"The Common Sense of Political Economy" (Wicksteed Reprinted)

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"THE COMMON SENSE OF POLITICAL ECONOMY" (WICKSTEED REPRINTED)[1]

ALL students of economics are placed deeply in debt to the London School of Economics, to Professor Robbins individually, and to the publishers by the bringing-out of this work. In it are included not only the "Common Sense" but, in addition, all of Wicksteed's economic writings of importance except the *Co-ordination of the Laws of Distribution*, which has also been reprinted, but under separate covers, in the London School series of reprints. These other papers fill nearly two hundred pages of the second volume. The two volumes are offered for sale separately, the first, with an admirable introduction by Professor Robbins, containing Book I of the "Common Sense," which makes Wicksteed's general statement of his system available in convenient bulk for use in elementary classes. The reviewer has some doubts as to whether there will be any great demand for the work for this purpose in the United States, where the elaborate illustrations in the barbarous system of pounds, shillings, and pence will form a considerable obstacle to the undergraduate mind. And there are deeper reasons which will be obvious from the following more critical comments on Wicksteed's work.

In writing any discussion of Wicksteed's work (and making excuses for the tardiness and unconventional character of this note), it is necessary for the present reviewer to make some statements of a somewhat "confessional" character. To begin with, my own published ideas on economics have frequently been compared, not to say bracketed, with those of Wicksteed, especially by the editor of these volumes. I therefore feel compelled to say, not only that I never read the "Common Sense" until recently in this reprinted form, but that when I once "thumbed through" the book about 1923 or 1924, I found it intolerably prolix; and furthermore, that I get much the same feeling now. It seems to me to use endless pages in saying what could be more intelligibly and forcefully said in a fraction of the space. This might not deserve putting into print were it not for the second fact, which I hope is of more

[1] *The Common Sense of Political Economy and Selected Papers and Reviews on Economic Theory.* By Philip H. Wicksteed. Edited by Lionel Robbins. London: George Routledge & Sons, Ltd., 1933. 2 vols. Pp. xxx+398; vi+401–871.

importance. It is considerably over a year since, at Professor Viner's suggestion, I took the copy of the reprint for the purpose of writing a brief and rather perfunctory notice in this *Journal*. About the same time, the publication of Viner's article on cost theory in the *Weltwirtschaftsliches Archiv* led to some discussion of that subject in the theory group at Chicago. It became necessary for me to "straighten out" my ideas on the subject of cost before I could write my notice of the book, and in that connection to study through Wicksteed's theoretical position. The result is a considerable reconstruction of my own system, so that it no longer agrees so closely with the position of Wicksteed, which is practically that of Wieser and the present-day Austrians; and I have to modify quite materially some doctrines previously expounded in print. The following pages present briefly this change in position and constitute, not, indeed, a "review" of Wicksteed's book or work, but a discussion of the pivotal doctrine in his position.

This master-theme is that economic theory is merely a clear working-out of the "common-sense" of the administration of resources, and particularly that the same principle governs the organization of production and consumption. Producers, like consumers, spend money in the way to make it buy the largest result. Productive services, like individual incomes, are said to be allocated on the principle of equalizing marginal increments of the result—value-product in one case, utility in the other. In an economic system so conceived, prices are equal to money cost, and can be said to be determined by cost, money-cost outlays representing payments to productive services, which payments in connection with any one product reflect the competing offers of producers of other products for productive capacity. Thus, equality between price and cost is but another view of the fact that resources are so allocated as to be equally productive in all uses, and the real cost of any product is a displaced quantity of competing product, which at equilibrium must be of equal value. Resources specialized to any particular use get a "rent" or a "price-determined" remuneration and do not affect the price at all.

A short article of mine, published in 1928, which expounded this general view, received some favorable comment.[2] But it contains one rather crucial and, to me now, painfully obvious error, which I think applies also to the general position of Wicksteed and the Austrian school on the subject of cost. That is to say, the general principle of

[2] "A Suggestion for the Simplification of the General Theory of Price," *Journal of Political Economy*, June, 1928, pp. 353–70.

alternative-product cost so carefully and elaborately expounded by Wicksteed is subject to a sweeping limitation. It has to do with the question of "irksomeness" or subjective cost, which was the central cost concept of the older classical economists but is virtually eliminated from consideration in the general equilibrium theory of Wicksteed and the Austrians. The relative "irksomeness" of different occupations (the same notion really applies to all factors as well as to labor) is supposed to have no effect. And it does not if money earnings are in fact equalized; but the error is that they need not be equalized even at equilibrium and under freedom of movement.

