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## THE FUTILITY OF MARGINAL UTILITY

Marginal-utility economics has nothing to say of the genesis, growth, or current working of economic institutions.<sup>1</sup> Its deliverances, accordingly, are futile for the problem of social betterment, since social betterment is a matter of the adjustment of institutions to changing circumstances and changing ideals. the marginal-utility doctrines are likewise futile for the purposes of the limited problem to which they are applied. That problem is the explanation of market value (price) as the resultant of individual (subjective) valuations expressed in market bids and To be competent such an explanation must comprise (I) a psychologically tenable analysis of the process of individual valuation, and (2) a practically useful account of the market situation through which individual valuations are conceived to eventuate in market price. The marginal-utility theory fails in both particulars. (I) It is not psychologically tenable because it is essentially and irremediably hedonistic, whereas the human mind is perversely and persistently non-hedonistic. (2) It is not practically useful because it does not offer, in any concrete case, an explanation of price, but only restates the price problem in language which is unintelligible to the layman, and which is meaningless even when understood.2

<sup>&</sup>lt;sup>1</sup> Veblen: "The Limitations of Marginal Utility," Journal of Political Economy, November, 1909; "Professor Clark's Economics," Quarterly Journal of Economics, February, 1908.

<sup>&</sup>lt;sup>2</sup> Carlile: "The Language of Economics," Journal of Political Economy, July, 1909.

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That the marginal-utility theory usually has been formulated in hedonistic terms is pointed out at length by a recent profound and sympathetic critic of that theory<sup>3</sup> and is, indeed, too well known to require particular citation here. It is just as little open to question that hedonism is hopelessly discredited by modern psychology.<sup>4</sup> The frailty of this outworn psychological doctrine as a foundation for economic theory is sufficiently patent. Yet, just because hedonism does underlie what is termed "modern" economics, a brief review of the hedonistic doctrine and of some of the cardinal objections thereto may not be out of place.

The hedonism here criticized is the theory that human conduct is guided by a rationalistic calculation of self-interest in terms of "pleasure" and "pain" (pleasantness and unpleasantness).<sup>5</sup> To apply this hedonistic calculus to everyday economic affairs requires no small dialectical finesse, but the marginal utilitarians—to coin a not inappropriate phrase—are quite equal to the feat. Starting with the desire for wealth as the immediate motive of economic acts, these economists point out that wealth is desired because it represents command over "enjoyable (pleasure-giving) goods and services." But wealth can be acquired only at the cost of painful effort (labor and "abstinence"). So economic activity comes to be rationally directed with a view to obtaining the maximum of wealth with the minimum of effort. Seen in this light, pecuniary loss and gain are convertible with pain and pleasure. Pecuniary gain is looked upon as an intermediate

<sup>&</sup>lt;sup>3</sup> Davenport, Value and Distribution, pp. 304 ff.

<sup>\*</sup>For criticisms of hedonism see: Fite, "The Place of Pleasure and Pain in the Functional Psychology," Psychological Review, November, 1903; Fite, Introductory Study of Ethics, chap. viii; Dewey and Tufts, Ethics, pp. 269-75; Dewey, Study of Ethics, A Syllabus; Irons, Psychology of Ethics, passim; McDougall, An Introduction to Social Psychology, chap. i; MacKenzie, Introduction to Social Philosophy, pp. 215, 216; James, Principles of Psychology, Vol. II, pp. 549-59.

<sup>&</sup>lt;sup>5</sup>Bentham and his followers meant by "pain" both the sensations now so termed and the affective tone now known as "unpleasantness." But political economists have generally understood "pain" in the sense of "unpleasantness," as is shown by their use of such expressions as "labor-pain," "pains of abstinence," and the like.

object only, the ultimate object in all cases being "psychic income"
—the pleasurable effects anticipated from acts of consumption.

The objection to all this is its want of verisimilitude, and that in two respects. (1) It assigns too large a place to reflective choice as an element in human conduct, and (2) it misconceives the basis of choice.

