

# Precedents for Defining Capital

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I

Professor Nicholson, in his latest work writes: "On the meaning and the functions of capital, volumes have been written, and, to judge by the economic journals, volumes are still being written and no doubt will continue to be written. Properly viewed, this is not a matter for regret, as it simply indicates that capital is one of the most far-reaching conceptions."<sup>(1\*)</sup> In mediate fulfilment of this prophecy appears an article in the November number of this Journal by Professor Charles A. Tuttle.<sup>(2\*)</sup> This article is, I believe, a step in the right direction, and will help ultimately to clear away much of the confusion which still pervades this subject. But, as Professor Tuttle seems to believe that his conception of capital is essentially different from the one which I have advocated,<sup>(3\*)</sup> and that his definition has the indorsement of ancient usage, while mine has not, it seems advisable, without repeating what I have already written, to re-examine briefly some of the points at issue. I shall at the same time take this opportunity to consider the somewhat similar objections to my treatment of capital which were raised a few years ago by Professor Alfred Marshall and Professor Frank A. Fetter.

The problem of definition is always twofold: it is partly a matter of words and partly a matter of ideas. In short, a definition has to meet the requirements both of terminology and of science. The scientific procedure starts with an idea, and seeks to find a name to fit it. The procedure of terminology, on the other hand, starts with a name already in popular use, and seeks some accurate idea to interpret its meaning. These two processes, proceeding in opposite directions, do not always reach common ground, from which fact arise most of the disputes as to definitions. Sometimes it is impossible to satisfy the requirements both of terminology and of science. In such a case the scientist usually ignores the former entirely, either discarding the popular terms or giving them meanings which are confessedly arbitrary and independent of former usage, justifying his high-handedness by the utility of his definitions in scientific analysis. But, when it is possible to obey at once the behests of usage and analysis, it is expedient, if not obligatory, to do so. This is, I am persuaded, the case with capital, when defined as "a stock (of wealth or property, or the value of either) existing at an instant of time," as distinguished from income, which is a flow through a period of time.

The distinguishing characteristic of this definition is that it makes the capital-concept depend not on the classification of wealth, but on its relation to time. For its scientific justification it is claimed that this concept plays an important role in the analysis of the so-called "problems of capital," in particular the problem of interest. This role, as I conceive it, has already been sketched briefly.<sup>(4\*)</sup> and I hope soon to show more particularly how the proposed definition is suited to the

study of the theory of interest.

But those who have rejected this definition of capital have usually done so, not on the ground that it was unfitted to solve the "problems of capital," but that it was too radical a departure from established usage; in other words, because it failed to satisfy the requirements, not of science, but of terminology. Says Professor Marshall:(5\*) --

If I understand his [my] position rightly, the difference between us is very small and is mainly one of words.... Continuity of tradition is important everywhere; it is nowhere more important than in our use of terms.... a breach with tradition as regards notions should be deferred so long as there remains any considerable doubt as to its wisdom. If one is in doubt whether the landscape would be improved by cutting down an old oak, the oak should be left yet a little while.

Professor Fetter(6\*) speaks of my definition of capital as a "radical proposal in economic terminology.... A final objection is that the term 'capital' is made synonymous with wealth, and two good words are employed in the same sense."(7\*)

Professor Tuttle writes:(8\*) --

But why apply to the so-called "stock" of economic goods in existence at a given instant the name capital? To this question Professor Fisher has not given a convincing answer.... That the distinction between "a stock" and "a flow" or "a rate of flow." is an important one, the writer of this article does not doubt. But he can find no justification in etymology or "in history or in popular and business usage" for the application of the term "capital" to such "a stock." The conception is adequately and scientifically characterized by the phrase "the existing stock of economic goods at an instant of time." To apply the term "capital" to it is not only confusing, but arbitrary and wasteful of terminology.

The issue is thus squarely presented whether the application of the term "capital" to "a stock of wealth existing at an instant of time" is good terminology, and, in particular, whether it is consistent with or in violation of former usage.

To many this question, being one of words only, will not seem to merit extended discussion. Indeed, this has been my own opinion; and accordingly it received scant attention in the three articles in the Economic Journal.(9\*) But it is evident from the foregoing criticisms, and others which might be mentioned, that the principal obstacle to the acceptance of the proposed definition and the conception which it carries with it is the belief that it is an innovation in terminology. That Marshall gives so much weight to tradition is, of itself, sufficient reason for giving it a thorough and respectful hearing: especially as he leads tradition more than he follows it.

## II

There are two sources to which we must look for the justification of economic terms: first, economic usage; and, second, popular and business usage.

As to economic usage, it must be evident to any one who has compared the various authors that, since the time of Adam Smith, there has been no established usage whatever.(10\*) On the

contrary, the most of what has been written on this vexed subject has consisted in making existing confusion worse confounded. Senior said, nearly seventy years ago, --

Capital has been so variously defined that it may be doubtful whether it have any generally received meaning.(11\*)

And in recent years Professor Böhm-Bawerk(12\*) repeats the lament: --

Almost every year there appears some new attempt to settle the disputed conception, but, unfortunately, no authoritative result has as yet followed these attempts. On the contrary, many of them only served to put more combatants in the field and furnish more matter to the dispute.