In my own paper above referred to, the example of the deer and beaver used by Adam Smith was made the basis of the argument; but my own statement, as a matter of fact, contains a clause which starkly calls attention to the fallacy, although I did not see it for years. (These personal details seem to me worth giving because they are so typical of what has happened all through the history of economic thought and should be helpful in emphasizing caution and preventing errors.) A passage of the paper (*loc. cit.*, p. 356) reads: "Suppose for example it be found that deer hunters 'voluntarily' work twice as many hours per week as beaver hunters for the same reward in deer or beaver at their market ratio, or 50 per cent more hours for two-thirds the reward." It should, as it now seems, hit any critical reader in the eye that under the first assumption the alternate-product principle is valid, but that under the second it is not. That is, it is palpable that if, say, the workers in two occupations of different degrees of "irksomeness" are indifferent between the two at the same total wage, if they compensate for the difference in irksomeness by working a different number of hours per day, or in any other of several possible ways except the money earnings, the alternate-product principle of cost is valid; the cost of a unit of deer is the quantity of beaver of equal value, and vice versa. But if the difference or any part of it is reflected in total earnings, then it is palpable that resources are not at equilibrium distributed between the two uses in such a way as to equalize the *pecuniary* return, and the addition to the output of one product resulting from subtracting a dollar's worth from the other will not be exactly a dollar's worth but somewhat more or less.[3]

[3] The alternative cost principle which goes with the notion of general equilibrium in terms of pecuniary return can be formulated in terms either of value of sacrificed alternative or of physical quantities. It tells us more about the situation, is a more complete analysis, to keep values and quantities separate. This means expressing

It now seems to me that the reference to the possibility of the reward being two-thirds in one use what it was in the other was a "slip" in writing, that what I really thought was that such a result was inconsistent with rational choice between occupations on the part of the laborer. The reality back of the irksomeness notion is a competing possibility of using productive capacity in other ways than to produce income—say for "recreation," or, in the case of labor, "leisure" (see below). Certainly after the issue was clearly defined in my own mind (in which process discussion with Professor T. O. Yntema was perhaps especially stimulating), I for some time felt it sound to argue that the same rationally choosing subject would not combine pecuniary and non-pecuniary utilities in different proportions in different occupations. This would be sound if all pecuniary utility were really of the same kind and all non-pecuniary utility likewise, or, in general, if all the alternatives were composed of common elements which could be combined at will in any proportions. But it is now clear that such is not the case; the composite non-pecuniary alternative given up in working is an extremely complicated and subtle concept and would never be identical in two occupations. That is, it would never be the same *function of time*, and time enters into such comparisons in a peculiar way, being the one independent variable which is a real physical dimension of both and all alternatives compared. And while the pecuniary alternatives will probably be less divergent, they will rarely be the same either. A man will typically spend his money for a different list of products, or at least for the same list in significantly different proportions, as a consequence of changing his occupation. And any considerable change in the composition of a utility complex affects the utility of every element and makes it a new complex. Worse still, expenditures for enjoyment can never be accurately separated from those which are properly "costs" or "deductions"—such as transportation, special clothing, and location and mode of life which go with the job. Hence, it cannot at all be as-

the condition of equilibrium as an equality between a physical ratio and a value ratio, rather than as an equality between two mixed magnitudes each a value of a physical quantity. In the simplest common-sense form, equilibrium means that the physical quantities of any two products which have identical costs in transferable resources will have identical incremental utilities to all consumers (who consume both—see below). The ratio form of statement is accurate only for mathematical derivatives in a rather complicated form. There is no definite ratio between either utilities or costs of finite magnitudes of product, as there is none between any two subjective magnitudes except at the point of equality or ratio of 1:1.

sumed that one will strike a balance at the same pecuniary income, if perfectly free to proportion working and "not working" at will. (In general, a worker has this freedom only in a limited degree, but it is in order to assume the greatest flexibility at all justifiable in relation to the facts.)

