HEA Part IV Chapter 6

General Economics: Its Character and Contents

VIII Schumpeter, Hist Econ Anal, Part IV, ch. 7, #1

952 Wicksell's engaging frankness reveals the two pillars of his arch to the most perfunctory glance: the one is Walrasian, the other is Böhm-Bawerkian.

964 By a stationary state, as the term implies, we mean not a method or mental attitude of the analyst, but a certain state of the object of analysis, namely an economic process that goes on at even rates or, more precisely, an economic process that merely reproduces itself. ... it is nothing but a methodological fiction. Essentially it is a simplifying device.

The term evolution may be used in a wider and in a narrower sense. In the wider sense it comprises all the phenomena that make an economic process non-stationary. It the narrower sense it comprises these phenomena minus those that may be described in terms of continuous variations of rates within an unchanging framework of institutions, tastes and technological horizon, and will be included in the concept of growth.

.. We may describe a stationary process by a dynamic model... We may also describe an evolutionary process by a series of static models.... (Comparative Statics).

966 Qualifications from usage (esp. historical)

968 Pure theory there had been from the first or almost. But its technique had been a simple affair. The Walrasian system of simultaneous equations, however, brought in a host of new problems of specifically logical or mathematical nature that are much more delicate and much deeper than Walras or anyone else had every realized. Mainly they turn upon determinateness, stability, and equilibrium. They are much too difficult and too technical for us.
Note 12 bibliography for non-mathematical reader and mathematical.

975 But instead of considering the hybrid cases (monopolistic or imperfect competition) as deviations from , or adulterations of, the fundamental ones we may also look upon the hybrids as fundamental and on pure monopoly and pure competition as limiting cases in which the content of actual business has been refined away.

(A suspicious reader of this view) is requested to ask himself whether the definition of pure competition that has been given above really fits what we mean when talking about competitive business. Is it not a fact that what we mean is the scheme of

Schumpeter, HEA IV ch 7 #4 con'd

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motives, decisions, actioins imposed upon a firm by the necessity of doing things better or at any rate more successfully than the fellow next door; that it is this situation to which we trace the technological and commercial efficientcy of competitive business, and that this pattern of behavior would be entirely absent both in the cases of pure monopoly and pure competition, which therefore seem to have more claim to being called degenerate than to being called fundament al cases.

(Comp and monop easier to take as premises or assumption from which further conclusions can be neatly deduced)

Note 9 Analysis of competition may exhibit all its elements and yet miss what is essential to the compound patteern (BL).

Schumpeter HEA

973 Cournot begins from single monopolist, then gradually adds seller after seller; when an unlimited number are added, the competitive situation is reached.

Jevons added his Law of Indifference: in the perfect market there cannot exist at any given moment more than one price for each homogeneous commodity.

Competition is supposed to function by everyone's wish to maximize his optimal adaptation to the quantities to be bought and sold... It remains that adaptation will produce results that differ according to the range of knowledge, proptitude of decision, and 'rationality' of actors, and also according to their expectations about the future course of prices.

HEA 1023-24 Walras postulated these complexities away: he exhibited his conceptual scheme in its purity.

Marshall was bent on salvaging every bit of real life he could possibly leave in.

Definition of monopoly leads to similar quandaries.

COMPETITION

1123 As we have seen, it was the spectacular phenomenon of ~~[illegible]~~ 'crises' and the less spectacular but still more irritating phenomenon of depressions (gluts) which, in the preceding period, ~~[illegible]~~ first attracted ~~[illegible]~~ the attention of economists.... Nevertheless it was only during the period under survery that the 'cycle' definitimvely ousted the 'crisis' from its place in economists' minds and that the ground was cleared for the development of modern business cycle analysis, though practically ~~[illegible]~~ al the workers in the field continued to use the old phrase -- an interesting case o f 'terminological lag.' This is why the decisive performance is considered here although it was published in 1862. It was the work of a man who was a physician by training, but must be ranked, ~~[illegible]~~s to talent and command of scientific method among the greatest economists of all times, Clement Juglar (1819-1905). This evaluation rests //1124//

1124 upon ~~[illegible]~~ three facts. To begin with , he was the first to use time-series material (mainly prices, interest rates, and central bank balances) systematically and with the ~~[illegible]~~ clear purpose in mind of analyzing a definite phenomenon. Since this is the fundamental method of modern business-cycle analysis, he can jsutly be called its ancestor. Second, having discovered the cycle of ~~[illegible]~~ roughly ten years' duration that was most obvious in his material -- it was he who discovered the continent; islands near it several writers had discovered ~~[illegible]~~ before -- he proceeded to develop a morphology of it in terms of 'phases" (upgrade, 'explosion,' liquidation). Though Tooke and Overstone had done the same thing, the modern morphology of cyc~~[illegible]~~les dates from Juglar. And s does, in the same sense 'periodicity.' This morphology of a periodic process is what he meant when he proudly claimed to have discovered the 'law of crises' without any preconceived theory or hypothesis. Third he went on to try his hand at exp~~[illegible]~~lanation. The grand feature about this is the almost ideal way in which 'facts' and 'theory' are made to intertwine. In themselves, most of the~~[illegible]~~ suggestiongs concerning the factors that bring about the downturn (loss of cash~~[illegible]~~ by banks, failure of new buying) do not amount to a great deal. But all-important was his diagnosis of the nature of depression, which he expessed with epigrammatic force in the famous sentence:

Page

1124 'the only cause of a depression is prosperity.' This means that depressions are nothing but adaptations to the economic system to the situations created by the preceding prosperities and that, in consequence, the basic problem of cycle analysis reduces to the question what is it that causes prosperities -- to which he failed however to give any satisfactory answer.

e Wesly C. Mitchell, Business Cycles 1913; Business Cycles: The Problem and its Setting, 1927; Measuring Business Cycles by A. F. Burns and W. C. M., 1946.