Any one who attempts to pick out from the mass of definitions which have been proposed some common elements will find them so vague and general as to apply to all wealth. The dividing line between wealth which is capital and wealth which is not is totally different in each definition, and even different in each interpretation of the same definition. This part of the subject was treated at length in a former article.(13\*) It was there shown, for instance, that Adam Smith's definition excludes a dwelling occupied by the owner, as bringing no revenue, while Hermann's definition includes dwellings as "durable" goods. On the other hand, a fruiterer's stock in trade is capital according to Smith, because used for profit, but is apparently not, according to Hermann, because perishable. To Kleinwächter, capital consists only of "tools" of production, such as a railway, and excludes food, for instance, as passive. Jevons, on the contrary, makes food the most typical capital, and excludes a railway, except as representing the sustenance of the laborers who built it. Mill makes the distinction depend upon the mind of the capitalist; Marx and M'Culloch, on its effect on the laborer, the effect being, according to the first, exploitation, according to the second, maintenance; while most of the others take into account neither of these conditions. And so we might go on enumerating discrepancies.

If there exists anywhere evidence of established usage among economists, I have not been able to find it. It is certainly not found by comparing the classical authors: Turgot, Adam Smith, Ricardo, Malthus, Mill, Senior, M'Cullough, Say, Roscher; nor by comparing the current text-books of, for instance, Marshall, Sidgwick, Nicholson, Hadley, Wagner, Schmoller, Pareto, Leroy-Beaulieu, Gide, Pierson; nor in the dictionaries of political economy of Palgrave, Block, Lexis, and Macleod; nor again in the popular dictionaries. On the contrary, the bulk of what these authorities say on capital (and most of them say a great deal) is critical and controversial. So far as any guidance to the follower of precedent is concerned, the matter is summed up in A. J. Schem's *Deutsch-amerikanisches Conversations-Lexicon*. (New York, 1872): --

Kapital oder Capital... bei weitem der wichtigste Begriff in der Volkswirtschaftslehre (Nationalökonomie), aber auch bei weitem der streitigste....

Abandoning, then, the impossible task of discovering what is the accepted economic usage, let us turn to the usage of the business man and the general public which is innocent of

political economy. It will surprise many academic economists, as it certainly did me, that a study of this phase of the subject shows: (1) that before Adam Smith no(14\*) precedent is found for definitely and avowedly dividing stock into two parts, only one of which is capital, but that stock and capital were practically synonymous; (2) that the definitions before the time of Adam Smith, while they all conflict with him and most other economists, are in substantial agreement with each other; (3) that present popular and business usage continues to follow the pre-Smith usage, almost wholly undisturbed by the economists; (4) that this continuous popular and business usage for three hundred years seems always consistent with and in many cases specifically identical with the conception of capital here advocated.

Since the best index of usage is in the work of lexicographers, they being the ones who have sought from time to time to record it, the basis of this part of our study is a comparison of seventy-two dictionaries in the Yale University Library (or ninety-one, if we include the different editions).

The origin of the term "capital" in the western world is now conceded to be "capitalis pars debiti," the principal, or "principal part" of a debt.(15\*) In this sense, capital was defined in an early dictionary of the French Academy: --

1694, Dictionnaire de l'Académie française, Paris. -- Capital,...  
Le sort principal d'une dette.(16\*)

A second and broader meaning is the value of stock in trade. This is found in an early Venetian dictionary: --

1612, Vocabolario degli Accademici della Crusca....  
Venezia.Capitale, sust. [antivo] la sorte principale, che è quella quantità di danari, che pongono i mercatanti in sui traffichi, che si dice anche, corpo. Lat. sors, caput.

The edition of 1746 has practically the same wording. The following is from the earliest English dictionary available: --

1730, Bailey, N., Dictionarium Britannicum; Or, A more compleat... English dictionary.... London. -- Capital stock [in Trade, etc.] is the stock or fund of a Trading Company, or the sum of money they jointly contribute to be employ'd in trade.

The edition of 1755 gives the same definition. Very often the term is applied to the sum originally put into the trade instead of to what may exist at the moment. For instance: --

1759, Rider, W., A New Universal English Dictionary....  
London. -- Capital. Among merchants, the sum of money brought in by each party to make up the common stock. Likewise the money which a merchant first brings into trade on his own account.(17\*)

Sometimes, again, "capital" is applied to the sum permitted in the charter, which is now usually called by business men the authorized capital.

1750, Dyche (Thomas) and Pardon (W.), A New General English Dictionary.... 6th edition. London. --... capital stock, in trading companies, is the fund Or quantity of money, they are by their car allowed to employ in trade.