Following up this reasoning, we find that the conception which is the very cornerstone of Wicksteed's work, namely, the conformity of the economic choices in consumption and production to a common principle, is subject to a sweeping limitation which seems to have generally escaped economists, as it did the present writer; or, if it was sensed by the pain cost and real cost theorists, it has not been correctly and clearly stated. In consequence of the principle of division of labor in particular, and more generally the fact of diversity of ownership of resources, there is a fundamental non-parallelism between the theory of the allocation of income among competing uses by consumers and the allocation of resources among competing lines of production in society as a whole. An essential principle in the former case is that every consumer, in apportioning his income rationally, will establish the same "relative marginal utility" between any two products, with the result that this relative marginal utility of different products is, in a sense, "objective" for all exchangers, even though it is in essence a subjective magnitude.[4] The same formal principle holds for the entrepreneur's apportionment of his expenditures among different productive resources, and hence the relative marginal productivity of every resource is equalized over the whole system in the same way as relative marginal utilities—*in the aspect of resources as things bought* by the persons who do buy them, and in so far as different entrepreneurs can be said to buy and use the "same" resources.

But if differences in the psychological attitudes of different resource-owners (especially, but not exclusively, laborers) is taken into account, then to the degree that such attitudes in fact differ, the resources *furnished by different owners* to different occupations are not the same, and no statement can be made about the equalization of return to different

[4] Failure to grasp this principle profoundly disturbed Wieser and the later Austrians and gave rise to the spurious "rich-man–poor-man" difficulty in the utility explanation of value. It was all clear to Jevons, who repeatedly and explicitly emphasized that there is no comparison of utilities between individuals except as to equality of ratios; it was possibly understood by Menger also, though he is not so explicit.

owners, since there is no common base of reference.[5] This, as already suggested, is a plain consequence of the general principle of specialization elliptically referred to as the "division of labor." Because of this principle, the individual as "producer," i.e., owner of labor or other resources, does not allocate productive resources among different uses, as the individual consumer allocates income. And in the absence of specialization—in a society consisting of self-sufficient individuals—there would of course be no problem of money costs.

What lies back of the notion of irksomeness, as already suggested, is in any rational view of conduct the competition of "other uses," apart from money-making, for the productive capacity owned by an individual, whether in the form of labor power or any other form. In the case of labor, we are likely to think of this competition as leisure or recreative use of *time*. But even a superficial analysis must recognize both (1) that non-monetary alternatives are open to other resources as well as to labor, though with differences in detail, and (2) that much more is involved than different uses of time. On the first point, the clearest illustration is perhaps "land," particularly agricultural land. The typical farm-owner will use a part of his land for producing things for sale and a part for such direct uses as buildings, lawn, etc.; and on a larger scale, land for agricultural and other commercial uses has to compete with such employments as parks, game preserves, golf links, etc.

But the difficulty does not end with a simple dichotomy between uses, or, in the case of labor, with the fact that the human individual is relatively indivisible between pecuniary occupations, while every individual distributes or allocates his potential labor capacity in some way between pecuniary and non-pecuniary production. The case of agriculture again suggests that the owning farmer also uses some of his land for such purposes as growing garden vegetables, a part of which may be sold on the market and a part used at home, and the part used at home *more or less* displaces and is *more or less* equivalent to things

[5] The principle of "equal wages for equal work" so glibly argued, even by economists like Pigou, and also fought for, can be given no definite meaning, unless (*a*) *both* the "work" and the "wages" are measured finally and absolutely by the estimation of each individual worker, and (*b*) the performance is measured by that of the purchaser; and in that case there can never be any possibility of inequality. It is peculiarly interesting that the argument always centers around the inequality of money wages. In the abstract there is no more presumption that the same dollars represent the same utilities in consumption to two workers than there is that the fact of equal payment proves equality of "sacrifice."

which are bought and to things which are sold in the market. Again, these things which more or less displace and equate commodities in the market shade off into other human interests which do not properly come under the economic principle of rational quantitative comparison between uses of resources and maximizing of total return at all. We have to recognize a "trichotomy" of interests and motives lying along a scale from values definitely, sharply, and completely measured in pecuniary terms by (in theory) perfectly competitive market dealings (or opportunities) at one extreme, to motives which must be designated for the purposes of economics by such negative terms as "imponderable" at the other.

