THE ECONOMIC JOURNAL

JUNE 1957

ADAM SMITH'S APPROACH TO THE THEORY OF VALUE[1]

I

It has been powerfully argued by Dr. Emil Kauder that " the analysis of subjective elements in economic valuation starts with Aristotle," and that " French, Italian and Swiss authors of the enlightenment have so perfected this analysis, that it might have been possible during the time of Adam Smith to base a system of political economy entirely on marginal utility calculation." [2] We are not, of course, attempting any kind of assessment of Dr. Kauder's learned case, but aim only at calling attention to two points of contrast concerning Adam Smith's treatment of value. These points come at such a vital turning-point in the history of economic thought that they deserve more emphasis and examination in the many discussions of Smith's fundamental ideas than they have hitherto received.

First, there is the contrast between Smith's treatment of value and that of his Scottish predecessors, Gershom Carmichael and his teacher Francis Hutcheson; and secondly, there is the contrast between Smith's own treatment in his *Lectures* of 1762–63 and that in the *Wealth of Nations*. The doctrines on value taught by " the never-to-be-forgotten Dr. Hutcheson " had come from Puffendorf via Gershom Carmichael. Before Puffendorf these ideas can be traced back through Grotius to the Aristotelian tradition. Hutcheson's treatment of value anticipates not so much the more one-sided utility theory of Jevons and Menger, but rather the well-balanced, dual, " both-blades-of-the-scissors " analysis of Marshall. Whether or not Smith did know, or could have reasonably been expected to explore, much of the relevant writings of Davanzatti, Montanari, Galiani, Turgot, Condillac and Bernoulli (set out so illuminatingly by Dr. Kauder), the ideas of Puffendorf, Carmichael and Hutcheson were fully at his disposal to build on had he wished. It is interesting to see to what extent Smith, in the *Wealth of Nations*, chose to alter decisively the emphasis of his approach to value at the

[1] It is a pleasure for one of the authors (W. L. Taylor) to record the helpfulness, counsel and stimulating suggestions, and to acknowledge the valuable co-operation he received, from Mr. T. W. Hutchison of the London School of Economics in the preparation of an earlier draft of this paper.

[2] E. Kauder, " Genesis of the Marginal Utility Theory," Economic Journal, Vol. LXIII, September 1953, pp. 638 ff.

expense of the ideas of scarcity and usefulness stressed by Hutcheson (and to some extent by Smith himself in his *Lectures* in 1762–63) in the direction of a one-sided, almost exclusive emphasis on labour and cost of production.

Puffendorf's brief discussion of value lays direct emphasis on the two basic elements of usefulness and scarcity,[1] fundamental concepts which were clearly indicated and transmitted by Puffendorf and his Scottish followers to Adam Smith.

Puffendorf's ideas on value came to Hutcheson via Gershom Carmichael (1672(?)–1729), Hutcheson's teacher and immediate predecessor in the Glasgow Chair of Moral Philosophy, and the first professorial occupant of that most celebrated of chairs. Carmichael translated Puffendorf's *De Officio* into Latin and added a critical expository commentary in footnotes. Hutcheson himself said that Carmichael was " by far the best commentator " on Puffendorf and that " the notes are of much more value than the text." [2] To the brief chapter on value Carmichael adds some half-dozen notes, including some of the greatest acuteness, which show a clear and masterly grasp of the various fundamental elements of the value problem, as, for example, in the following summary:

> " In general we may say that the value of goods depends on these two elements, their *scarcity* and the *difficulty of acquiring them*. . . . Furthermore, scarcity is to be regarded as combining two elements, the number of those demanding (the good) and the usefulness thought to inhere in the good or service and which can add to the utility or pleasure of human life." [3]

In another note Carmichael lays further emphasis on the subjective element by pointing out that the usefulness or " aptitude," which is an essential constituent of value, may be real or imagined (p. 249).

[1] Here is an English version of some of the relevant passages in Puffendorf's *De Officio*, Chapter XIV: " The natural Ground of the *Common Value*, is that Fitness which any Thing or Action has for supplying, either mediately or immediately, the *Necessities* of Humane Life, and rendring the same more *easie* or more comfortable. Hence it is we call those things which are not of any *Use* to us, *Things of no value*. There are nevertheless some *things most useful* to Humane Life, which are not understood to fall under any *determinate Price or Value* "; (*e.g.*, the upper Regions of the *Air*, the *Sky*, and the *Heavnly Bodies*, the clear Light of the *Sun*, the serene and pure *Air*) . . . the *necessity* of the thing or its extraordinary *Usefulness* is not always regarded; but on the contrary we see those things are of the least account or Value, without which Human Life is least able to subsist; and therefore not without the singular Providence of Almighty God, *Nature* has been very *bountiful* in providing *plentiful* store of those things. But the *rarity* or *Scarceness* of Things conduces chiefly to the enhancing their Value. . . ." *The Whole Duty of Man According to the Law of Nature*, by that famous Civilian Samuel Puffendorf. Translated by F. C. (London, M DC XCI), pp. 165–7.

[2] F. Hutcheson, *Introduction to Moral Philosophy*, 1747, p. i.

[3] See p. 247 n. of Carmichael's edition of Puffendorf's *De Officio* (2nd ed., Edinburgh, 1724): " In genere hic dici potest. Pretium rerum ex his duobus capitibus pendere, *Indigentia*, et *Adquirendi difficultate*. . . . Indigentia, sc., porro ex duobus aestimatur, numero sc. amientium, et aptitudine, quam isti rei vel operae inesse putant, qua ad vitae humanae usum aut voluptatem aliquid conferre possit." Very little seems to have come down about Carmichael, though he was the founder of the Glasgow school of moral philosophy. For further details of his life and career, see W. L. Taylor, " Gershom Carmichael, a Neglected Figure in British Political Economy," *The South African Journal of Economics*, Vol. 23, September 1955, pp. 251 ff.

