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Institutionalism and Economic Development

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The Dynamism of the Economic Process

FOR MANY YEARS it has seemed to me that the most significant distinguishing mark of the institutionalist way of thinking is its emphasis upon the dynamism of technology. This point has not escaped its critics. As far back as 1935 Frank H. Knight, a discerning though hostile critic, remarked that Veblen and his followers seem to think that technology embodies some "inscrutable" force that impels it forward, and with it the whole economy.¹ Except for the implications of the word "inscrutable," this is indeed the case. As I shall try again to show in the pages that follow, there is nothing inscrutable about it, and its importance for an understanding of the process of economic development can scarcely be overemphasized.

This idea came to Veblen from the then infant science of anthropology. During his fallow years when, following completion of a Ph.D. in philosophy, he was unable to obtain an academic appointment, he retired to the family farm and for seven years read voraciously and widely. At that time a unilinear theory of social evolution permeated the studies of the great pioneers in this field, just as the science of psychology, then in its adolescence, was likewise committed to the concept of instinct. Consequently Veblen described "workmanship," and the closely related "parental bent" and "idle curiosity," as instincts, and represented them as having been dominant in an idyllic state of primitive "savagery" (reminiscent of Rousseau as well as Lewis Morgan) but later "contaminated" by instincts of pugnacity and exploit in a period of "barbarism," the effects of which had persisted down to the present.

Most scholars have found it impossible to dissociate Veblen's conception of technology as a dynamic factor in economic development from the now obsolete rubrics in terms of which he couched it, and so have dismissed the

¹ "Intellectual Confusion on Morals and Economics," *International Journal of Ethics*, Vol. XLV, No. 2, p. 208.

whole idea as no less preposterous than the primitive utopia of savagery. But in so doing they have thrown out a thriving infant with his dirty bath water. As regards whole cultures it is now well established that there is no single series of "stages" through which all have passed in regular succession. In particular is this true of kinship systems and other social structures, as well as of taboos, ceremonial rites, and tribal legends and beliefs, none of which seem to have evolved through any sort of regular succession. Nevertheless, the arts and crafts of all peoples do seem always to have developed in the same direction, from simpler and cruder tools and operations to finer, more complex, and more effective ones. This is true of human experience as a whole, and of the experience of any given culture area. Not all peoples have developed the same devices. Thus it is well known that the pre-Columbian cultures of the Western Hemisphere reached very high levels of science and technology without producing any wheeled vehicles. But what is meant by "higher" and "lower" levels of technology is perfectly clear to all scholars, and archeological excavations in all parts of the world demonstrate that simpler and cruder tools, weapons, dwellings, and the rest are invariably earlier in time, the finer and more complicated operations invariably later.

Why is this? Owing no doubt to his commitment to instinct psychology, Veblen contributed very little to answering this question. But others have been much more helpful. In particular, the instrumental logic of John Dewey is of vital significance. In recent years Dewey has been the object of much contumelious criticism, most of it undeserved and none of it directed at his major contributions. Certainly his instrumental logic remains far above the field of battle, unclouded by the dust of educational controversy.

The basic principle of this analysis of the thinking process is that "thinking" and "doing" are indissociable. Thinking is not something that goes on "in the head," independently of all the other things that people do. It is always involved with doing. To use another word which has found wide favor, it is always "operational." Since the sciences are by definition the clearest and most successful manifestation of operational thinking, Dewey used the word "instrumental" to underscore the function of instruments in the process of scientific investigation.

Being inveterate romanticists, we like to think of scientific discoveries and the formulation of scientific "laws" as manifestations of pure, intuitive, intellectual "genius," to which all the apparatus of the laboratory plays only an incidental part—provides the setting, as it were. But in fact it is all done with instruments. Even the "purest" of the sciences, mathematics, is just as operational as any other. What mathematicians do is done with symbols, formulas, equations, and the like and could be done in no other way. The mathematicians manipulate their formulas just as physicists manipulate their

bevatrons. To recognize this is not to depreciate the genius of master manipulators. Their manipulations constitute the highest pinnacle of human ingenuity. But they are not generically different from what anybody else ever does. On the contrary, they are just what everybody does carried to the highest level of refinement. That is why they are significant.

