

Albert O. Hirschman

ALBERT O. HIRSCHMAN was born in 1915 in Berlin. He left Germany in 1933 and studied economics in Paris, London, and at the University of Trieste where he received his doctorate in 1938. He served in the French army in 1939–40 and emigrated to the United States in 1941. After two years at the University of California (Berkeley) and three years in the U.S. army, he joined, in 1946, the Federal Reserve Board where he worked on the financial problems of postwar reconstruction of Western Europe. From 1952 to 1956 he lived in Bogotá, Colombia, first as Financial Adviser to the National Planning Board and then as private consultant. In 1956 Hirschman went to Yale University, and then taught at Columbia (1958–64) and Harvard (1964–74). Since 1974 he has been Professor of Social Science at the Institute for Advanced Study in Princeton, New Jersey.

His early books remain influential: *National Power and the Structure of Foreign Trade* (Berkeley: University of California Press, 1945; expanded edition, 1980); *The Strategy of Economic Development* (New Haven: Yale University Press, 1958); and *Journeys toward Progress* (New York: Twentieth Century Fund, 1963).

Among his numerous other books and articles, the following titles convey some notion of his innovative and wide-ranging contributions: *Development Projects Observed* (Washington, D.C.: Brookings Institution, 1967); *Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States* (Cambridge, Mass.: Harvard University Press, 1970); *A Bias for Hope: Essays on Development and Latin America* (New Haven: Yale University Press, 1971); *The Passions and the Interests: Political Arguments for Capitalism before Its Triumph* (Princeton, N.J.: Princeton University Press, 1977); *Essays in Trespassing: Economics to Politics and Beyond* (New York: Cambridge University Press, 1981); *Shifting Involvements: Private Interest and Public Action* (Princeton, N.J.: Princeton University Press, 1982); and “Rival Interpretations of Market Society: Civilizing, Destructive, or Feeble?” *Journal of Economic Literature* (December 1982).

A Dissenter's Confession: "The Strategy of Economic Development" Revisited

Ah, what happened to you, you my written and painted thoughts! Not long ago you were so colorful, young and malicious, so full of thorns and secret spices that you made me sneeze and laugh—and now? Already you have doffed your novelty, and some of you, I fear, are about to become truths: so immortal do they already look, so distressingly honorable, so boring!

—NIETZSCHE

WHEN I RECEIVED THE INVITATION to participate in the symposium as one of the "pioneers" alongside Raúl Prebisch, Gunnar Myrdal, Arthur Lewis, and other such luminaries of development economics, my first reaction was one of surprise. Not that I doubted my status as a luminary; but, in my own mind, I still saw myself as a rebel against authority, as a second-generation dissenter from the propositions that, while being themselves novel and heterodox, were rapidly shaping up in the 1950s as a new orthodoxy on the problems of development. Had my once daring and insurgent ideas then become classic, respectable, that is, "distressingly honorable" and "boring" in the manner of Nietzsche's plaint? Perhaps. In any event, I must somewhat revise the picture I had of myself. Viewed in perspective, my dissent, however strong, was in the nature of a demurrer *within* a general movement of ideas attempting to establish development economics as a new field of studies and knowledge.¹ My propositions were at least as distant from the old orthodoxy (later called neoclassical economics) as from the new. In retrospect, therefore, it is only natural that my work should be lumped with the very writings I had chosen as my primary targets.

1. There were other such demurrers. A striking case of convergence with my thinking is Paul Streeten's article "Unbalanced Growth," *Oxford Economic Papers*, N.S., vol. 2 (June 1959), pp. 167–90. His article and my book, *The Strategy of Economic Development* (whose working title was for a long time "The Economics of Unbalanced Growth"), were written quite independently. Paul Streeten tells me that the printing of his article was delayed for several months by a printers' strike, otherwise his defense of unbalanced growth might have come out before mine.

In an earlier essay,² I have written in the most objective way I could muster about the development of our discipline. To repeat myself as little as possible I shall do the opposite in this paper, which will therefore be totally subjective and self-centered. First, I shall attempt to present the personal background and principal motives for the positions I took in *The Strategy of Economic Development*. Next, I shall look at the main propositions put forward in that book in the light of subsequent developments and present-day relevance.

Developing a Point of View

There is nothing quite like a good story to lend authority to a half-truth. For a long time, when people asked me how I came to hold the views I proposed in *The Strategy of Economic Development*, my stock answer was: I went to Colombia early in 1952 without any prior knowledge of, or reading about, economic development. This turned out to be a real advantage; I looked at “reality” without theoretical preconceptions of any kind. Then, when I returned to the United States after four and a half years’ intensive experience as an official adviser and private consultant, I began to read up on the literature and discovered I had acquired a point of view of my own that was considerably at odds with current doctrines.

It is a nice line, and not *notably* untrue; but now I want to tell a more complex story.

The Marshall Plan Experience and Other Personal Background

I did go to Colombia without being well read in what development literature existed at the time.³ But I had just been working, with intensity and occasional enthusiasm, on postwar problems of economic reconstruc-

2. “The Rise and Decline of Development Economics” in *Essays in Trespassing: Economics to Politics and Beyond* (Cambridge, Eng., and New York: Cambridge University Press, 1981), chap. 1. There will be several references here to this book as well as to *The Strategy of Economic Development* (New Haven: Yale University Press, 1958; and New York: Norton, 1978) and to *A Bias for Hope: Essays on Development and Latin America* (New Haven: Yale University Press, 1971). Their titles will here be shortened to, respectively, *Trespassing*, *Strategy*, and *Bias*.

3. I had participated in one conference on development, held at the University of Chicago in 1951, which was notable primarily for the active participation of some eminent anthropologists and for the fact that this was the occasion for Alexander Gerschenkron to unveil his masterpiece, “Economic Backwardness in Historical Perspective.” The proceedings of the conference were published as *The Progress of Underdeveloped Areas*, Bert Hoselitz, ed. (Chicago: Chicago University Press, 1952), to which I contributed a paper, “Effect of Industrialization on the Markets of Industrial Countries,” a topic far removed from development economics as such. The conference stimulated my interest in the problems of development.

tion and cooperation in Western Europe, as an economist with the Federal Reserve Board, from 1946 to 1952.

In particular, I was dealing with economic reconstruction in France and Italy, and with various schemes for European economic integration, such as the European Payments Union, that were central to the Marshall Plan concept. I came out of this experience with the following impressions or convictions: (1) Orthodox policy prescriptions for the disrupted postwar economies of Western Europe—stop the inflation and get the exchange rate right—were often politically naive, socially explosive, and economically counterproductive from any longer-run point of view. The advocates of orthodoxy seemed to have “forgotten nothing and learned nothing” since the days of the Great Depression. (2) The innovators who, to their lasting credit, proposed the creative remedies embodied in the Marshall Plan and, in justification, propounded novel doctrines, such as the “structural dollar shortage,” soon became unduly doctrinaire in turn.

These innovators exhibited a perhaps inevitable tendency to take themselves and their ideas too seriously. This was particularly and understandably true for their balance of payments projections, for aid was given in proportion to prospective balance of payments deficits so that the projection exercises assumed crucial economic and political importance. To be effective advocates within the Executive Branch and in relations with Congress we had to exhibit far greater confidence in those statistical estimates than was warranted by the meager extent of our knowledge and foreknowledge, a “dissonant” situation leading to the development of a character trait known as charlatanism in some, and to active dislike of the whole procedure and withdrawal therefrom in others. Moreover, in order to be disavowed as little as possible by emerging reality, Marshall Plan administrators attempted to *make* their estimates come true by taking a considerable interest in the domestic plans and policies that shaped the external accounts of the aid-receiving countries.

During my six years in Washington I sided in general with the innovators, but not without some reservations. From the French and Italian experiences I had lived through in the 1930s, I had come away with a healthy respect (based on watching the misadventures of the French economy) for the efficiency of the price system, particularly with respect to the effect of exchange rate changes on the balance of payments,⁴ and with a correlative distrust (based on watching Fascist economic policy in the second half of the 1930s) of peacetime controls, allocations, and grandiloquent plans. Having studied the expansion of Nazi Germany's influence in Eastern and Southeastern Europe, the background to my first book,

4. See my paper “Devaluation and the Trade Balance: A Note,” *Review of Economics and Statistics*, vol. 21, no. 1 (February 1949), pp. 50–53, which was a late fruit of that experience.

National Power and the Structure of Foreign Trade,⁵ I had developed a special sensitivity to the propensity of large and powerful countries to dominate weaker states through economic transactions. I therefore felt a natural concern and aversion when Marshall Plan administrators were aggressively pressing their views about appropriate domestic programs and policies upon countries such as Italy that were large-scale beneficiaries of aid. They did so for the best of motives—they sincerely sought for Italy not only the “right” balance of payments deficits, but a more prosperous economy and a more equitable society. But it was perhaps because they felt thus unsullied by imperialist concerns that the aid administrators thought they were justified in pursuing their objectives in an imperious manner. Fortunately this phase lasted only a short time since Marshall Plan aid to Europe was terminated, in surprising accord with the original time table, after only five years—thereby putting an end also to much of U.S. leverage.