Hutcheson's teachings on value follow very closely those of Puffendorf, as further sharpened and developed by his almost forgotten teacher, Carmichael. These ideas have not been completely neglected, since Edwin Cannan quoted two or three paragraphs on the subject from the *Introduction to Moral Philosophy* (1747).[1] But Hutcheson's brief treatment deserves considerably more attention than it has yet received, both for its own sake and as a contrast to the treatment of Adam Smith in the *Wealth of Nations*. Hutcheson's fullest discussion comes on pp. 53–5 of Volume II of his *System of Moral Philosophy* (1755):

> " The natural ground of all value or price is some sort of *use* which goods afford in life; this is prerequisite to all estimation. But the prices or values in commerce do not at all follow the real use or importance of goods for the support, or natural pleasure of life. . . . When some aptitude to human life is presupposed, we shall find that the prices of goods depend on these two jointly, the *demand* on account of some *use* or other which many desire, and the *difficulty* of acquiring, or cultivating for human use."

" Use " is defined by Hutcheson as:

> " Not only a natural subserviency to our support, or to some natural pleasure, but any tendency to give any satisfaction, by prevailing custom or fancy, as a matter of ornament or distinction."

" Difficulty of acquiring " is explained in terms of scarcity as:

> Not only a great labour, or toil, but all other circumstances which prevent a great plenty of the goods or performances demanded. . . . Price is increased by the rarity or scarcity of the materials in nature, or such accidents as prevent plentiful crops of certain fruits of the earth; and the great ingenuity and nice taste requisite in the artists to finish well some works of art, as men of such genius are rare. The value is also raised, by the dignity of station in which according to the custom of a country, the men must live who provide us with certain goods, or works of art."

Hutcheson summarised as follows:

> " When there is no *demand*, there is no price, were the *difficulty* of acquiring never so great; and were there no *difficulty* of labour requisite to acquire, the most universal *demand* will not cause a price; as we see in fresh water in these climates. Where the demand for these two sorts of goods is equal, the prices are as the difficulty. Where the difficulty is equal, the prices are as the demand " (italics supplied).

This discussion aims at drawing attention to some significant contrasts with Smith's treatment of value in the *Wealth of Nations*. The famous explicit treatment of utility and value, consisting of the single paragraph on " value-in-use " and " value-in-exchange," appears in Book I, Chapter IV. This brief discussion is rounded off by a lengthy elaboration of a labour and cost of production analysis and of a labour standard of value (" utility " or

[1] See E. Cannan, *Review of Economic Theory* (London, 1929), p. 160.

" value-in-use " having been dismissed from the scene). Various other aspects of value theory are touched on in passing, for example, in Book I, Chapters V, VI and VII. Again in Chapter II, Part II, in discussing the prices of the precious metals, Smith states that the demand for them arises partly from their utility, and partly from their beauty, and mentions that the qualities of utility, beauty and scarcity are the basis of the high prices of the precious metals. But unlike his immediate Scottish predecessors, who placed the term and concept of scarcity in a central and dominant position in their treatment of value, Smith, in these few digressions from his definitive treatment of value, includes the idea of scarcity implicitly, but not explicitly.

(*a*) In contrast with Hutcheson's emphasis on " some sort of use " being " a natural ground of all value or price," Smith lays it down (Book I, Chapter 4) that " utility " or " value-in-use " is *not* a necessary ingredient of exchange value, since things " which have the greatest value in exchange have frequently little or no value in use " (or " utility "), *e.g.*, diamonds.[1]

(*b*) Whereas Carmichael and Hutcheson by " use " or " usefulness " meant something closely similar to the concept of utility as required and employed in modern value theory (*i.e.*, power to satisfy any kind of want, " real " or " imagined," basic or ornamental), Smith, in the *Wealth of Nations*, resorts to a narrower ethically tinged sense of " utility " (according to which diamonds have little or no utility).

(*c*) While Smith makes only passing reference to the fundamental term " scarcity " and makes no reference to it at any critical point in his discussion of value, both the term and the concept of scarcity (or " difficulty ") had a very central place in the chapters of Puffendorf and Hutcheson and had been very clearly emphasised in the two sentences of Carmichael.[2]

The broad general influence of Hutcheson on Smith seems generally to

[1] L. H. Haney, *History of Economic Thought* (New York, 1936), p. 217, points out that Smith's distinction between value-in-use and value-in-exchange seems to correspond with the idea of *valeur usuelle* and *valuer venale* as held by Quesnay and the Physiocrats.

Paul H. Douglas, in his lecture " Smith's Theory of Value and Distribution " in *Adam Smith, 1776–1926; Lectures to Commemorate the Sesquicentennial of the Publication of the " Wealth of Nations,"* edited by J. M. Clark (Chicago: The University of Chicago Press, 1928), p. 78, goes so far as to say of Smith's treatment of " utility " in the *Wealth of Nations*: " Not only is utility not a determinant of exchange value, but—and here Smith goes farther than Ricardo and later exponents of the labour theory of value—it is not even a necessary prerequisite."

[2] Halévy remarks on Hutcheson's discussion of " use " and value, that his language is " more exact than Smith's on two points: By ' use ' Hutcheson, differing from Adam Smith, means not only natural or reasonable utility, but also any aptitude to produce a pleasure which is founded on custom or fashion: and, above all, by ' difficulty of acquiring,' he means not only the amount of work necessary in order to produce or to obtain the object, but, in a more general way, the scarcity of which this difficulty is only a particular instance." Elie Halévy, *The Growth of Philosophic Radicalism*, translated by Mary Morris, with a Preface by A. D. Lindsay (London, 1928), p. 96. According to Halévy, Smith " had the choice between two perfectly distinct traditional doctrines " on value: that represented by Puffendorf and Hutcheson, who based value on utility and scarcity, and that represented by Locke, who based value on labour. Halévy suggests that " it is a curious question " why Smith and subsequent economists chose to follow what he describes as the tradition of Locke. Whether or not this is a fully satisfactory description of Locke's ideas on value, it seems quite clear that Smith *could* have chosen, but in the *Wealth of Nations* all but completely discarded, the most important elements in the doctrines of Puffendorf and Hutcheson.

have been assumed, or even sometimes explicitly stated, to cover their ideas on value, as for example, when Smith's distinguished biographer, John Rae, wrote that Hutcheson's " remarks on value contain what reads like a first draft of Smith's famous passage on value in use and value in exchange."[1] It is suggested, on the contrary, that the texts justify us in suggesting that the differences, as they stand, have far more fundamental implications than any similarities, and that these differences are all the more crucial considering that we are surely here at a major turning point in the history of economic thought.