The instrumental principle has two corollaries of the greatest importance for an understanding of the developmental process. One follows immediately from the objective existence of the instruments and formulas of science and the tools, materials, and processes of all technology. Because these things exist and so survive their original creators, they are capable of transmission and diffusion. They are also, necessarily, capable of co-existence. Students of the history of science are continually pointing out to us the fashion in which discoveries have been made by the ingenious combination of previously existing, but previously uncombined, instruments and formulas; and students of the history of technology find exactly the same process underlying all inventions. Thus at the present moment a brilliant young physicist, who has discovered that electronic (radio or radar) waves are bounced back by ionized gases produced by the launching of a missile (just as they are by the ionosphere) and so give detectable warning of a very distant missile launching, is being quoted as saying that the idea occurred to him two years ago when he read a couple of publicized papers, one on the "back-scatter" phenomenon and the other on ionized gases, and realized the connection between the two. "It's so simple," he is quoted as remarking; "I don't know why someone didn't think of this before."² Obviously no one, however brilliant, ever would have done so if these two papers and the related instruments had not existed.

The other corollary is the virtual inevitability of combinations occurring once their components have been brought into existence and have been so widely distributed as to be generally juxtaposed. "Inevitable" is a tricky word. Obviously nothing is inevitable in any absolute sense, and it is equally obvious that tools, materials, instruments, and formulas (all of which can be lumped together as technical culture traits) do not combine themselves. They are of course combined by human beings, and they are of course more likely to be combined by perspicacious human beings than by stupid ones. But it is also of major significance that they are more likely to be combined to the extent that they are so distributed as to lie side by side. That is why inventions and discoveries so frequently occur simultaneously in widely separated but still substantially identical situations, and that is why scientific and technological progress is more rapid in direct proportion to the profu-

² *Time*, Vol. LXXIV, No. 7 (August 17, 1959), p. 45.

sion of technical culture traits and slower in proportion to their scarcity. Man was just as perspicacious fifty or a hundred thousand years ago as now, but he did not have quite as much to work with.

During the present century the word "progress" has been the object of general suspicion, and rightly so; for it has been outrageously misused by sentimentalists of all sorts. Who can say whether a patrilinear kinship system is better than a matrilinear one? For that matter, who can say whether the denizens of simple, so-called "primitive," cultures may not have been happier than we? Who can say whether domestic animals may not be happier than men, or wild animals happier than domestic animals? Clearly such a word as "progress" must be used with caution. Mathematicians use it so, carefully defining a progression as a series each member of which is derived from the preceding member by the same operation.

If the foregoing analysis is sound such also is the nature of a technological series. Each invention and discovery is made by exactly the same operation as brought the foregoing technical culture traits into existence. Every invention and discovery results from the combination of previously invented or discovered tools, materials, instruments, or formulas, each of which has previously been invented or discovered by the same process; and each does something that its previously existing components did not do, thereby setting up a situation in which still further inventions and discoveries are possible. In the most exact sense of the word, this is progress.

Whether the human race is "better off" by reason of scientific and technological progress is another question. What has been at issue here is only the dynamism of technology—the "inscrutable" force, as Professor Knight once called it—which institutionalists impute to the technological process. That force exists. It is a perfectly natural force, and its operation is quite simple. The key to an understanding of it is the objective existence of the tools and instruments with which man works, and the consequent amenability of all such things to combination through the medium of human ingenuity.

The Conditions of Economic Progress

Presumably the dynamism of technology is the same in all societies. But obviously technological progress has not actually been realized in all societies to the same degree or at the same rate. Hence it is a reasonable inference that some other factor has been at work, the effect of which has been to inhibit technological progress. If so, what is it?

At this point, too, Veblen gave institutionalist thinking a significant lead—one so significant, indeed, that it gave rise to the tag by which this way of thinking is generally identified. From early in his career Veblen seems to

have harbored the idea that man is somehow caught between opposing forces, one somehow "good" and the other somehow "bad." This of course is a very ancient idea, one that has appeared and reappeared in a wide variety of metaphors, such as white horses pulling one way and black horses the other, throughout the ages. Unfortunately, in this case Veblen's insight also was confused by his commitment to instinct psychology and "stage" ethnology.

Veblen's insight was still further confused by his adoption of the scientist's pose of lofty superiority to moral judgments. Even when his language was unmistakably derogatory, he insisted that no condemnation was implied, that his only concern was with the facts, and that if his language was uncomplimentary that was only because no other could truthfully be used. Was this irony or confusion? Perhaps Veblen himself never fully made up his mind. Perhaps he sincerely believed that he was not passing moral judgment, but was nevertheless so sure of the contrasting qualities of such matters as "workmanship" and "leisure class canons of taste" that he gave his extremely vigorous vocabulary full rein.

Nevertheless Veblen was right on one point, the full significance of which is only now beginning to be appreciated by those who are interested in the economic development of the so-called "backward" peoples. The superstitions, taboos, and tradition-encrusted status systems of all peoples work at cross-purposes with the technological process. They do so for two reasons. First, all the various features of this culture complex derive their sanction from the past, and are therefore highly resistant to change; and, second, their effect is to limit and circumscribe technological activities at every turn. This is true for obvious reasons. Decorum is always at odds with efficiency, just as superstition is always at odds with fact. Any status system which prescribes who shall carry on certain activities is almost certain to result in those activities not being performed by those who are most expert. This is true of "family businesses" in our own society, but very much more significant where the physical existence of the community may depend on the knowledge and skill of the functionary in question.