Revolting against a Colombian Assignment

So I went to Colombia with some preconceptions after all. During my first two years there I held the position of economic and financial adviser to the newly established National Planning Council. The World Bank had recommended me for this post, but I worked out a contract directly with the Colombian government. The result was administrative ambiguity which gave me a certain freedom of action. I was in the employ of the Colombian government, but obviously also had some sort of special relationship with the World Bank, which had taken an active part in having the Planning Council set up in the first place and then in recruiting me for it.

My natural inclination, upon taking up my job, was to get myself involved in various concrete problems of economic policy with the intention of learning as much as possible about the Colombian economy and in the hope of contributing marginally to the improvement of policymaking. But word soon came from World Bank headquarters that I was principally expected to take, as soon as possible, the initiative in formulating some ambitious economic development plan that would spell out investment, domestic savings, growth, and foreign aid targets for the Colombian economy over the next few years. All of this was alleged to be quite simple for experts mastering the new programming technique: apparently there now existed adequate knowledge, even without close study of local surroundings, of the likely ranges of savings and capital-output ratios, and those estimates, joined to the country’s latest national income and balance of payments accounts, would yield all the key figures needed. I resisted being relegated to this sort of programming activity. Having already plunged into some of the country’s real problems, I felt that one of the

5. Berkeley, Calif.: University of California Press, 1945.

things Colombia needed least was a synthetic development plan compiled on the basis of "heroic" estimates. This was a repetition, under much less favorable circumstances (the quality of the numbers was much poorer), of what I had most disliked about work on the Marshall Plan.

One aspect of this affair made me particularly uneasy. The task was supposedly crucial for Colombia's development, yet no Colombian was to be found who had any inkling of how to go about it. That knowledge was held only by a few foreign experts who had had the new growth economics revealed to them. It all seemed to be an affront to the Colombians who were, after all, struggling or tinkering with their problems in many fields through a great variety of private decisions and public policies. My instinct was to try to understand better *their* patterns of action, rather than assume from the outset that they could only be "developed" by importing a set of techniques they knew nothing about. True, this paternalistic mode of operation was given much encouragement by the Colombians themselves who were, initially at least, treating the foreign advisers as a new brand of magicians, and who loved to pour scorn on themselves by exclaiming at every opportunity "Aquí en el trópico hacemos todo al revés" (Here in the tropics we do everything the wrong way around). But the foreign advisers and experts took such statements far too literally. Many Colombians did not really feel all that inept. For at least some of them the phrase implied that, in the particular environment in which they operated, they might well have worked out by trial and error some cunning principles of action, of which they were themselves hardly conscious, that might seem perverse to outsiders, but have actually proven quite effective.

Searching for Hidden Rationalities

This was exactly what I thought worth exploring. I began to look for elements and processes of the Colombian reality that *did* work, perhaps in roundabout and unappreciated fashion. Far more fundamentally than the idea of unbalanced growth, this search for possible *hidden rationalities* was to give an underlying unity to my work. It also gave it vulnerability.

To uncover the hidden rationality of seemingly odd, irrational, or reprehensible social behavior has been an important and quite respectable pastime of social scientists ever since Mandeville and Adam Smith.⁶ If successful, the search results in those "typically counterintuitive, shocking" discoveries on which social science thrives.⁷

My principal findings of this kind were the possible rationality ("uses") of (1) shortages, bottlenecks, and other unbalanced growth sequences in the course of development (*Strategy*, chaps. 3–7); (2) capital-intensive

6. In the humanities, the tradition goes much further back, at least to Erasmus's *Praise of Folly*.

7. See "Morality and the Social Sciences: A Durable Tension," in *Trespassing*, chap. 14, p. 298.

industrial processes (chap. 8); and (3) the pressures on decisionmakers caused by inflation and balance of payments deficits (chap. 9). I shall discuss later these key themes of my book. But I must say something right away about the vulnerability that comes with such discoveries.

Once the discoveries were made and proudly exhibited, there arose, inevitably and embarrassingly, the question: Would you actually *advocate* unbalanced growth, capital-intensive investment, inflation, and so on? The honest, if a bit unsatisfactory, answer must be: yes, but of course within some fairly strict limits. There is no doubt that the unbalanced growth strategy can be overdone, with dire consequences. But I stand by the concluding paragraph of an article I wrote jointly with C. E. Lindblom to bring out the similarity of our approaches in different fields:

There are limits to “imbalance” in economic development, to “lack of integration” in research and development, to “fragmentation” in policy making which would be dangerous to pass. And it is clearly impossible to specify in advance the optimal doses of these various policies under different circumstances. The art of promoting economic development, research and development, and constructive policy making in general consists, then, in acquiring a feeling for these doses. This art . . . will be mastered far better once the false ideals of “balance,” “coordination,” and “comprehensive overview” have lost our total and unquestioning intellectual allegiance.⁸

Another problem arises in connection with that embarrassing question about advocacy. Social scientists who discover the hidden rationality of a social practice should be aware that they frequently act as something of a spoilsport: once the uses of unbalanced growth or of inflation are discovered and explained, the attempt consciously to apply these notions and to replicate the earlier successes is likely to stumble for various reasons. For one, policymakers who up to then had merely backed into such devices will now tend to overdo and otherwise abuse the newly discovered knowledge.⁹ Moreover, various affected parties will neutralize much of the policy by acting in anticipation of it once it is expected, in line with reasoning made familiar by the rational-expectations argument.

Thus the discovery of hidden rationalities clearly yields “dangerous knowledge.” But, as is well known, knowledge is intrinsically dangerous. And this simple observation gives me a chance to turn the tables on my critics. As long as the findings I had come up with were dangerous there was at least some chance that they truly constituted new knowledge. This

8. “Economic Development, Research and Development, Policy-Making: Some Converging Views” (1962), reprinted in *Bias*, pp. 83–84.

9. I noted this previously for the combination of inflation and overvaluation which permitted the financing of import-substituting industrialization in many countries in the 1950s. See *Trespassing*, p. 110.

is more than can be said for quite a few of the bland and banal pieties that have been paraded under the banner of either "principles of development planning" or "efficient allocation of resources!"

Uncovering hidden rationalities permitted me to fight against what I perceived as two very different, yet interrelated evils. On the one hand, as already noted, I reacted against the visiting-economist syndrome; that is, against the habit of issuing peremptory advice and prescription by calling on universally valid economic principles and remedies—be they old or brand new—after a strictly minimal acquaintance with the "patient." But, with time, another objective was assuming even more importance in my mind: it was to counter the tendency of many Colombians and Latin Americans to work hand-in-glove with the visiting economist by their own self-deprecatory attitudes. As I put it in another article written shortly after *Strategy* was published: "Some of my main contentions could serve to reconcile the Latin Americans with their reality, to assure them that certain ubiquitous phenomena such as bottlenecks and imbalances in which they see the constantly renewed proof of their ineptness and inferiority are on the contrary inevitable concomitants and sometimes even useful stimulants of development."¹⁰

Because Latin Americans were wont to issue blanket condemnations of their reality they became incapable of learning from their own experiences, so it seemed to me. Later, in detailed studies of economic policymaking, I even coined a term for this trait: the "failure complex," or *fracasomania* in Spanish and Portuguese.¹¹

At this point, however, my bias for hidden rationalities might seem to harbor yet another danger. Was it not going to make me blind to the imperative need for change in societies where economic growth was frustrated at every turn by antiquated institutions and attitudes as well as by exorbitant privilege? Was my enterprise then going to end up as a giant exercise in apology for the existing order (or disorder)? This danger actually never bothered me much, for the simple reason that the hidden rationalities I was after were precisely and principally *processes of growth and change already under way* in the societies I studied, processes that were often unnoticed by the actors immediately involved, as well as by foreign experts and advisers. I was not looking for reasons to justify what was, but for reasons to think that the old order was already changing. In this way I tried to identify progressive economic and political forces that

10. "Ideologies of Economic Development in Latin America," first published in 1961 and reprinted in *Bias*, pp. 310–11.

11. See my *Journeys toward Progress: Studies of Economic Policy Making in Latin America* (New York: Twentieth Century Fund, 1963; Norton, 1973); and "Policymaking and Policy Analysis in Latin America—A Return Journey" (1974), reprinted in *Trespassing* as chap. 6. In both works, but particularly in the latter, I pointed out that *fracasomania* (the failure complex) could lead to real *fracasos* (failures).

deserved recognition and help. This position did put me at odds with those who judged that the present society was “rotten through and through” and that nothing would ever change unless everything was changed at once. But this utopian dream of the “visiting revolutionary” seemed to me of a piece with the balanced growth and integrated development schemes of the visiting economist.¹²

A Paradigm of My Own?