II

In the light of this first contrast between Hutcheson's ideas on value and those of the *Wealth of Nations* some further examination and emphasis may be appropriate regarding the contrast between Smith's treatment of value in the *Lectures* of 1762–63 and his definitive treatment in the *Wealth of Nations*.[2] The second contrast is based on two passages in the *Lectures*:

(*a*) The two opening sections of the division of the *Lectures* devoted to political economy are entitled (by Cannan) *Of the Natural Wants of Mankind* and *That all the Arts are subservient to the Natural Wants of Mankind.* Cannan points out that there is nothing corresponding to these two sections at the beginning of, or later on in, the *Wealth of Nations*, though almost all the other important sections of this part of the *Lectures* match up with the opening chapters in the *Wealth of Nations*. He wrote—

> " It is not easy to explain why the first two sections were omitted from the *Wealth of Nations*, and the fact will be regretted by those who ask for a theory of consumption as a preliminary to the other parts of political economy." [3]

From the opening sentences Smith links his general subject of *Cheapness* and *Plenty* (" or, which is the same theory, the most proper way of procuring wealth and abundance "), directly with the ideas of plenty and scarcity; and like Puffendorf and Hutcheson, and unlike his own later positive treatment in the *Wealth of Nations*, Smith introduces this fundamental concept into his explanation of the water-and-diamonds paradox.

> " It is only on account of the plenty of water that it is so cheap as to be got for the lifting; and on account of the scarcity of diamonds (for their real use seems not yet to be discovered) that they are so dear." [4]

[1] See J. Rae, *Life of Adam Smith* (London, 1895), p. 14. This passage is quoted approvingly by W. R. Scott, *Francis Hutcheson* (Cambridge, 1900), p. 237, who adds, however: " It should be noted that while Hutcheson emphasises the position of labour he does not make it the sole distinguishing characteristic of wealth, for he also adds the limitation of supply and appropriation—as for instance, ' the rarity or scarcity of the materials in nature etc.' " Surely this is an absolutely fundamental addition by Hutcheson, particularly as Hutcheson, as in one of the quotations above, relates scarcity to demand.

[2] See E. Cannan, *Review of Economic Theory*, p. 164, and Marian Bowley, *Nassau Senior and Classical Economics* (reprinted New York, 1949), pp. 67–9, who have also touched on the differing treatments of value in Smith's *Lectures* and the *Wealth of Nations*.

[3] E. Cannan, *Lectures of Adam Smith* (Oxford, 1896), Editor's " Introduction," p. xxvii.

[4] *Ibid.*, p. 157.

Moreover, Smith in this opening section is mainly concerned to point out that most of the production of a community, when any considerable division of labour has developed, is for meeting not basic " natural " wants but those springing from the love of variety or delicacy of taste, on account of which gems of diamonds, for example, are " much esteemed by us," though iron is far " more useful."

Certainly these two opening sections in the *Lectures* are, at most, general discussions of " wants and their satisfactions," yet surely their presence marks a most significant contrast with what has often not unreasonably been construed to be the one-sided general emphasis on labour and production in the *Wealth of Nations.*

(*b*) The second point of contrast relates to Section 7 (in this division of the *Lectures*), *What Circumstances regulate the Price of Commodities,* as compared with the corresponding Chapter VII in the *Wealth of Nations* on natural and market price. In this chapter we are simply told about market price that it—

> " is regulated by the proportion between the quantity which is actually brought to the market, and the demand of those who are willing to pay the natural price." [1]

We are given no further word of explanation or analysis of " demand " beyond that we are to understand by " demand," " effectual demand " and not the " absolute " demand which a poor man might have for a coach and six (*ibid.*). While Puffendorf, Carmichael and Hutcheson explicitly put the term and concept of scarcity in a crucial and vital place in their analysis, Smith makes no direct reference to " use " or usefulness, and only includes the concept of scarcity in an implicit fashion, *e.g.*—

> " A competition will immediately begin among them, [buyers] and the market price will rise more or less above the natural price, according as either the greatness of the *deficiency,* or the wealth . . . of the competitors happened to animate more or less the eagerness of the competition. Among competitors of equal wealth and luxury the same *deficiency* will generally occasion a more or less eager competition, according as the acquisition of the commodity happens to be of more or less importance to them." [2]

These ideas of scarcity and utility are basically essential for any satisfactory treatment of value theory; yet Smith tended to turn away from them and emphasise the role of labour.

In the *Lectures* we are given three determinants of market price:

> " First, the demand, or need for the commodity. There is no demand for a thing of little use; it is not a rational object of desire.
>
> Secondly, the abundance or scarcity of the commodity in proportion to the need of it. If the commodity be scarce, the price is raised, but if the quantity be more than is sufficient to supply the demand,

[1] A. Smith, *Wealth of Nations,* Cannan Edition (London, 1950), Vol. I, p. 58.
[2] *Ibid.,* pp. 58–9.

the price falls. Thus it is that diamonds and other precious stones are dear, while iron, which is more useful, is so many times cheaper, though this depends principally on the last cause, viz.:—
Thirdly, the riches or poverty of those who demand " (p. 176).

The *Lectures* do not go further on this subject than these headings. But the explicit presence of these ideas, the perceptive connection and lucid linking together in a basic and fundamental explanation of utility, scarcity and demand (in the manner of Hutcheson and Carmichael) may be held to mark a certain contrast with the treatment devoted to this problem in the *Wealth of Nations*.