1125 Common Ground and Warring 'Theories.'

...By the end of the period however most workers agreed -- or tacitly took for granted -- that the fundamental fact about cyclical fluctuations was the characteristic fluctuation in the production of plant and equipment.

... Even the greement to the effect that it is the activity in the plant-and-equipment (capital goods) industries which is the outstanding feature in cyclical fluctuations does not go far in ensuring agreement in results since it leaves the decisive question of interpretation wide open.

... The fact that the 'relatively large amplitude of the movements in constructional, as compared with consumption, industries' is one of the most obvious 'general characteristics of industrial fluctuations' (Pigou, Industrial Fluctuations,
1126 1927, Part I, ch. 2) can hardly fail to ob//1126//trude itself upon anyone who has learned to look at a cycle as a whole, though it may escape attention so long as one looks merely at the depression phase. Nevertheless, it took time for it to be recognized consciously and with awareness of its pivotal importance.

The outstanding work in the line under discussion is Arthur Spiethoff's....

1127 ... with the possible exception of Marx, Spiethoff was the first to recognize explicitly that cycles are not merely a non-essential concomitant of capitalist evolution but that they are the essential form of capitalist life.

D. M. Robertson

1128 to 1132 A few examples will suffice to display the fact that most theories of cycles are nothing but different branches of the common trunk, 'plant and equipment.' Other approaches 1132-35.

Schumpeter, pp. 1114 f. Credit Creation [On U. S. Law cf. Samuelson 9th p 300 ff

The theory to which economists clung so tenaciously makes them out to be savers when they neither save nor intend to do so; it attributes to them an influence on the supply of credit which they do not exert. The theory of 'credit creation' not only recognizes patent facts without obscuring them by artificial constructions; it also brings out the peculiar mechanism of saving and investment that is characteristic of full-fledged capitalist society and the true role of banks in capitalist evolution. With less qualification than has been added in most cases, this theory therefore constitutes definite advance in analysis.

Nevertheless it proved extraordinarily difficult for economists to recognize that bank loans and bank investments do create deposits. In fact, throughout the period under survey they refused with practical unanimity to do so. And even in 1930, when the large majority had been converted and accepted that doctrine as a matter of course, Keynes rightly felt it to be necessary to reexpound and to defend the doctrine at length,[5] and some of its most important aspects cannot be said to be fully understood even now.

[5] Treatise on Money, chapter 2. It is moreover highly significant that, as late as 1927, there was room for an article by F. W. Crick, 'The Genesis of Bank Deposits' (Economica), which explains how bank loans create deposits and repayment to banks annihilates them -- in a manner that should have been, but evidently was not even then, 'time honoured theory.' There is however a sequel to Lord Keynes' treatment of the subject of credit creation in the Treatise of 1930 of which it is necessary to take notice in passing. The deposit creating bank-loan and its role in the financing of investment without any previous saving up of the sums thus lent have practically disappeared in the analytic schema of the General Theory, where it is again the saving public that holds the scene. Orthodox Keynesianism has in fact reverted to the old view according to which the central facts about the money market are analytically rendered by means the public's propensity to save coupled with its liquidity preference.

Commercial paper : trade supported by discounting bills of exchange
Banknotes : the gold standard (store of gold fraction of banknotes)
Check currency : makes deposits equivalent of legal tender

1020f It is there (4th edit, 1900) that //1021// the whole of the Walrasian structure of pure theory appears in all its logical beauty.

The ground floor of this structure is the theory of the market of consumers' goods. On the second floor we find the theory of production and the 'market' of production services, not separated from, but united with the first market. On the third floor we have the market of capital goods similarly integrated with the two others. And on the fourth floor there is another 'market' integrated with the other three, of circulating capital, that is, of the stocks or inventories of goods goods -- new capital goods for sale at the establishments of the producers, and consumers' and producers' inventories of all kinds -- that are necessary to keep things going.

But Walras eliminated this problem by the heroic assumption that stocks, like capital goods, are exactly as if they had been produced in the past with a view to conditions obtaining in the present.... There is point in such a construction. But once more it is but the first mile-stone on a long road.

1024ff Difficulties: does the theory of money fit or conflict with the equilibrium of the earlier system of a numéraire.

1026f If in the last analysis Walras' system is perhaps nothing but a huge research program, it still is, owing to its intellectual quality, the basis of practically all the best work of our time.

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Note72: ... It should be added again that economists who wish to establish a tendency in the capitalist economy to produce perennial unemployment have nothing to fear from a proof, on so high a level of abstraction, that perfect equilibrium in perfect competition would involve full employment. Nor has this proof anything to fear from the ubiquity of unemployment in a world that is never in perfect equilibrium and never perfectly competitive.

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Schumpeter, Hist Econ Analysis, Part IV, ch 7, #8

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#8. The Produuction Function. Cf. Gordon, Supply curves.