1818, Nicholson, W., American edition of the British Encyclopaedia,... Philadelphia. -- Capital, among merchants,

traders, and bankers, signifies the sum of money which individuals bring, to make up the common stock of a partnership when it is first formed.... The word capital is opposed to that of profit or gain, though the profit often increases the capital, and becomes itself a part of it.

The question now arises, Are the foregoing definitions to be interpreted as restricting the meaning of the term absolutely to trade -- capital? Or is the phrase "in trade," by which the definitions are often preceded, simply meant to specify the sphere in which the term is generally found, just as the definitions of "cornice" are under the heading "architecture," "inventory" under "law" or "hawser" under "nautical"? Both interpretations are possible. That some at least of the dictionaries merely meant to specify the sphere of ordinary use would appear from the varying ways in which that sphere is described, as "in trade," "among merchants," "in trading companies," "among merchants, traders, and bankers," "the stock invested in any business, company, or institution." (18\*) Sometimes the restrictive term is omitted altogether. But, if there be still doubt whether any authorities intended to extend the use of the term outside of "business," it is dispelled by the following definitions, which expressly include all wealth whatsoever. The earliest example appears to be that quoted in Murray's Dictionary: (19\*) --

1611, Cotgrave. -- Capital, wealth, worth; a stocke, a man's principall or chiefe substance.

Another early example is: --

1678, Dufresne du Cange, Glossarium. -- Capitale dicitur bonum omne quod possidetur, praesertim vero bonorum species illa, quae in pecudibus consistit. (20\*)

Other definitions of the same tenor are as follows: --

1830, Lieber, F., Encyclopaedia Americana.... Philadelphia. -- Capital, in political economy, is the stock of valuable exchangeable commodities possessed by individuals or a community. This is the usual and more limited meaning of the term; for in comparing the capital of one individual with that of another, we have in mind the amount of money for which the stock of each can be exchanged.

1841, Sandford (D. K.), Thomson (T.), and Cunningham (A.), The Popular Encyclopaedia.... Glasgow. -- Capital, in political economy, is the stock of valuable exchangeable commodities possessed by individuals or a community. This is the usual and more limited meaning of the term....

1859, Bouillet, M. N., Dictionnaire universel des sciences.... 4e édition, Paris. -- Capital. On donne vulgairement ce nom à toute smme amassée et plus particulièrement à celles qui, placées ou prêtées, peuvent produire intérêt....

1883, Simonds, P. L., The Commercial Dictionary of Trade Products, Manufacturing and Technical Terms.... London. -- Capital, the amount of money or property subscribed or employed in a joint-stock association; the money assets invested in business by a trading firm or individual; the net worth of a party.

Practically the same is found in several other

dictionaries.(21\*)

We see now the genesis of the term "capital." Originally applied to the principal of a debt as distinguished from the interest, a fund as distinct from a flow, the present wealth as distinct from what grows out of it, it soon became applied to a merchant's stock in contradistinction to the flow of profits, if any, springing from it, and hence to any fund or stock whatever.

### III

This was the situation when the term "capital" was transmitted to the economists. Turgot accepts the meaning, and amplifies it. --

Whoever, either from the revenue of his land, or from the wages of his labour or of his industry, receives each year more values than he needs to spend, may place this superfluity in reserve and accumulate it: these accumulated values are what is called a capital.... It is absolutely indifferent whether this sum of values or this capital consists in a mass of metal or anything else, since the money represents every kind of value, just as every kind of value represents money.(22\*)

As I stated in a previous article:(23\*) --

Turgot regarded capital as savings. If this term be used to include all commodities acquired, but not yet consumed, i.e., all in existence at any one time, his conception agrees precisely with the one here advanced. But it would seem from the passages previously quoted that Turgot meant to exclude all goods of "current" consumption.... Except for these differences,... his conception was practically the one here proposed.

I feel more doubtful now than when the above was written that Turgot meant to exclude any part of the stock, as being used in "current consumption." Professor Tuttle believes that he did. If so, Turgot was, like Knies and Tuttle, guilty either of the confusion of subtracting a flow from a fund or of an arbitrary separation of stock into that to be used for the immediate future and that reserved for the more remote future. But let Turgot speak for himself. In the following passage he expressly includes the value of land, calculating its value from its annual income multiplied by the number of years' purchase: --

Since an estate of land of a certain revenue is but the equivalent of a sum of value equal to this revenue multiplied a certain number of times, it follows that any sum whatever of values is the equivalent of an estate of land producing a revenue equal to a definite fraction of that sum.... We have seen that every rich man is necessarily the possessor either of a capital in movable riches, or of an estate in land equivalent to a capital. Every landed estate is the equivalent of a capital; consequently every proprietor is a capitalist.(24\*)

In the following passage he expressly includes "all the other movable property" except debts: --