1. Deliberation, reasoned choice, plays but a minor part in the affairs of men.7 (a) Habit, not calculation, governs the greater part of all our acts. Even such calculating and choosing as we do is done only upon the basis and within the limits of habit.8 Moreover, the habits of thought which count for most in shaping choice are not the result of prevision, but are of the nature of conventions uncritically accepted by virtue of membership in a particular group. It is these conventions, far more than rational appraisal by individuals, that determine the relative "utilities" of "consumers' goods." The "utility" of diamonds or dress suits, for example, is purely conventional. If the price of these objects depended upon serviceableness for the life-process, or even upon aesthetic appreciation, their power-in-exchange would be small indeed. They owe their market value to the convention of pecuniary emulation which gives them a high "utility" as evidences of their wearers' ability to pay. To ignore this conventional value and explain the high price of diamonds and dress suits by their "marginal utility" as objects of use and beauty9 is to lose sight of the main factor in the case. (b) Those acts which are not merely habitual quite as often result from suggestion as from choice (comparison of ideas and selection among them). This would appear to follow as an easy corollary of the

<sup>&</sup>lt;sup>6</sup> "The truth is—and it should never be lost sight of—that business men conduct their business with an eye always to enjoyable income" (Fisher, *The Rate of Interest*, p. 241). The "truth" is, of course, that the larger business men rarely think of converting their gains into "enjoyable income." Not enjoyable income but pecuniary rating, magnitude of capitalized wealth, is the object of large business operations.

<sup>&</sup>lt;sup>7</sup> "Mankind is only a little bit reasonable and to a great extent unintelligently moved in quite unreasonable ways." McDougall, op. cit., p. 11.

<sup>&</sup>lt;sup>6</sup> For a discussion of this point see Judd, Psychology, chap. xiii.

Ompare Böhm-Bawerk, Positive Theory of Capital, p. 153.

economists' postulate that we seek our ends by the easiest path (with the smallest possible effort). 10 Calculation is difficult work. It is much easier to act on a suggestion than to weigh alternatives. The path of least resistance in buying a necktie is to enter a shop where neckwear is attractively displayed and select the cravat insinuatingly recommended by the engaging salesman. To make an exhaustive canvass of shapes, colors, prices, and of alternative uses of the purchase-money is far more tedious and wearisome. Whatever be the merits of the least-resistance theory, it is, at any rate, a fact of observation that the human mind is extremely responsive to suggestion. The effectiveness of advertising, of window displays, and of salesmanship, mainly depends upon this principle. A "catchy" advertisement fixes the attention upon a single idea to the exclusion of all others. It is effective in proportion as it precludes comparison and selection. Similarly, the commercial value of such phrases as "It floats," or "There's a reason," lies in their power to produce an unreasoned conviction as to the superior merit of the commodities with which these phrases are associated. The high "marginal utility" of very many articles of commerce is created by similar devices.

What has just been said as to the influence of habit and suggestion is, of course, a recital of psychological commonplaces. The recital is important only as tending to show that a theory of valuation which places the emphasis upon rationalistic appraisal overlooks the most important features of the process which it seeks to explain.

2. So far as men take thought for the future they habitually do not think in terms of anticipated feelings. It is probable, indeed, that feelings cannot be imaged: hence, that they cannot be anticipated: hence, that anticipated feeling cannot serve as a motive.<sup>11</sup> The sounder view appears to be that the idea (image)

<sup>10</sup> Oft-quoted statements of the "economic motive" are: "To satisfy our wants to the utmost with the least effort" (Jevons: *Theory of Political Economy*, p. 37); "Men follow the line of least motive resistance" (Davenport: Outlines of Economic Theory, p. 33).

in That feeling cannot be imaged appears to follow from the modern theory of affection. But even if it be granted that pleasantness-unpleasantness can be imaged, it seems certain that the image, if obtained, cannot act as a motive.

of the thing anticipated is accompanied by a feeling of pleasantness or unpleasantness. I anticipate an approaching meeting with a long-absent friend. The thought of the meeting is presented to my mind as a vivid image—the friend's appearance, voice, manner, greeting—and this image, or group of related images, is accompanied by a rush of joyous feeling. The pleasure is felt, not anticipated, at the moment of anticipating the meeting. Doubtless this concomitant pleasure strengthens my desire to see my friend, but the pleasure is the result, not the cause, of the desire.

