeterian rent-creation is worth the risk of liberal-style rent-seeking.

However, the argument is limited in two respects. First, Evans's argument about embeddedness and autonomy is in no way inconsistent with the most subtle liberal argument about government intervention, although it certainly represents a blow to the kind of dogmatic pro-market rhetoric found any day in the Economist or the Wall Street Journal. While I am sympathetic to Evans's effort to make a case for Schumpeterian rent-seeking—or rent-creation—as opposed to the neoliberal sort, the circularity of his argument leaves me unsettled.

Second, and somewhat strangely, Evans's entire argument ignores both the path-dependent nature of political and state institutions and the way that prior adaptation to the world market pushed his countries (among many others) along particular paths. This is especially clear in Evans's unconscious treatment of what many scholars of industrial policy now call "governance regimes"—the set of social and political institutions regulating exchange relationships among organizations so that they can develop, produce, and market new goods (Kitschelt 1991; Perrow 1986; Schmitter and Streeck 1990; Hollingsworth et al. 1994; Williamson 1983). Governance regimes address such questions as how transactions are regulated, how exchanges are routinized, who pays for public and quasi-public goods, the division of labor between the state and civil society, and the rights and obligations of the state and of organizations in civil society.

Though Evans never explicitly addresses nor cites this literature, his book in essence describes the origins and consequences of IT governance regimes in his three countries. Governance regimes can be well or maladapted to the needs of a given sector, depending on a variety of factors—among other things, asset specificity, the kind of learning that occurs in the sector, and the scale of production. As these factors change in a given sector, a regime's suitability will also change: today's "best practice" regime may be tomorrow's mediocre regime. Evans's answer to the overarching question of development is thus certainly time- and context-bound, and, as he admits, sector-bound as well.

EMBEDDED AUTONOMY

To take up the issue of embedded autonomy first, Evans observes correctly that proper state policy requires access to information available to market participants. But why? By 1945, F. A. Hayek had already sketched the broad parameters for answering this question much more clearly than have the rent-obsessed neoliberals addressed by Evans. Hayek wrote that "economic problems arise always and only in consequence of change. As long as things continue as before, or as they were expected to, there arise no new problems requiring a decision, no need to form a new [economic] plan." Consequently, the "economic problem of society is rapid adaptation to changes in the particular circumstances of time and place" of economic activity (Hayek 1945).

Hayek believed that, in general, states were unable to plan adequately because of the rapidity of change in the market. Only active participants in the market could gather enough information to respond before the information became dated. Thus only under the very special circumstance in which all information was known and unchanged could states plan successfully.

For Hayek, however, market prices were the only important source of information. But conceivably other, socially embedded forms of information which cannot be captured in prices alone matter just as much in economic growth and competition (Lundvall 1988; Granovetter 1985; Perrow 1986)." Embeddedness" allows the state to overcome both Hayekian and broader information problems. By cultivating channels—"connectedness"—to society, the state can harvest sufficient information to accommodate, anticipate, and perhaps shape actors' market behavior. Indeed, by providing information to actors about the availability of capital under certain conditions or about the time availability of capital under certain conditions or about the shape of overseas technological trajectories, the state can often construct the market information that Hayek's actors process. Alternatively, Evans might have argued that the very absence of entrepreneurs in this sector necessitated state intervention—for if there are no firms to process information then Hayek's claim that the state is ill-positioned becomes moot.

But arguing that embeddedness allows states to overcome Hayek's information problem in no way vitiates the neoliberal argument, particularly as Evans's cases are not, as he claims, crucial cases. In a crucial case all the variables posited by a theory are present and acting in the manner the theory presumes; consequently, the predicted outcome should hold. If it does not, this
calls into question the theory's validity. Evans asserts that he is studying crucial cases because the fast-paced nature of the IT industry would seem to make state intervention unlikely and counterproductive. If any industry best suits the neoliberal argument about the primacy of markets and market-based actors, it is IT.

But in fact neoliberals could make the same crucial-case argument in reverse about the autonomy side of the argument: the military's salience in starting the IT industry in all these cases suggests that any evidence that market pressures mattered is telling evidence against the statist case. The very structure of the IT industry helped states pursue Evans's "demigric" policies initially, for the high asset specificity and large investments of the IBM-iron, proprietary-software, closed-architecture era suited state ownership. (Even though South Korea eschewed state ownership, did not state ownership of banks and production of subsidized loan capital in essentially unlimited quantities come close to a demigric policy?) Furthermore, it is intrinsically easier to capture the "information" needed to do catch-up industrialization because many uncertainties regarding the appropriate technology and organizational formats are already well known. Even so, these states could only do this because, as Evans forthrightly says, the military in each country stood four-square behind them.