But though we cannot include, in calculating the riches of a nation, the capital which corresponds to the interests of money placed on loan without reckoning it twice over, we ought to include all the other movable property, which, although they

formed originally the occasion of expenditure and bear no profit, nevertheless form, from their duration, a true capital which is constantly accumulating and which, inasmuch as it can at need be exchanged for money, makes, as it were, a reserve fund which may enter into commerce, and, when one pleases, make up for the loss of other capitals. Among these may be mentioned furniture of all kinds, jewels, plate, paintings, statues, ready money shut up in the chests of misers: all these things have a value, and the sum of all these values may reach a considerable amount in rich nations; but, considerable or no, it is still true that it ought to be added to the sum of the price of landed estates, and to that of the advances circulating in enterprise of every kind, in order to make up the sum total of the riches of a nation.(25\*)

It is evident that Turgot, if he excluded any consumption goods, did not exclude much. He does not mention food in his list to be included; and he gives, as a reason for including some things, their durability. But as, on the other hand, he expressly includes land, and, excepting debts, "all the other movable property," and as he ends by calling the sum of all capital the "sum total of the riches of a nation," it is not at all clear that he meant to exclude anything.

From Turgot the stream of usage bifurcates. Popular language and business kept, with Turgot, faithful to the old tradition which closely identified capital and stock. A few economists, including possibly J. B. Say, did the same. But Adam Smith broke with tradition, and the force of his example was powerful enough to carry succeeding economists with him. Mistaking the fact that "capital" is ordinarily a trade term for a logical restriction of its meaning, he identified all capital with trade-capital. The confusion resulting therefrom did not, however, reach the dictionaries at first. The earliest example which we find of the influence of the economists on the lexicographers is in 1826: --

Ersch (J. S.) u. Gruber (J. G.), Allgemeine Encyclopädie.... Leipzig. -- Capital oder Erwerbvorrath (Erwerbstamm, Verlag), wird in der Staatswirthschaft dem Verbrauchsvorrathe eatgegengesetzt, und zu den drei Quellen des Einkommens (Land, Arbeit und Kapital) gerechnet.

Another early example is: --

1843, Brande, W. T., A Dictionary of Science, Literature, and Art.... New York. -- Capital. In Political Economy, that portion of the produce of labour saved from immediate consumption which is employed to maintain productive labourers, or to facilitate production. (See Political Economy.)

In 1846 the examples of "economic" definitions invading the dictionaries are quite numerous; and, what is very significant, the definitions now begin to diverge and conflict instead of remaining in substantial agreement as was the case previously. This lack of harmony is especially emphasized by the fact that some of the dictionaries find it necessary to distinguish between capital as used "in commerce" and capital as used "in political economy." For instance: --

1874, Colange, L., Zell's Popular Encyclopedia, a universal dictionary.... Philadelphia. -- Capital. (Polit. Econ.) A term applied to that portion of the produce of labor saved from immediate consumption which is employed to maintain productive

laborers, or to facilitate production.

(Com.) Principal stock, etc., of a bank, corporation, or monetary undertaking; the sum of money which a merchant, trader, or other individual, embarks in any concern to form its funded basis, or which he contributes to the common stock of partnership; as, a capital of one million dollars.

1888, Chambers's Encyclopaedia.... New edition. Edinburgh. -- Capital, in the ordinary sense, is the means with which business is carried on, and may consist either of money or of property convertible into money. In the more accurate language of political economy, capital is wealth appropriated to reproductive employment...

1889, Whitney, W. D., The Century Dictionary, Vol. I., New York. -- Capital.... 1. In polit. econ. that part of the produce of industry which, in the form either of national or of individual wealth, is available for further production; an accumulation of the products of past labor capable of being used in the support of present or future labor. 2. Specifically, the wealth employed in carrying on a particular trade, manufacture, business, or undertaking; stock in trade; the actual estate, whether in money or property, which is owned and employed by an individual, firm, or corporation in business.... See stock. 1893.

Peck, H. T., The International Cyclopaedia.... New York. -- Capital, in trade and political economy, is in its restricted sense applied to the money, or the property convertible into money, with which a trader or producer carries on his business. In this sense Adam Smith and many other writers call it stock; and there is a convenience in having a separate term for expressing this sense of the word C., since it is totally different from its wider [?] sense as an element in political economy.

1893, Murray, J. A. H., A New English Dictionary.... Vol. 2, Oxford. -- Capital. B. sb. 3. A capital stock or fund. a. Commerce. The stock of a company, corporation, or individual with which they enter into business and on which profits or dividends are calculated; in a joint-stock company, it consists of the total sum of the contributions of the shareholders. b. Pol. Econ. The accumulated wealth of an individual, company, or community, used as a fund for carrying on fresh production; wealth in any form used to help in producing more wealth.

