Peter F. Drucker, "Toward the next economics"

4.1 "Four major changes in world view" cf pp 6-9

4.2 Economics today is very largely the house that Keynes built. economists today are not Keynesian in their specific theories, but they tend to define themselves largely through their relationship to Keynesian economics, as near-Keynesians or non-Keynesians or anti-Keynesians. Their terminology assumes the economic aggregates on which Keynesian economics is based. The views of economic activity, economic policy, and economic theory which Keynes propounded or codified around 1930, 50 years later, have become the home-ground of economists , regardless of persuasion.

5.1 Yet today Keynesian economics is in disarray. It is unable to taskle the central policy problems of developed economies--productivity and capital formation. Keynesians must deny that these problems even could exist. Nor is it able to provide a theory that can exncompass let alone explain observed eocnomic reality and experience.

5.2 The two theoretical approaches , which during the last 10 to 15 years, have shown consistent predictive power, are both incompatible with the Keynesian model, the theories of Robert Mundell and of the "rational explanations" school. The latter postulates that governmental macroeconomic intervention is futile and and ineffectual.

5.3 These new approaches are equally incompatible with pre-Keynesian theories, whetehr neoclassical or Marxist.... The next economy will be meta-Keynesian: it cannot ignore Keynes but ir will have to transecend him.

6.1 We do not yet know what the future economics will be, but we do know what the main roblems, conerns, challenges will be.

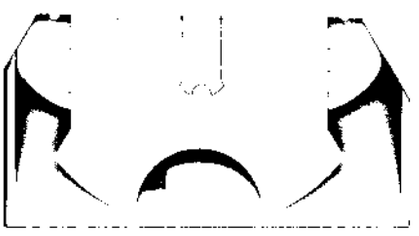
6.2 Hence we have to review the four previous scientific revolutions and the Keynesian successor.

6.3 Economics began with the Cameralists and the Mercantilists of France in the first half of the 17th century. They were the first to see the economy as autonomous. Earlier there was no economics, however great the concern with trade and livelihoods, with wealth, coinage and taxes. As a system, a world view, Mercantilism was macroeconomic and its universe a political unit, the territory controlled by the Prince. Indeed the definition of the national tate, as it emerged at the end of the 16th century, was essentially an economic one: the unit controlled by the Prince through his control of coinage and foreign trade. Mercantilism was supply-focused economics. To produce the largest possible export surplus, and with it the currency needed to pay professional soldiers, was its central concern.

6.4 Mercantilism collapsed as a system in what we would call today a productivity crisis. The more the French government promoted manufacture for export, the poorer the country became--especially by contrast with the non-mercantilist, unsystematic, and unscientific English across the channel. Mercantilism also failed to

7.0 spur capital formation. There were few statistics in those days ... but there is no doubt that the French savings rate dropped sharply while savings in non-mercantilist England steadily went

7.1 The Physiocrats started their "scientific revolutiojn" with the paradox that, under Mercantilism, Europe's richest country, France, had become one of the poorest ones, and was becoming the more wretched the more specie it earned. They solved the probelem by applying Gallic logic to Anglo-Saxon pragmatism. Their system



Peter Drucker, ward the next economics."

7.1 remained as much supply-focused as was that of the Mercantilists. But they turned microeconomist, with the individual piece of land and its culttivator the ecoonomic unit. This then forced them into the first economic theory of value--that is, the first theory that did not square wealth with money. The Physiocrats source of value was nature in its economic manifestation, that is, land as producer of human sustenance. With this, econoics had become genuinely autonomous, had become a 'discipline.'

7.2 Classical economics-- the third of the economic world systems-- took from the Physiocrats both the concenr with supply and the focus on microeconomics. But it shifted the theory of value from "naure" to "man." With labor theory of value, economics became a moral science. It is to this, as much as to its success in producing wealth, that classical economics owed its rapid rise as the star among the new disciplines. But very soon, in 1850 or so, the labor theory of value became an impediment and the cause of very serious theoretical turbulence.