Furthermore, the salience of the military is a good explanation for why "embeddedness" did not produce the usual "agency capture" outcome that public-choice theory predicts once local firms began to emerge. The military presence created the autonomy Evans praises. Although militaries can be quite corrupt (vide Zaire), as a general rule I think it is safe to say that in any given country the military is, relatively speaking, the institution least susceptible to corruption most likely to create compelling corporate sense of mission. Clearly this was true of the military in these three countries. Defense needs both large and small drove electronics production initially. Defense needs and demigric legacies created a conducive environment for starting an IT industry in India and Brazil; defense needs strongly influenced South Korean policy. This salient military presence and military mission undoubtedly prevented capture. So what Evans needs more than a theory of the state is a theory of the military. After all, it was not the health ministries, or even the telecommunications ministries, that initiated these industrial policies.

But once the IT industry geared up and the nature of the industry evolved towards PC-based open architecture and open systems, the state found itself forced to withdraw and the elite groups guiding the industry—the Farbudinhos, Blue House group and BARC group—disappeared into the industry or became irrelevant. From a neoliberal point of view, market pressures forced these new local industries in a predictable direction if they were to survive; where the local states did not recognize this they ran into trouble. So the tension between autonomy and embeddedness, a tension between being close enough to harvest information yet distant enough to avoid capture, was resolved in one direction or the other.

In this sense Evans's embedded autonomy argument simply imports neoliberal arguments into a dependency polemic against the neoliberals. For a better set of crucial cases, Evans should have looked for an industry in which market relationships were unquestionably the preferred governance regime, one in which the barriers to entry were low because of low asset-specificity and low capital requirements and in which comparative advantage predicted a local advantage in Korea, Brazil, and India. This sort of industry would have provided Evans with a true crucial case study of the neoliberal line. Showing that even this sort of industry could not start without the kinds of state policies he analyses would have provided a more compelling refutation of that line. And indeed, his brief description of Taiwanese textiles—the classic market-regulated, low barrier to entry, low-wage industry—provides a tantalizing picture of such a case.

GOVERNANCE REGIMES AND PATH DEPENDENCE

Evans's effort to use comparative institutional analysis to compare IT governance regimes glides over the continuing institutional effects of prior participation in the world market and the limits on states' abilities to pursue developmental policy. This is where he loses sight of his intellectual roots in his critique of the neoliberals.

States are usually unable to construct governance systems of their own choosing. Generally they inherit governance structures adapted to some earlier round of economic growth centered on specific sectors, and those older governance structures are often maladapted to newly emerging sectors. Thus it is a mistake to say, as Evans does, that one may "take existing structural types as starting points, using them to show how internal organization and relations to society produce a distinct developmental impact" (Embedded Autonomy, p. 45). While this leads to a useful analysis of how agents use their (limited) autonomy to construct new institutions and so effect a particular developmental project, it makes it difficult to see how limited that autonomy is and how fragile the outcome.

In short, Evans ignores what was best about Cardoso and Faletto's (1967) analysis of Latin American development: the path-dependent nature of state institutions, social actors, and their various pacts. To recast it in anachronistic terms—because the language was not available then, although their book certainly displayed a primitive understanding of the concepts—Cardoso and Faletto offered a path-dependent analysis of the interaction of social structures, including the state, and economic development. International economic
opportunities allowed, encouraged, or forced regional economies in Latin America into the world economy. The social groups that seized this opportunity formed states to serve their needs, admittedly out of the residues of the Iberian empires around them, and they naturally tried to pursue policies conducive to their own economic well-being. Even without asserting, as early staples theory and dependency theory did, a one-to-one correspondence between sectors and social groups, it is clear that what countries were forced to make or chose to make shaped their institutional terrain (Shafer 1995). These state structures proved remarkably durable: even though changes in global demand for commodities "necessitated" different and better "governance structures," existing institutions proved hard to change.

Evans makes some of this clear in the potted institutional histories in Chapter 3 of *Embedded Autonomy*. He particularly emphasizes that the key question was the degree to which his *barbusdinhos*, Blue House group, and BARC group could escape these constraints and construct a new governance regime more appropriate to the IT industry. As noted above, in all three cases the legacy of heavy state intervention into the economy allowed these states to mount a credible challenge to dominant producer IBM the same way they earlier had challenged dominant multinational oil firms, for example. At the beginning, IT had characteristics much like the steel industry, only more so: high capital costs for entry, enormous economies of scale, increasing returns, and so on. A difference—enormous demands for R&D funding. But demagogued IT firms became bogged down by their bureaucracies once the IBM/mainframe/proprietary-software era ended, and PCs, networks, open software and the new "internationalization" emerged.