In direct contradiction with the famous statement in the *Wealth of Nations*, it is noteworthy in the above passage that diamonds in fact have, and must have, considerable " use " from the fact of their being demanded, and very much demanded, since their price is raised thereby above the price of iron, in spite of the latter being " more useful " (*i.e.*, having a greater total utility). It has been noted above that Smith had previously held that no " real use " had yet been discovered for diamonds, so his treatment of use and utility appears somewhat inconsistent in the *Lectures*. But Smith here is inconsistently *right*, and we prefer economists who are inconsistently right to those who are consistently wrong.

It would be dangerous to lay much store on the precise wording of the ideas presented in the *Lectures*, and it is quite impossible (as Scott argued against Cannan) to conclude from the omission of a subject or idea from the *Lectures* that it had not occurred to, or been treated by, Smith in 1762–63. But the approach to and ideas on value of the Aristotle–Puffendorf–Carmichael–Hutcheson tradition are all explicitly, if not so very compactly and consistently, set out in the *Lectures*, and it can at least be safely assumed that they are not the invention of a note-taker. In fact, according to Scott,[1] it can be assumed that Smith probably gave them a much fuller treatment than is apparent from the text of the notes.[2]

Referring to Smith's treatment in the *Wealth of Nations*, Dr. Kauder concludes his review of seventeenth- and eighteenth-century utility theorists with the following judgement on Smith:

> " Yet it was the tragedy of these writers that they wrote in vain, they were soon forgotten. . . . Instead, the father of our economic

[1] W. R. Scott, " The Manuscript of An Early Draft of Part of *The Wealth of Nations*," ECONOMIC JOURNAL, Vol. XLV, September 1935, p. 431.

[2] The manuscript of the opening chapters of *An Early Draft of the Wealth of Nations*, (*c.* 1763) (printed by W. R. Scott in his *Adam Smith as Student and Professor*, pp. 322 ff.) dates apparently from 1763, just after the *Lectures*, but may already be said to mark a transition towards the *Wealth of Nations*. The manuscript volume begins with a chapter headed " Chapter 2," the substance of which was to become Chapters I and II in the *Wealth of Nations*. The Chapter I still apparently intended, but not in fact included in the 1763 manuscript, would presumably have covered the subject of wants and their satisfaction, discussed in the first two sections of the *Lectures*, but finally omitted from the *Wealth of Nations*. The chapter on price in the manuscript (Chapter 3) is simply an outline of headings which follows the *Lectures* in setting out three determinants of market price and specifically mentions needs and scarcity, but even more briefly than in the *Lectures*.

> science wrote that water has a great utility and small value. With these few words Adam Smith had made waste and rubbish out of the thinking of 2,000 years. The chance to start in 1776 instead of 1870 with a more correct knowledge of value principles had been missed " (p. 650).

These are rather strong words, and in spite of the tantalising anticipations before 1776 of modern utility theory to which Dr. Kauder (from post-1870 hindsight) has been able to refer, it may still appear an unreasonably harsh judgment. But Smith certainly did know the ideas on value of Hutcheson and Carmichael, which also had roots two thousand years old in Aristotle, and had, in fact, expounded them in his *Lectures*.

If the above quotation from the *Lectures* (p. 176) on demand, use and scarcity had appeared in the text of the *Wealth of Nations*, and if, on the other hand, the famous paragraph in the *Wealth of Nations* on value-in-use and value-in-exchange (where it is suggested that utility is *not* a necessary pre-requisite of value-in-exchange) had occurred in the *Lectures*, then it could be undoubtedly claimed that, at this point, the *Lectures* give a garbled and in-complete account of Smith's ideas. It could also be pointed out that the correct and definitive account could be found, where one would expect to find it, in the *magnum opus* which took him so long to write. But as it is, the " correct and definitive " treatment comes second-hand from much abbre-viated notes of earlier lectures, and the garbled and incomplete version in the finished *magnum opus*. It seems that there may always remain a certain rather fascinating aura of mystery as to why the most crucial elements in these ideas were hidden in the background of the *Wealth of Nations* almost as though by some deliberate process of censorship.

If one is an upholder of the labour theory of value one can wholeheartedly applaud the new and different emphasis Smith adopted in the *Wealth of Nations* in his treatment of the fundamentals of value. But if one considers that the ideas of scarcity and " usefulness " are basic and essential for any satisfactory treatment, or if one even defines the subject-matter of economic science in terms of the scarcity concept, then there can be only regret for Smith's new emphasis given with such vastly influential consequences in the *Wealth of Nations*, which led on to at least a serious under-emphasis on, and, at times, to the almost complete eclipse of, these ideas in British political economy for nearly a hundred years.[1] Smith's treatment of value appears

[1] The eloquent comments of Paul H. Douglas may be recalled: " By failing to follow up the hints which these writers (Locke and Harris) had developed, Smith helped to divert the writers of the English Classical school into a cul-de-sac from which they did not emerge, in so far as their value theory was concerned, for nearly a century, while he also helped . . . to give rise to the eco-nomic doctrines of nineteenth-century socialism. . . . There are, it seems to me, few more unfair instances in economic thought than the almost complete unanimity with which the English-speaking economists of the chair have heaped condemnation upon the over-worked and poverty-stricken Marx, who worked under such great difficulties, and, save for the comments of Jevons and a few others, have heaped praises upon Smith and Ricardo. The failure was the failure not of one man but of a philosophy of value, and the roots of the ultimate contradiction made manifest to the world in the third volume of *Das Kapital* lie embedded in the first volume of the *Wealth of Nations*," (*op. cit.* pp. 80 and 95).

as a profoundly consequential divagation from the main path of European thinking, a divagation very many of the steps in which had subsequently to be retraced.