The present generation of anthropologists, in their eagerness to understand various primitive peoples, have disregarded this principle and so have almost unwittingly taken a position that is essentially static. They deserve full credit for having seen that, in the way of life of each people, beliefs, ceremonies, and taboos that seem quite irrational to the Western mind nevertheless serve to bind such a community together, provide them at times with a sense of dedication and at other times with no less necessary emotional relief, and generally make it possible for them to live as they do. What sympathetic students of primitive culture have underemphasized is that all

these aspects of such a culture likewise make it impossible that the people in question should live better.

Thus the over-all economic development of any people is conditioned by the interaction of the dynamism of technology and the inhibitory force of institutionalized tradition. This is no less true of the Western peoples than of any other. It is their great good fortune to have received the technological heritage of thousands of years of Mediterranean civilization, but to have been themselves recently civilized barbarians whose tribal traditions had been diluted by the superposition of what to them were alien traditions and institutions. Following this transposition they managed to detach themselves from Mediterranean control, and so were uniquely accessible to technological acculturation by a unique series of Old World culture contacts, which occurred during the ensuing centuries. The consequence of this unique situation was a technological revolution of a magnitude comparable with only two other cultural mutations, as one anthropologist has called them,³ which occurred at the dawn of the human way of life and in neolithic times with the development of agriculture and city-centered civilization.

Like all others, Western society has its traditions and its "official keepers of the code," who seek to give authenticity to their precious traditions by rooting them in the remote past. Hence the myth of legitimate descent from classical antiquity: the belief that all that is good in modern civilization is a heritage of "Hebraism and Hellenism," and that science and technology are crude and external. Like all myths, ours has a certain basis in historical fact but is nevertheless substantially false. Industrial society is in actuality the product of a vast scientific-technological revolution which was brought about no less by the permissive elasticity of our traditions than by the propulsive force of a unique series of inventions and discoveries.

The susceptibility of Western institutions to adaptation to changing circumstances is well illustrated by the institution of property, which, since it defines the procedures by which industry and commerce are administered, is therefore of strategic importance for a commercial-industrial society. Like all institutions (and the societies of which they are manifestations), property is a mixture of institutionalized traditions and operational procedures. The former of course derive from the past; and since our immediate past is medieval feudalism, we would naturally expect to find traces of feudal rights-of-status persisting even in the twentieth century. Quite obviously inheritance is such a trace. The recognition of rights-of-status as such of course goes much further back, indeed to primitive society, as is clearly evidenced by the medieval belief that such rights derive from God. But the

³ Ralph Linton, in *The Tree of Culture* (New York, Alfred A. Knoff, Inc., 1955), p. 662.

linkage of property with the medieval kinship system—its transmission, like that of social rank, by legitimate descent—is of course feudal in derivation.

Nevertheless, the modern institution of property differs from feudal fief in respects which have proved critically important for the consummation of the technological revolution. Instead of being indissolubly linked to kinship, property has become a device through which status-rights analogous to those of feudalism have become transferable. As rights, they are still "sacred." Hence a man's (commercially acquired) home, or business establishment, has become his "castle," into which even the king may not intrude except through due process of law. It is in this sense, of course, that property has been and to some extent still is a bulwark of freedom.

Moreover, having once manifested a susceptibility to modification, the institution of property continues to evolve. In response to the growth of commercial-industrial enterprises in both magnitude and complexity, property has become a fractional share of an undifferentiated mass of assets. The germ of feudal indefeasibility still persists. But it takes such a wide variety of forms which in turn define the procedures of administration in so many different ways that competent scholars now declare that as an institution property itself has now been superseded by the corporation.⁴ Nevertheless, corporate securities are still inheritable. Thus the roots of ancient rights-of-status still underlie the vast operational mechanism of modern business organization.

In short, economic progress is still conditioned, as it has always been, not only by the dynamism of technology but also by the degree of flexibility or of obduracy of institutionalized tradition. One of the most obdurate of traditions is that of nationalism. Like all others, political systems are mixtures of irrational traditions and operational procedures, and like property these systems have undergone vast changes. Local counts have given way to regional kings, and regional kings have given way to continental nations. Are nations now in process of giving way to world organization in which operational procedures will at last supplant what Veblen called "the sense of partisan solidarity"?⁵ Obviously that is something that still remains to be seen. When the spokesman of Asian or African peoples tell us that they propose to enjoy the benefits of an industrial economy but do not propose to relinquish their ancient traditions, we try to tell them as gently as we can that what they propose is impossible. But it is no less impossible that industrial economies should persist through a regime of nuclear warfare. Clearly the sentiment which inspired the celebrated protestation, "My Country: may she

⁴ Notably, of course, Berle and Means in *The Modern Corporation and Private Property* (New York, The Macmillan Company, 1932).