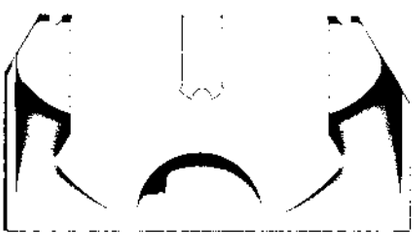
7.3 This underlay the third of the scientific revolutions, the shift from classical to neoclassical economics, from the disciples of Ricardo to Leon Walras in Belgium and the Austrian pioneers of marginal utility. The shift was priamrily philosophical. The neoclassics shifted from value to utility. They shifted from human needs to human wants. They shifted from economic structure toeconomic analysis. To a noneconononomist, this may not seem a major shift... but it introduced a new spirit that has animated economics and economists alike to this day.

7.4 The third scientific revolution also split economics. Marx and the Marxists refused toabandon the labor theory of value. This then forced them to spurn economic analysis. And they were forced to sub-

8.0 ordinate economic to noneconomic "historical forces." // The classics' micoreconomics with its built-in "equilibium," they asserted, would work only if and when meta-economic obstacles to labor's obtaining its full share of the social product were removed through political upheavals generated by the system's "economic contradictions--or as Lenin later redefined it, by the system's political contradictions. Then the state would wither away, then micoreconomics would take over, then there would be true equilibrium.

8.1 Seen against the pardigmatic background of economics, Keynes was indeed right in the claim he voiced in his Cambridge eminar in the 1930's, that his economics represented a far more radical break with tradition than Marx and Marxism. Keynes not only went back to the mercantilists in being macroeconomic. He stood all earlier systems on their heads by being demand-centered. In all earlier economics demand is a function of supply. In Keynesian economics dupply is a function of demand and controlled by it. Above all-- the greatest innovation--Keynes redefined eocnomic reality. Instead of goods, services, and work--realities of the physical world and "things"--Keynes' economic realities are symbols: money andcredit. To the Mercantilists, too, money gave control, but political rather than economic conrol. Keynes was the first to postulate that money and credit gave complete economic control.

8.2 The relationship between the "real" economy of goods, work, services, and the "symbol" economy of money and credit had been a problem since earliest times. Few economists were satisfied with the way the Classics (following the Physiocrats) dismissed money as the veil of reality. Well before Keynes, economists of stature, such as



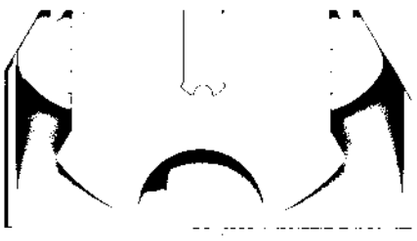
8.2 MacCullogh who was otherwise a devout Ricardian, or in the generation before Keynes, the Sweded Karl Gustav Cassell and the German Georg Friedrich Knapp, had attempted to replace a thing-based economics with a ymbol-based one. But it was Keynes' observation that in the recession of the 1920's the English labor unions treated money wages as "real" and as "income" even when they actually resulted in lower purchasing power for their members, that thenproduced a genuine scientific revolution. IN Keynesian economics commodities, production, and work are the veil of reality. Or rather these things are determined by monetary events: money supply, credit, interest rates, and governmental surpluses or deficits. Goods, services, productivity, production, demand, employment, and finally prices, are all dependent variables of the macroeconomic events of the
9.0 monetary economy. Philosoophically speaking, // Keynes became an extreme nominalist--it was perhaps not altogether coincidence that he and Wittgenstein were contemproaries at Cambridge.

9.1 To classics, neoclassics, and Marxists, the Great Depression of the 1930's originated in the real economy, in the impoverishment of Europe in the First World War, further aggravated by reparations and by a sharp drop in the productivity of European agriculture and industry. To the Keynesians, however, including Milton Friedman,* the Great Depression was the reuslt of the Stock Exchange crash of 1929, of speculation, or of a contraction in the money supply--that is, of events in the symbol economy.