III

It is one thing to pose a problem in the transmission of ideas; but it is another and most unsatisfactory thing to leave it as an unsolved problem. Dr. Kauder attempts no solution of the problem of why Adam Smith " made waste and rubbish out of the thinking of two thousand years "—if one excludes the cheap corollary that it must be because Adam Smith was neither as learned nor as perceptive as Dr. Kauder himself. But, as has been shown above, the pupil of Francis Hutcheson and the lecturer of 1762–63 could hardly make use of the bluff Johnsonian *riposte,* " Sir, it was pure ignorance."

It is, of course, rather hard to saddle so unoriginal and derivative a writer as the Adam Smith of this Schumpeterian age with making waste of so many years of effective thought with these few words: " water has a great utility and a small value." [1] For these few words are indeed even more than second-hand. The contrast also goes backwards almost 2,000 years in the history of thought; the very phrasing is an echo of the same illustration given by John Law in 1705,[2] and the same way of putting it is shared not only by Francis Hutcheson, who taught him, but even by Samuel Puffendorf, who was put forward by Dr. Kauder as a model whom Adam Smith would have done well to follow.

> " Those things are of the least account of Value [remarked Puffendorf] without which Human Life is least able to subsist; and therefore not without the most singular Providence of Almighty God, *Nature* has been very *bountiful* in providing a *plentiful* store of those things. [But] the wanton Luxury of Mankind has set *extravagant Rates* upon many things which Humane life might very well be without, for instance upon *Pearls* and *Jewels*." [3]

Admitting all the myopia with which Smith may have viewed the proposition, it is difficult to sustain that by adopting it he was discarding the valuable traditions of 2,000 years. He used few words because he was merely echoing something he regarded as traditional, trite and obvious, and, in doing so, can hardly be accused of drawing a fresh curtain of his own devising over a long tradition of price theory based on utility.

It might be remembered that Von Wieser himself treated this " paradox of value " with considerably more respect. Indeed, he started his great work on *Natural Value* by pointing out that it would appear obvious to any

[1] E. Kauder, *op. cit.*, p. 650. Adam Smith's " few words," in fact, have a homelier ring than those ascribed to him. "Nothing is more useful than water; but it will purchase scarce any thing; scarce any thing can be had in exchange for it. A diamond, on the contrary, has scarce any value in use; but a very great quantity of other goods may frequently be had in exchange for it " (*Wealth of Nations*, Cannan edition (London, 1950), Vol. I, p. 30).

[2] Conveniently reproduced in E. Cannan, *Review of Economic Theory* (London, 1929), p. 159.

[3] Samuel Puffendorf, *op. cit.*, pp. 167–8.

intelligent business-man, as it did to the early theorists, that the value of things was derived from their utility. But facts, including the paradox that " things which have a great deal of use have often a smaller value than those which have little use," showed that this conclusion was not so obvious, after all, but on the contrary, " as often and as strikingly, that value is in agreement with the exact antithesis of use—namely with costs."

As a result, Von Wieser pointed out, for a long time many of the best writers on value refused to consider utility as the source of value, but asserted that the value of goods comes from the difficulty of their attainment and is proportionate to it. On the other hand, most of those who have based their theory on utility have been manifestly unsatisfactory :

> " They have either placed themselves in contradiction to the facts . . . without explaining away the contradiction, or laid so much stress on these facts that, in the end, they can scarcely be distinguished from those writers who have rejected the principle of utility, except by their express avowal of that principle." [1]

One could hardly deny that Daniel Bernoulli, as early as 1738, had made an attempt—in the diagram and accompanying explanation given by Dr. Kauder—to give geometrical representation to the use of the differential calculus to represent the diminishing marginal utility of additions to a man's fortune. But it is done upon the basis of an assumption concerning the relationship between this marginal utility and the size of the man's existing fortune which is purely arbitrary (viz., inverse proportionality), and his geometry does no more than illustrate the assumption. Adam Smith would not have flinched from the interpersonal comparison or from the assumption that the marginal utility of an addition to (or, at any rate, subtraction from) the greater fortune was less than that of a similar addition to the smaller fortune.[2] But he was certainly suspicious enough of the Political Arithmetician to distrust the spurious trick of pretending to give precise measurement to what was mere assumption.

It is not immediately apparent from Bernoulli's explanation (as there given) that the relative curve SS_1 in the diagram (SS in the text) represents, as it must, the total utility derived from additions to a basic fortune; its shape depends upon the particular—and unconvincing—assumption made, and it surely postulates a good deal of post-1870 hindsight to read into this apparently rather inadequately explained diagram what we are told Adam Smith might have built upon in 1776.

The marginal-utility analysis which was developed after 1870 was an analysis applied to the problem of individual values, on the basis of different quantities of individual commodities already possessed or different rates of acquisition of commodities. There is no hint that Bernoulli's purely formal

[1] F. Von Wieser, *Natural Value,* English Translation by Mrs. C. Malloch, ed. W. Smart (London, 1893), pp. 3–5.

[2] Adam Smith: *Theory of Moral Sentiments* (1759), Bohn Standard Library Edition (London, 1853), Pt. III, Ch. 3, p. 195. " The poor man must neither depend nor steal from the rich, though the acquisition might be much more beneficial to the one than the loss could be hurtful to the other."

illustration of what can be interpreted as a particular rate of diminishing marginal utility of money can be applied to the problem of individual prices. Moreover, on a straightforward interpretation of the wording given, Bernoulli's discovery would seem to have taken place in the course of a piece of reasoning which assumes implicitly that the total utility of 100,000 ducats is the same as the total utility of 50,000 ducats![1] It is true that, with post-1870 hindsight we can interpret otherwise the statement " then for the wealthier person one ducat is worth as much as one half ducat for the poorer person." But the obvious pre-1870 reading would have been that Bernoulli's " worth " of each ducat or half-ducat was something capable of addition to give this surprising result; only since 1870 could the more sophisticated reading be generally adopted, that it means only " marginal utility " and that summation is impossible.