My basic concern with the discovery of hidden rationality shows up in my first general paper on development, written in 1954 after two years in Colombia, for a conference on Investment Criteria and Economic Growth at the Massachusetts Institute of Technology.¹³ Here I presented, besides a critique of what I called “The Myth of Integrated Investment Planning,” two empirical observations which could qualify as investment criteria. One was about the superior performance of airplanes in comparison with highways in Colombia (the need for adequate maintenance and efficient performance in general being far more compelling in the case of airplanes), a point which later led me to a general hypothesis about the comparative advantage less developed countries have in certain types of activities. The other observation dealt with what I then described as “the impact of secondary on primary production” and later named “backward linkage.” Both observations served to justify investments (in case of airlines) or investment sequences (in the case of backward linkage) that seemed questionable or *al revés* (the wrong way around) from the commonsense point of view.

In 1954 these were isolated observations. But they remained key elements of the conceptual structure that I erected three years or so later in *Strategy*. I now searched for a general economic principle that would tie them (and several related propositions) together. To this end, I suggested that underdeveloped countries need special “pressure mechanisms” or “pacing devices” to bring forth their potential. In my most general formulation I wrote: “development depends not so much on finding optimal combinations for given resources and factors of production as on calling forth and enlisting for development purposes resources and abilities that are hidden, scattered, or badly utilized” (*Strategy*, p. 5).

I presented this point as a special characteristic of the underdeveloped countries and implicitly granted that the advanced countries continued to be ruled by the traditional principles of maximization and optimization, on the basis of given and known resources and factors of production. Actually, these principles were to be impugned in short order, or were

12. For some elaboration, see *Journeys*, pp. 251–56.

13. Reprinted in *Bias*, chap. 1.

already being impugned, precisely for the advanced countries, by various important contributions of other economists. For the business firm, Richard Cyert and James March documented the importance of what they called “organizational slack,” on the basis of Herbert Simon’s pioneering work on “satisficing” as opposed to “maximizing.” Adopting the concept of “inducement mechanism,” Nathan Rosenberg showed how the pattern of inventions and innovations in the advanced countries simply does not follow the gradual expansion of opportunities as markets and knowledge grow, but has been strongly influenced by special “inducing” or “focusing” events such as strikes and wars. Finally, Harvey Leibenstein built his X-efficiency theory on the notion that slack is ubiquitous and effort sporadic and unreliable, again in the absence of special pressure situations.¹⁴

It appears, therefore, that the very characteristics on which I had sought to build an economics specially attuned to the underdeveloped countries have a far wider, perhaps even a universal, range and that they define, not a special strategy of development for a well-defined group of countries, but a much more generally valid approach to the understanding of change and growth. In other words, I set out to learn about others, and in the end learned about ourselves.

As many anthropologists have discovered and taught us, this is by no means an unusual meandering of social thought and knowledge. Nor does it come to me as a disappointment that I must give up the pretense of having discovered *the* distinguishing characteristic of underdeveloped societies. There always was some irony, not to say inconsistency, in the intellectual path I had followed. First I rejected the old and new paradigms of others and stressed the importance of steeping oneself in the Colombian reality—from which I eventually emerged with a triumphant paradigm of my own! So I am quite happy at this point to renounce that claim,¹⁵ especially as long as some of my more specific findings and suggestions (frequently generated only by means of my overall conceptual scheme) continue to lead an active life of their own. I shall now show that this is indeed the case.

14. H. A. Simon, “A Behavioral Model of Rational Choice,” *Quarterly Journal of Economics*, vol. 69, no. 1 (February 1955), pp. 99–118; Richard M. Cyert and James G. March, *Behavioral Theory of the Firm* (Englewood Cliffs, N.J.: Prentice-Hall, 1963); Nathan Rosenberg, “The Direction of Technological Change: Inducement Mechanisms and Focusing Devices,” *Economic Development and Cultural Change*, vol. 18, no. 1 (October 1969), p. 18; and Harvey Leibenstein, “Allocative Efficiency versus X-Efficiency,” *American Economic Review*, vol. 56, no. 3 (June 1966), pp. 392–415, and *Beyond Economic Man* (Cambridge, Mass.: Harvard University Press, 1976).

15. In order not to be misunderstood I must emphasize that I do not renounce my basic idea (about the need for pacing devices and so on), but only the claim that with it I had hit upon the *distinguishing* characteristic of a certain group of (economically less developed) countries.

The Life of Some Specific Propositions

Linkages

If a popularity contest were held for the various propositions I advanced in *Strategy*, the idea of favoring industries with strong backward and forward linkages would surely receive first prize. The linkage concept has achieved the ultimate success: it is by now so much part of the language of development economics that its procreator is most commonly no longer mentioned when it is being invoked.

A major battle I fought in *Strategy* was against the then widely alleged need for a “balanced” or “big push” industrialization effort; that is, against the idea that industrialization could be successful only if it were undertaken as a large-scale effort, carefully planned on many fronts simultaneously. To contradict this idea I pointed to the processes of industrialization that could in fact be observed in Colombia and other developing countries. Their entrepreneurs, domestic and foreign, had apparently hit upon a good number of *sequential* rather than *simultaneous* solutions to the problem of industrialization, but the more typical sequences were often unusual by the standards of experience in the more advanced countries. Precisely for this reason, these sequences were either not easily perceived or, once noted, were judged to be characteristic of an inferior, inefficient, or (according to a term that became fashionable in the 1960s) “dependent” industrialization.

My approach was exactly the opposite. Following Gerschenkron, I saw originality and creativity in deviating from the path followed by the older industrial countries, in skipping stages, and in inventing sequences that had a “wrong way around” look. It was surely this attitude that permitted me to ferret out the backward and forward linkage dynamic and to acclaim as a dialectical-paradoxical feat what was later called, with disparaging intent,¹⁶ import-substituting industrialization: in its course, a country would acquire a comparative advantage in the goods it imports; for the “fatter” the imports of a given consumer good grew, the greater was the likelihood that, in Hansel and Gretel fashion, they would be “devoured” or “swallowed” by a newly established domestic industry (*Strategy*, chap. 7). My intent throughout was to underline the originality of these various dynamics, as well as the feasibility, then in doubt, of a sequential approach. As with unbalanced growth, there was of course danger that the dynamics I celebrated could be overdone, to the point of setting up a highly inefficient industrial structure. But is it not unreasonable to ask the inventor of the internal combustion engine to come up immediately with a design for pollution control and airbags?

16. *Trespassing*, p. 127, n. 39.

Be that as it may, as an analytic tool the linkages have led an active life over the past twenty-five years. They have been particularly useful in orienting various historical studies of developing economies.¹⁷ It has been much more difficult to turn the linkage criterion (priority to investment in industries with strong linkage effects) into an operational device for industrial planning, with the help of input-output statistics. A great deal of discussion about appropriate measurement has taken place.¹⁸ The most extensive and successful study of this sort to date has been undertaken by the Regional Employment Program for Latin America and the Caribbean (PREALC) of the International Labour Office.¹⁹ It uses the linkage concept for the purpose of measuring employment creation, rather than industrial expansion in terms of value added. The idea is of course to help in devising an industrialization strategy that would maximize employment. One empirical finding of the study deserves special notice: once the indirect employment effects (via backward and forward linkages) are taken into account, investment in large-scale (capital-intensive) industry turns out to be just as employment-creating as investment in small-scale (labor-intensive) industry for the industrially advanced countries of Latin America.

The linkage concept was devised for a better understanding of the industrialization process, and initially most applications were in this area. Fairly soon, however, the concept caught on even more in the analysis of the growth patterns of developing countries during the phase when their principal engine of growth was (or is) the export of primary products.²⁰ Very different growth paths were traced out by countries exporting copper rather than coffee, and these differences were difficult to explain by the traditional macroeconomic variables. The linkages permitted a more detailed look, yet stopped short of the wholly descriptive account that had been practiced by Harold Innis and other practitioners of the so-called staple thesis.

17. Albert Fishlow, *American Railroads and the Transformation of the Ante-Bellum Economy* (Cambridge, Mass.: Harvard University Press, 1965); Judith Tendler, *Electric Power in Brazil: Entrepreneurship in the Public Sector* (Cambridge, Mass.: Harvard University Press, 1968); Michael Roemer, *Fishing for Growth: Export-led Development in Peru, 1959–1967* (Cambridge, Mass.: Harvard University Press, 1970); Scott R. Pearson, *Petroleum and the Nigerian Economy* (Stanford, Calif.: Stanford University Press, 1970); and Richard Weisskoff and Edward Wolff, "Linkages and Leakages: Industrial Tracking in an Enclave Economy," *Economic Development and Cultural Change*, vol. 25 (July 1977), pp. 607–28.