9.2 The Origins of the present crisis

The present crisis in economics is a failure of the basic assumptionc, of the paradigm, of the "system," rather than of this or that theory. Keynesian economics has run into the most severe productivity crisis since that of 18th century France which discredited Mercantilism. The productivity crisis in all developed countries--and worst in the most faithfully Keynesian countries, Great Britain and the United States--invalidates the Keynsian theorem of the demand-control of supply. The crisis in capital formation which we are facing at the same time--again at its worst in Great Britain and the United States--could not, within Keynesian economics, have happened at all; it is theoretically impossible within the Keynesian paradigms.

9n* Looked at paradigmatically, Milton Friedman is as much a Keynesian as the master himself, rather than the anti-Keynesian he is commonly depicted as. Friedman accepts without reserve the Keynesian world view. His economics is pure macroeconomics, with the national government as the one unit, the one dynamic force, controlling the economy through the money supply. Freidman's economics are completely demand-focused. Money and credit are the pervasive, indeed the only, economic reality That Friedman sees the money supply as original and interest nates as derivative, is not much more than a minor gloss on the Keynesian scriptures. It is fine-tuning Keynes. And what makes Friedman stand out is not so much his monetary theory as shis insistence on economic activity as being autonomous, on economic values as the hinge on which economic policy and behavior must turn, and on the free market--on all of which Keynes himself would have been in full agreement.

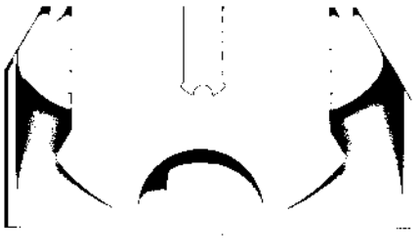


Keynes was fully aware of the importance of productivity. But he was also convinced that productivity is a function of demand and determined by it. In the early 1930's, the great years of the Keynes seiminar at Cambridge, one heard again and again of Keynes being asked by one of he first-rate minds in the seminar--Joan Robinson perhaps, of Roy Harrod, or Abba Lerner--"What about // productivity?" He always answered: "We can take productivity for granted, provided that employment and demand remain high."

The classics had not taken productivity for granted. On the contrary, central to classical economics is the "law" of diminishing returns on all resources. Marx had based his forecast of the imminent emise of he bourgeois system (the term captialism was not widely used until after Marx's death) on this axiom. What made Marx different was his meta-economic, semi-religious belief that the end of alienation would release such enormous human energy as to reverse the diminishing return on resources in an outburst of "creativity." But just when Marxin the last unfinished volume of Das Kapital, most confidently predicted the demise of the system because of its inherent productivity crisis, productivity began to go up sharply. In part this was the result of the systematic approach to work, first developed by Frederick W. Taylor in his task study (only later misnamed "scientific management"), which showed that human work can be made infinitely more productive, not by working harder, but by working smarter. In part this was the result of the great age of innovation, as a result of whichresources were systematically shifted from older and less productive into newer and more productive employments. In large part the rise in productivity was the result of steady work in making resources --especially capital--more productive. The greatest productivity increas in the last hundred years has probably been not in the factory but in commercial banking, where one dollar of assets today supports at least a hundred times the volume of transactions it supported one hundred years ago--without any release of creativity or any great innovation. At that time--that is, in the decades around 1900--the developed countries used capital not to replace labor but to upgrade it and to make it more productive, as Simon Kuznets has shown in his pioneering studies. Altogether, the reversal between 1900 and 1920 of the theory of productivity from one thatpostulated a built-in tendency towards deminishing returns to one that postulated a steady increase, was a major factor in the Keynesian "scientific revolution." It made possible, in large measure, the shift from supply-focus to demand-focus, i. e., to the belief that production tends inherently to surplus rather than to scarcity.

It was thus not totally frivolous to assume, as Keynes did 50 years ago, that productivity would take care of itself and would continue to increase solwly but steadily, if only economic confience prevailed for both businessmen and workingmen, and if only demand // stayed high and unemployment low. In the early 1930's Keynes' was a rational albeit optimistic view (though even then Joseph Schumpeter and Lionel Robbins could not accept it).