When Adam Smith is blamed for not building out of these thoughts the new science of political economy, the question surely arises whether one could have expected him to build upon a foundation of such arrant nonsense as this last supposition must at the time have appeared to be. But why did he not, in the *Wealth of Nations*, build upon his own earlier propositions that the market price of a commodity was based on:

> " First, the demand, or need for the commodity. . . . Secondly, the abundance or scarceness of the commodity in proportion to the need of it. . . . Thirdly, the riches or poverty of those who demand. . . ."?[2]

The answer would appear to be, in the first place, that Adam Smith felt that this sort of subjective analysis was leading nowhere. It had not so far proved capable of being employed in any actual quantitative measurement, while even had he been aware of Bernoulli's illustration, since this posited equal utilities derived from the possession of two very different fortunes, it might not have proved very encouraging to pursue it further.

That Adam Smith turned his back upon utility largely because it did not seem to provide more than vague generalisations is not difficult to imagine. Yet perhaps he did not turn his back upon it so decisively as is usually supposed.

Two fundamental ideas running through the *Wealth of Nations* may be regarded as evidence of this. The first is the stress which Adam Smith laid upon men's propensity to barter as the origin of a socio-economic organisation based on the division of labour. It would seem doubtful that Adam Smith had really abandoned the primacy of subjective estimates of utility as a determinant of value, when his whole system is bound up with the existence of a society in which the different individuals implicitly offer: " Give me that which I want, and you shall have this which you want," in which " every man thus lives by exchanging, or becomes in some measure a merchant, and the society itself grows to be what is properly a commercial

[1] E. Kauder, *op. cit.*, p. 648. [2] *Lectures*, pp. 176–7 (see above p. 187).

society." [1] Clearly this depends upon different subjective valuations of the objects of exchange.

The second lies, of course, in his stress on there being a necessary connection between the apparently independent sets of prices comprised under his classification of " natural price " and " market price." This was already formulated in the *Lectures* (p. 173), but it formed a more important feature of the *Wealth of Nations*. The " Early Draft " published by Professor Scott is clearly a link between Adam Smith's earliest formulation and his final one, for it sets out both elements of which only one, a piece (and that a different one each time) is stressed almost to the exclusion of the other in the *Lectures* and in the *Wealth of Nations*.[2]

What is the essential difference between the *Lectures* and the *Wealth of Nations* in this respect? Surely that, although in the *Lectures*, Adam Smith asserts that:

> " Of every commodity there are two different prices, which though apparently independent, will be found to have a necessary connection, viz. the natural price and the market price." [3]

it there remains little more than an assertion.

His supply-and-demand formula refers only to market price. His natural price formula is applied only to the natural price of labour, and hardly goes beyond—if indeed it goes as far as—Cantillon. But in the *Wealth of Nations*, on the other hand, new stress is given to the determinants of natural price, by way of the model, designed to explain at one and the same time both value and distribution, for which he may have been indebted either to the Physiocrats [4] or to James Oswald of Dunnikier.[5] The component parts of the price of every commodity can be resolved into the shares of wages, profits and rent, and—

> " as the price or exchangeable value of every particular commodity, taken separately, resolves itself into some one or other, or all of those three parts; so that of all the commodities which compose the whole annual produce of the labour of every country, taken complexly, must resolve itself into the same three parts, and be parcelled out amongst different inhabitants of the country, either as the wages of their labour,

[1] *Wealth of Nations*, Cannan Edition (London, 1950), Vol. I, pp. 16 and 24. One is tempted to bring in collateral evidence from the still more uncompromising exponent of a labour-theory-of-value, David Ricardo. In his chapters on the incidence of taxes, Ricardo shows his awareness of a theory of consumer's demand in such characteristic passages as this: " Whatever habit has rendered delightful will be relinquished with reluctance . . . but this reluctance has its limits. . . . One man will continue to drink the same quantity of wine, though the price of every bottle should be raised three shillings, who would yet relinquish the use of wine rather than pay four. Another, will be content to pay four, yet refuse to pay five shillings. . . . Every man has some standard in his own mind by which he estimates the value of his enjoyments, but that standard is as various as the human character," (D. Ricardo, *On the Principles of Political Economy and Taxation*, Ch. XVI (ed. P. Sraffa and M. H. Dobb) (Cambridge University Press, 1951), Vol. 1, p. 241).

[2] W. R. Scott, *Adam Smith as Student and Professor* (Glasgow, 1937), pp. 345–6.

[3] *Lectures*, p. 173.

[4] *Ibid.*, Cannan's introduction, pp. xxx–xxxi.

[5] W. R. Scott, *Adam Smith as Student and Professor*, pp. 117–18, 320–1.

the profits of their stock, or the rent of their land. . . . Wages, profit and rent are the three original sources of all revenue as well as of all exchangeable value." [1]

Thus the unifying analysis is that there is everywhere an " ordinary," " average " or " natural " rate of wages, profit and rent which determine " natural " prices of commodities. National output (= income) is equivalent to the total contribution of the three factors of production co-operating through the division of labour. National income (= output) is distributed as the payment for the services of these factors. Individual " natural " prices are determined by this distribution, though they also determine the distribution, just as in Marshall's analogy, " when several balls are lying in a bowl, they mutually govern one another's positions."

Just in the same way as, in the *Lectures*, Adam Smith virtually confined himself to a rather superficial supply-and-demand theory of market price, though asserting a connection with market price and mentioning quite incidentally that " labour . . . is the true measure of value " (p. 190), so now in the *Wealth of Nations*, without abandoning the explanation of market price *via* utility and scarcity inherited through Hutcheson, Puffendorf and the Scholastics, he concentrated upon what now appeared to him to be the more important phenomenon of " natural price " or normal value, for which the traditional utility approach appeared inadequate.