⁵ *The Nature of Peace* (New York, The Macmillan Company, 1917), p. 31.

always be right; but right or wrong, my Country!" is incompatible with continued economic and social development, just as much so as those of Indian villagers or African tribesmen.

Institutionalism versus Price Theory

This, I submit, is economic theory: a theory of what the economy is and how it works. Edwin Cannan, the great Scots economist of the last generation, once defined economics as the study of "Why all of us taken together are as well off or ill off . . . as we are, and why some of us are much better off and others much worse off than the average."⁶ The main outlines of institutionalist theory correspond exactly to these questions. What determines how well off any whole community is, is the degree of technological advancement which that community has been able to attain; and what determines that some members of the community shall be better off than others, and who those some shall be, is the institutional structure of that society.

These answers are directly contrary to those of classical price theory. What we commonly call price theory is the intellectual superstructure of a theory of the economy as centered in, guided, and regulated by the market through the agency of price. A great many factors and circumstances—too many for rehearsal here—combined during early modern times to focus attention on the market and so contributed to the extraordinary plausibility of the market theory. But the upshot of it all is that exchange of goods in the market—buying and selling, motivated on the part of each individual participant by the desire for gain—is what makes any community as well off as it is. This was clearly and explicitly announced by Adam Smith. He began his great treatise on *The Nature and Causes of the Wealth of Nations* by calling attention in his opening sentences to what was a matter of common observation even in the 1770's: the increasing "opulence" of the Western peoples. That was what required explanation. Moreover, having stated the problem, he did not keep his readers long in suspense. The root cause of this amazing development, so he proceeded at once to say, is buying and selling.

To his everlasting credit, Adam Smith did take cognizance of technological process. But he did so only to attribute "the division of labor" to "the propensity to truck, barter, and exchange."⁷ Then there follows a passage so naïve that few later writers have cared to recall it, although in fact it tells the whole amazing story. Even among primitive peoples, he said, there must surely have been some individuals who were more skilled at making bows and arrows than at shooting game; and it must surely have been evident to

⁶ *Wealth* (London, P. S. King, 1914), p. v.

⁷ *Wealth of Nations* (Mod. Lib. ed., New York, Modern Library, Inc., 1937), p. 13.

them that they would be better off devoting themselves exclusively to the arts of manufacture and trading the products of their skill to hunters for an appropriate share of their bag.⁸ Thus the market—trade, and the prospect of gain through trade—was showed to be the efficient cause of all economic development.

The prime object of the price theory that followed, in the pages of Adam Smith and those of his successors during the ensuing century and three quarters, has been to reach the same conclusion. Notwithstanding the prodigious elaboration to which this body of theory has proved susceptible, economists have sometimes remarked that its basic principles are few, simple, and obvious.⁹ When, for whatever reason, the price of a given commodity goes up, relatively to others, the production of that commodity is more profitable than formerly. This attracts to that business alert businessmen who increase the volume of that commodity offered for sale. Eventually this brings on a glut and prices fall. As prices fall, those businessmen whose costs are higher than others (for whatever reason) will eventually go bankrupt, so that the volume of that commodity offered for sale will dwindle to the point at which buyers commence offering higher prices to obtain this scarce commodity, and so the cycle begins again. Thus, as Adam Smith said in good Newtonian language, actual prices “gravitate about” a midway point which is the “natural” or “normal” price. This is the equilibrium of supply-and-demand forces of which all price theory is an elaboration.

It is of course true and obvious that in any such situation any businessman who gets hold of a new and more efficient (or less expensive) method or material for producing the commodity in question will be in a position to capture the market. No one, not even Veblen, has ever questioned this. The question is, Where and how does he get hold of it? The (generally unspoken) presumption is that it is the opportunity for gain that leads to the devising of such new methods and materials and even altogether new industries. But the actual processes of scientific investigation and even technological invention are well known to be quite different. To an amazing extent discoveries and inventions are hit upon by “serendipity,” a word that has come into increasingly common use in recent years. Even Adam Smith

⁸ *Ibid.*, p. 14.