But surely it can no longer be maintained. And yet within the Keynsian system there is no room for productivity, now way to stimulate it or spur it, no means to make an economy more productive. With productivity emerging as a central economic need and problem, especially in the most highly developed countries--and a need alike in manufacturing, in services, and in agriculture--the Keynesian inability to handle prodctivity within the theoretical structure or within economic policy is as serious a flaw as was the inability of Ptolemaic astronomy around



the time of copernicus to explain the motion of stars and planets.

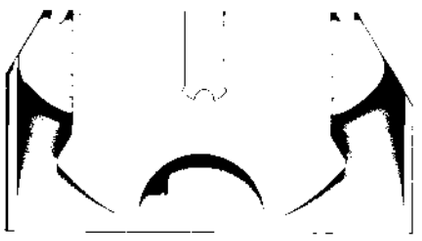
11.2 For economic theory the decline in capital formation in the developed countries, and especially in the countries of the Keynesian true believers--the United States and Great Britain--is even more serious. Within Keynesian economics the decline cannot be explained, cannot have happened.

11.3 Capital is the future. It is provision for the risks, the uncertainties, the changes, and the jobs of tomorrow. It is not present cost--but it is certaincost. An economy that does not form enough capital to cover its future costs is an economy that condemns itself to decline and continuing crisis, the crisis of "stagflation."

11.4 The essence of Jeynesian economic theory, as every undergraduate is being taught, was the repudiation of "Say's Law," according to which savings always equal investment, so that an economy always forms ehough capital for its future needs. Keynes postulated instead a tendency toward over-saving for developed economies. "Under-saving"--that is, a shortfall in capital-formation--cannot possibly occur in a developing economy according to the Keynesian postualte. From the beginning his was seen as a serious flaw in Keynesian economics by such thought-(abd sympathetic) critics as Joseph Schumpeter. Surely, once it is accepted that savings and investment need not be identical, "under-saving" is jsut as likely as "over-saving." And what we have had in the last 30 years in the English-speaking, developed, Keynesian, countries--since well before the energy crisis--is under-saving on a massive scale. The basic assumption underlying the Keynesian paradigm can therefore no longer be held or defended. Nor withint the Keynesian economic universe can capital formation be dealt with. For Keynesian economics explicitly excludes the possibility ofunder-saving, and thereby of inadequate capital formation. And if capital is a true "cost"

12.0 of the economy--and even Keynes never doubted this--demand-based macroeconomicscannot adequately deal with economic theory or economic policy.

12.1 Even more serious may be the failure of the basic postulate underlying Keynesian economic policy: the "economic-king", the objective, independent expert eho makes effective decisions based solely on objective, quantitative, unambiguous evidence, and free of both political ambitions and political pressures on him. Even in the 1830's, a good many people found it difficult to accept this. To the continental Europeans inparticular, with their memories of the post-war inflation, the "economic-king" was sheer hubris--which in large measure explains why Keynes had so few followers on the Continent until the last 10 or 15 years. By now however few would take seriously the postulate of a non-political economist who, at the same time,controls crucial political decisions. Like all enlightened despots, the Keynesian "economist-king" has proven to be a delusion, and even a contradiction in terms. If there is one thing taught by the inflations of the last decade--as it it was taught by the inflations of the 1920's in Europe--it is that he economist in power either becomes himself a politician and expedient (if not irresponsible), or else he ceases to have power and influence. It is simply not true, as is often asserted, that economists do not know how to stop inflation. Every economist since the late 16th century has known how to do it: Cut government expenses and with them the creation of money. What economists lack is not theoretical knowledge; it is political will or political power. And so far all inflations ave ended by politicians who had the will rather than by economists who had the knowledge.



12.2 Without the "economist-king" Keynesian economics ceases to be operational. It can play the role of critic, which Keynes played in the 1920's, and which Milton Friedman plays today. In opposition, the Keynesian economist, being powerless, can also be politics-free. But it is an opposition that cannot become effective government. The Keynesian paradigm is thus likely to be around for a long time as a critique and a guideto what not to do. But it is fast losing its credibility as a foudnation for economic theory and as a guide to policy and action.