The explanation must be that, in the *Wealth of Nations*, Adam Smith had cast his thought in a more ambitious role. His eyes were set, not on the transient determination of market values but on a long-term demonstration of the causes of the variations in the *Wealth of Nations* in which alone could he make clear:

> " That there is in every country what may be called a natural balance of industry, or a disposition in the people to apply to each species of work precisely in proportion to the demand for that work." [2]

In the *Wealth of Nations* Adam Smith was studying the influence of society and social institutions upon material welfare, leaving aside the various technical considerations which previous authors had always mixed up with these. In his *Introduction and Plan of the Work* he made the main points of his analysis quite clear. He was interested in the social causes which determine real national income per head. The first major influence of social organisation upon economic welfare, as thus conceived, is exerted through the division of labour. Hence Adam Smith first devoted attention to the reasons why the division of labour leads to an increased produce (Book I, Chapter I) and next considered the principle from which the division of labour draws its force, namely, mutual exchange (Chapter II). Then he discussed the limits which determine how far the division of labour may proceed (Chapter III).

[1] *Wealth of Nations* (Cannan edition), Vol. I, p. 54.
[2] W. R. Scott, *Adam Smith as Student and Professor*, p. 346.

The division of labour is, on the one hand, derived from a human propensity to exchange, and on the other hand, it gives rise to the importance of exchange in developed communities. Exchange, in turn, is facilitated by the use of money, discussed in Chapter IV, and gives rise to the problems of value discussed in Chapters V–VII. He shows that the acts of production and valuation proceed *pari passu* with the distribution of the National Product amongst the owners of the co-operant factors of production. And so he goes on to discuss wages (Chapter VIII) and profits (Chapter IX), connecting them in Chapter X by discussing the principles which give rise to differences in earnings for different employments of labour and capital—which, incidentally, throws further light upon the share of those two components of the natural price of commodities. Chapter XI completes the general picture (and Book I) by discussing rent and the influence of the progress of the economy upon the distribution of the product between landlords, wage-earners, merchants and master-manufacturers. It contains a long digression upon a practical question, to which further reference will have to be made, viz., the complications introduced by variations and the value of silver itself (the standard measure of value as price) during the past four centuries.

With increasing division of labour, the economic and social importance of capital is enhanced, hence in Book II Adam Smith discussed capital in greater detail in five separate chapters, whose inter-relationship was explained in a short introduction. In Book III he discussed, with a wealth of comparative historical illustration, the " different progress of opulence in different nations." This is bound up with differences of economic policy, such as are discussed in Book IV, which is in the main a discussion of and an attack upon mercantilistic principles of regulation which have hindered the achievement of a greater national product through the more effective division of labour. Having thus, in Books III and IV, examined the influence of the state upon economic welfare, in Book V he discussed what expenditure the state ought to undertake and how it ought to raise the necessary revenue if it was to promote the general welfare at least cost.[1]

It is evident that the *magnum opus* was cast in the mould of a powerful unifying conception. Now within this framework it is clear that the measurement, in real terms, of the " wealth " of nations, and in particular of its progress, would seem to call for some unvarying standard of value which would enable valid comparisons to be made through time. For this purpose, market values which depended on momentary whims and fashions on the market, on temporary relationships between supply and demand, did not appear satisfactory. For this reason, if for no other, it does not appear inexplicable that Adam Smith no longer paid so much attention to the lines of

[1] While this analysis of the leading features of the *Wealth of Nations* is based essentially on Adam Smith's own account of his intentions in the *Wealth of Nations* itself and on an assessment of how far he succeeded in carrying them out, based upon the book as a whole, its formulation has undoubtedly been influenced by the similar one of N. G. Pierson in " Het begrip van volksrijkdom," *Verspreide Economische Geschriften, Dl I, De methode en theorie der Staathuishoudkunde* (Haarlem, 1910), pp. 52–3.

argument taken over from Hutcheson, which had served well enough in the *Lectures*.

He now made much more of the distinction between natural (*i.e.*, normal or long-run) price and market price. He showed that over a long enough period, market price must be sufficient to cover all costs included in the natural price, *i.e.*, the sum of the normal wages, profit and rent of the co-operant factors of production. He elucidated the relationship further by demonstrating that owing to immobilities (*e.g.*, monopolies, lack of knowledge of alternatives, etc.), market price might be kept for quite long periods above the natural rate. Incidentally, in discussing the case of the market price falling below the natural price, he brought in the concept of a margin at which the market price for the whole supply is fixed, *i.e.*, a concept of a marginal demand price falling in much the same category as that implied in Ricardo's remarks quoted in note 1 on p. 192:

> " When the quantity brought to market exceeds the effectual demand, it cannot all be sold to those who are willing to pay the whole value of the rent, wages and profit, which must be paid in order to bring it thither. Some part must be sold to those who are willing to pay less, and the low price which they give for it must reduce the price of the whole." [1]

In the *Wealth of Nations* also, he made very much more of the distinction between the " real " and the " nominal " price of commodities. He discussed the advantages of making long-term calculations in corn rather than money, on the grounds that corn was more likely to maintain stability of its own value. But, as a solution to the problem of finding an invariable standard of value, he plumped for labour.

It is worth while to look at Smith's own statement of the reasons for his choice:

> " But as a measure of quantity, such as the natural foot, fathom or handful, which is continually varying in its own quantity, can never be an accurate measure of the quantity of other things; so a commodity which is itself continually varying in its own value, can never be an accurate measure of the value of other commodities. Equal quantities of labour, at all times and places, may be said to be of equal value to the labourer, in his ordinary state of health, strength and spirits; in the ordinary degree of his skill and dexterity, he must always lay down the same portion of his ease, his liberty and his happiness. The price which he pays must always be the same, whatever may be the quantity of goods which he receives in return for it. Of these, indeed, it may sometimes purchase a greater and sometimes a smaller quantity; but it is their value which varies, not that of the labour which purchases them. At all times and places that is dear which it is difficult to come at, or which it costs much labour to acquire; and that cheap which is to be had easily, or with very little labour. Labour alone, therefore, never varying in its own value, is alone the ultimate and real standard

[1] *Wealth of Nations* (Cannan Edition), Vol. I, p. 59.

by which the value of all commodities can at all times and places be estimated and compared. It is their real price; money is their nominal price only." [1]