18. See the symposium on linkage effect measurement in *Quarterly Journal of Economics*, vol. 90, no. 2 (May 1976), pp. 308–43.

19. Norberto E. García and Manuel Marfán, "Estructuras industriales y eslabonamientos de empleo" [Industrial structures and employment linkages], *Monografía sobre empleo* 126 (Santiago, Chile: PREALC, December 1982), processed (to be published in Spanish and English, with a preface by the present author, by the International Labour Office).

20. For a more extensive treatment of this topic, see *Trespassing*, chap. 4, "A Generalized Linkage Approach to Development, with Special Reference to Staples."

At this point the linkage concept proliferated. In analogy to backward and forward linkage, consumption linkage was defined as the process by which the new incomes of the primary producers lead first to imports of consumer goods and then—in line with the “swallowing” dynamic—to their replacement by domestic (industrial or agricultural) production. Similarly, fiscal linkage is said to occur when the state taxes the newly accruing incomes for the purpose of financing investments elsewhere in the economy. Such fiscal linkages are either direct, as when the state is able to siphon off a portion of exporters’ profits through export duties or royalties, or indirect—in this case the various incomes earned through exports are not tapped directly, but are allowed to generate a flow of imports which are then made to yield fiscal revenue through tariffs.

Once the various ways through which exports of primary products can give rise to further economic activities had come into view, it became clear that some of the linkages are usually to be had only at the cost of doing without some of the others. In this manner, typical *constellations* of linkages could be identified for different kinds of primary commodities; as a result, it became possible to differentiate what had long been designated “export-led growth” and treated as a unified and transparent process. More important still, this approach almost compels one to consider the interaction between the social structure and the state, on the one hand, and the more narrowly economic factors, on the other.

Latitude in Performance Standards

While the linkages, in their increasingly numerous varieties, help us understand how one thing leads to another in economic development, an even more basic inquiry is how one firm or productive operation can be made to *endure* as an efficiently performing unit of the economic system. The answer to this question yielded what was, in my opinion—and, once again, in that of any market test—the other major find I made in Colombia. It had its origin in the already noted observation about the comparative efficiency (and maintenance) of airplanes and highways and was developed in *Strategy* (chap. 8) into the much more general point—sometimes called the Hirschman hypothesis—contrasting machine-paced with operator-paced machinery, and process-centered with product-centered industrial activities.²¹ An implication was that a certain type of

21. The hypothesis lent itself to testing by empirical data; if it were true, the productivity differentials between advanced and less developed countries would be larger in certain types of industries than in others. A large number of attempts at testing have been made and are reviewed in Simon Teitel, “Productivity, Mechanization, and Skills: A Test of the Hirschman Hypothesis for Latin American Industry,” *World Development*, vol. 9, no. 4 (1981), pp. 355–71. See also M. Shahid Alam, “Hirschman’s Taxonomy of Industries: Some Hypotheses and Evidence,” *Economic Development and Cultural Change*, vol. 32 (January 1984), pp. 367–72.

capital-intensive, advanced technology could be more appropriate, in a country with little industrial tradition, than the labor-intensive technology and “idiot-proof” machinery—contrary to some of the most frequent, automatic, and insistent advice proffered by visiting experts.

I became fascinated with this point for several reasons. First, it permitted me to indicate another hidden rationality: the widely noted preference of developing countries for advanced technology and capital-intensive industry with a flow process was perhaps not in all cases a damaging bias, based exclusively on misguided prestige-seeking.

Second, I had come upon a concept or criterion that was helpful in understanding a number of social and economic processes: the greater or smaller extent of latitude in standards of performance (or tolerance for poor performance) as a characteristic inherent in all production tasks. When this latitude is narrow the corresponding task has to be performed *just right*; otherwise, it cannot be performed at all or is exposed to an unacceptable level of risk (for example, high probability of crash in the case of poorly maintained or poorly operated airplanes). Lack of latitude therefore brings powerful pressures for efficiency, quality performance, good maintenance habits, and so on. It thus substitutes for inadequately formed motivations and attitudes, which will be *induced* and generated by the narrow-latitude task instead of presiding over it.

Here, then, was another promising “wrong way around” sequence. Ever since Max Weber, many social scientists looked at the “right” cultural attitudes and beliefs as necessary conditions (“prerequisites”) for economic progress, just as earlier theories had emphasized race, climate, or the presence of natural resources. In the 1950s, newly fashioned cultural theories of development competed strongly with the economic ones (which stressed capital formation), with Weber’s Protestant Ethic being modernized into David McClelland’s “achievement motivation” as a precondition of progress and into Edward C. Banfield’s “amoral familism” as an obstacle. According to my way of thinking, the very attitudes alleged to be preconditions of industrialization could be generated on the job and “on the way,” by certain characteristics of the industrialization process.²²

The emphasis on latitude in performance standards as a variable influencing efficiency also had a bearing on approaches that regard certain economic institutions as necessary conditions for development. For many economists, competition is the all-powerful social institution bringing pressures for efficiency. Strangely and somewhat inconsistently, some of these economists seem intent on granting competition a monopoly in this endeavor. But with competition being so often quite feeble and with the battle against inefficiency and decay being so generally uphill, why not search and be grateful for additional mechanisms that, to paraphrase

22. Alex Inkeles and David H. Smith, *Becoming Modern* (Cambridge, Mass.: Harvard University Press, 1974).

Rousseau, force man to be efficient? In *Strategy*, lack of latitude seemed to me to hold considerable promise in this regard. Twelve years later I stressed another such mechanism: protests, complaints, and criticism by consumers and, more generally, by members of organizations when the quality of the organization's output deteriorates. This I called "voice," and the interaction of voice with competition, called "exit" for greater generality, involved me in the writing of another book.²³

One matter I notice only now, with much surprise over the underlying unity of my thought: there appears to be a real affinity between these two mechanisms, which I developed quite independently one from the other. Narrow-latitude tasks will, if performed poorly and (ex hypothesi) disastrously, give rise to strong public concern and outcry—to voice. This is obvious in the case of airplane crashes and was specifically noted in *Strategy* for another concrete example of a narrow-latitude task, road construction using a certain technology. I cited the opinion of a highway engineer who favored low-type bituminous surfaces on relatively low-traveled routes, rather than gravel and stone surfaces, for the reason that "local pressure would be applied to the Ministry of Public Works to repair the deep holes which will develop in cheap bituminous surfaces if maintenance and retreatment is delayed, and that such pressure would be greater than if a gravel and stone road is allowed to deteriorate."²⁴ Maintenance of cheap bituminous surfaces is therefore a narrow-latitude task that, if neglected, is likely to give rapid rise to strong voice (the results of poor performance being intolerable).

It could be argued that, in this case and in that of airplanes, voice is the only available mechanism since these are instances of natural or institutional monopoly (in the case of air transportation being reserved to one national airline). This is not so, however; even when competition is lively for narrow-latitude products or services—for example, pharmaceuticals—public regulation is generally present, testifying to the presence of public concern and to the feeling that, because of the possibly disastrous consequences, the assurance of the "right" level of quality cannot be left to market forces. I had earlier pointed out that voice is likely to come to the fore when there is a strong public interest—for example, because of concerns for health and safety.²⁵ The narrow-latitude criterion leads to the same conclusion.

If there is a strong affinity between narrow-latitude and voice, one would expect a corresponding association between exit (that is, competition) and wide-latitude goods and services. These are items that can be and are produced and marketed to very different quality standards, without lower quality having disastrous effects. It is indeed correct that, with

23. *Exit, Voice, and Loyalty* (Cambridge, Mass.: Harvard University Press, 1970).

24. *Strategy*, p. 143. This passage is part of a letter to me from a highway engineer who was then working in Colombia as a consultant to the World Bank.

25. *Trespassing*, p. 217.

regard to such goods and services, comparison shopping and competition in general come peculiarly into their own. The attractiveness of Milton Friedman's proposal for introducing competition into primary and secondary education may precisely derive from the wide-latitude characteristic of education. It is a fact that the quality of education varies widely and that this variability is both inevitable (because of varying teacher quality, for one) and tolerated by the public, however disastrous the individual and social effects of poor education may in fact be. On this score, then, I must grant that education seems to be a task whose performance might be improved by competition. For reasons I have discussed elsewhere,²⁶ however, the maintenance and improvement of quality in education still seem to me to require, on balance, a strong admixture of voice.

Even before I came to write on exit and voice, the concept of lack of tolerance for poor performance continued to yield dividends. In *Development Projects Observed*²⁷ a major chapter, entitled "Latitudes and Disciplines," deals with a large variety of pressures for performance stemming from various characteristics of the project: spatial or locational latitude, temporal discipline in construction, tolerance for corruption, latitude in substituting quantity for quality, and so on. These categories proved quite useful in understanding the specific difficulties and accomplishments of different projects.