These dictionaries would seem to show that the original meaning of capital as stock still prevails in commercial and popular use. Business men who have been consulted confirm this. It would astonish a business man to have an economist strike out from his assets as non-capital his raw materials, as would Kleinwächter, his perishable goods, as would Hermann, his fuel, as would Walras, or, above all, his land, as would most of the classical economists. That land is capital they all emphatically declare. As a manufacturer expressed it, the land is the very first thing into which the paid in capital of a new concern is converted. Again, they maintain that the function of capital has nothing to do with its meaning. It need not be "for production" or "for sustaining laborers," nor for any particular object whatever. The only point on which some of them hesitate is whether or not all articles in consumers' hands are capital. The reason for this hesitation may possibly be found in the customs



of bookkeeping. As one business friend expressed it, "Capital is simply a book-keeping term." The business man naturally associates the term with his shop and not his home, for he keeps a balance sheet in the former and not in the latter; but, once given a balance sheet, it does not matter what purpose is behind it. A social club, an art gallery, or a hospital, may have a capital. It is even said that in one year a joint stock company with capital stock was organized to build the yacht for defending the America's cup. If a private family should call itself a joint stock company and draw up a balance sheet, entering all its property, house, furniture, provisions, etc., on one side, with the debts on the other, no business man, I imagine, would hesitate to call the balance of assets over liabilities "capital." Even as it is, business men do not object, when their attention is called to the matter, to extend the application of the term capital beyond the limits of trade-capital. One representative business man said, "Capital isn't a part of wealth, but all a man has got, including his automobile." "Is that cigar in your mouth capital?" I asked. "No," he said hesitatingly. But this opinion he quickly reversed as inconsistent with his first statement, and because he was made to see that a box of cigars and each cigar in it, or out of it for that matter, was a part of his stock or reserve.

It ought now to be clear what the course of history has been. Business and popular usage has preserved a very consistent tradition from 1678 -- when capital meant, among other things, "all goods which are possessed" -- to 1883, when it still meant "the net worth of a party." The other meanings, principal loaned, stock in trade, capital stock, etc., were special applications rather than contradictions of this broader meaning. But Adam Smith turned aside from this beaten track. Following him came the other economists; but, as their master's trail led nowhere, each set out through trackless wilds on a path of his own. This wandering in the wilderness has now continued so long that a return to the beaten track seems itself a desertion of tradition! And yet in no other way can economists get into that harmonious relation with business facts and methods which most of us so earnestly desire.

It is true that a few seem to think that the needs of business men and economists are so different that "capital" should have a distinct meaning in the two fields. Professor Nicholson objects to identifying capital with stock, because this definition "seems rather adapted to accounting than economics."(26\*) Now if there is any feature of the business world which contains lessons for the economist, it is business book-keeping. Long and hard practical experience has developed the business man's methods of accounting. He has acquired in these matters an almost unerring instinct for truth. The wage-fund theory could scarcely have befogged economists, had they known how to keep reckoning of funds in "capital accounts" and of wages in "income accounts." So also the confused double counting of "income" by economists can be obviated by a little familiarity with double entry book-keeping.(27\*)

#### IV

But for those who prefer academic tradition to business tradition it may be argued that, among the contradictory definitions in the text-books, the definition of capital here advocated finds almost as much favor among economists as most of its competitors. Following Turgot came possibly J. B. Say,(28\*)

and certainly Courcelle-Seneuil(29\*) and Guyot.(30\*) Edwin Cannan, among present economists, reintroduced it. To-day it is used in four or five standard works,(31\*) as well as in some minor writings. Many economists have orally expressed their approval of the proposed definition.

Others virtually or nearly adopt it, as, for instance, Knies, Clark, Pareto,(32\*) Giffen,(33\*) De Foville,(34\*) Nicholson,(35\*) as well as my three critics. Professor Marshall says that in earlier years he "invariably thought of capital as the whole stock of goods, and of interest as the whole of the usance or benefits derived from the Use of that stock";(36\*) that, "when one approaches the problem of distribution from the mathematical point of view, there is practically no choice"(37\*) but to do so; and that "wealth in the form of houses or private carriages helped to give employment to labour as much as when in the form of hotels or cabs."(38\*) He expressly concedes what is really my chief contention when he says, "I concur in his [my] conclusion that whatever we do with the word capital, we cannot solve problems of capital by classifying wealth."(39\*) Yet he "concluded, not without doubt, that it is best to"(40\*) base his definition of capital on such a classification, purely out of deference to what he conceives to be the dominant usage.

Professor Fetter includes under capital all wealth when converted into money value. "Wealth and capital consist in precisely the same things."(41\*) By wealth he means stocks of wealth, each kind being measured in its own unit, -- yards, tons, acres, etc., -- and by capital the value of this stock. His capital is therefore identical with one of my senses of capital; namely, "capital-value."(42\*) In a very excellent paper,(43\*) which has recently appeared, Fetter emphasizes, with Clark, the fact that rent and interest apply equally to all goods, the one to the things themselves, the other to their value.