⁹ Thus, for example, Kenneth E. Boulding, an eminent exponent of “economic analysis” and (previously, at all events) a vigorous critic of institutionalism, remarked in the course of “A New Look at Institutionalism,” *American Economic Review*, Vol. XLVII, No. 2 (May, 1957), p. 9: “Even today the great bulk of what is taught under the name of economic theory is statics or comparative statics. I am prepared to defend this—and have defended it—on the ground that it does lead to some useful elementary propositions at the level of household wisdom: if we touch a hot stove we will burn our fingers, if we fix prices ‘too high’ we shall have surpluses, if we cannot absorb the capacity output we shall have unemployment, and so on.”

cited the story of the child laborers who, hired to open and close the steam valves of a primitive steam engine, hit upon the scheme of tying a string to a moving part so that the valve would be opened and closed automatically. Smith evidently felt that what a child could do was of slight concern, and so completely ignored the massive significance of the machine.¹⁰ The market system does indeed make it possible for alert (or lucky) businessmen to “obtain the usufruct” of scientific and technological advances, as Veblen used to say. The market theory necessarily assumes the existence of a body of scientific knowledge and technological equipment in which alone such discoveries and inventions can occur—discoveries and inventions which the market theory proceeds to attribute to the lure of gain on no better evidence than the fact that somebody has actually made money out of them.

Most of the criticism to which price theory has been subjected has been internal: that is, criticism of theoretical minutiae by professional economists; and most of this criticism has taken the form of pointing out tautologies. Thus the term “utility,” defined as “the want-satisfying quality” of any and all commodities, is so employed as to convey the suggestion that the adjustments of the market bring about the greatest happiness of the greatest number—that is, the maximization of utilities. But in order to show how this comes about, it is necessary to know what is for sale at what prices, and how much people buy with such incomes as they have. It is then possible to argue that people would not have bought what they did if they had not got the greatest possible satisfaction from such a demand schedule. But this is only juggling with words: substituting a presumed “satisfaction” (or quantum of happiness) for the known fact of purchase.

Much the same is true of “productivity.” What this concept implies is that under the rule of the market everybody is paid exactly what he is worth. But in order to establish this interesting proposition it is necessary to know what people are in fact being paid, as well as what is being asked for the other “factors of production,” and what the final product brings. Then, since an employer could not very well be expected to pay higher wages than others would be willing to work for, or employ more people than he can sell the product of, it seems to follow that the wages he is paying exactly equal the “value added” by his employees. But since in order to know what is this “value added” one must first know the entire configuration of the market, it seems clear that equating this situation with “exactly what everybody (and everything) is worth” is only a way of saying whatever is, is right.

¹⁰ Edwin Cannan remarks in a footnote to this passage (Mod. Lib. Ed., p. 10): “This pretty story is largely, at any rate, mythical,” and proceeds to trace its origin to a misreading (“not necessarily by Smith”) of an early account of the invention in question. But this makes no difference to the spirit of Smith’s citation.

Such tautologies have often been recognized by orthodox economists who have therefore sought to preserve the integrity of the market theory by using synonyms for the offending terms, or by explicitly denying that the terms in question mean the only thing they could possibly mean. But the case of capital is more difficult. The difficulty here is one of ambiguity. From the time this word began to be employed in an economic sense (about the middle of the sixteenth century) it has been used to refer indifferently to two quite different things: the physical paraphernalia of industrial production, and sums of money accumulated with a view to investment. What seems to justify this mutual identification is of course the fact that such sums of money can be, and are, used to buy industrial property, and the fact that the income which they "earn" derives from the operation of that industry. Thus from the point of view of the owner's receipt of income whether "capital" be thought of machine-wise or money-wise seems to make no difference.

But from the point of view of general economic growth it makes a great deal of difference, as Edwin Cannan pointed out in a very remarkable article written just a few years before his death.¹¹ As he showed, this confusion of meanings confuses the individual and the general aspects of capital. What is true of an individual—that he can accumulate money and buy into an industry—is not true of the nature and causes of the wealth of nations. That, he said, is due to "the heritage of improvement." This, he argues, as Veblen had done many years earlier,¹² and not individual accumulation and investment of money, is the true source of the general "increase of opulence."

This criticism has been generally ignored, and for obvious reasons, since the concept of capital is the heart, or solar plexus, of the whole market theory of the economy. As such it is no less significant than the presumption that buying and selling is what gives impetus to the increase of opulence. For economic growth takes more than ideas. It takes capital, and capital is brought into existence only by saving.

Such, at all events, is the classical tradition. Moreover, the exponents of that tradition are not so naïve as to suppose that money savings are transmuted into industrial equipment by magic. Their argument is more subtle. In order for industrial apparatus to be set up and put into production it is necessary that the entire physical output of the economy shall not be used up in day-to-day living. The presumption is that if something less than the entire money income of the community is spent (i.e., if part of it is saved)

¹¹ "Capital and the Heritage of Improvement," *Economica*, N.S., No. 4 (November, 1934), p. 381.