Yet later I found that I was by no means the inventor of these concepts of latitude or discipline and of their uses, but that I had some illustrious predecessors, such as Montesquieu and Sir James Steuart! These thinkers were evidently not concerned with the functioning of development projects or the efficiency of industry; they had more portentous matters on their mind—their overriding concern was the more or less tolerable performance of the state. But here their reasoning was very close to mine; they were looking for ways of constraining the latitude of the state, of repressing the "passions" of the sovereign, and they thought they found a solution in the expansion of the "interests" and the market. I shall not retell this tale here, but merely meant to indicate the straightforward connection between my interest in the comparative performance of airlines and highways in Colombia and the principal theme of *The Passions and the Interests*.²⁸ Here also, I came up against the limits of latitude concept, but that is another story.

Views on Inflation and Balance of Payments Problems

One of the pleasant experiences in writing a book rather than an article is that the ideas one starts out with are given enough breathing space so they can fully unfold and expand in all kinds of originally unanticipated

26. *Trespassing*, pp. 219–22.

27. Washington, D.C.: Brookings Institution, 1967.

28. Princeton, N.J.: Princeton University Press, 1977.

directions. This is what happened with *Strategy*. The book's basic theses on unbalanced growth and sequential problem-solving eventually yielded positions of my own on the problems of inflation, balance of payments disequilibrium, and population pressures (chap. 9), as well as on regional development (chap. 10). In the following I shall limit myself to just two of these topics.²⁹

INFLATION. With its shortages and bottlenecks, the unbalanced development path I had described as most typical, "conveys an almost physical sensation of inflationary shocks being administered to an economy" (p. 158). Relative price rises, so I argued, play an important role, via more or less elastic supply responses, in overcoming the imbalances. In the process, however, "with any given level of skill and determination of [the] monetary and fiscal managers" (p. 158), the general price level will be subject to upward pressure, especially if supply responses are weak or slow in some key sectors such as food and foreign exchange (pp. 162–63). In this manner, I put forward a view on inflation that was just then being elaborated within the U.N. Economic Commission for Latin America as the "structuralist," as opposed to the "monetarist," approach. That very view came to the fore in the North, without any reference to its Southern antecedents of course, under the name of "supply-shock inflation" during the oil crises of the 1970s and their monetary repercussions.³⁰

In presenting inflation as the unfortunate, but to be expected side effect of a certain type of growth process, I had in mind the comparatively moderate inflations—in the 20 to 30 percent range—that Colombia and Brazil were then (in the 1950s) experiencing. I advocated implicitly a greater comprehension on the part of the advanced countries and the international financial institutions (the International Monetary Fund and the World Bank), which at that time considered any two-digit inflation as evidence of profligate fiscal and monetary policies that had to be corrected before further development finance was made available. Particularly in the Brazil of the Kubitschek years this policy seemed to me highly ill-advised,

29. At the time my book appeared, my most "scandalous" position was the one I expressed on population pressures. I maintained that, in certain circumstances, such pressures could be considered as stimulants rather than as depressants of development. I do not wish to return to the argument here, except to point out that my position was later given considerable support through the influential writings of Ester Boserup, who stressed the effects of population growth on the introduction of new agricultural techniques. See her books, *The Conditions of Agricultural Growth* (New York: Aldine, 1965), and, more recently, *Population and Technological Change* (Chicago: University of Chicago Press, 1981).

30. An extended retrospective treatment of these matters is in my survey article, "The Social and Political Matrix of Inflation: Elaborations on the Latin American Experience," in *Trespassing*, chap. 8.

and I still believe that it bears some responsibility for the tragic “derailment” of Brazilian politics from 1958 to the military takeover in 1964.³¹

BALANCE OF PAYMENTS PROBLEMS. This brings me to the balance of payments problems of developing countries. Once again I analyzed pressures on a country's international accounts as “part and parcel of the process of unbalanced growth” (*Strategy*, p. 167) rather than as primarily the reflection of macroeconomic disequilibrium between domestic savings and investments. In this perspective, the needs of developing countries for international financial assistance do not arise so much from the fact that they are too poor to save the amounts needed to achieve some growth target—this was the then current rationale for foreign aid—as from some disproportionalities that arise in the growth process. At some stage the need of the expanding economy for imported inputs outpaces its ability to increase exports, unless the country is lucky enough to produce some items that are in rapidly expanding demand on the world market. In other words, the need for financial assistance from abroad would by no means be greatest when the country is poorest, but would be liable to bulge—perhaps several times—in the course of development as certain initially import-intensive economic activities are being put into place. The point was once again to get away from the excessive simplicities of certain growth models and to argue that balance of payments pressures, like inflation, are not necessarily reflections of profligate fiscal and monetary policies.

So much for the effect of growth on the balance of payments. How about the equally important inverse relation—the effect of foreign exchange abundance or stringency on growth? Here I put forward an idea that I have since used in a number of increasingly broad contexts.³² It was based on a simple observation: after a period of comparative foreign exchange *affluence* that causes certain consumption habits, based on imports, to take root, the experience of foreign exchange *shortage* has often set in motion industrial investments designed to produce the previously imported goods that are now sorely missed. It therefore looked as though some alternation of good and hard times (with regard to foreign exchange availability) could be particularly effective in fostering industrial development. Still in *Strategy*, I made a similar point with regard to

31. For a critical evaluation of World Bank policy in Brazil during the 1950s, see Edward S. Mason and Robert E. Asher, *The World Bank since Bretton Woods* (Washington, D.C.: Brookings Institution, 1973), pp. 660–62.

32. The idea was originally expressed in a discussion paper written for a conference of the International Economic Association held at Rio in 1957. See Howard S. Ellis, ed., *Economic Development for Latin America* (New York: St. Martin's Press, 1961), p. 460; and *Strategy*, pp. 173–76.

regional development (chap. 10). I saw certain advantages in an underdeveloped region (such as northeastern Brazil) being closely integrated with the country's more advanced provinces, whereas other kinds of development stimuli would arise from withdrawal and insulation. Later on, I wrote about the virtues of *some* oscillation between contact and insulation in connection with both foreign trade and investment.³³

This thesis was not going to make me popular either with the advocates of delinking or with their neoclassical opponents.³⁴ Once again, moreover, it was sure to disappoint those looking for operational policy advice: first, the optimal width of the oscillation between foreign exchange affluence and penury is impossible to define; second, such ups and downs are generally not subject to a single country's control. If it is correct, my point has nevertheless important implications: it makes policymakers aware that each situation brings with it its own set of opportunities (and of possible calamities).

The principle of oscillation is obviously a close relative of the strategy of unbalanced growth which, in spite of the commanding position it occupies in my book, has not yet been discussed here as such. Since I have some new thoughts on this topic, I left it for the concluding section.

The Politics of Unbalanced Growth

To write in praise of lack of balance is evidently a provocation for which a price must be paid. The worst penalty is not inflicted by the critics, but by those who proclaim themselves devoted disciples and commit all kinds of horrors in one's name. Here is a striking example of this sort of occurrence.

On a visit to Argentina around 1968, shortly after the military coup that toppled the civilian regime of Illia and brought to power General Onganía, I was told by a high-ranking official, "All we are doing is applying your ideas of unbalanced growth. In Argentina we cannot achieve all our political, social, and economic objectives at once; therefore we have decided to proceed by stages, as though in an unbalanced growth sequence. First we must straighten out the economic problems, that is, restore economic stability and stimulate growth; thereafter, we will look out for greater social equity; and only then will the country be ready for a restoration of civil liberties and for other political advances." I was of course appalled by this "application" of my ideas. It seemed quite preposterous to me on various counts. After all, the imbalances I had written

33. See *Bias*, pp. 25 and 229–30.

34. An excellent survey of the pros and cons of delinking is in Carlos F. Díaz Alejandro, "Delinking North and South: Unshackled or Unhinged?" in Albert Fishlow and others, *Rich and Poor Nations in the World Economy* (New York: McGraw-Hill, 1978), pp. 87–162.

about were far less grand than those referred to by my Argentine interlocutor. They had been confined to the economic sphere and were concerned with disproportionalities between sectors, such as industry and agriculture, and even more with interactions between much more finely subdivided subsectors. Because of the interdependence of the economy in the input-output sense, the expansion of one sector or subsector ahead of the other could be relied on to set forces in motion (relative price changes and public policies in response to complaints about shortages) that would tend to eliminate the initial imbalance. As I put it in a letter to André Gunder Frank, who had written one of the more perceptive reviews of my book³⁵ (this was before his “development-of-underdevelopment” phase):

If one wants to move [straight] from one equilibrium position to the next, then, because of the discontinuities and invisibilities *that I take for granted*, the “big push” or “minimum critical effort” is indispensable. But if we assume that intermediate positions of development-stimulating disequilibrium are sustainable at least for limited time periods, then we can manage to break down the big push into a series of smaller steps. In other words, I am in favor of utilizing the energy which holds together economic nuclei of given minimum size in the *building up* of these nuclei. (Letter of August 18, 1959; emphasis in the original.)