Time horizon: the time span over which the firm plans

Technological horizon: the complete list of all those alternatives with which A or his consulting engineer is familiar.

A continuous function has no jumps, a smooth function has no kinks.

1031 I have emphasized the fact that the full lofgical meaning of the concept of production functions reveals itself only if we think of them as planning functions in a world of blueprints, where every element that is technologically variable at all can be changed at will, without any loss of time, and without any expense.

1039 First order homogeneity: a multi-variable function in which the ratio of thesolutions to the variables is unchanged by dividing through by the coefficient of one of the variableas. I. e., one variable can be eliminated, at once.

1045-48 Increasing returns and equilibrium

1048-53 Tendency toward Zero Profits

1049 Now nobody has ever asserted that this rate of profit either is or tends toward zero, viz.,

earnings of management of all possible kinds, including also the earnings of better-than-common management

gains from successful risk-taking or uncertainty-bearing

gains from advantages incident to the control of particular factors, some of which would, in other firms, not contribute as much as they do where they are

chance gains that go to the owner as residual claimant, due regard being paid to the wisdom of Goethe's dictum that only the able enjoy consistent luck;

gains that accrue to a firm as it grows or because it grows, relatively or absolutely or both, an element of monopoly entering implicitly or explicitly wherever required.

Marshal's normal rate of profit out of this compound, a rate which he associated with the representative rather than the marginal firm. This normal rate of profit may be loosely defined as the rate that makes it worth while to enter and to stay in business. All of this has grown into Marshall's normal rate of profit and into the marginal efficiency of Keynes' General theory.

1080 n 1 A fourth type is exemplified by Sir R. H. Inglis Palgrave's statistical work on central banks, especially the Bank of England, (most of it summed up in his Bank Rate and the Money Market, 1903, which is a masterpiece in the art of making figures speak); it is very difficult to formulate particular results but he who peruses this book page by page suddenly discovers that he understands its subject.

1081 Why is it then that the work of this period is sometimes referred to so slightingly and that many of us construct an entirely unrealistic cleavage between it and out own? One answer is precisely that the evolutionary quality of those new methods and results make them look like mere reformulations of old stuff. But there is another answer, one that is highly interesting for the student of the mechanisms of scientific 'progress.' That period failed to to develop and systematize its conquests on a form readily accessible to all economists, with all implications nicely worked out and displayed on a silver platter. These conquests therefore did not penetrate into the common run of literature, especially into the textbooks, so that derogatory criticism, while it arouses just indignation in scholars like Professor Marget, is at the same time is in a position to justify itself from the common run -- even from such such well-known, successful and, in their way meritorious books as....

1088 Wicksell was the first to see the problem clearly and to coin the appropriate concept, Neutral Money.... So its creation led to the hunt for the conditions in which money is neutral. And this point led eventually to the discovery that no such conditions can be formulated, that is, that there is no such thing as neutral money....

1093 Laspeyres published the formula p_1q_0 / p_0q_0 (prices weighted by quantities in the base year) which secured him immortality... Cf. Jahrbücher für Nationalökonomie und Statistik, 1864 also 1871.

HEA, Note on the Theory of Utility, pp. 1053-74

From marginal utility to consumer's choice: escape from utilitarianism and psychologism.

1066 But it took until 1934 to give full effect to it and to develop a theory that is nothing but a logic of choice: the theory of Allen and Hicks that was published in that year was, as far as I know, the first to be completely independent of existence of an index function and compétely free from any lingering shadow of even marginal utility, which is replaced in their system by the marginal rate of substitution.[14] In consequence, elasticities of substitution and complementarity are defined exclusively from the scales of preference and likewise divorced from utility. Beyond this we cannot go. It must suffice to mention the most important of the problems that are not yet solved within the range of the theory of choice: sr far, indifference curves are satisfactorily defined for individual households only; the question remains what meaning is to be attached to collective indifference curves -- for instance, indifferences curves of a country -- which have been used in some of the most brilliant theoretical work of our time.[15]

14 It may be well to point out at once that this involves discarding at once Gossen's law of insatiable wants.

15 See e. g., Prof. Leontieff's paper on the use of indifference curves in the analysis of foreign trade, Quarterly Journal of Economics, May 1933.

1064 Xx Allen and Hicks,'Reconsiderations of the Therey of Value.' Eonomica, February and May 1934.

1067 ... from a practical standpoint we are not much better off when drawing purely imaginary indifference curves than we are when speaking of purely imaginary utility functions. Accordingly. it has been pointed out, as early as 1902, by Boninsegni, and a few years later by Barone, that for purposes of writing the equations of equilibrium we do not need either. What then do we need... A little reflection shows that even the early theory of value never actually used any other postulate than this: faced with a given set of prices and a given 'income,' everychooses to but (or sell) in a uniquely determined way. Everything else is idle decoration....

Schumpeter, HEA, Part IV, chap. 7, Appendix, #8,

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X

Marshall (Principles, pp. 533 ff.) averred that the sum total of satisfaction in a society might be increased beyond the maximum attainable under laisser-faire in a state of perfect equilibrium and perfect competition by taxing the production the production of commodities subject to decreasing returns and using the proceeds in order to subsidize the production of commodities subject to increasing returns. This proposition... has been much amplified by Professor Pigou and especially by Mr R. F. Kahn, the chief authority on the subject. See his paper Econ. Journ., March 1935.