¹² Notably in two articles entitled "On the Nature of Capital," originally published in the *Quarterly Journal of Economics* (August and November, 1908) and reprinted in *The Place of Science in Modern Civilization and Other Essays* (New York, The Viking Press, Inc., 1919).

that necessarily means that something less than the entire physical output of the community will be so used up. This, then, becomes available as physical capital to be employed in new production.

It is this presumption that has prompted many present-day economists to identify their discipline as the study of "economizing," a habit of thought that is also implicit in the standard definition of economics as the study of "the allocation of scarce resources among alternative uses." The presumption is that at any given moment the community has only so much to do with, and it can eventually do more only if part of that so-much is held back from current consumption and allocated to the building of new industry. This is presumably effected by individual (and corporate) income-saving, prompted by the expectation of gain from the new industry.

But there are difficulties. The materials which are required for the construction of new industrial plant are not quite the same as those for which reckless spenders (if undeterred by the lure of future gains) would spend their money. Moreover, there is no historical evidence of any community's ever having economized its way to affluence. Indeed, just the reverse seems always to have been the case. However it has come about, the growth of industry has always meant an increase in what we now call the Gross National Product, with the volume of consumers' goods and the volume of producers' goods increasing simultaneously.

The truth is that, although the market theory purports to be a theory of economic development, its analysis of market forces has always assumed a "stationary state." In assuming that resources are "scarce," its exponents do not mean to deny that the relative scarcity-or-profusion of the "gifts of nature" may be affected by scientific discovery and technological progress generally. The point is that in order to understand the posture of the market at any given moment it is necessary to take the supply of resources at that moment as "given." The same is also true of allocation among alternative uses. No economist is unaware of the fashion in which the institutional structure of society defines such alternatives and effects such allocation. The point is that here also in order to understand the posture of the market all this must be taken as "given." Given the prevailing structure of society, and given the current state of the industrial arts, price theory shows how the allocation is effected by the market.

This fundamental characteristic of traditional price theory is what Veblen had in mind in characterizing that entire body of theory as "pre-Darwinian." No stricture of his has been more bitterly resented, and for obvious reasons. Understanding and acceptance of the evolutionary process has come to be one of the prime stigmata of an educated man. Hence to accuse any scholar of entertaining "pre-Darwinian" notions is tantamount to accusing him of

believing that the earth is flat. Nevertheless, Veblen had a point. The theory of price equilibrium is essentially static. All attempts to render it "dynamic" result in the introduction of so many "variables" into the neat equations of supply and demand as to render the whole situation unmanageable. Thus it seems clear that in so far as institutionalism takes its cue from Veblen—which is to say in so far as it is a theory of the nature of the economy and of the forces that shape it—this theory is incompatible with the traditional theory of a market-organized economy.

Institutionalism as a Unified Field Theory

But to most avowed institutionalists, and to virtually all other economists, institutionalism is not a body of theory.¹³ Indeed, the influence of Veblen even upon those who have felt it most strongly has not prompted a general effort toward the elaboration of a counter-theory of the economy. Rather its effect has been to produce or accentuate a certain degree of disenchantment with various aspects of the prevailing economic scene and a certain degree of impatience not merely with traditional price theory but even with theory as such.

Thus the institutionalists as a group have been prevailingly empiricists rather than theorists. Some—most notably, perhaps, John R. Commons and his students and co-workers—have been out-and-out reformers and as such the authors of a unique array of reform legislation. Others—most notably, perhaps, Wesley Mitchell and his associates in the National Bureau—have been primarily investigators of the actual operation of the economy in various particular respects. Thus even Walton Hamilton, who gave institutionalism its name,¹⁴ is best known for his early work on bituminous coal and his later work on patents. Even his price studies were concerned not so much with the theoretical significance of the classical description of the market as with showing that what actually happens in various industries is quite different from the traditional picture.

It was in this spirit—the spirit of responding to the challenge of economic actuality—that Morris Copeland, who was introduced to the study of the economy by Walton Hamilton, has identified institutionalism as concern with the devising of "institutional supplements" to the prevailing structure of society.¹⁵ This, too, was the spirit of John R. Commons' theo-

¹³ Such, for example, is the view of Edwin Witte, as expressed in his article, "Institutional Economics as Seen by an Institutional Economist," *Southern Economic Journal*, Vol. XXI, No. 2 (October, 1954). See especially pp. 132, 133.

¹⁴ See Joseph Dorfman, *The Economic Mind in American Civilization*, 5 vols. (New York, The Viking Press, Inc., 1946–1959), Vol. IV, p. 353.