Professor Tuttle includes under capital the value of land, dwellings, automobiles, and all considerable stores of wealth of any kind, and yet not quite all wealth. I confess I do not understand what, or rather how much, he intends to exclude. His definition of capital, "surplus wealth(44\*) as a possession," although somewhat vague, seems entirely acceptable, and, if literally interpreted, is exactly equivalent to the value of the "stock of wealth existing at an instant of time." But the term "surplus" has been used in so many senses that it always needs interpretation. Business men use it in both income accounts and capital accounts. A natural interpretation would seem to be what still remains over and above what has been already consumed, or, in other words, what at any instant of time survives destruction. "Surplus wealth as a possession" would then mean simply surviving or existing wealth. But this interpretation Professor Tuttle expressly rejects. He omits from a stock of wealth "what is required for the satisfaction of current wants."(45\*) But it is evident that wealth used for "current" consumption must mean either what has been or is to be consumed. No finite amount can be consumed in "the present"; for the present is only a point, and all consumption requires time. If, then, surplus wealth does not mean what is left after past consumption, it must mean what is left after subtracting from the present stock some amount which is destined for future consumption. But are we to subtract what is to be used to-day, next week, next month, or next year?(46\*) Unless this question be definitely answered, the restriction that capital must be a surplus seems to be little more than the Hibernian statement that no one has any capital unless he has a great deal. It is, of course, true that "capital"

is popularly applied to large rather than small amounts; and "capitalist" is popularly opposed to laborer, even if the latter has a savings-bank deposit. But such a use of terms is too loose to serve as a basis for definition. Among all the dictionaries which have attempted to reflect the popular use of the term "capital," only four have been found which distinguish capital as a "large" stock. All of these are Russian.(47\*)

Professor Tuttle's reference to the simile of the lake and river and his criticism of my use of it(48\*) sound somewhat like the oft-met-with confusion between a stock and a flow. Most certainly should the contents, at any instant, of "the inflowing and outflowing streams"(49\*) be added to the contents of the lake. The distinction between capital and income is not like the mere relative distinction between lakes and rivers, but is like the absolute distinction between the amount of water at an instant of time (in lake or river), on the one hand, and the flow of water during a period of time (through lake or river), on the other. The two sets of distinctions are not in the least coincident. A lake has a flow as truly as a river, and a river has a stock as truly as a lake.(50\*) Rivers and lakes differ only in degree: stocks and flows differ in kind. The one distinction is merely classificatory, and is used in descriptive geography: the other is analytical, and is used in rational physics. It is precisely for the purpose of ridding rational economics of classificatory definitions of capital and substituting an analytical one -- to show that capital and income differ in kind, not in degree -- that I have been striving in this and former articles.

Distinctions of classification of course have their place. In fact, most of the distinctions which have partitioned stock into so-called capital and non-capital are valid for descriptive purposes, even when the line cannot be drawn with precision. "Land" is different from other wealth; "durable" goods are a fairly distinct category; there is a difference between goods associated with production and those associated with consumption. Of all such dividing lines one of the most natural and important seems to be that which separates business wealth from private wealth. I should call the two trade-capital and personal-capital. This distinction, as Komorzynski(51\*) says, is what many definitions of "capital" are seeking. But I submit that neither this nor any other line of demarcation helps us in the least to solve "the problems of capital." For this purpose they are as barren as is the distinction between lakes and rivers to solve the problems of hydrodynamics.

Except for the few differences in points of doctrine already mentioned, the disagreements between my critics and myself are purely as to terms. Professor Marshall and Professor Fetter object to my use of the term "capital" because it is thereby made a synonym of wealth. This, however, is scarcely correct. The quantity of wheat exported during 1903 was certainly wealth, yet it was not a stock of wealth existing at an instant of time. Again, Professor Tuttle and Professor Fetter, following Professor Clark's example, are very insistent that capital should be applied only to the value of stock, and not to the concrete objects of which it is composed, rightly remarking that the two concepts play a totally different role. But it would seem that the important distinction between them is even more explicitly marked by calling the concrete stock capital-wealth, and its value, capital-value. It seems to be thought that business men never apply the term "capital" to concrete wealth; but this is an error. The dictionaries also supply precedent for so applying the

term.(52\*)

In spite of all the differences between us, verbal or actual, the writings of my three critics follow a common trend of thought away from the partial views of capital which we have inherited from Adam Smith. In fact, on the really important issue we are all, I think, agreed; namely, that we cannot solve the problems of capital by classifying wealth in kinds or categories. But Professor Marshall hesitates to harmonize his use of the term "capital" with his conception of the problems of capital, while Professor Fetter and Professor Tuttle restrict the application of the term to the value of the stock as against the concrete objects of which it is composed. Finally, Professor Tuttle restricts the term still further by striking out stocks too small to be called a "surplus."

Thus, under slightly different terms, we find essentially the same conceptions; and unity of conceptions is chiefly important. Be it said that this paper is written not in the interests of a purist nomenclature, but in the hope of removing certain verbal obstacles which now block the way to important ideas. What meanings are attached to the words "capital" and "income" would be of slight consequence were it not that the present usage (or lack of usage) prevents economists from exploiting the ideas of "stock" and "flow." Words and ideas usually move together, and it can scarcely be expected that those who feel obliged to define the word "capital" as a part of stock will nevertheless, like Marshall, proceed to treat the "problems of capital" with reference to the whole.(53\*) It is simpler and less confusing to first square our words with our ideas. We now see that this can be done with a clear conscience, for to do so will square them with precedent also.