Schumpeter, History of Econ. Anal., pp. 1174 f.

1174: Keynes' system is essentially static

dynamic elements are added but to a skeleton that was severely static

the static theory is not the theory of long-run normals but the theory of short-run equilibria

1175: (implicitly the theory is limited) to an analysis of the factors that determine the higher or lower degree of utilization of an existing industrial analysis

Keynes, General Theory, HEA 1171--76

Clement Juglar, Les crises.., HEA 1122-24

Various opinions, HEA 1125-35

Walras, HEA 998-1026

HEA Increasing Returns, 258 f.

Decreasing Returns, Rent, HEA 259-61

Historical Increasing Returns, HEA 262 f.

Senior 584, Marshall 1049f., Marx 1051.

XII

Schumpeter, History, Part IV, Chapter 8, Section 9, pp 1122-24

Non-Monetary Cycle Analysis (a) Juglar's Performance 1123

Note 3; Clément Juglar (1819-1905) abandoned medixcine for economics in 1848. He had no formal training in the latter and cared even less than he knew about formal theory. He was the type of genius that walks only the way chalked out by himself and never follows any other. Many people do this in a subject like economics. But then they mostly produuce freaks. The genius ᴍ comes in where a man produces, entirely on his own, truth that will stand. Of his many publications it is only necessary to mention his principal oneX: Les crises commerciales et ᴍᴍx leur retour périodique en France, en Angleterre /1124/ et aux etats-Unis (crowned by Académie in 1860; publiᴍin 1862, 2nd ed 1889, ET from 3rd ed 1916.....

1123 ... the decisive performance....It was the work of a a manwho was a physician by training, but must be ranked, as to talent and command of scientific method, among the great-economists of all times, Clément Juglar. This evaluation rests /1124/ ᴍᴍ upon three facts... he was the first to use time--series material (mainly prices, interest rates, and central bank balances) systematically and with the clear purpose in mind of analyzing a definite phenomenon. Since this is the fundamental method of modern business-cycle analysis, he can justly be called its ancestor. Second, having discovered the cycle of roughly ten years' duration that was most obvious in his material -- it was he who discovered the continent; islands near it several writers had discovered before -- he proceeded to doscover a morphology of it in terms of 'phases' (upgrade, 'explosion,' liquidation).... This morphology of a periodic process is what he ᴍeant when he proudly claimed to have discovered the law of crises without any preconceived theory or hypothesis, Third, he went on to try his hand at explanation.... all-important was his diagnosis of the nature of depression, which he expressed with epigrammatic force in the famous sentence: 'the only cause of depression is prosperity.' This means that depressions are nothing but the adaptation of the economic system to the situations created by the preceding prosperities and that, in consequence, the basic problem of cycle analysis reduces to the question, what is it that causes prosperities -- to which he failed to give a satisfactory answer.

Schumpeter, History of Economic Analysis, 1125 ff.
Part IV, Chapter 8, Section 9, (b).

The fact that 'the relatively large amplitude of the movements in constructional, as compared with consumption, industries' is one of the most obvious 'general characteristics of industrial fluctuations'[7] can hardly fail to ~~obtain~~ ob-
/1126x/ trude itself upon anyone[8] who has learned to look at a cycle as a whole, though it escape attention so long as one merely looks at the depression phase. Nevertheless it took time for it to be recognized consciously and with full awareness of its pivotal importance.

[7] Pigou, Industrial Fluctuations, 1927, Part I chapter 2.

[8] Walras, it is interesting to note, treated as common knowledge the fact that the x production des capitaux neufs goes on in alternating high tides and low tides -- characterized by respectively high and low rates of discount and of prices -- and identified it (in 1884) with what we call business cycles of about ten years duration. He does not quote Juglar but Jevons. (Etudes d'économie appliquée, 193?, p. 31)

p. 1128
A few examples will suffice to display the fact that most theories of cycles are nothing but different branches of that common trunk, 'plant and equipment.'

BL: Purely monetary theories place the origin of the cycle in the monetary sphere, but they may be included among the investment theories. If it places the origin in shifting rates of interest, still low rates encourage investment and high rates discourage it.

Again, investment in the physical sense may be content with a perpetuuum mobile theory: a long depression creates a need for new investment and an invitation from low prices. More to the point is the activity of promoters or, more generally, to the intrusion into the horizon of entrepreneurs of new technological or commercial possibilities.

Again, whatever may be the original impulse, it remains that the construction of new plant and equipment takes time. During that time there is nothing to blunt the edge of the original impulse. Later when consumer goods hit the market,

an excessive production will cause prices to fall, and discourage the investors.

Again, there is a crop of those theories which in one way or another impute responsibility for depressions to the inadequacy of money incomes in general -- more precisely their failure to expand pari passu with the production, actual or potential, of consumers' goods. But Schumpeter repeats Lord Keynes remark that, though such theories are numerous, they continue to live in a scientific underworld.

"So much was this the case that leading economists did not even bother to make the concessions that were obviously indicated. For though the argument against oversaving //1129,/1130,/ may be strong so long as they aver that saving is an ultimate and independent cause of disturbance, it should never be denied on the one hand that there are plenty of hitches in the saving-investment mechanism and, on the other hand, that a depression that has already set in for reasons other than saving, may make things worse on balance than they otherwise need be, especially if saving takes the form of hoarding as it is likely to do in a depression. But the leaders of prevailing opinion, completely failed to go into the matter properly -- a fact that explains much in the recent history of economics. They evidently attached but little importance to these possibilities of disturbance. They did not even emphasize the role in the cycle of that form of saving that is being used for the repayment of bank loans...."