But apart from this question of anticipated feeling, it is clear to modern psychologists that men do not "strive after happiness" or "satisfaction" or any other all-inclusive object of desire, but after definite, concrete, realizable objects—a college degree, a political office, a million dollars, the control of a rail-way. <sup>13</sup>

It is these concrete objects, and not the remote reasons for desiring them, which are the effective motives of action and which, consequently, are to be appealed to for the explanation of acts so motivated. It is notorious, for example, that the accountancy employed by business men runs in terms of money, not in terms of "consumption goods" or of "psychic income." The habitual resort to the pecuniary accountancy would require to be explained in a genetic account of business enterprise, but for the study of current business traffic it is to be taken as a datum, analysis of which would be irrelevant to the problem in

For, in order to react to the image, we must attend to it, and this, as Titchener has pointed out, is impossible. "We cannot attend to affection at all; if we attempt to do so, the pleasantness or unpleasantness eludes us and disappears" (Text-Book of Psychology, p. 231). Further, proof of the reality of a feeling-image appears to be impossible. There is no way of discriminating, introspectively, between an incipient or other feeling and the alleged image of the feeling. That is, there are no qualitative marks of the feeling itself by which the feeling and its image can be differentiated.

For this last point, as also for much helpful criticism, the writer is indebted to Mr. J. G. Scott, a graduate student at the University of Missouri.

<sup>&</sup>lt;sup>12</sup> Böhm-Bawerk, Positive Theory of Capital, p. 9.

 $<sup>^{13}</sup>$  Compare Dewey and Tufts, *Ethics*, p. 270; Dewey, *Psychology* pp. 361, 362.

hand. To resolve this money accountancy into terms of anticipated "gratification," after the fashion of marginal-utility theorists, is worse than useless: it is a false explanation of, or rather an attempt to explain away, the phenomenon in question.

The foregoing brief review should serve to make it clear that the hedonistic theory of "reasonable conduct" is a psychological misconception. Few economists of the marginal-utility persuasion are notable for their acquaintance with modern psychology; yet certain disciples of even this school have latterly come to feel that the ancient standpoint no longer affords a secure basis for economic analysis. But these doubters have not thereby been led to relate their economic speculations to more tenable psychological views. Instead they (1) have sought to escape hedonistic implications by a change of phraseology without substantial change of content, or else (2) they have denied that the soundness of hedonism is essential to the validity of doctrines based on hedonistic postulates. These two lines of defense against the anti-hedonistic protest require separate consideration.

I. A good illustration of the pious effort to modernize an antiquated system of doctrine by slight alterations of terminology is Professor Fetter's use of the term "gratification." That this word, as used by Professor Fetter, carries a hedonistic content is sufficiently apparent from the following passages: "The [rationally conceived] purpose of industry is to gratify wants." The substitution of goods in men's thought is the shifting of the choice from a good that does not give the highest gratification economically possible at the time to another good that does." "Time-discount" (interest) is an "anticipation of the difference between present and future gratifications." The value of all things must be traced back to gratification, to the relation of goods with psychic income" psychic income being the flow

<sup>&</sup>lt;sup>14</sup> Of the same character are Professor Carver's "satisfaction of desire" and Professor Fisher's "psychic income."

<sup>18</sup> Fetter, Principles of Economics, p. 9.

<sup>16</sup> Ibid., p. 27.

<sup>17</sup> Ibid., p. 150.

<sup>&</sup>lt;sup>18</sup> Ibid., p. 277.

of pleasant feelings experienced or anticipated from the act of consumption.<sup>19</sup>

2. Some adherents of the marginal-utility school insist that the whole issue between hedonists and anti-hedonists is irrelevant to value theory. Admitting that marginal utilitarians usually have been hedonists they deny that the marginal-utility doctrines stand or fall with hedonism. Those who take this position—and their number includes the chief apostle of the faith<sup>20</sup>—assert that economics is concerned only with the fact of choice between goods or between alternative activities, and not with the basis of choice.<sup>21</sup> But if this be true, all talk of "gratification," "psychic income" or the "balancing of utilities" must be thrown out of economic discussion—whereupon the whole literature of marginal utility reduces itself to a meaningless jargon. For if choices are really made between goods and not between the "utilities" represented by the goods, why talk of "utility" at all? And, if it be admitted that economic choice is more frequently the outcome of habit, suggestion, and the like, than of a rationalistic weighing of alternative gratifications, the marginal-utility analysis of price loses all its significance.