**LUCK VS. SKILL: OR, CAN THIS BE DONE AGAIN?**

A second problem stemming from Evans's comparative institutionalist method, which also overlooks a valuable insight from dependency theory and limits the application of his lessons, concerns the implicitly static nature of his analysis. While Evans may have discovered the philosophers' stone in IT at this time and place, his lessons are not necessarily portable. As Alchian (1950) argued more than forty years ago, market success has as much an aleatory as a purposive character. Alchian held that rather than firms succeeding in markets through deliberate, rational behavior, an evolutionary selection of organizations with given characteristics occurs. Some organizations—and, by extension, systems of state-firm relations—are better suited than others to a given market environment. These combinations prosper until the market changes, because other, less well-suited firms or altogether new firms create product or process innovations that change the fundamental nature of that market. The latter prosper until the environment changes once again, then still other firms with other qualities prosper. In Alchian's evolutionary economics, accidental and incidental qualities constitute efficiency at any given time. Therefore it is impossible ever to say that a particular combination of characteristics is optimal, although in principle, over time, a given population of economic organizations should move toward some theoretical optimum—unless, as Schumpeter argued, a gale destroys the existing environment.

Alchian does not deny the purposive behavior Evans sees, but he does downplay its significance. And this I think is one of the essential points of the earlier, now-discarded versions of dependency theory. The market that selects out the best organizational format, the best set of choices by state bureaucrats and capitalist entrepreneurs, is a global market, a market characterized by constant change, and a market in which many of the critical choices that change the fundamental technologies, and with them what constitutes the most appropriate governance structure(s), emanate from the large concentrations of market demand known as the advanced economies or the core.

Evans's dialectical argument implicitly recognizes Alchian's point. Successful state policy combined with changes in IT industries out in the world economy to change the environment for both the state and the local IT industry. Evans notes that the new internationalization "demands a higher level of [bureaucratic] sophistication and resources than it did before, that instead of diminishing the need for state capacity, the new internationalization has increased it" (*Embedded Autonomy*, p. 205). But he is unclear about what kind of capacity and what kinds of steering mechanisms are available because he cannot specify what broad technologies characterize this sector.

But the key question clearly is whether older, perhaps now dysfunctional IT governance structures can give way to more appropriate ones. Can the state generate new ones? Here the surprise may be that Evans's developmental paradigm, South Korea—whose relative success owed much to the greater autonomy its new state, born out of the Korean War era military, possessed—may turn out to be dysfunctional in the long run. It is perfectly suited to directing the operations of large companies with huge stocks of physical capital. But if the world economy is heading toward an era dominated by human capital and design, then powerful, autonomous, and repressive bureaucies may be a hindrance.

After all, institutional maladaptation is nothing new in the history of development, nor is embedded autonomy the once and for all optimal configuration. In the nineteenth century, fully embedded, barely autonomous states appeared to be the best possible configuration for successful agriculture-led development. Certainly Argentina did quite well for a long time with this kind of state. But as the possibilities for agriculture-led development disappeared, this configuration proved maladapted and Argentine economic success evaporated. This was not for lack of purposive behavior in Argentina (Waisman 1987; Schwartz 1989, 1991).
SEE THE FOREST, SEE THE TREES, SEE THE ECOLOGY

All books highlight some things by throwing others into darkness, and Evans's book shines light squarely on three modest but vigorous trees in the global economic forest, and particularly on their information technology branches. It may seem unfair to criticize the book by shining light into corners of the forest that Evans has deliberately left dark. But substantively, many of the weaknesses and unanswered questions of the book are thrown into relief when one looks away from Evans's well-analyzed trees and toward the forest. I will not argue that Evans misses the forest for the trees, but rather that the forest has to be considered as an ecology.

It is not only that the older, taller trees so shade the young saplings that the latter cannot grow—as early versions of dependency theory would have it. As well, the detritus from the older trees often fertilizes the newer, and the occasional fire often sweeps away the leaf cover, opening up new possibilities for growth. So Evans's study should be taken with a measured dose of history, which suggests that embedded autonomy is not everywhere and always the right answer to the developmental question, and that the race is not always to the swift.

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Herman Schwartz is associate professor of Government at the University of Virginia. His most recent book is States vs. Markets (New York, 1994). He is currently working on a book comparing public-sector reorganization in Australia, Denmark, New Zealand, and Sweden in the 1980s, and is co-editing a book on Denmark's welfare state. He would like to thank John Echeverri-Gent and David Waldner for comment and criticism, but all error remain his.

NOTES

1. Though Evans does not explicitly say so, we can presume from his earlier work (Evans 1979) that state autonomy must also encompass autonomy (or so-called) from (or by) transnationals and foreign governments, as well as from the broad populace.
2. I am indebted to John Echeverri-Gent for calling this to my attention.
3. And this is nothing new for states. The Sehamuna, a Russian state trading company of the early 1800s, behaved in many respects like the later, private-sector Japanese saya shokuba and Korean trading companies.
4. As many, including Evans, have noted, late industrialization is also therefore usually not so profitable, since risk and reward are inversely correlated. Jumping into the product cycle at its end is safe but low-yielding.
5. For a recent example of staple theory in action, see Shaffer 1995. As David Waldner (1995) argues, these approaches often confine sector for reasons of production and thus easily slide into a one-to-one correspondence.
6. Certainly in the late 1980s, the South Korean state stepped in and prevented a new wage and social pact from emerging between some export firms and their work force, emptying, for example, a deal between Daewoo and its automobile workers.

REFERENCES