J. A. Hobson, Overproduction through saving.

1131 ff. Marx, Never wrote a treatise on cycles, wrote on economic evolution, saw in crises the foreshadowing of the ultimate breakdown that would usher in the revolution....

1132 Other Approaches

Impossible to survey all other ideas that emerged during that period about the nature and causation of economic fluctuations. Necessary to point out that most of them, besides being suggested by untutored observation, were bound to appeal to economists who had developed economic statics as the centerpiece of their science... they naturally exaggerated the importance of their central achievement. They saw more in it than we do, that is, more than a logical schema that is

that is useful for clearing up certain equilibrium relations but is not in itself directly applicable to the given processes of real life. They did not relize how many and how important the phenomena ~~xxxx~~ are that escape this logical schema and loved to believe that they had got hold of all that was essential and 'normal'. Now, from the standpoint of this type of 1133// analysis, it is natural to locate the causes of observed disturbances either outside of the economic system or in the fact that the economic engine, like any engine, never works with precision."

Examples: harvest fluctuations; impute responsibility to uncertainty (and so perhaps to free enterprise), or to waves of optimism or pessimism; or to anything of sufficient importance that goes wrong for whatever reason.

Böhm-Bawerk once argued that crises pertain to the last chapter of an economic treatise; there all possible causes are to be listed. Schumpeter finds in this opinion more than at first appears; he inclines to believe that Marshall would have agreed with it; but Juglar's work reveals its inadequacy.

A general indictment of 1914 economists (to which J. A. S. subscribed in his Business /Cycles) is that with the exception of Marx0 they all tended to look upon cycles as a phenomenon superposed ~~xx~~ upon the normal course of capitalist life and mostly as a pathological one; it never occurred to the majority to look to business cycles for material with which to build the fundamental theory of capitalist reality.

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VI J A Schumpeter, Hist Econ Anal, Part IV: From 1870 tp 1914 & Later

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What they thought they saw with their vision at the back of their analysis (p. 571).

909 Part IV, ch. 6, #3.

The Revolution in the Theory of Value and Distribution

In this section, we shall try to formulate, in an entirely elementary manner, what this so-called revolution consisted in and what difference it made to economic analysis. For this purpose, we shall adopt the language of the maginal utility theory in its original and most uncritical form. And we shall use primarily the Austrian edition of it, because the Austrians (Menger, Wieser, Böhm-Bawerk), in spite of their defective technique, succeeded in bringings out certain certain fundamental aspects more clearly than did Jevons or Walras.

910 .. Neglecting these questions, we proceed at once to state the postulate -- or law -- that was fundamental to the 'new' or 'psychological' theory of value: as we go on acquiring successive increments of each good, the intensity of our desire for one additional unit declines monotonically until it reaches -- and then conceivably falls below -- zero. Or, replacing Menger's discrete figures discrete figures by a continuous curve or function, MX and the phrase 'desire for one more unit' by Marginal Utility: the Marginal Utility of a thing to anyone diminishes with every increase in the amount of it he already has' (Marshall, Principles p. 168). Waiving various objections, we may define from this (as a sum or integral) the concept of Total Utility and then also say that the total utility of a thing to anyone increases, up to the point of satiety, with every increase in the amount of it but at a decreasing rate.

In either form this is what Marshall called the law of Satiable Wants and what the Austrians called Gesetz der Bedürfnissättigung In honor of the most important 'forerunner' it is also called Gossen's first law. We add immediately the proposition which is or should be called Gossen's Second Law. Unlike the first it is not a postulate but a theorem: in order to secure a maximum of satisfaction from any good that is capable of satisfying different wants (including labor or money), an individual or household must allocate to these different uses in such a way as to equalize its marginal utilities in all of them.

Marginal Analysis, ~~Ricardo, cont'd.~~ Revolutions, con'd

But we should not... attribute tok him... an understanding of the principles of productivity analysis: his theory of rent, far from amounting to a recognition of these principles in a particular case, xxx really amounts to a denial of them.

J. B. Clark (1847-1938) HEA 868

The Austrians (Menger, Wieser, Böhm-Bawerk) HEA 909 ff.

909 3. ~~The Revolution in the Theory of Exchange x Ratios~~ See INSERT

911 ¶ Jevons, Menger, Walras (especially), also Gossen applied marginal utility to barter. They all aimed at the same goal, which was to prove that the principle of marginal utility suffices to deduce the exchange ratios between commodities that will establish themselves in competitive markets and also the x conditions under which ranges of possible ratios must be substituted for uniquely determined ones. In other words they established what A. Smith, Ricardo, and Marx had believed to be impossible, namely, that exchange value
912 can be explained in terms of use value //912//...

The essential point is that, in the new theory of exchange marginal utility analysis created an analytic tool of general applicability to economic problems....

The concepts of marginal and total xxixx utility refer to consumers' wants. They carry direct meaning only with respect to goods or services the use of which yields satisfaction of consumers' wants. But Menger went on to say that means of production -- or as he called it 'goods of higher order' -- came within the concept
/913/ of economic goods/by virtue of the fact that they also yield consumers' satisfaction, though only indirectly, through helping to produce things that do satisfy consumers' wants directly.