In addition to making clear my position as dissent from a dissent (without a return to the original orthodoxy), this passage well illustrates my conception of the unbalanced growth process as something fueled and justified by the “energy which holds together” the various sectors and branches of the economy and which would ensure that the various imbalances would be approximately self-correcting.

Even for intersectoral imbalances, my principal concern was not so much to praise imbalance in general as to draw a distinction between “compulsive” and merely “permissive” sequences. On the basis of this distinction, I was critical of the then prevailing emphasis on investments in infrastructure (*Strategy*, chap. 5). Further, I noted that in regional development the process of unbalanced growth is fundamentally different from unbalanced growth in the sectoral sense because of the weakness of the forces making for restoration of interregional balance (chap. 10). Hence, it is illegitimate to invoke the unbalanced growth idea when there are no compelling reasons why an advance in one direction and the ensuing imbalance should set countervailing forces in motion. In the Argentine case I have cited, it was impossible to detect any such forces unless one trusted the self-proclaimed intentions of the new regime (that came duly to naught) or the dubious correlations between economic growth and

35. “Built-in Destabilization: A. O. Hirschman’s Strategy of Economic Development,” *Economic Development and Cultural Change*, vol. 8, no. 4 (July 1960), pp. 433–40.

the growth of democracy adduced by the more sanguine political-development theorists of the time.

But there is another, perhaps more interesting, way in which the Argentine sequence differed from the one I had talked about. My Argentine interlocutor conveniently failed to mention that the military had just ordered severe curtailments of political freedoms. Whatever economic advance the new regime would bring was being achieved at the cost of previously political and civil rights of the citizens. Later on these rights were to be restored—perhaps, in turn, at the cost of some of the previous economic advances? This sort of (implicit) sequence is again very different from the one I had had in mind: in my scheme one sector, say, manufacturing industry, was to move ahead without any simultaneous expansion in power or transportation or agriculture, but certainly not at the expense of these sectors. Nevertheless, there is here some scope for reflection and, at long last, for self-criticism. Is it really true that the process of unbalanced growth, as sketched in *Strategy*, never implies actual retrogression for any economic agents? Probably not. When industry advances and uses the *existing* power and transportation facilities, then, in the absence of excess capacity, there are fewer such facilities available for the traditional users who will therefore be worse off. The same is likely to hold, with rather more serious consequences, for an isolated advance of industry while agricultural output remains stationary.³⁶

It appears therefore that, for some of these purposes, I have to redraw the diagram by which I have attempted to portray the unbalanced-growth process.³⁷ The comparatively innocuous pattern of figure 1 is transformed by the preceding considerations into the more problematic pattern of figure 2, where at each stage in the sequential growth process the income-receivers of one of the two sectors are gaining at the expense of those of the other sector. As drawn, to reflect the eventual all-around increases in output, the incomes received in both sectors are growing in the course of the process as a whole, but at any one point Sector A is gaining at the expense of Sector B or vice versa, making for what might be called an *antagonistic* growth process. Note that antagonistic is very different from zero-sum since all-around growth is in effect being achieved.

36. This matter could obviously be elaborated at considerable length. The effect of unbalanced growth on sectoral incomes in a two- or three-sector economy depends on the intersectoral terms of trade, and it is conceivable that the incomes generated in the expanding sector would decline rather than expand. Harry G. Johnson's classic article, "Economic Expansion and International Trade," is still a good starting point for the analysis of the various possibilities. See *Manchester School of Economic and Social Studies*, vol. 23, no. 2 (May 1955), pp. 96–101.

37. The most straightforward such presentation is in the already cited article, co-authored with C. E. Lindblom, "Economic Development, Research and Development, and Policy Making: Some Converging Views," p. 65; in *Strategy*, a similar, but more complex diagram is on p. 87.

Figure 1. *Balanced and Unbalanced Growth*

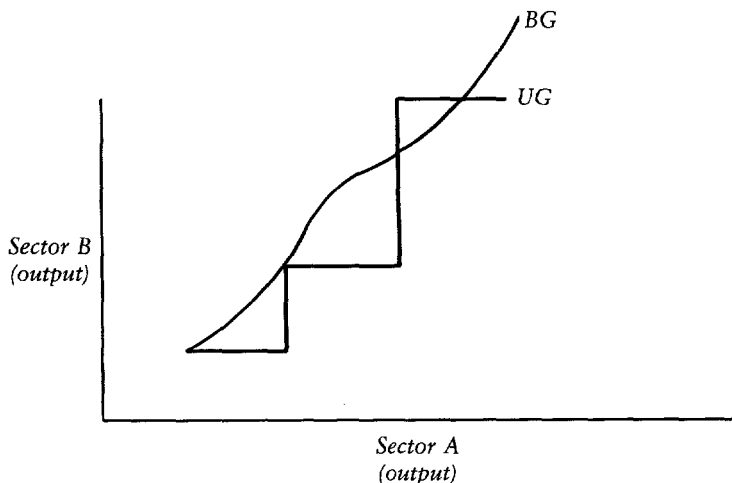
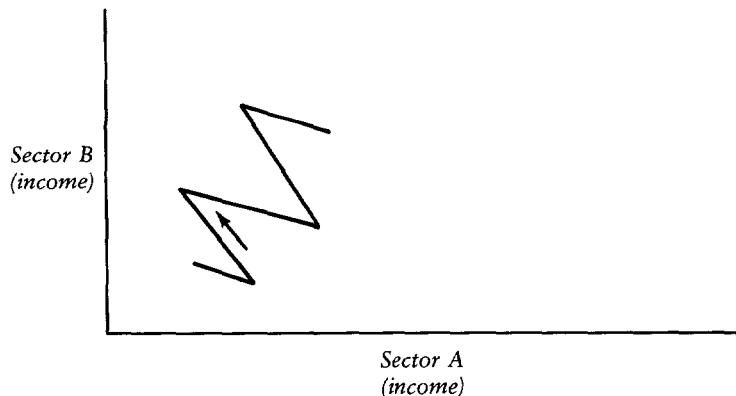


Figure 2. *Antagonistic Growth*



I had not noticed that my unbalanced growth path had these antagonistic implications. Had I done so I might have inquired into the political consequences and prerequisites of the process. For it to unfold, a certain level of tolerance for increasing inequality in the course of growth appears to be required. This matter was later investigated in my article, "The Tolerance for Income Inequality in the Course of Economic Development,"³⁸ but only after the antagonistic potential of the development

38. First published in 1973 and reprinted in *Trespassing*, chap. 3.

process had led to civil wars and various other disasters. Along with my fellow pioneers, I thus stand convicted of not having paid enough attention to the political implications of the economic development theories we propounded.³⁹

But perhaps it was not altogether unfortunate that we were myopic and parochial. Had we been more far-sighted and interdisciplinary, we might have recoiled from advocating any action whatever, for fear of all the lurking dangers and threatening disasters.

Take my own case. In the hopeful 1950s I found it quite daring and paradoxical enough to advocate a growth pattern corresponding to figure 1. I just *had* to repress the thought that the process depicted there implies to some extent the antagonistic process shown in figure 2. Twenty-five years later we have learned so much, alas, about the enormous difficulties and tensions that come with any social change that the antagonistic growth process portrayed in figure 2 no longer looks as gratuitously harrowing as would have been the case earlier. In fact, I now want to argue that the process of antagonistic unbalanced growth—it could be called “sailing against the wind”—is far more common than one might think.

In figure 2 we are free to make the two coordinates represent not the incomes of two important social groups, such as workers and capitalists, but more generally two important social objectives such as economic stability (internal and external) and growth, or growth and equity (a less unequal distribution of income and wealth), or, for that matter, equity and stability. As soon as we do so we realize that sailing against the wind is actually how Western societies have frequently been traveling when they were moving forward at all.

I have two reasons to suggest. First, each of these objectives is so difficult to achieve that progress with just one of them requires the utmost concentration of intellectual energies and political resources. The result is neglect of other crucial objectives, a neglect which subsequently comes to public attention; the resulting criticism then leads to a change in course, to a new concentration—and a new neglect.

Second, I want to argue that the sailing-against-the-wind pattern is congenial to the democratic form of government, and particularly to the two-party system of democratic governance. If, in such a system, each of the two parties retains a characteristic physiognomy or ideological consistency of its own, then each party will give very distinct priorities to such social objectives as growth, equity, and stability; with the parties alternating in power, society is likely to move, in the best of circumstances, as though it were sailing against the wind.⁴⁰

39. For an early critique of this sort, see Warren F. Ilchman and R. C. Bargave, “Balanced Thought and Economic Growth,” *Economic Development and Cultural Change*, vol. 14, no. 4 (July 1966), pp. 385–99.