The next economics

12,3 The next "scientific revolution," the overturning of the paradigms that underlay economic theory and economic policy these last
13.0 30 years, may start with productivity or with capital formation. There are beginnings in both areas. But that there is both a productivity crisis and a capital-formation crisis makes certain that the next economics will have to be again microeconomic and centered on supply. Both productivity and capital formation are events of the microeconomy. Both also deal with the factors of production rather than being functions of demand.

13.1 We know a good deal about productivity and cpaital formation. A vast amoung of empirical and theoretical work ahs been done in both areas within the last 30 years. Productivity, we know, means both the economic yieldsfrom every one of the factors of production (the human resource, capital physical resources, and time) and the overall yield of the joint resources in combination. Capital formation we know has to be at least equal to the cost of capital. And in a growing economy, the costs of the future to be covered by today's capital formation are substantially higher than the cost of capital. In a growing economy, tomorrow's jobs, by definition, will require substantially higher capital investment than today's jobs, and thus will require substantially greater capital formation than the replacement of capital represented by the prevailing return rate for capital. And we know how to determine the rate of capital formation needed for the uncertainties of the future within a margin of error that is no greaterthan that which pertains to such accepted costs of the present in the accounting model as depreciation or credit risks.

13.2 We also know quite a bit about the factors and forces which encourage both greater productivity and greater capital formation. None of them it should be said is a factor of the symbol economy of money and credit. Events in the symbol economy can discourage but are unlikely significantly to encourage, either productivity or a higher rate of capital formation.

13.3 But while we have both the concepts and the data, we do not have so far a microeconomic model that embraces both productivity and capital formation. Even the terms are largely unknown to available theories, such as the "Theory of the firm," which is the microeconomics most commonly taught in our coolege courses. Instead of productivity and capital formation, the Theory of the Firm talks of profit maximization. But we have known for at least 50 years that "profit maximization" is a meaningless term if applied to anything other than a unique, non-recurrent trading transaction on the part of an individual and in a single commodity--that is, to an exceptional, rare, and quite unrepresentative incident. The next economics in its microeconomics will, almost certainly, discard altogether the concept of "profit.'
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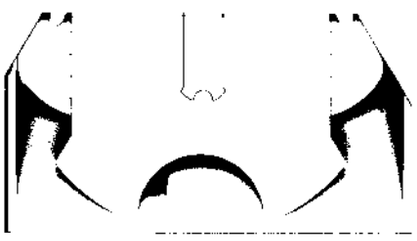


14.0 It assumes a static, unchanging, closed economy. In a moving, changing, open-ended economy in which there is risk, uncertainty, and change, there is no profit, except--as Schumpeter taught 70 years ago, the temporary profit of the genuine innovator. For any other economic activity there is only cost--the costs of past and present, which are embodied in the accounting model, and the costs of the future expressed in the cost of capital. Indeed, no business is known to apply "profit maximization" to its planning or to its decisions on capital investment or pricing. Instead the theories and concepts that govern the actual, as against the theoretcal, behavior of firms are theories of the cost of capital, of market optimization, and of the long-range cost gains ("the learning curve") from mazimizing the volume of production rather than from mazimizing profitability.

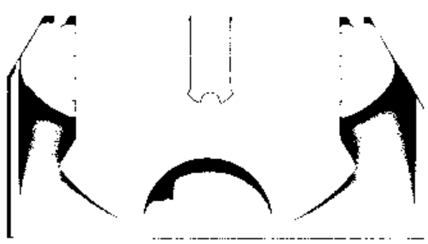
14.1 The next economics will thus require radically different microeconomics as its foundation. It will require a theory that aims at optimizing productivity; for a balance of several partially dependent functions is, of necessity, an optimization rather than a maximization. Catpital formation requires a minimum concept: the coverage of the cost of capital. It requires a theory that aims at "satisficing" rather thanat maximizing profit (though the minimum cost of capital will, paradoxically, be found to be substantially higher than what most presnt-day economists and most business executives consider the available maximum profitability--which is of course the reason why there is a "capital formation crisis"). The nest microeconomics, unlike the present one, will be dynamic and assume risk, uncertainty, and change in technology, business conditions, and markets. Yet it should be equilibrium economics, integrating a provisionfor an uncertain and changng future into present and testable behavior. Much of the spadework for this has already been done--in part, 50 years ago by the Chicago economist Frank Knight, in part, by the contemporary English economist, G. L. S. Shackle. The next microeconomic thery should thus be able to resolve the dilemma that has plagued economists since Ricardo, almost 200 years ago. Economic analysis is impossible unless it excludes uncertainty and change. In the next microeconomics, we should be able to integrate both analysis and policy in one dynamic equilibrium through productivity and capital formation.