That the disavowal of hedonism does deprive marginal-utility economics of its whole content may be shown by applying the expurgated theory to a single concrete case. At the town where this paper is being written pork chops are selling for eighteen cents a pound. The most naïve explanation of this fact, in terms of the marginal-utility theory, is that some portion of the whole supply of pork chops offered for sale possesses a "utility" to the purchaser precisely equal to the "utility" of the "marginal increment" of some other good procurable for the same moneyoutlay. Hence, if the price should rise by even a fraction of a cent, some portion of the supply would be left unsold, since the

<sup>&</sup>lt;sup>19</sup> More naïvely hedonistic expressions are not wanting in Professor Fetter's writings. Thus: "Our economic bookkeeping can be made to balance only when real income be looked upon as a flow of pleasure in all cases" (Quarterly Journal of Economics, Vol. XV, p. 27).

<sup>&</sup>lt;sup>20</sup> Böhm-Bawerk, Grundzüge der Theorie des wirtschaftlichen Werts, pp. 49-50.

<sup>&</sup>lt;sup>21</sup> Davenport, op. cit., pp. 305-11; especially p. 306.

"marginal purchaser" might then procure a greater "utility" by an equal money-outlay for some other commodity.<sup>22</sup>

All this is intelligible enough if a hedonistic content be given to "utility." To a hedonistic man "the pleasure and benefit" of a barrel of apples may be comparable with "the pleasure and benefit" of a hat or a theatrical performance. Moreover, since the hedonistic man is, ex hypothesi, endowed with a high degree of foresight and hindsight, it may be assumed that his "marginal purchase" of pork chops in the winter exactly balances in respect of "utility" his "marginal purchase" of underclothing the preceding autumn, or of peaches the ensuing summer. For hedonistic men, accordingly, the comparison of the utility of different goods, at different times, or even to different persons, presents no insuperable difficulty.

But the case is otherwise when the theory attempts to take account of (non-hedonistic) human beings. A restaurant-keeper, in the course of a morning, orders pork chops for his kitchen, coal for his furnace, and a box of cigars for himself. Possibly he hesitates between a prime cut of pork costing \$1.80 and an inferior grade costing \$1.55, between Missouri coal for \$2.75 and Illinois coal for \$3.00, between one brand of cigars at \$3.25 and another at \$3.50. Here are three "marginal increments" of the same price magnitude. Can it be said that they represent the same utility magnitude, as the theory would require? The caterer may compare the two brands of cigars in respect of the pleasure felt as he imagines himself smoking the one or the other. Most likely he compares the two sorts of coal in respect of fuel-value,

<sup>22</sup> Clark, Essentials of Economic Theory, chap. vi.

Some careless statements of the Austrian doctrine imply that value is proportional to "marginal utility," or even directly proportional to "utility." Thus Professor Carver writes: "... the value of a transferable thing depends upon how much it is wanted in comparison with other transferable things," which he terms an "obvious assumption." ("Diminishing Returns and Value," Rivista di Scienza, Vol. VI, No. 12.) That is, a six-dollar pair of shoes is wanted twice as much as a three-dollar hat—which to the writer appears to be an obvious absurdity. The statement in the text above is not accurate Austrianism (see below), but it is believed to represent Professor Clark's analysis at its best.

23 Clark, op. cit., p. 98.

dirtiness, and the like without thinking of these qualities in feeling-terms. It is almost certain that he will decide in favor of one or the other grade of meat according to his expectation of profit and that he will not resolve this prospective money-gain into consumption-units of any sort. Can quantitative equivalence be predicated of things so disparate as pleasant feelings, fuel-value, and money-gain? Clearly this cruder formulation of the utility theory necessitates some common denominator of "utility," such as the pain-pleasure jelly of unrefined hedonism.

The more sophisticated formulation of the doctrine does, indeed, escape the necessity of finding a common denominator of "utility," but it does so only by becoming inconsequential. This formulation runs that the market price of pork chops is fixed at eighteen cents because to the "marginal purchaser" of the existing supply the "subjective significance" of a pound of pork chops is greater than the "subjective significance" of eighteen cents' worth of any other good but less than the "subjective significance" of eighteen-and-a-half cents' worth of some other good.