#### NOTES:

1. Elements of Political Economy (Macmillan, 1903), p. 41.
2. "The Real Capital Concept", pp. 54-96.
3. "What is Capital?" Economic Journal, December, 1896: "Senses of Capital", *ibid.*, June 1897; "The Role of Capital in Economic Theory", *ibid.*, December, 1897.
4. "The Role of Capital in Economic Theory", Economic Journal, December, 1897.
5. "Distribution and Exchange," Economic Journal, vol. viii., 1898, pp. 55-56.
6. Quarterly Journal of Economics, November, 1900, p. 18.
7. Besides these objections on the ground of terminology, Professor Fetter raises others on the ground of scientific expediency; but these are evidently due to a misunderstanding on his part. He seems to think that I restrict the meaning of capital to concrete wealth rather than the value of wealth, and that I do not admit "services" under income. But these are both prominent theses of mine, the former in the second Economic Journal article, the latter in the third. Possibly Professor Fetter conceived his objections after reading the first of the three articles, without sufficiently examining the other two.
8. "The Real Capital Concept", p. 75.

9. See "What is Capital?" *Economic Journal*, December, 1896, p. 517.

10. For a fuller presentation of this phase of the subject see "What is Capital?" *Economic Journal*, December, 1896, p. 520; also, Tuttle, "The Real Capital Concept", *Quarterly Journal of Economics*, November, 1903, p. 54.

11. *Encyclopaedia Metropolitana*, vol. vi. p. 153.

12. *Positive Theory of Capital*, English translation, London, 1891, p. 23.

13. "What is Capital?" *Economic Journal*, December, 1896.

14. Since the above was written, I note a probable exception quoted by Umfenbach, *Das Kapital in seiner Kulturbedeutung* (Würzburg, 1879), p. 32:

1776, Krünitz, *Encyclopädie*, Band 7, "Capital (lat. sors.) nennt man sins Summe Geldes sofern sie dazu bestimmt ist, Gewinn zu bringen, im Gegensatz dieses Gawinnes."

As the date of this *Encyclopaedia* is the same as that of the appearance of *The Wealth of Nations*, it is possible, though not probable, that the author was influenced by Adam Smith. We note that he contrasts capital with "Gewinn" a flow and not a part of stock.

15. Böhm-Bawerk, *Positive Theory of Capital*, English translation, 1891, p. 24.

Knies, *Das Geld* (Berlin, 1885), 2nd edition, p. 25.

Some of the other terms to signify capital have a broader etymology, e.g.: the German *Hauptstamm*; the Chinese "root or trunk of a tree," "root money," "mother money"; and the Japanese "stem" or "origin."

16. Other early dictionaries containing the same definition are: 1733, *Grosses vollständiges universal Lexicon*,... Hale u. Leipzig: 1771, *Dictionnaire universel... de Trévoux*, nouvelle édition. Paris.

17. Other early examples giving practically the same definition as the fore-going are: 1763, D. Fenning, *The Royal English Dictionary*,... 2d edition, London; 1766, Samuel Johnson, *A Dictionary of the English Language*, 3d edition, London; 1774, Proctor (P.) and Castieau (W.), *The Modern Dictionary of Arts and Sciences*... London.

18. Worcester (*Universal and Critical Dictionary*, Boston, 1846).

19. J.A.H. Murray, *A New English Dictionary*, vol. ii., Oxford, 1893.

20. Quoted by Umfenbach, *Das Kapital in seiner Kulturbedeutung* (Würzburg, 1879), p. 32.

21. Namely: 1855, Clarke, H., *A New and Comprehensive Dictionary of the English Language*, London; 1881, Dal. V., *Defining Dictionary of the Living Great-Russian Languages*, 2d edition, St. Petersburg; 1882, Skeat, W.W., *An Etymological Dictionary*... Oxford.

22. The Formation and Distribution of Riches, § lviii., Ashley's translation (Macmillan, New York), pp. 50-59.
23. "What is Capital?" Economic Journal, 1896, vol. vi. p. 517.
24. The Formation and Distribution of Riches, §§ lviii and xciv, pp. 50, 91.
25. The Formation and Distribution of Riches, § xcii, pp. 89, 90.
26. Elements of Political Economy (Macmillan, 1903), p. 44.
27. See "The Role of Capital in Economic Theory", Economic Journal, December 1897; Economics and Accountancy, by Victor Branford, London (Gee & Co., 62 Moorgate Street, E.C.) 1901.
28. See Tuttle "The Real Capital Concept" Quarterly Journal of Economics, November, 1903, p. 83; but of Böhm-Bawerk, Positive Theory, English translation, p. 59 n.
29. Traité théorique et pratique d'économie politique, 1867, tome i. p. 47.
30. Principles of Social Economics, English translation, p. 50.
31. Among those which now occur to me are Cannan's History of Theories of Distribution, Hadley's Economics, Smart's Distribution of Income, Daniels's Finance.
32. See "What is Capital?" Economic Journal, December, 1896.
33. In his Growth of Capital.
34. In his "Wealth of France and of other Countries." English translation, Journal of the Royal Statistical Society, 1894.
35. In his Elements, pp. 42, 43.
36. "Distribution and Exchange", Economic Journal, 1898, p. 56.
37. Ibid., p. 56.
38. Ibid., p. 57.
39. "Distribution and Exchange" Economic Journal, 1898, p. 59.
40. Ibid., p. 56.
41. "Recent Discussion of the Capital Concept" Quarterly Journal of Economics, vol. xv. p. 42, November, 1900.
42. See "Senses of Capital" Economic Journal, June, 1897.
43. "The Relations between Rent and Interest" a paper presented before the American Economic Association, December, 1903. Cf. Clark, Capital and its Earnings, p. 27, and Distribution of Wealth (Macmillan, 1899), chaps. ix and xiii. Cannan developed the same idea in "What is Capital?" Economic Journal, June 1897. Cf. my "Role of Capital" Economic Journal, December, 1897, pp. 524, 526.