This is clearly based upon a definite psychological assumption regarding the disutility or real cost of labour. The assumption is surely erroneous; but the problem involved is of such fundamental importance that there is little mystery about the reasons why Adam Smith, once having set his mind to this problem of inter-temporal comparisons, should have put aside his earlier approach to problems of value based on the ideas of scarcity and usefulness in favour of " a one-sided, almost exclusive emphasis on labour and cost of production." Nor, indeed, are the ideas of scarcity and usefulness abandoned; they are merely taken for granted. When Adam Smith, in the passage just quoted, or in the succeeding one, plumped not merely for labour but for the amount of labour commanded in the market, as providing the measure of the real price of everything, he was not excluding those inevitable market forces; he was merely tackling a different problem:

> " The real price of every thing, what every thing really costs to the man who wants to acquire it, is the toil and trouble of acquiring it. . . . That money or those goods . . . contain the value of a certain quantity of labour which we exchange for *what is supposed at the time to contain* the value of an equal quantity . . . it was not by gold or by silver but by labour, that all the wealth of the world was originally purchased; and its value, to those who possess it, and who want to exchange it for new productions, is precisely equal to the quantity of labour which it can enable them to purchase or command." [2]

As Malthus put it, accepting Samuel Bailey's view that " value, in its ultimate sense, appears to mean the esteem in which any object is held," he would on that very basis choose the amount of labour commanded by the commodity at two different periods as providing the most certain measure of changes in the esteem in which it was held.[3]

Unfortunately, while upon Adam Smith's assumptions regarding the real cost of his labour always remaining the same to the labourer, the amount of labour commanded would provide a standard measure of value, this must be regarded as irrelevant to the problems of what determine values, since no

[1] *Wealth of Nations* (Cannan Edition), Vol. I, p. 35.

[2] *Ibid.*, Vol. I, pp. 32–3.

[3] T. R. Malthus, *Definitions in Political Economy*, 1827 (reprinted New York, 1954), pp. 126, 165. In fact, Malthus went further, and while rejecting the " labour embodied " as the measure of the value of a commodity, still asked " whether the labour required to produce a commodity does not, beyond all comparison, express more nearly the esteem in which the commodity is held than a reference to some other commodity, the producing labour of which is utterly unknown, and may therefore be one day or one thousand years? " Malthus was the economist amongst Smith's immediate successors to whom the importance of the problem of making valid comparisons through time was most apparent, and his remarks therefore form a valuable commentary upon Adam Smith's intentions. See also his *Principles of Political Economy*, 2nd edition, 1836 (reprinted New York, 1951); especially the " Advertisement," pp. vii–xi, and Chapter II, especially Sections V–VI, pp. 93–122.

satisfactory explanation is offered as to why the price of any article should be such as to *command* any given quantity of labour. The different nature of the problems was obscured by an attempt to link " labour " in another way with the problem of normal or " natural " values, in which an illegitimate transference was attempted from a simplified model of a primitive society to a realistic model of a more developed one.

In assessing the component parts of " natural " prices of commodities, which are equivalent to the total factor payments necessary to ensure continuity of supplies to the market, Adam Smith made the amount of labour *expended* or *embodied* in production the sole source of the particular value of commodities in primitive communities, to which " natural " profit and " natural " rent had to be added in the case of more developed communities.[1] But he gave no satisfactory explanation of these added elements; and he left a confusion here which Ricardo (who seems to have had a different view from the one put forward here regarding Adam Smith's intentions) confounded still further in his attempt to bring in logical consistency.[2]

If a true explanation is given here of the reasons for Adam Smith turning from " scarcity and utility " to a labour theory of value, did he not, in fact, do more for the progress of economics by a grand failure in an impossible but fundamental task, than he would have done, had he been content to add a seventh rung or even to strengthen some of the existing steps in the rickety ladder of subjective-value theory such as, according to Dr. Kauder, it appeared in 1776? Economics has remained less than a science because, in spite of all efforts, no firm basis has yet been discovered for the measurement of real national income or for relating changes in the product with changes in welfare. But it would have remained mere *dilettantism* had the attempt to make a genuine Inquiry into the Nature and the Causes of the *Wealth of Nations* not been undertaken.[3] If Adam Smith committed some folly in his attempt to forge a labour theory of value into a tool for use in this great task, perhaps it was because—

> " At that period of history this theory was worth being taken up by any gifted genius who could make it throw a first ray of light into the dark mass of economic phenomena. . . . A great thought may in the long run turn into a childish error." [4]

[1] *Wealth of Nations*, Bk. I, Ch. VI.

[2] Although this is a rather lengthy survey, it is doubtful if, in fact, it adds anything to the sympathetically critical analysis in Marian Bowley, *op. cit.*, pp. 67–74.

[3] Some ingenious attempts to measure relative economic welfare per head in different countries may turn out to be mere sophistications of Adam Smith's measuring rod of " labour commanded." Thus if one tries to measure comparative real earnings in terms of Colin Clark's " International Units," the result will be to price the earnings of labour in terms of a basket of commodities valued at constant dollar prices based on the years 1925–34. This is merely an inverse relationship linking commodities and the amount of labour exchangeable for it, to the one put forward by Adam Smith. But one can sympathise with Clark's impatience with those who are content to take up a mere *non possumus* attitude. See Colin Clark, *The Conditions of Economic Progress* (London, 1951), Ch. 2.

[4] F. Von Wieser, *op. cit.*, p. 202.

Finally, even upon the assumption that the marginal-utility revolution of the 1870s at last illumined all, and that costs can be firmly put in their place as opportunity costs or displaced alternatives, what is the fundamental-factor scarcity that makes it necessary for alternative uses of factors to be foregone? Could it be that in his ordinary state of health, strength and spirits, in the ordinary degree of his skill and dexterity, the output of a man's labour is limited by his finding labour irksome?

H. M. Robertson
W. L. Taylor

Department of Economics,
University of Cape Town.