It enables us to treat... all services of natural agents and labor that are not directly consumed as incomplete xxxxxxxxxx consumable goods... This means on the one hand that the marginal utility principle now covers the cost phenomenon and in consequence also the logic of allocation of resources (structure of production), hence the supply side of the economic problem so far as this is determined by economic considerations. And it means on the other hand, that, inasmuch as costs to firms are income to households, the same marginal principle, with the same proviso, automatically covers the phenomena of income xixxxixxxixxx formation or of 'distribution' which really ceases to be a distinct topic.... The whole organon of pure economics thus finds itself unified as never before in the light of a single principle -- in a sense in which it never had been before.

Schumpeter, IV, ch. #3 c.

918 .. But it was only in the period under [redacted] discussion that the conception of an economic cosmos that consists of a system of interdependent quantities was fully worked out with all its problems, if not quite satisfactorily solved, at least clearly arrayed and with the idea of a general equilibrium between these quantities clearly established in the center of pure theory.

This was the achievement of Walras. So soon as we realize that it is the general equilibrium system which is the really important thing, we discover that, in itself, the principle of marginal utility is not so important after all as Jevons, the Austrians, and Walras himself had believed. But analysis of Walras' schema at the same time discloses the fact that marginal utility was the ladder by which Walras climbed to the level of general-equilibrium system. If the marginal utility theorem ceased to be all-important after this level had been reached. it was nevertheless all-important heuristically.

919 But as far as pure theory is concerned, there is no more sense in calling the Jevons-Menger-Walras theory neo-classic than there would be in calling the Einstein theory neo-Newtonian.

However! 'No theory in the sense of pure theory can ever be a theory in the sense of complete analysis of the phenomena to which it refers.'

Note23 The marginal theorists were (like most theorists to this day) only imperfectly aware of the formal character of their analysis... they thought that they were teaching much more about economic reality than was actually the case.

BL: An important point if ethics is to be introduced into thought about economic affairs.

Schumpeter throughout regards Walras as the genius. He devotes pp. 998-1026 to an exposition of his position. Still he concludes with the words: If in the last analysis Walras' system is perhaps nothing but a huge research program, it still is, owing to its intellectual quality, the basis of practically all the best work of our time. p. 1026.

827 .. so far as pure theory is concerned, Walras is in my opinion the greatest of all economists. His system of economic equilibrium, uniting as it does the quality of 'revolutionary' creativeness with the quality of classic synthesis, is the only work by an economist that will stand comparison with the achievements of theoretical physics. Compared with it, most of the writings of that period -- and beyond -- ... look like boats beside a liner.

Original titles HEA 1207.

Cf. life sketch, pp. 827-29; Also P-K Guide, p. 3, 1st paragraph.

910 .. to state the postulate -- or law --that was fundamental to the 'new' or 'psychological' theory of value:

as we go on acquiring successive increments of each good, the intensity of our desire for one additional 'unit' declines until it reaches -- and then conceivably falls below -- zero.

(Again) 'The marginal utility of a thing to anyone diminishes with every increase in the amount of it he already has' (Marshall, Principles, p. 168).

.. we may define from this (as a sum or integral) the concept of total utility and then also say that the total utility of a thing to anyone increases, up to the point of satiety, with every increase in the amount of it, but at a decreasing rate.

In honor of its most important forerunner, it is also called Gossen's first law. .. Gossen's second law, unlike the first, is not a postulate but a theorem: in order to secure the maximum satisfaction from any good that is capable of satisfying different wants (including labor or money) an individual or household must allocate it to these different uses in such a way as to equalize the marginal utility of all of them.

A leap from psychological satisfaction, to utility of alternative materials or techniques, to criterion of optimal selection of alternatives, into application of cartesian coordinates and the calculus.

911 The Theory of Exchange Value.

[though not always realized] .. exchange value is but a special form of a universal coefficient of transformation on the derivation of which pivots the whole logic of economic phenomena.

911 In other words, they [Jevons, Menger, Walras] established what A Smith, Ricardo, and Marx believed to be impossible, namely, that exchange value can be explained in terms of use 912 value. Jevons, Menger, Walras would all of them have approved of this statement. It is this which they meant when they claimed to have discovered the 'cause' of (exchange) value.

The essential point is that, in the 'new' theory of exchange, marginal utility analysis created an analytic tool of general applicability to economic problems.

Cost, Production, Distribution. The concepts of marginal and total utility refer to consumers' wants. They carry direct meaning only with reference to goods and services the use of which yields satisfaction of consumers' wants. But Menger went on to say that means of production... come within the concept
913 of economic goods //913// by virtue of the fact that they also yield consumers' satisfaction, though only indirectly, through helping to produce things that do satisfy consumers' wants directly. Let us pause for a moment to consider the meaning of this analytic device... It enables us to treat such things as iron or cement or fertilizers -- and also all the services of natural agents and of labor that are not directly consumed -- as incomplete consumable goods, and thereby extends the range of the principle of marginal utility over the whole area of production and distribution. The requisites of factors or agents of production are assigned use values: they acquire their indices of economic significance and hence their exchange values from the same marginal utility principle that provides the indices of economic significance and hence explains the exchange values of consumable goods. But these exchange values constitute the costs of ~~production of~~ production for the producing
that/ firms. This means, on the one hand,/the marginal utility principle now covers the cost phenomenon and inconsequence also the logic of the allocation of resources (structure of production), hence the 'supply side' of the economic problem so far as all this is determined by economic considerations. And it means, on the other hand, that, inasmuch as costs to firms are incomes to households, the same marginal principle, with the same proviso, automatically covers the phenomena of income,

PK 46-60

formation or of distribution, which really ceases to be a distinct topic, though it may of course, still be treated separately for the sake of convenience of exposition. The whole of the organon of pure economics thus finds itself unified in the light of a single principle -- in a sense in which it had never been before.