What precisely does this mean? The "subjective significance" of pork chops may be an estimate of their food-value, or a mental picture of pork chops and gravy on the supper table, or again, it may be merely the recollection of Mary's request to bring home pork instead of beef. The "marginal purchaser" may compare a quarter's worth of pork chops with a pound of sirloin steak, or with two cigars, or, as is most often the case, with nothing in particular. The "marginal purchaser" will, indeed, buy a greater quantity of pork chops at eighteen cents than he would at fifteen cents a pound—otherwise he would not be a "marginal purchaser" —but his decision to take two pounds instead of three is much more likely to be based on a vague conviction that he "cannot afford" to spend more than about so much for a mess of pork than upon any comparison of pork chops with other goods. For "marginal purchases," like others, are made with very different degrees of deliberateness. A business man's "marginal" investment in his business will commonly be made after a careful canvass (in pecuniary terms) of alternatives; his "marginal increment" of restaurant service is likely to be purchased in quite unreflective response to the suggestion of an expectant waiter or the example of his dinner companions. To speak of a "balancing of utility" in such a case of unreflective purchase is simply absurd—there being no balancing of "utility" or of anything else in the case. And unreflective buying of "consumption goods," if not "normal," is, at least, fairly common.

If, then, all hedonistic implications be disavowed, what is the significance of saying that the "utility" of a pound of pork chops is only just greater than the "utility" of eighteen cents' worth of something else? The statement can mean only that the pork is, at the moment of purchase, preferred by the purchaser to anything else (perhaps nothing) with which it is, at the moment, actually compared—otherwise it would not be bought. The pork is purchased because it is preferred—the proof of the preference being the fact of purchase. All of which is unilluminating enough as an explanation of the "marginal purchaser's" preference.

And it is equally unilluminating as an explanation of the price of pork. In the last analysis it says only that pork chops sell at eighteen cents because some portion of the supply in the market would remain unsold at any higher price. It was already observed by them of old time that the sales of a commodity commonly fall off when its price rises relatively to the prices of other commodities. It adds nothing to the older doctrine to say that sales fall off because some persons buy other things or keep their money in their pockets.

To conclude this stage of the argument: If the marginal utility theory be interpreted hedonistically it is psychologically invalid. If the theory be deprived of its hedonistic content it is reduced to the unobjectionable statements: (1) that men will not buy a thing unless they want it; (2) that a commodity cannot be sold for more than somebody is willing to pay for it; (3) that in a perfect market no one will pay more for a given commodity than anyone else. Surely it needed no bulky volumes and a profusion of obscure terminology to tell us this.

Π

Our second proposition is that, quite irrespective of its psychological inadequacy, the marginal-utility theory falls short of practical usefulness. It does not solve concrete problems of price, but only translates them into a jargon hard to be understood. If this proposition can be established the futility of the theory will be sufficiently shown.

Men need to understand market price as a guide to either individual or social action. To cite a single instance, farmers and meat-packers wish to predict the price of hogs in order that they may shape their business operations in accordance therewith. The "consuming public" also is interested in the price of hogs, not merely as an aid in forecasting the probable future price of hog-products, but as throwing light on the question how far the high price of meat is due to the cost of growing and packing hogs and how far to causes susceptible of social control. The first requisite to the intelligent handling of either problem is evidently an analysis of the forces at work in the hog-market. Does the marginal-utility theory afford such an analysis?

The average price of hogs at Chicago was \$8.10 on October 4, 1909, and had fallen to \$7.53 on October 14. How is this to be explained? The marginal-utility theory has it that the price, on any given day, is fixed at a point between the "marginal price-offer" and the "marginal refusal price"—by which terms is meant the money-expression of the "subjective value" of hogs to the "marginal buyer" and "marginal seller" respectively.<sup>24</sup> It is clear, then, that the price of hogs fell because the "marginal price-offer" and the "marginal refusal price" simultaneously declined.