14.2 If productivity and capital formation are its focal points, a microeconomic theory can also do what never before could be done in economics to tie to tie together microeconomics and macroeconomics, if not make

15,0 them into one. While productivity and capital formation are events in the micro economy, there are--unlike profit--meaningful termsin the macroeconomy as well, and measurable macroeconomic aggregates. "Profit" by definition applies only to one legal entity, the "entrepreneur" or the "firm," But it makes sense to speak of the productivity of a country or of capital formation in the world economy.

15.1 ~~Ifxproductivityxandxcapitalxformationxarexitsxfocalxpointsxaxmicro~~

15,1 In the past, economic theory was either microeconomic or macroeconomic. Alfred Marshall, the last classical economist, tried in the early years of this century to combine the two, but nooone, including Marshal himself, thought that he had succeeded. It was Marshal's failure, in large part, that made Keynes opt for a purely macroeconomic system. The next economics will not, it is reasonably certain, have the luxury of choosing between macroeconomics and microeconomic. It will to accomplish what Marshal tried and failed to do.: integrate both. Macroeconomics has proven itself--for the second time--to be unable to handle supply, that is, productivity and capital formation. Yet micro-



15.1 economics alone is not adequate either for economic theory or for economic policy in a world of mixed economies, multinational corporations, non-convertable currencies, and governments that redistrobite half their nations' incomes. But what the term macroeconomy will actually mean in the next economics is anything but clear and will be highly controversial.

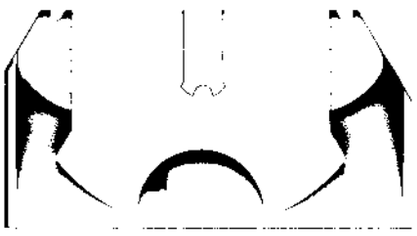
15.2 For 400 years the term automatically meant the national economy. The Germans, to this day, call the discipline of economics "Nationaloekonomie" or Volkswirtschaft." But the one thoery today which attempts to integrate micro- and macroeconomics, that of Robert Mundell, all but dismisses national government as a factor. Mundell's macroeconomy is the world economy. National governments, in Mundell's economics, are effective only insofar as they are the agents of the world economy, anticipating its structural trends and shaping their own domestic economies to conform; the examples are Germany and Japan in the years of their most rapid growth in the 1960's. And the countries that attempted to behave like true "macroeconomies" during the post-World War II period--especially the Keynesian countries, Great Britain and the United States--are as Mundell shows, also countries that had the least control over their own economies at the highest cost.

15.3 This, by the way, was the conclusion Keynes himself reached for towards the end of his life. Around 1942 Keynes himself ceased to be a Keynesian and abandoned the nation state as the macroeconomy.

16.0 Instead he proposed to build the post-war economy around "Bancor", a transnational money that would be independent of national governments and national currencies and managed by non-political economists acting as transnational civil servants. "Bancor" was shot down at the Bretton Woods Conference by the American Keynesians, who suspected it of being an attempt to maintain the pound sterling as the world's key currency, but who also were confident of the ability of the American dollar to be the world"s key currency, and of the wisdom of American conomists in managing the dollar and keeping it free from domesitic political pressures. But today even the Americans are pushing the "Special Drawing Rights" (SDR) of the International Monetary Fund as the transnational and non-national money of the world economy. Even the Americans have accepted that there can be no "key currency"-- that is, that no nation-state can aspire to genuine economic sovereignty. And the major holders of liquid funds in the world economy--the OPEC countries, the Central Banks, and the very large multinationals based in balance-of-payments countries such as Germany, Japan, or Switzerland--are fast putting their cash into transnational money such as the SDR's, market basket of national currencies, money of account indexed to purchasing power or gold.