¹⁵ "Institutionalism and Welfare Economics" (presidential address to the American

retical efforts. Taking price theory, as well as the capitalist economy, as "a going concern," he tried to show how the classical theory could and should be supplemented by recognition of the need for institutional reform.¹⁶

But these attitudes are by no means confined to avowed institutionalists. Such a state of mind existed before the time of Veblen and is now shared by nearly all economists. Thus it is well known that most, if not all, of the bold spirits who in 1885 organized the American Economic Association were moved by a spirit of impatience, impatience with the abstractions of pure theory, prompted in part at least by a feeling of its impotence in the face of the vast problems of capitalistic gigantism: the railroads and the trusts, oil and steel and meat-packing, the perennial plight of the farmers, and the seeming impotence of labor.¹⁷

Moreover, the same situation prevails at the present time. As price theory has become more and more recondite, the feeling is becoming more and more general among economists that they are being somehow victimized by the intellectual traditions of their own profession. It was not especially remarkable, perhaps, that Edwin Witte should have stated in the course of his presidential address to the American Economic Association that he now finds himself unable to read most of the articles that appear currently in the journals of his own profession.¹⁸ After all, he is a Commons man, outstanding for his distinguished services in the area of industrial disputes and for his major authorship of the Federal Social Security Act. What was remarkable was the thunderous and apparently unanimous applause which greeted that avowal. It would seem that the profession as a whole is not convinced of the usefulness of efforts to reduce the economy to a series of equations.

What the profession is convinced of is the necessity for specialized study of an increasingly large number of particular areas. As the economy has

Economic Association), *American Economic Review*, Vol. XLVIII, No. 1. See especially pp. 9 ff.

¹⁶ This is especially true of *Institutional Economics: Its Place in Political Economy* (New York, The Macmillan Company, 1934). His posthumously published *The Economics of Collective Action* (New York, The Macmillan Company, 1950) is much less concerned with effecting an adjustment with orthodox price theory.

¹⁷ See the excellent account of these events by Dorfman, *op. cit.*, Vol. III, pp. 205 ff.

¹⁸ *American Economic Review*, Vol. XLVII, No. 1 (March, 1957), p. 12. It is worth noting that in 1933 Edwin Cannan, as president of the Royal Economic Society, had opened his address, "The Need for a Simpler Economics," with this sentence: "It is rash for one of my generation to pass any judgment on the elaborate economic theory which is now being taught to the young, for we do not understand it." *Economic Journal*, Vol. XLIII, No. 171 (September, 1933), p. 367. Two years later, following Cannan's death, T. E. Gregory in effect identified him as an institutionalist in a memorial article entitled, "Edwin Cannan: A Personal Impression," *Economica*, NS, Vol. II, No. 8 (November, 1935). The compatibility of Cannan's later views with those of American institutionalism is all the more remarkable in view of the fact that, so far as I have been able to ascertain, he had virtually no contact with the American movement.

grown in magnitude and complexity the necessity for detailed knowledge of its many widely differing industries and operations has become increasingly pressing, and this necessity has been multiplied by the corresponding elaboration of governmental agencies. The great depression of the 1930's and the war effort and postwar problems of the '40's and '50's brought unprecedented numbers of economists into government service, in Washington and elsewhere. The skill and dedication of these men and women, and the value of their services, are beyond question. But it is likewise well known that prevailing these specialists and government servants have left their ideological commitments behind them. As empiricists they have been indistinguishable from avowed institutionalists. This is what Allan Gruchy meant by remarking that "The institutionalists have established riparian rights along the Potomac."¹⁹ In Washington everybody is an institutionalist.

But nature abhors a vacuum. Whether the various participants are aware of it or not, some sort of intellectual concord must permeate so general an effort. Furthermore, such intellectual common ground must extend further than the classical conception of a market-organized economy. For economists are not the only social scientists, nor are they the only public servants. The more empirical economists become, and the more their work impinges upon public policy, the closer is the contact with other social sciences into which they are inevitably drawn. Thus the logical necessity for intellectual concord which these circumstances postulate extends to the whole roster of social scientists. Of necessity they must share common conceptions of the nature of society and of the significance of the institutional supplementation in which they are all engaged.

Such a unified field theory exists, in embryo at least. Although it is not generally identified as institutionalism and may never be, its germ has been present in the theory that was implicit in Veblen's work and has likewise been implicit in the dedicated empiricism of later institutionalists and even of the profession generally. That germ is the later nineteenth-century concept of culture which Veblen absorbed during his formative years and which has since become the foundation-concept of all twentieth-century social thinking.