914 If the explanation of the exchange value of means of production is based upon their indirect utility or use value to consumers of their final product, i. e., if their economic significance is to be derived which they severally make to consumers' satisfactions, the problem naturally arises how the contribution of each of them is to be isolated, seeing that all factors are equally requisite for the final product and that complete withdrawal of any one of them will in most cases result in a zero product....

915 Marginal physical productivity of a 'factor' is the increment of product that results from an infinitesimal increment of that factor. Marginal value productivity of a 'factor' to a firm is this physical increment multiplied by the corresponding increment in the firm's total revenue or gross receipts... Fundamentally, the Austrian marginal productivity was indeed a value productivity but one that did not presuppose the price

marginal/ of the product: it was not physical/productivity multiplied by any price but physical marginal productivty multiplied by some consumer's marginal utility...

Now this conception of marginal value or utility productivity makes obvious common sense only in the case of a Crusoe economy...

916 In order to determine the prices of factors and their distributive shares we do not need to know their utility values

PK 90-3; 92. first. All we need to know is consumers' tastes, the technological conditions of production, and the initial distribution of ownership of 'factors'; then the principle of maximum net revenue, implying a principle of minimum cost, will do the rest.

917 Discussion of marginal utilities of means of production

s in the spirit of the theory of imputation easily lead to the recognition of the relevance to these marginal utilities of the elements of complementarity and substitutability of factors and of their alternative uses. By this route the Austrians arrived at what has been called the alternative-use or opportinity theory of cost

918 1016

Schumpeter: Notes on Development of Analysis of Costs & Profits

660: He (J. S. Mill) handed to Marshall ready-made the doctrine of the two factors of 'real cost" -- the disutility (irksomeness) experienced by the laborer and abstinence experienced by the saver.

923: Marshall meant (by real cost) 'The exertions of the different kinds of labor that are involved directly or indirectly in making it (a commodity), together with the abstinences or rather the waitings required for saving the capital used in making it.'

917: Discussion of marginal utilities of means of production in the spirit of the theory of imputation easily leads to the relevance to these marginal utilities of the elements of com-
PK 76ff. plementarity and substitutibility of factors and of their alternative uses. By this route the Austrian arrived at what has been called the alternative-use or opportunity theory of cost -- What a thing really costs us is the sacrifice of the utility of
the/ those other things which we could have had from/resources that that went into the one that we did produce.

912f. Scope of marginal analysis: all costs and distribution
920: Its limitations: theories of enterprise, capital, interest.
923: Its compatibility with disutility and abstinence in Gossen, Jevons, Auspitz, Lieben, and Clark -- not Walras though --
918: ... The history of analytic effort in this field is the history of a growing awareness, partial at first, ever more general later on, of the presence of a logically coherent economic process, an awareness that first attained conscious formulation in works of such men as Cantillon, Quesnay, A. Smith, Say, and Ricardo. But it was only in the period under discussion[1870-1914] that the conception of an economic cosmos that consists in a system of interdependent quantities was fully worked out with all its problems, if not quite satisfactorily solved, at least clearly arrayed and with the idea of general equilibrium between these quantities clearly established in the center of pure theory.

This was the achievement of Walras. So soon as we realize that it is the general equilibrium system which is the really important thing, we discover that, in itself, the principle of marginal utility was the ladder by which Walras climbed to the level of his general-equilibrium system. If the principle of marginal utility ceased to be all-important after this level had been reached, it was nevertheless all important heuristically. This observation sheds new light on the achievement of Jevons

and the Austrians. They too found the ladder. Defective technique only prevented them from climbing to the top of it. But they did climb as high as their technique permitted. In other words: we must see in the Jevons-Menger utility theory an embryonic theory of general equilibrium or, at/all events, a particular form of the unifying principle that is at the bottom of/any general equilibrium system. Though they did not make it fully articulate, mainly because they did not understand the meaning of a set of simultaneous equations, and though they saw in marginal utility the essence of their innovation instead of seeing in it a heuristically useful methodological device, they are none the less, just like Walras, among the founding fathers of modern theory. This also holds for J. B. Clark. Later critics were so delighted with their own technical improvements and so anxious to renounce communion with Jevons and the Austrians that they failed entirely to perceive this.

1016f. In the Walrasian system, the theory of capital formation is, on the one hand, the foundation of the theory of interest and, on the other hand, itself rests on the theory of capital-goods prices...

The new capital goods that are being demanded and produced may not suffice, or just suffice, or more than suffice to make up for the loss the existing stock currently suffers from accident or from wear and tear. The last of these three defines saving, which expressed in terms of the numéraire, is therefore the excess of net income (the total net value of the services sold by households) over consumption (the total value of the products bought by households). Hence, exactly as in Keyness General Theory, current saving is tautologically equal to current investment. Saving is here merely a word that identifies a particular kind of demand, namely, the demand for capital goods....