It is impossible to draw a clear-cut boundary around the sphere or domain of human action to be included in economic science. The most nearly objective boundary would shut out all interests or activities the results of which do not actually go through the market. But practically it is absurd to make an absolute distinction between commodities or services actually bought and sold and those which are or come infinitely near to being absolutely the same thing, and which would come into the market or go out, more or less, with the least shift in price in either direction. This last category obviously includes a very considerable bulk both of productive services of the various kinds and of their products in the form of commodities and direct services. In so far as behavior is to be interpreted in terms of economic categories and principles, we have to assume that the individual divides the use of any kind of productive capacity between money-making and other employments on the basis of the same kind of comparison and marginal equalization which underlies the choice between different uses of income. But the apportionment between different money-making uses (an aspect of which is the theory of alternative costs) conforms to this principle only to a limited degree.

This negative statement holds especially for labor, in consequence of the indivisibility of the human individual and the principle of division of labor, i.e., of the general facts which lead to the division of labor and to social economic organization in general. With regard to other forms of property,[6] there are no such sharp physical and technical limits to the division of the productive capacity owned by a given individual among a multiplicity of employments; but there still are limits to such apportionment, and, in fact, some new considerations working against

[6] In a property system labor power is the "property" of the laborer; and, in fact, most of it is the product of investment.

it come into play, but they need not be considered here. On the other side, there is no reason for the apportionment, comparable to that which leads to the apportionment of income among commodities—no diminishing relative psychic utility of one line of use in comparison with others, as the one in question is extended.[7] The main reason making for apportionment of his property by the individual owner is the reduction of his personal risk, a consideration which does not apply under perfectly economic conditions at all. Any "risk" which can be recognized as compatible with rational economic choice will be eliminated by "insurance," in some form, i.e., by organized relations with other individuals.[8]

On the point numbered (2) above, it is obvious that there are other ways of dividing the use of one's labor capacity between money-earning and other uses, and of changing the proportions in such division, in addition to shifting segments or increments of the time stream bodily from one field to the other. Here the problem relates especially to labor, which can obviously vary its productivity in a given occupation by working at varying degrees of intensity for a given fraction of the time as well as by changing the fractional distribution of the total time-stream of 24 hours per day and 365 days per year between the occupation and "leisure" employments. It is also obvious that these other modes of variation are, marginally at least, equivalent to changes in the distribution of time. For by working at a slower pace, or with less close attention, or in more satisfactory stretches, and the like, one can save "energy," literal and figurative (or physical and "spiritual"), from one's work for other purposes (which again will be more or less

[7] This argument naturally leads to the observation that the "objectivity" of the utility theory itself, even in the sense in which it has objectivity, i.e., that the quantities of two commodities having the same incremental utility are the same for all individuals, is also subject to limitation. As regards any two commodities, it is true only for those individuals who do consume both, or at least are actually on a margin of indifference with respect to doing so.

[8] "Risk-taking" is in reality a motive on its own account, but is one which cannot possibly be brought under economic principles unless, again, the risk is measurable and hence insurable, and very doubtfully even then; at least I do not see how the principles of rational choice through quantitative comparison of increments can be applied to the desire to gamble, even in such a mechanical case as the roulette wheel, where the essence of the interest is ignorance as to whether the result will be a gain or a loss. The converse notion of gambling as a disutility, paid for on the basis of marginal productivity, though argued for by Pigou, is even more unintelligible to me—not to mention that if a business man knows how much "risk" he is taking he is not taking any at all, or is merely playing roulette.

comparable quantitatively with the things actually measured by the money denominator). Many different ways in which energy may be saved could be distinguished, but such analysis would be difficult and vague at best—beyond the factor of physical speeding at least—and would rapidly run off into dubious subtleties. With regard to "property" (apart from labor capacity), there are also possibilities of varying the intensity of performance apart from redistribution of time, but the question is still more subtle and vague.