But is this anything more than a puzzling restatement of the problem? It says only that the "marginal buyer" was disposed to pay less, and the "marginal seller" willing to take less, on October 14 than on October 4. As to the reasons for this change of heart we are left completely in the dark. And we are just as little enlightened as to the forces which fix the price on any given day. The "marginal price-offer" is simply the lowest offer which

<sup>24</sup> Böhm-Bawerk, Positive Theory, Book IV, chap. iv.

any buyer can make without being outbid by other buyers. Likewise, the "marginal refusal price" is simply the highest price which any seller can ask without being undersold by other sellers. If there is a "perfect market," so that all hogs of a given grade are sold for the same price—which, of course, never occurs— "marginal price-offer" and "marginal refusal price" will coincide, or nearly coincide, with each other and with market price. But the "marginal" bid and offer are only in an infinitesimal degree the cause of the market adjustment; they count for no more in that adjustment than do any other bids or offers.<sup>25</sup> The "margin" of price-paying or price-refusing disposition is what it is only because of the action of all the buyers and sellers in the market. And the action of buyers and sellers is what it is only because of all the forces which bear upon hog-supply, on the one hand, and upon the demand for hogs, on the other. That is to say, the "margin" is the resultant of all those forces which fix market price. The "margin" is, indeed, a purely a posteriori fact. Barring omniscience, there is no way to ascertain the position of the "margin" until the "going price" has been established. To say that the price of hogs fell because the "marginal price-offer" for hogs declined is, therefore, to say that the price fell because it fell. Hogs sold at \$7.53 because they did not sell for more.

Nor, seemingly, is the marginal analysis capable of carrying us much farther than this. Utility theorists would, indeed, point out that, hogs being an "intermediate good," their value is "reflected back from the value of hog-products"—ultimately from the "gratification" afforded by the consumption of meat and lard. It would appear, then, that hog-buyers anticipated an approaching fall of some 7 per cent. in the "marginal want-gratifying power" of hog-products and reduced their "marginal price-offers" accordingly. But the "marginal want-gratifying power" of hog-products exists only with reference to a given quantity and only because of all those facts—dietary habits, customs, climate, and the like—which create the demand for pork. "Marginal want-gratifying power," accordingly, requires to be explained by showing how the demand for, and the supply of, hog-products

<sup>25</sup> Compare Davenport, op. cit., pp. 548, 549.

come to be what they are. And the effect of changes in the estimated future "marginal want-gratifying power" upon the present price of hogs can only be explained through an analysis of the hog-market. The net result of all this talk of "ultimate want-gratifying power" is to call attention to the fact—which was in no danger of being overlooked—that the estimated future price of hog-products is one of the elements in the present demand for hogs.

Thus the marginal analysis leaves the problem just where it was at the outset—the fall in the price of hogs is still to be explained. Price can no more be explained by saying that it tends to coincide with "marginal price-offer" than by saying that it is such as to equate "demand and supply." Indeed, the older phraseology is to be preferred, as being more familiar. The choice of phraseology is, however, a minor matter. The important question is an explanation of price-movement, and this is to be found, not in a phrase which describes the outcome, but in an analysis of the market forces which make the outcome what it is.

In the present case, all would agree that the *general level* of the price of hogs is determined by the relative demand for hogproducts over against the relative scarcity of hogs. Both these factors require detailed analysis. But, for the present purpose, it is sufficient to point out that between the hog-grower and the "ultimate consumer" intervenes a complex market organization capable of producing quite wide variations in the price of hogs without any marked change either in the pork-eating habits of the population or in the aggregate supply of hogs. It is to this market organization that attention must be directed if either the rapid fluctuation of live-stock prices or the wide margin between these prices and the retail cost of meat is to be explained.

Such a study as is here suggested—but which, of course, cannot here be carried out—would probably show that drovers, commission men, and speculators<sup>26</sup> serve to increase the margin between what the farmer receives and what the consumer pays. It would show that the same result is powerfully furthered by an

Refers, of course, to persons technically so termed in the live-stock market.

understanding or "community of interest" between the large packers who are almost the sole buyers of hogs. Further, it might appear that the short-term fluctuations in live-hog prices are largely produced by the concerted action of the packers. They cannot keep the price of hogs too low without disastrously affecting the supply, any more than they can push the price of meat too high without disastrously restricting sales. But, from time to time, they can force a reduction in price by "staying out of the market," so that a large number of hogs are left unsold in the pens and a sharp decline occurs.<sup>27</sup> When receipts begin to fall off, an advance is permitted until conditions again become favorable for a "raid." The average price is, in this way, kept considerably below what it would be in a competitive market, but it is kept so by wider and more frequent fluctuations than would probably otherwise occur. But, if some price-fluctuations are to be thus accounted for, others are due to more fortuitous occurrences—a railway wreck delaying deliveries, an unexpectedly large or small "run" of hogs, (sometimes wilfully) erroneous estimates of the day's receipts. Lastly, it is a well-known fact that quite different prices are paid, even at the same moment, for equally desirable "lots" according to the market information, the judgment, the anxiety to buy or sell, the "bargaining ability," the business connections and even the luck of different buyers and sellers.