The equality of current saing and current investment is an identity and not an equilibrium condition. The equilibrium condition is that the sum total of saving in a given period should be equal to the costs of the capital-goods producing firms (produced and) sold in that period, since these firms like all others are subject to Walras' law of costs. (Cf crossover equilibrium).

Now -- unlike Keynes General Theory - the only motive that capitalists can have in this set-up for demanding capital goods is the net revenue expected from them... From this follows another

equilibrium condition, which must be fulfilled by their prices: these prices must, under ideal conditions, be proportional to their net yields or else arbitrage operations would set in to enforce proportionality. But this may be expressed by saying that our capital-goods market is really a market of streams of perpetual net revenues (revenues less depreciation and insurance), from which standpoint all capital goods are on the same footing irrespective of their physical shapes. In order to emphasize this aspect, Walras created an ideal or imaginary commodity that represents 'perpetual net revenue.' This gadget -- another purely theoretical construct -- enables him to endow each household (sic) with a marginal utility and a demand function for 'perpetual net revenue,' and to replace all the (unknown) prices of the capital goods by a single price, which helps then to determine them, namely, the price of a unit of perpetual net revenue per unit //1018// of time -- a profound move on the analytical chessboard... Thus the single price in question is simply the reciprocal of the rate of perpetual net revenue, which is a factor of proportionality, common to the values of all the capital goods and readily identified -- so long as there is no money -- with the rate of interest.

... We must be content to state without proof that Walras' system is not -- we are still following an analysis that abstracts from genuine money --upset by the facts, as stylized by him, of capital formation and by the excursion that the theory of it involves into... non-stationary states.

1026 If in the last analysis Walras' system is nothing perhaps but a huge research program, it still is, owing to its intellectual quality, the basis of practically all the best work of our own time.

Cf GPKE p. 84: As Jaffé puts it: "Walras's aim even in his pure economics was prescriptive or normative rather than positive or descriptive. His object was to formulate [invent?] an economic system in conformity with an ideal of social justice."

Cf HEA 827f. Unfortunately Walras himself attached too much importance to his questionable philosophies about social justice, his land nationalization scheme, his projects of monetary management, and other things that have nothing to do with his superb achievement in pure theory. Cf. original titles, 1207.

930 (Böhm-Bawerk's theory of interest).. admits of a simplification that one may accept without committing oneself to the details of B-B's analytic structure. This simlified version reads like this: interest arises from the interaction of (psychological) time preference with the physical productivity of investment. And in this diluted form, Böhm-Bawerk's theory became not only one of the iterest theories of the period but the most widely accepted one of all, though each author added special features of his own, that did not as a rule meet with the approval of any considerable number of other authors.

931 The 'agio' (ease) theory of interest involves an entirely different conception (from the Marxist exploitation theory). Being a general time discount that applies to the returns from productive services of all kinds, interest as it were preys upon

932 them all, //932// upon the returns from the services of physical capital goods not less than upon any others. It is, therefore, something that differs in nature from all productive returns properly so-called, not only from rents of natural agents and wages of labor but also from the productivity returns of capital goods.

n. 20 Money, like time is a requisite of production, but that does not make it productive as is land, labor, or a shovel.

935 Much more important, however, was one of his (Marshall's) most felicitous creations, the concept of quasi-rent or 'income from an appliance for production already made by man,' that embodies the recognition of two facts that were particularly important in connection with the new theories of interest: the fact that any price paid for the services of capital goods is closely analogous to the price for the services of natural agents; and the fact that this analogy holds particualry for the chort run and decreases with the increase in the length of time to which a proposition is intended to apply.

BL (1) (3) (2) Interest owes its generality and distinctiveness because it conditions the existence of the redistributive function in an expanding economy, makes possible its ever increasing rate of expanding, and generates surplus income as long as surplus is more than repairs and replacement of capital plant and equipment.

Schumpeter, HEA, Interest, Rent, Wages.

930 Böhm-Bawerk's theory of interest admits a simplication that one may accept without committing oneself to the details of B-B's analytic structure. The simplified version reads like this: interest arises from the interaction of (XXXXXX 'psychological') time preference with the physical productivity of investment.

931 The 'agio' or premium theory of interest involves and entirely different conception. Being a general time discount that applies to the returns from productive sources of all x kinds,
932 interest as it were preys upon them all, //932// upon the returns from the services of physical capital goods not less than upon any others.... A much more important consequence was that intxerest now entered the theories of rent and wages in an entirely new manner.

933 First, then, as regards the rent of natural agents, it is obvious that the Jevons-Menger-Walras analysis provided a xxx perfectly good explanation of this rent phenomenon.... All that had to be done was to take a clue from Say or Cantillon, that is, to recognize that rent is simply a matter of pricing the services of these requisites ofx production and to apply the marginal principle to the formation of these prices.

(But resistance out of loyalty to Ricardo) (Marshall's)

935 Much more important, however, was one of his most felicitous creations, the concept of quasi-rent or 'income from an appliance for production alreadyx made by man,' that embodies the recognition of two facts... the fact that any price paid for the services of capital goods is closely analogous to the price paid for for the services of natural agents; and xx the fact that this analogy holds particularly for the short run and decreases with the increase of the length of time to which a proposition is intended to apply.

939 Developments and cautions regarding the application of marginal productivity to an account of wage rates.