A rational theory of the apportionment of productive capacity between pecuniary and non-pecuniary employments must rest on the assumption that the human individual considered as a productive instrument, and every other productive agency, actually has a given fixed productive capacity, the use of which is fractionally apportioned. This given capacity could only be quantitatively defined as the maximum pecuniary income which the individual or instrument could produce in the most remunerative employment open. (Capacity not available for making money income is completely outside the ken of the economist.) The difference between this income and lesser actual earnings would have to be treated as representing the use of the corresponding fraction of the total capacity to create some "other," "non-pecuniary" utility. It is evident, however, that virtually any change in the general economic conditions, physical or psychical, in the economic system in question, would change the definitions of all these magnitudes. We must face the fact that the notion of given magnitudes in economic life is itself an assumption subject to severe limitations.

Finally, it should again be emphasized that even under given conditions in the strictest sense, the concept of economy and the economic is subject to severe limitations as a principle of behavior interpretation. Most of the individual's activity outside of the sphere actually organized through market dealings is not properly or fully amenable to such interpretation. A rationalizer from the outside may indeed argue that the choices involved in play, sociability, friendship, and the love-life, and in aesthetic, cultural, and religious activity, do come under the principle of comparing increments of desirable-result obtainable from the use in different ways of increments of "productive capacity." Wicksteed himself seems to take this position (Book II, chap. i), and Canon Rashdall has even more explicitly defended it in his book on *The Theory of Good and Evil* (especially Vol. II, chap. ii).[9] But it is

[9] Interestingly enough, the outstanding critic of the position in English as far as the writer knows is John A. Hobson; see his *Work and Wealth*, especially the last chapter. For a brief criticism of Rashdall, cf. R. Kingsdown Pemberton, "The

surely evident to common sense that if the behaving subject himself attempts to view his behavior in economic or mathematically maximizing terms, he changes its character and in most cases "spoils" the interest in and enjoyment of the activity. One of the most inspired products of the phrase-maker's art is perhaps the observation of Professor John M. Clark that an irrational passion for dispassionate rationality may take the joy out of life.

It may be interesting to glance at the history of the discussion of cost from the standpoint of the issues which have been raised above. The classical school of economics of course started from the "axiom" that cost is labor cost. This principle is expounded in *The Wealth of Nations* (Book I, chap. v). But in Smith the view is limited to his "philosophical" treatment of the value problem; when he comes, in chapter vi, to discuss price concretely, he starts out from the familiar deer and beaver illustration, in which the underlying meaning is obviously that of relative cost of two commodities in terms of perfectly mobile and indifferent labor. In reality, this makes the cost of a unit of either product a definite quantity of the other (constant cost), it being assumed also that the productive capacity is valued only for its exchangeable product. As long as the commodities compared are produced under such conditions—a single homogeneous resource of any sort, whose "owner" is indifferent between the occupations on the basis of equal time—it is possible to measure the cost in terms of resource time, if one prefers. (It possibly deserves explicit remark that the feelings attached to employment or unemployment have nothing to do with the case; the argument holds in every detail in the same way if we substitute acres for laborers.) When the costs are heterogeneous, this can no longer be done, and the *only* measure is displaced alternative product, or in a developed economic situation, the complex of competing products reduced to a common denominator in terms of money. In Smith's later argument, especially in chapter vii ("Of Natural and Market Price"), he makes it even clearer that the mechanism under-

Commensurability of Values," *International Journal of Ethics*, October, 1922, pp. 23–33. The issue raised is undoubtedly the real crux of the problem of marginal utility about which so much that is not very profoundly relevant has been written on both sides. Cf. also R. B. Perry, *The General Theory of Value*, and his article, "Economic Value and Moral Value," *Quarterly Journal of Economics*, XXX (1915–16), 443–85, and critical discussion of his work, and indeed the entire literature on the relations between economics and the various types of value recognized by the philosophers. The work of German social-organism economists like Spann is also in question.

lying the cost reasoning is simply that of equalizing the yield of resources by correct apportionment among competing uses, in which labor, land, and "stock" are put on the same basis. Many details are, of course, not worked out, and others are confused; but the essential position is that of modern "Austrian" economics.[10]