44. By "wealth" Professor Tuttle means its value.

45. Quarterly Journal of Economics, November, 1903 p. 78; see also pp. 60, 79.

46. At one point (p. 79) Professor Tuttle seems to refer to Böhm-Bawerk's "production period" as the time in question. He can scarcely intend this, however, since the amount consumed during that period is about double the whole stock of wealth itself (excluding land)! See Böhm-Bawerk, Positive Theory of Capital, English translation (Macmillan, 1891), pp. 327, 426.

47. 1867, St. Petersburg, Imp. Acad. of Sci., Dictionary of the Slavonic and Russian Language, 2d edition. -- Kapital. 1. A considerable sum of money.

1874, Berezin, I.N., Russian Encyclopedic Dictionary. -- Kapital, a large sum of money bearing interest.

1878, Kliushnikov, V., Universal Cyclopedic Dictionary. -- Kapital, a large sum of money bearing interest.

1881-82, Kartashev & Balski. -- Kapital... 1. Large sum of ready money.

48. "It is important to note that Professor Fisher's conception of a 'stock' is much broader than that of Adam Smith. To the latter the idea of a surplus is the fundamental characteristic of stock, while to the former 'stock' comprises all economic goods in existence at a given instant. To illustrate, while to Adam Smith, on the one hand 'stock' corresponds to the pond of water -- the accumulated surplus of the inflow over the outflow, -- to Professor Fisher, on the other hand it is the pond of water plus the inflowing and outflowing streams at an instant of time. Yet, in spite of his definition, Professor Fisher unconsciously lapses into Adam Smith's conception of 'stock'. He does this when he illustrates that his distinction between a 'stock' and a 'rate of flow' 'brings capital into the simplest and most intimate relation to interest.' He says: --

"When a stock of goods or capital is exchanged for a perpetual flow of goods or income, the ratio of exchange constitutes the rate of interest. If £100 will buy an income of £3 per year, or if 100 tons of beef are worth a perpetual supply of 2 tons annually, the rate of interest is 2 per cent per year.'

"What makes it possible, we ask, to exchange £100 for an income of £3 per year? Is it simply the fact that £100 is in 'existence at a given instant of time'? Certainly not: it is because £100 exists under such conditions that it is possible to use it to buy an income. In other words, it must exist as a surplus." "The Real Capital Concept" Quarterly Journal of Economics, vol. xviii., November, 1903, pp. 75, 76.

The answer to this last is: All wealth is used "to buy (or otherwise obtain) an income." whether use-income or contract-interest. Existence as wealth is sufficient to make this possible. See Economic Journal, December, 1897, p. 525.

49. See last note.

50. Cf. "What is Capital?" Economic Journal, December, 1896, pp. 516, 517.

51. Die Nationalökonomische Lehre vom Credit (Innsbruck, 1903), p. 135.

52. See for instance: --

1857, G. Ripley and B. Taylor, *The Home Cyclopaedia*, New York.

1879, Stormouth, *Etymological and Pronouncing Dictionary*.

1883, Simmonds, *Commercial Dictionary*, London.

1888, *Chambers's Encyclopaedia*, new edition, Edinburgh.

1890, *Century Dictionary*, New York.

1893, *Funk's Standard Dictionary*, New York.

1901, *Webster's International Dictionary*.

All these admit concrete stock as one of the senses of capital employed in commerce. Many other dictionaries admit it as used "in political economy."

53. Among those who have pursued this paradoxical course, however, must be included: John Rae, whose definition of capital (*New Principles of Political Economy*, 1834, p. 171) has nothing to do with his thoroughgoing and admirable analysis of interest, which he connects entirely with "stock"; and Böhm-Bawerk, the inadequacy of whose definition of capital is manifested by frequent extension of his principles of capital to land (e.g. *Positive Theory*, English translation, p. 320 n.) and by recourse to "the subsistence fund", or general stock of wealth, for essential parts of his interest theory (*ibid.*, pp. 322, 325, etc.)