16.1 And yet it makes sense to speak of a "Brazilian economy" or a "British economy." The nation-state is a reality. It is not the economic reality, the way traditional macroeconomics has it. But it is also not an "extraneous factor" which can limit economic economic activity but cannot determine or direct it. For the national state is surely, for the foreseeable future the one political institution arounce.

16.2 Predictably there fore the next economics will, at its center, have a spirited debate over the place of the national government in economic theory. One approach might follow Mundell and consider the national government, at least, to be no more than a gear in the system rather than its engine. Another approach, predictably, will attempt to maintain the nation-state and its government as the center



16.2 of the economic universe, with both the macroeconomy and the world economy, so to speak, planets in orbit around it. There may even be two parallel theorems of such a "Ptolemaic," "nation -centered" economic system, an Anglo-American and noe-Keynesian one, and a French andCameralist one. One approach would attempt to maintain control and uniqueness of the national economy through money and credit, and the other one control through what the Fench call "indicative
17.0 planning"--that is, through allocation of capital, labor, and physical resources. There may be--methodologically there almost has to be--a further approach which tries to organize the three centers in one system, the microeconomics of the individual and the fifm, the intermediate economics of the nation-state, and the macroeconomics of the world economy. This, I would think, might be the only model adequate for developing countries, and especially for rapidly industrializing ones. In any event, the next economics will surely again be "political economy," with the question of the relationship between the economic realities of the world economy andmicroeconomy, and political realities of the nation-state, both central to economic theory and highly controversial.

17.1 Equally central and perhaps more controversial, will be the relationship between the real economy of things--commodities, resources, work--and the symbol economy of money and credit. There is no return to the ood dismissal of the symbol edconomy as the veil of reality. But there is no holding on to the recent orthodoxy in which the symbol economy is the real and true economy, with things (commodities, services, and work) only functions, and indeed totally dependent functions of the symbol economy.

17.2 We may have to be content, however, with something analogous to the physicist's "Uncertainty Principle," in which the only meaningful statements in respect to certain events--forinstance, productivity, capital formation, the allocation of resources, and so on--

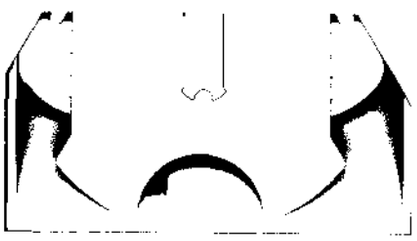
are statements in terms of the real economy, with events in the symbol economy no more than a restraint and a boundary. But other and equally real events can perhaps only be discussed, analyzed, and even described in terms of the symbol economy, with the real aconomy of things being a restraint on them. This would not be a particarly satisfactory outcome-- but it may be the best we can acheive.

The new theory of value

17.3 The next economics may even attempt tobe again both humanity and science.

17,4 An anecdote popular among the younger members of Keynes' Cambridge seminar had one of the disciples ask the Master why there was no theory of value in his General Theory. Keynes answered: "Because the only available theory of value is the labor theory and it is totally discredited." The next economics should again have a theory
18.0 of value. It may base itself on the postulate // that productivity --that is, knowledge applied to resources through human work-- is the source of all economic value.

18.1 Productivity as the source of value is both a priori amd operational, and thus satisfies the specifications for a first principle. It would be both descriptive and normative, both analyze what is and why. and indicate what ought to be and why. Marx, the "Revisionists" of Socialism around 1900 argued, was never fully satisfied with the labor theory of value but groped for a substitute. None of the great non-Marxist economists of the last hundred years, Alfred Marshall, Joseph Schumpeter, or John Maynard Keynes, was un turn comfortable with an economics that lacked a theory of value altogether.



18.1 But as the Keynes anecdote illustrates, they saw no alternative. Productivity as the source of all economic value would serve. It would explain. It would direct vision. It would give guidance to analysis, to policy, and to behavior. Productivity is both man and things, both structural and analytical. A productivity-based economics might thus become what all the great economists have striven for: both a "humanity" a "moral philosophy," a "Geisteswissenschaft;" and, rigorous "science."