Both Ricardo (*Principles*, chap. iv), and Senior (octavo ed., p. 101) even more explicitly worked out the cost theory in terms of the flow of resources from one use to another and equalization of yield. Abstracting from incompleteness and error in detail, this is again the general equilibrium theory, in which the real cost is displaced alternative product. Ricardo argued in chapter i for labor cost as an approximation, and in his work elsewhere assumed identity between labor cost and value as a kind of metaphysical dogma without any argument whatever. Senior, however, made his best-known contribution to economic doctrine in the form of a supplement to pain-cost theory in the form of the abstinence doctrine, and this position was even more definitely adopted by Cairnes.

If resources are considered mobile from one use to another, and indifferent between uses in the sense indicated at the outset above, namely that at equilibrium, under freedom of choice, they earn the same total income—compensating in any way other than money for differences in "time-irksomeness," the different relative appeal of income and alternative fruits of each time unit—then any doctrine of pain cost or resource cost involves a simple failure to see the obvious relativity of the price and cost idea. (Not to mention the impossibility of measurement; under specialization only final products are directly compared and reduced to equivalence.) If the real alternative to employment in producing (the final unit of) the commodity actually produced (the alternative which would be chosen) is at equilibrium the production of an equal value of some other commodity, then it is this quantity of the other commodity which is the cost; and neither "pain" nor resource use as such, nor any concomitant of the latter, has anything to do with the case. The only connection in which pain or consumption of resources becomes significant in relation to the price of products is, as

[10] It is impossible to make any sense out of a doctrine of labor cost in harmony with this position, whether labor cost is taken in a philosophical or other meaning; the philosophical doctrine is as "wrong" as a labor-cost theory of price empirically considered. It is not labor cost, but scarcity relative to need or desire, and the necessity of choosing, which is the ultimate basis or essence of value when the latter is taken as a magnitude in any sense. This principle was as well and clearly stated by Senior as it has ever been since.

already indicated, that at equilibrium a small transfer of resources from one use to another will for some reason actually involve a change in the total amount of pain undergone or resource capacity used in the making of money income; this change is indicated and measured, of course, by a change in the total amount of money income earned, and ties up with a shift inward or outward in the boundaries (contraction or expansion) of the economic system as a whole.

However, there is a positive side to the matter, along with failure to understand. Alongside this equilibrium view implying an alternative cost or displaced product-cost doctrine, there seems to be more or less implicit admixture of a different conception of cost altogether, one in which cost as pain has somewhat more meaning. This view, separated out and stated explicitly, considers all production as due to labor, i.e., subjective sacrifice by individuals, but assumes that every laborer is completely *immobile* or specialized to the particular product on which he actually works. The "supply curve" of any product, then (to use modern jargon), is entirely a matter of variation in the amount of work done, whether arising out of variation in the distribution of time or in any or all of the factors making up "intensity." This, as already noted, makes the pain-cost doctrine somewhat more meaningful, although, if the conduct is rationalized at all, "pain" and "pleasure" in any literal sense have nothing to do with it, as choice is again simply a matter of apportioning between alternatives in the use of capacity, in this case the alternatives of working at the particular occupation and the composite of "not-working"; the individual choosing might be either maximizing pleasure or minimizing pain, according to the accidental zero point of this personal scale at a given moment—if the notion has any meaning at all.

Such a cost theory is so far from the facts of life that it is naturally difficult to attribute it conclusively to any writer. It seems, however, to be the theory generally in the mind, or implied in the words, of Jevons, particularly; and John Stuart Mill is open to the same accusation. Both of them emphasize labor cost, and neither expressly or clearly recognizes, as do Smith, Ricardo, and Senior, the shifting of resources as the essential process underlying price fixation. This applies to Mill's direct discussion of cost; in the treatment of international trade, he is explicit that the essential peculiarity in the situation is the *im*mobility of capital and labor. (All the classical economists, including Marshall, assume, or argue as if, "land" has no mobility affecting the supply and price of products.)