Correctness, much less adequacy, is not claimed for the foregoing analysis. The point intended to be made, by way of illustration, is that some such detailed analysis is indispensable to the proximate solution of any price-problem. The marginal analysis gets nowhere precisely because the margin, whether of utility or of cost, is fixed by the very forces which determine price. The "marginal utility" of turkeys at Thanksgiving is the resultant of very numerous demand-forces—the ceremonial fitness of a turkey dinner to express the feeling of thankfulness, the state of trade and industry, the numbers of the population, the diffusion of wealth and of Thanksgiving customs—and of equally numerous supply-forces—the usual cost of growing turkeys

<sup>\*</sup> See Chicago Daily Tribune, October 13, 1909.

(itself in part determined by the price which turkey-growers expect to realize), the accidents of the particular turkey-growing season, the degree of monopoly possessed by private car-lines, the organization of the commission and retail poultry-markets. Any change in any one of the demand factors will alter the "marginal utility" and the price of the existing supply and will affect the "marginal cost" and the amount of next year's supply. Any change in any supply factor will alter the "marginal cost" and the amount, and hence the "marginal utility," of this year's supply. Hence analysis of these factors is necessary in order to ascertain the position of the margin, either of utility or of cost. But these are just the factors of market price, so that analysis of them will give the solution of the problem for the sake of which alone the position of the margin is sought to be ascertained.

It may be thought that all this insistence upon detailed analysis is uncalled for—no theorist ever supposed that general principles could be applied to particular cases without due allowance for the circumstances of each case. But, in the view here spoken for, it is just these "particular circumstances" and not the "general principles" that are of chief consequence for the problem of market price. It is not "the value problem whole-all commodities in their inter-relations of exchange"28—much less the ultimate ground of value, but particular prices—the money-exchange relations of particular commodities at particular places and times—the movements of prices, the amenability of prices to social control—to which practical interest attaches and with which economists must concern themselves, if their "science" is to be more than an intellectual pastime. Now, price in this sense is always a particular case, explicable only by the forces at work in this particular situation. These price-determining forces are so numerous, and they vary so much, both in number and in relative importance, from one situation to another, that no generalization about price which is of much significance can be true. It is, to be sure, often convenient to comprehend the multitudinous price-factors in some general formula—as that price depends

 $<sup>^{28}\,\</sup>mathrm{Davenport},~op.~cit.,~p.~33.$  The passage cited refers to Ricardo's conception of the value-problem.

upon the demand and supply forces in the particular case, together with the relative "strategic" position of buyer and seller. But such a formula has meaning only as content has been given to its terms by previous analysis; and it is applicable to any concrete case only in the sense of pointing to the need of specific analysis.

The marginal-utility theory aims at showing, not how price is determined in any actual case, but how price would be determined if men were to act in certain ways under certain assumed circumstances. This mode of theorizing is grounded upon the assumption that the behavior of men in any given situation can be predicted from elementary human nature. It appears that adepts of the theory have misconceived human nature, and that the situation in which they assume market price to be worked out never actually occurs. But the decisive objection to this whole line of doctrine goes to the basis upon which it is built up. Elementary human nature may (or may not) be fairly uniform, but it functions through institutions, and these are not uniform. The behavior of men can be neither predicted nor understood apart from their habitual modes of thought and from the institutional situation in which they act. It is not surprising, therefore, that a century and a quarter of diligent research into "labor-pain," "abstinence," "marginal utility," and the like, should have contributed substantially nothing to "the increase and diffusion of knowledge among men."

Marginal-utility economics is an admirable body of dialectics—scarcely surpassed for subtlety, reach, and want of content by the finest products of mediaeval scholasticism. It affords unrivaled opportunity for the pursuit of refined distinctions between elusive ideas and for the multiplication of strange-sounding terms. "Economics" of this type strongly attracts men of a metaphysical turn of mind, and will doubtless continue to be cultivated. But it has not contributed, and it cannot contribute, to the elucidation of any practical problem.

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