40. An empirical study and verification for twelve Western European and North American nations during the postwar period is in Douglas A. Hibbs, Jr., “Political

It does seem, at first blush, an odd and even perverse way of moving forward—a course in which some important social group is constantly aggrieved and attacked and some primary social objective constantly disregarded and even set back. Yet this may be the characteristic, even the only available pattern, of progress in a society which lives by the canons of competitive politics. Such a society is necessarily divided into “ins” and “outs,” with the interests and aspirations of the latter being neglected until it is their turn to take over and to turn the tables on their opponents.

In sum, the art of moving society forward in a democracy is to do so in spite of substantial and justified discontent on the part of some important groups, followed by similar discontent on the part of others. At any one point in time, there is always not only strife and clash and conflict, but also loss of some valuable terrain previously gained. Yet it is possible that all-around progress is being achieved behind the back, so to speak, of the parties and groups in conflict. Democracy is consolidated when, after a few alternations of the parties in power, the various groups come to realize that, strangely enough, they have all gained.

There can of course be no certainty that the antagonistic moves here described will actually have this happy outcome. They can just as well do the opposite—in figure 2 the movement would simply have to be visualized as taking place in the direction opposite to that of the optimistic arrow there shown. In such circumstances democracy will be proclaimed to be in crisis and to be involved in playing zero- or negative-sum games. “Fundamental” solutions will now be sought, such as an end to the “destructive” party struggle and a national accord on basic objectives, so that society can move forward along a “balanced” path with simultaneous progress being made toward each and every one of the agreed-upon objectives. Such is the ever present corporatist and authoritarian temptation that arises when a pluralist regime puts in a poor performance. Our antagonistic, sailing-against-the-wind growth pattern makes it clear that another solution might also be available, one that has the considerable merit of not jettisoning the pattern of competitive politics.

By now my self-criticism of unbalanced growth has obviously taken a strange turn. I started by faulting myself for not having recognized, in the course of my advocacy of unbalanced growth, that such growth could imply for a while an actual decline in the incomes of the initially nonexpanding sector. But then I established a connection between this antagonistic growth model and the awkward way in which a democracy typically moves forward. Thus my self-blame soon ran out of steam, and I ended up presenting this growth model as a remarkable social invention by means of which pluralist politics and the achievement of multiple social objectives can be reconciled.

What I have done, once again, is to show that the unbalanced growth model of *Strategy*, originally intended exclusively for the better comprehension of processes in developing countries, has its uses, after a slight transformation, in dealing with problems of political economy in the advanced countries. And this demonstration gives me considerable satisfaction: in the end, the advanced countries too are forced into awkward solutions to their problems, they too do things seemingly *al revés*, the wrong way around!

Conclusion

Our instructions from the organizers of these lectures said—in effect, though not in these exact terms—that we should both celebrate and criticize (in the light of intervening events and experiences) our ideas of yesteryear. Like my distinguished fellow pioneers, I have found it difficult to be evenhanded in this dual task. Moreover, what started out here and there as a confession of sins tended to end up, curiously enough, as a confession of faith.

It is probably a futile exercise to go back to a work, some twenty-five years later, and to pronounce some ideas as still good, others as disproven; some as having had a wholesome influence, others as having been harmful—and then to strike a balance with a bottom line. It makes more sense to attempt what Benedetto Croce pointed to with one of his titles that read *What Is Alive and What Is Dead in Hegel's Philosophy*, that is, to evaluate what is alive and what is dead of our work.⁴¹ There too, of course, the authors themselves are poor judges, and all they can do is to try to convince the reader that there is quite some life left in those old “written and painted thoughts” and that they continue to evolve in interesting ways.

One last remark, on the impact of new ideas. Since my thoughts on development were largely dissents, critical of both old and new orthodoxies, they have led to lively debates, thus helping, together with the contributions of others, to make the new field of development economics attractive and exciting, back in the 1950s and 1960s. I rather think that this was the major positive contribution of my work as well as its principal impact.

Perhaps there is a general point here. The effect of new theories and ideas is much less direct than we often think: to a considerable extent, it comes by way of the general impetus that is given to a certain field of studies. As a result of a few contributions, that field suddenly comes alive with discussion and controversy and attracts some of the more intelligent, energetic, and dedicated members of a generation. This is the indirect, or

41. *Ciò che è vivo e ciò che è morto nella filosofia di Hegel* (Bari: Laterza, 1907).

recruitment, effect of new ideas, as opposed to their direct, or *persuasion*, effect which is usually the only one to be considered. It happens frequently that the recruitment effect is far more significant and durable than the persuasion effect. The importance of the recruitment effect explains, among other things, why the influence of new ideas is so unpredictable and why it is so difficult—and often ludicrous—to assign intellectual responsibility for actual policy decisions, let alone for policy outcomes.

The field of development studies is a remarkable case in point. After the success of the Marshall Plan, the underdevelopment of Asia, Africa, and Latin America loomed as the major unresolved economic problem on any "Agenda for a Better World." At the same time, various contending views came forward on how best to tackle that problem. The recruitment effect of this combination of circumstances was notable. As the problem turned out to be tougher and more hydra-headed than any of us had anticipated, this was most fortunate. In this manner, we, the so-called pioneers, can take pride, not in having solved the problems of development, but in having contributed to attracting into our field a large number of people who will carry on.

Comment

Carlos F. Diaz Alejandro

WHAT HAS HIRSCHMAN REBELLED AGAINST? His paper gives us generous clues: the France of the 1930s taught him to suspect both gold standard practical orthodoxy and populist simplicities, as one hopes young Chileans have learned from the excesses witnessed in their country during the 1970s. Hitler and Mussolini warned Hirschman about planning. Even during the slack 1930s he could observe the power of the price system and the dangers of thoughtless interventionism; he became, if not an elasticity-optimist, at least a devaluation-optimist, in the sense of discovering that the worse the current account situation was, the more likely was its improvement following devaluation. Marshall Plan experiences reinforced his doubts about planning exercises in which “if you give me the intercept, I will give you the slope.”

From these origins, Hirschman went on to search for “hidden rationalities.” This crucial methodological decision puts him in the middle, or rather in the vanguard, of mainstream economics. Young 1980s economists, schooled in choice-theoretic models with uncertainty, imperfect information, and missing markets are likely to find Hirschman not so much a heterodox rebel but rather a forerunner and a rich source of ideas and testable hypotheses. Hirschman himself notes how recent industrial organization literature emphasizes a number of notions found in his early writings. One is even tempted to point out similarities between Hirschman and conservative economists associated with the old Chicago School: suspicion of planning, faith in the rationality (hidden or otherwise) of the peasant and other private agents, skepticism about foreign aid and bureaucratic “experts” administering it, a delight in shocking, counterintuitive results, and an optimism and bias for hope many critics of mainstream economics find so offensive. But there are important differences. Searching for inducement mechanisms, Hirschman explores beyond the market; hence government is not viewed as intrinsically stupid and inefficient. Early exposure to Hegel, Marx, and other Continental thinkers

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gave Hirschman not only a taste for standing things on their heads, but also an admirable willingness to trespass outside the market and to pretend that there are no boundaries among the social sciences. Furthermore, aware of the substance of what today would be called moral hazard, asymmetric information, and costly supervision of effort (as in the classic example of airplane maintenance as opposed to road maintenance), Hirschman displayed, in contrast with “old Chicago,” a greater skepticism regarding the efficiency of the invisible hand.

So Hirschman has been a rebel and a dissenter not so much against the major traditions of mainstream, academic economics, but against the simplifications, banalities, and limitations of practical orthodoxy *and* heterodoxy, and against the charlatanism of practitioners impatient with subtleties and the “pale cast of thought.” The Hirschman rebellion has been at its finest when fighting vulgar recipes imposed on the weak or the vanquished.

Let me now turn to criticisms of the Hirschman style. He notes in his paper an early objection: what is the operational content of his work; what exactly is his policy advice; did he really mean that imbalances should be deliberately engineered? Hirschman’s kingdom is no longer of *that* world; he replies, basically, that this is not his business. In a profession characterized by excess supply of aspirants to positions in councils of economic advisers and an unseemly eagerness to peddle nostrums in the mass media, I find his answer quite satisfactory and refreshing. The ex-practitioner has become a shining example of scholarly defiance, responsible only for generating mind-expanding ideas and maintaining academic pulchritude.

What about the “idiot disciple” syndrome? Are not the Hirschman paradoxes a joy when spun by the master, but dangerous in the hands of mediocre followers, hence to be labeled poison? Traditional academic immunity would also be enough to dismiss this charge, but perhaps this and the previous criticism deserve a more Hirschmanian exploration.

Hirschman’s results typically involve the conclusion that a little bit of something is a good thing, but too much of it is bad. Timing and intensity matter a good deal, but his analysis remains qualitative. Formalization and quantification, without which optima cannot be pinned down, are absent. This is a pity, not so much because the policymaker is left without a recipe for action, but because the scientific validity of his propositions are left not quite ready for testing. Furthermore, his style of analysis, like labor-intensive techniques in the tropics, may be said to have too many permissive sequences and too wide a tolerance for sloppy imitation, in contrast with the narrow tolerance and somewhat mechanical pacing generated by analytical styles relying more on capital-intensive quantification and formal model-building.