It is clear that an inclusive theory of cost in relation to price must take some account of both these viewpoints. For it is a fact and is significant that each individual resource-owner is on the one hand limited —and, in the case of labor, quite narrowly—in the proportional allocation of his resources among the various uses theoretically open, while at the same time each owner must make, and has some choice in making, an apportionment of his productive capacity between pecuniary and non-pecuniary uses. But in a general summing-up, the theory of cost and price will have to run primarily in the alternative cost terms of Wicksteed's "Common Sense." Most of what can be done to make it more realistic and true to fact will take the form of recognizing limitations and specifying in a general way the kinds of divergence from reality which are to be expected and their causes; relatively little seems possible in the way of formulating supplementary theories with any degree of generality. It is, of course, true that in so far as an individual is free and chooses rationally, he will equalize the utilities derived from the final increment of any resource in all fields, pecuniary and non-pecuniary, and both in indefinite multiplicity. But this freedom of apportionment is so limited as to make the theory highly unreal; and, as already emphasized, the fact and the desirability of rational quantitative comparison in choice are also limited. It seems impossible to formulate meaningfully the conditions under which equality of money earnings will be a condition of indifference between the money-earning alternatives, and the bearing of all the relevant complexities upon the determination of the relative prices of commodities simply does not admit of any workable general formulation. The only general-cost theory which can be maintained will, after all, be that of alternative cost, best formulated as displaced product cost, but this must be stated subject to the qualification that it is true only "in so far" as at equilibrium the indicated conditions obtain.

The "other" theory already referred to, of supply curves based on variability in the amount of productive *service* rendered by *given* productive *agencies*, specialized to particular uses, cannot be given much weight. In the first place, the dominant fact affecting the supply of a commodity is, in general, unquestionably the competition of other pecuniary employment for the services and not variability in the amount of specialized services offered. In the second place, the direction of the variability which may exist is a serious question. One of the difficulties of the labor-cost theory, which gradually forced its way to recognition (by J. S. Mill, and especially by Cairnes) was the obtrusive fact that, in general, the higher remunerations are paid for smaller and not greater sacrifices. The reasons for this are complicated and need not be taken up here; they include many things in addition to the variation in the supply of services from given agencies as prices vary, other things being equal. The nature of this variation itself is an unanswered question, and one which probably admits of no general answer.[11]

It is, of course, necessary to avoid confusion as to the meaning of changes in the supply of productive services, i.e., as to what changes affect price-determining costs, and how they work. (Money costs will always equal prices if full and accurate accounts are kept, but such payments may be either price-determining or price-determined.) In the first place, it should go without saying that the general conditions of a stationary economy are assumed, meaning especially a given supply of productive instruments or agencies of every type. In view of the foregoing argument, fixity in the productive capacity of existing agencies must also be specified as coming within this category. A change in either respect is a "historical" or "progressive" change (a change of the sort generally miscalled "dynamic"). The supply changes in question are, then, changes in the supply of salable-product-making services from *specialized* factors, at the expense or to the benefit of use of their capacity for other purposes. Of course, specialization is a matter of degree, and it would be more accurate to say, changes in the supply of services "in so far as they are specialized." In so far as any service is perfectly mobile among all pecuniary uses, changes in its supply will affect the (relative) prices of products only through the different elasticities of demand of different products. But "perfect" mobility would have to include perfect flexibility in combining proportions, which would contradict the most fundamental principles of production.

Only with such qualification and reservation can the central doctrine of *The Common Sense of Political Economy* be maintained, plausible as it is and widely as it has been and is held. But the historically opposed doctrines of pain-cost and real-cost are not thereby vindicated and are indefinitely farther still from the truth.[12]

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[11] Obviously, "leisure" and "products" are complementary goods. If it can be assumed that they are complementary in the special sense that the utility function for the two together is of the nature of a product [$U=L^aP^b$], then simple mathematical manipulation will show that the proportional division of productive capacity between commodity production and leisure, or the amount of leisure exchanged for income, is independent of price, depending only on the ratio between the exponents in the formula. For other mathematical forms of complementarity, the problem has not, as far as I know, been studied.

[12] A fuller exposition of the theory of cost as now understood by the writer has been provisionally accepted for publication as two articles in the *Zeitschrift für Nationalökonomie*, Vienna.