All social scientists now agree that all characteristically human activities are learned activities. They are, of course, the activities of an animal species whose anatomical structure and physiological processes closely resemble those of other species; and even in so far as human activities differ from those of any animal, that difference has a basis in the evolutionary development of the human brain, erect posture, free-swinging and richly enervated

¹⁹ "Institutional Economics: Discussion," *American Economic Review*, Vol. XLVII, No. 2 (May, 1957), p. 15.

hands, and all the rest. Nevertheless, the activities themselves—as distinguished from the component physiological processes which they employ—are not transmitted in the genes, but are learned by each member of the species from the older members of the community into which he is born. The sum total of all that is so learned—that is, the sum of all the activity patterns of the community—is called culture.

This is the area, so to speak, in which all the institutions of organized society have their being. All social scientists now agree that no institution, present or past, is “natural” in the sense of being prescribed by the species-organism. That the human species is bisexual is an organic fact. But no particular mating pattern or family pattern is any more “natural” than any other. All such patterns are cultural, as all social scientists now agree.

This likewise is the area in which all knowledge and all skills, as distinguished from the chains of reflexes which characterize animal behavior, are developed and transmitted. All such patterns are now commonly identified as technical culture traits to distinguish them from kinship systems, organizational status structures, myths, rites, and ceremonies. All are culture traits, meaning learned activity patterns of particular communities.

Thus the basic preoccupation of all social scientists is with the interplay of the culture traits of the communities in which they are interested. This interplay, all social scientists now agree, proceeds by a logic of its own. That is, when a particular culture trait is transmitted from one people to another it is likely to be changed by its conjunction with other features of its new community. Thus Boas²⁰ pointed out that certain graphic patterns have appeared in many different cultures but have had different “meanings” in each. So also a newly acquired culture trait may greatly alter other features of the receiving culture. Thus certain American Indian tribes, having acquired horses from European invaders, were enabled to follow herds of bison, with the consequence that much of their ancient way of life underwent alteration.

It is in terms of such logic that sociologists now seek to understand, for example, the status systems that prevail in our society, and political scientists seek to probe the meaning of democracy and its constituent culture traits; and it is in such terms that we now try to understand the vast cultural revolution of which the industrial economy has been the outcome. So considered, the theory that attributes the intellectual quickening of the whole of Western society to the shrewd calculation of financial advantage by pioneering merchants is a step in the right direction. It is almost certainly wrong. But, as

²⁰ Franz Boas, *Primitive Art* (Cambridge, Harvard University Press, 1927). See especially Chapter II.

Schumpeter said of Marx, it is at least a general theory of cultural evolution.

As we learn more of the history of science and technology—modern, ancient, and prehistoric—the inherent dynamism of that process will be more and more clearly revealed, as will also the counterforce of institutionalized tradition. As we gain deeper understanding of our own institutional dilemmas, and as we study the plight of the peoples to whom industrial technology is only just now spreading, we will realize more and more clearly the tragic significance of the juxtaposition of an industrial death rate with a pre-industrial birth rate. Thus whether or not this way of thinking is called institutionalism (and the probability is that it will not be), economics will gradually come to share with the other social sciences a sort of unified field theory based on the dynamism of science and technology and the passivism of institutionalized traditions and social structures.

From this will also come a theory of value. The effort of institutional supplementation, in which economists are engaged along with their colleagues in the other social sciences, necessarily postulates a standard of value. In recent years most social scientists have been disposed to disavow that they are trying to develop anything so grandiose as a general theory of value and to say that they are only trying to make existing institutions work better, in particular to make the industrial system work better. But this is a theory of value.

It is a technological theory. Implicit in the technological process itself is a criterion of value judgment. This means not that technology is better than institutionalized tradition in any absolute or inscrutable sense, nor that “workmanship” is inherently better than “sportsmanship,” as Veblen seemed to imply, nor that change is better than no-change. As John Dewey tried to point out many years ago,²¹ value judgments are judgments of the causal relation of one experience to another in the continuum of experience. The technological process affords a basis for such judgments because that process is continuous from age to age, whereas institutionalized traditions vary from one society to another and present no clear picture of “unilinear evolution.”

For various reasons the present generation has turned a deaf ear to this instrumental (or operational) theory of value. But since the effort of improvement necessarily implies the meaningfulness of improvement, it is inevitable that the meaning which is now implicit in the effort itself will

²¹ “Logical Conditions of a Scientific Treatment of Morality,” *Decennial Publications of the University of Chicago* (1903), Vol. III, pp. 115–139. These ideas were of course developed in Dewey’s later works, most explicitly in *The Theory of Valuation* (Chicago, University of Chicago Press, 1938).

eventually be recognized and formulated. The terms in which it is so formulated may be somewhat different from those now identified with instrumentalism or institutionalism. But they will be to substantially the same effect; and since they will be equally germane to all the social sciences, they also will constitute a basing point for a unified field theory.

Such, I believe, is the promise of institutionalism.