Could we devise curricula and inducement mechanisms so as to produce two, three, more Hirschmans? It is both a tribute to his style and a criticism

of it that it leaves behind no obvious foundation on which to build a school. But rather than lament that Mozart did not leave behind formulas on how to produce at least a few Mozarts in each generation, we should rejoice on having been graced by a one-of-a-kind visitation.

Flirting with ungrateful perversity, one last criticism may be considered. In his search for "hidden rationalities" in the tropics, has not Hirschman sometimes overshot, and justified policies which were really *al revés*? In his sympathetic attempt to understand, has he not forgiven too much, indulging in a new kind of paternalism? Old debates come to mind on the extent of import-substituting industrialization and on mechanisms for promoting it. Without reviewing those controversies, I would conclude that there is a little, but not much, to this criticism.

Let me close by remarking on some omissions in the Hirschman paper and by reflecting on development economics. The Rojas Pinilla interlude in Colombian history appears to have had little impact on Hirschman's thinking about the interaction of politics and economics in the breakdown of democratic government, a subject of compelling fascinations to Hirschman and other social scientists interested in Latin America during the 1970s. Perhaps the other omission was motivated by a modest reluctance to say "I told you so": the Alliance for Progress is mercifully ignored.

Hirschman notes in his paper that apparently deviant phenomena first observed and analyzed in the lush tropics have been, later on, also perceived in the cool regions of the world. Development economics, as created by pioneers like Hirschman, may be said to have been at its best as a School for Scandal, a frontier where the profession lowered its cognitive dissonance defenses and allowed itself to be surprised. Inevitably, many "discoveries" dissolved under closer scrutiny, while the robust ones were incorporated into mainstream economics. As long as the tropical periphery remains with us, there will be room for venturesome explorers willing to bear the phoenix-spangled banner of development economics. For having recruited us to serve under this multicolored flag, and for bearing it erect against petty and gross tyrants, we are grateful to rebellious Albert O. Hirschman.

Comment

Paul P. Streeten

The princes of Serendip, who did everything badly with fortunate results, are outnumbered by the disciples of the engineer Murphy, for whom anything that can go wrong will go wrong.

—CHARLES P. KINDLEBERGER,
“GOVERNMENT AND INTERNATIONAL TRADE,”
PRINCETON ESSAYS IN INTERNATIONAL FINANCE.

After reading Albert Hirschman’s paper I was dazzled by its brilliance and by the unity of so many different ideas. “Only connect” and connect with connections! The world made sense and everything fell into place.

But when the blinding glare of the dazzle fades, there are certain questions one would like to ask. First, there is a systematic asymmetry underlying Hirschman’s analysis which he himself expresses in the title of one of his books: *A Bias for Hope*. Things turn out better than we have a right to expect according to a more unbiased analysis. It is, of course, true that unbalanced growth creates incentives for decisions, highlights signals, and mobilizes motivations. If the task is to create pressures for action, unbalanced growth is the way to do it. But surely it also creates opposition, resistances, and counterpressures. Import-substituting industrialization, as we now know, has created very powerful vested interests that resist the change to more outward-looking policies. What is needed is a policy that creates an excess of positive stimuli over negative ones, and this is one argument for balanced growth. Unbalanced growth can be understood as a process or as an objective. It makes better sense as the former, if that excess exists.

In his diagram of antagonistic growth, Hirschman envisages the possibility that we lose something on one axis but gain more on the other, so that the direction is upward. He invited us to put objectives of policy on the two axes. Let these be full employment and price stability. Alas, the path has been downward to the southwest; we now have considerably higher rates of inflation and more unemployment, partly as a result of the

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expectations and pressures that have built up through stop-go policies, a form of unbalanced growth. Since many countries have succeeded in combining high rates of inflation, high levels of unemployment, and large balance of payments deficits, one would expect, in a symmetrical universe, the reversal of all government policies, like turning a stocking inside out, to produce a combination of all blessings. But the universe does not seem to be symmetrical.

Take another example. According to the Principle of the Hiding Hand people tend to underestimate the difficulties of the task they set themselves, but unexpected fortunate events that serve as challenges to human creativity can turn disasters or failures into successes. But can there not be also unexpected unfavorable events? The Principle of the Hiding Hand says that the underestimate of the difficulties is offset by the underestimate of our creative responses to these difficulties. But creative responses presuppose that there are opportunities on which to exercise the creativity. (Adam Smith thought that “the over-weening conceit which the greater part of men have of their own abilities, is an ancient evil remarked by the philosophers and moralists of all ages.”¹ The San Lorenzo irrigation project in Peru suffered delays, but these were compensated by its learning effects. Because the Aswan High Dam in Egypt prevented the rich sediment of the Nile from being deposited, however, manufactured fertilizer had to replace it, and much of the electricity that was intended to improve the lives of Egyptian peasants was needed to make up for the damage. Could we not design the Principle of the Hiding Fist, which is related to Murphy’s law, according to which “if anything can go wrong, it will.” When insurance companies thought that paying patients to get a second opinion would reduce unnecessary surgery, the result was more surgery. People who had resisted the knife on one doctor’s word were persuaded by two. Reduced latitude may increase incentives to good performance, as in the maintenance of Colombian airplanes, but increased latitude may reduce it. When cars were made more crash resistant, accidents rose because drivers took more chances. When, some years ago, Congress wanted to ensure that the big oil companies did not monopolize crude oil supplies, it set aside crude, at low prices, for small refineries. That produced a boom in tiny, inefficient refineries and a shortage of refinery capacity for unleaded gasoline required by the new cars. In *Shifting Involvements*,² Hirschman argues that people require a taste for public activity for its own sake, but he ignores the fact that we may also come to dislike it for its own sake when the intrinsic pleasures disappoint us. And so on.

Hirschman’s bias would be justified if it were simply to counterbalance

1. *The Wealth of Nations*, Edwin Cannan, ed. (London: Methuen, 1950), vol. 1, p. 109.

2. *Shifting Involvements: Private Interest and Public Action* (Princeton, N.J.: Princeton University Press, 1982).

biases that normally go the other way. But as a full analysis of what happens, it does seem to me somewhat unbalanced, which of course would recommend it in Hirschman's scheme. Another defense would be that he points only to possibilities, not to necessities or even probabilities. But how illuminating is this? If my aunt had wheels, she would be an omnibus. Is this a useful maxim for a minister of transportation?

Hirschman says that there has been a proliferation of linkages. Indeed, there have been production, consumption, and employment linkages; horizontal and vertical linkages; forward, backward, and lateral linkages; fiscal, foreign trade, and investment/savings linkages; and informational, technical, financial, procurement, locational, managerial, pricing, and other linkages.

But the linkage concept does presuppose a ceilingless economy. Not resources but decisionmaking is the bottleneck. The dispute over whether it is resources or decisions that impede progress underlies much of the controversy about development—indeed, about economic policy. Imagine two missions going to a country to make recommendations about taxation. The first mission believes resources are scarce and decisions will automatically follow the availability of resources. They recommend higher taxation in order to set free the resources for the priority objectives. The other mission believes decisions are the scarce factor and resources will flow as soon as entrepreneurial talent is activated. They recommend reduced taxation, because this would convey the signals and the incentives to the decisionmakers. Which is the right policy depends, of course, partly on the economy in question, but a basic dilemma between resources and incentives, between means and motives, between the will and the way remains. And a Bias for Despair could argue that whenever the will is there, there is no way, and whenever the way is there, there is no will, as in the case of the leaky roof that never gets repaired.

As a more constructive suggestion, I should like to invite Albert Hirschman to apply his notion of unbalanced growth to the interaction between ideas and interests in the history of thought and action. Keynes thought that it was the power of ideas that is, for good and ill, more important than vested interests. Marx thought that it was class interests that determine the superstructure of ideas. It would be consistent with Hirschman's approach to say that there is a continuing interplay between interests and ideas. It might be worth pursuing this interaction in specific areas, such as the controversy over industry versus agriculture, the population problem, or the issue of migration and brain drain. Together with the Bias for Hope this approach would be a counterweight both to those who emphasize ignorance and stupidity as the principal obstacles to progress (like Count Oxenstierna) and to those who stress wickedness, selfishness, or cupidity as the barriers. We might see that progress has been made and that the new problems in the sphere of ideas and of interests are often the result of the successful solution of the first generation of problems.

There is something irresistibly attractive in counterintuitive results. Social scientists thrive on them. But we should not despise truisms simply because they are true. Certainly, the flush of discovery of a new truth often has the appearance of the paradoxical. But in listening to Albert Hirschman, we are sometimes tempted to reflect: "It is paradoxical but nevertheless false."