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ADAM SMITH'S CONCEPT OF PRODUCTIVE AND UNPRODUCTIVE LABOUR: AN INTERPRETATION

BY

ROY H GRIEVE

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DEPARTMENT OF ECONOMICS
UNIVERSITY OF STRATHCLYDE
GLASGOW

ADAM SMITH'S CONCEPT OF PRODUCTIVE AND UNPRODUCTIVE LABOUR: AN INTERPRETATION

ROY H GRIEVE*

ABSTRACT

This note explores Smith's employment of the concept of 'productive labour', a concept which commentators have frequently found problematic. We suggest that Smith's difficulty in formulating a satisfactory definition of 'productive labour' stems from the fact that he seems to have had in mind - and to have tried to combine - two different (but only independently valid), concepts of productive labour: one (anticipating Marx) in respect of labour whose employment yields surplus value to the capitalist, the other (presaging Sraffa) focusing on labour employed in certain necessary or 'basic' industries within the economy.

Productive and unproductive labour: the Smithian classification

An essential feature which distinguishes classical from neoclassical economics is that classical economists envisaged production as a 'circular' process – 'the production of commodities by means of commodities' (Sraffa, 1960) – i.e. as a process in which the commodity inputs to production are themselves products of the production system. The classical conception contrasts sharply with the neoclassical representation of production as a 'one-way' process of transformation of given resources, through the application of 'factors of production', into final goods; the classics explicitly recognised that, to maintain a going level of output, part of current output must be such as can replace, in the next round of production, the inputs being used up in the current round. For instance some proportion of this year's harvest must be reserved from consumption and put back into the production process as seed corn to make possible the next year's harvest.

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When inputs are viewed in this way as products of the system – the same commodities being both used-up and re-produced in the course of productive operations - the idea of an 'overplus' or 'surplus' readily emerges when the quantity of commodity outputs is compared with the necessary input quantities of the same commodities. Such a conception is of course absent from the neoclassical model in which production is treated as a one-way process of transforming certain inputs into quite different outputs. In practical terms a surplus – the availability of output in excess of what is necessary to reproduce that output - is important as it provides the means of support of those members of the community who do not contribute directly to the production of their own subsistence, and provides also the means whereby, through savings and capital accumulation, the productive capacity of the economy can be extended.

In the literature reference had been made, long before publication of the *Wealth of Nations*, to the concept of the surplus, but Adam Smith, whose thinking was certainly consistent with the surplus concept, did not himself introduce the term at all. Smith's discussion (1776, Bk.II, Ch.III, pp.264-265) runs instead in terms of his famous (or perhaps 'infamous') distinction between 'productive' and 'unproductive' labour.

There is one sort of labour which adds to the value of the subject upon which it is bestowed: there is another which has no such effect. The former, as it produces a value, may be called productive; the latter, unproductive labour. Thus the labour of a manufacturer adds, generally, to the value of the materials he works upon, that of his own maintenance, and of his master's profit. The labour of a menial servant, on the contrary, adds to the value of nothing. Though the manufacturer has his wages advanced to him by his master, he, in reality, costs him no expense, the value of those wages being generally restored, together with a profit, in the improved value of the subject upon which is labour is bestowed. A man grows rich by employing a multitude of manufacturers; he grows poor by maintaining a multitude of menial servants.

The theme is clear – that there is particular advantage (profit on investment) to be had in employing productive rather than unproductive labour. Smith goes on to offer further explanation of what it is that makes productive labour special. Comparing the results of the

application of productive and unproductive labour, he observes (ibid., p.265) that the labour of the manufacturer (i.e. productive labour)

. . . fixes and realises itself in some particular object or vendible commodity, which lasts for some time at least after that labour is past. It is, as it were, a certain quantity of labour stocked and stored up to be employed, if necessary, upon some other occasion. That subject, or what is the same thing, the price of that subject, can afterwards, if necessary, put into motion a quantity of labour equal to that which had originally produced it. The labour of the menial servant, on the contrary, does not fix or realise itself in any particular subject or vendible commodity. The services of the menial generally perish in the very instant of their performance, and seldom leave any trace or value behind them, for which an equal quantity of service could afterwards be procured.

For emphasis, Smith forcefully reiterates the argument (ibid., p.265), in what, to some readers, certainly seemed gratuitously provocative terms:

The labour of some of the most respectable orders in the society is, like that of menial servants, unproductive of any value, and does not fix or realise itself in any permanent subject, or vendible commodity, which endures after that labour is past, and for which an equal quantity of labour could afterwards be procured. The sovereign, for example, with all the officers both of justice and of war who serve under him, the whole army and navy, are unproductive labourers. . . . Their service, how honourable, how useful, or how necessary soever, produces nothing for which an equal quantity of service can afterwards be procured. The protection, security, and defence of the commonwealth, the effect of their labour this year, will not purchase its protection, security, and defence for the year to come. In the same class must be ranked, both some of the gravest and most important, and some of the most frivolous professions: churchmen, lawyers, physicians, men of letters of all kinds; players, buffoons, musicians, opera-singers, opera-dancers, etc. The labour of the meanest of these has a certain value, regulated by the very same principles which regulate that of every other sort of labour; and that of the noblest and most useful produces nothing which could afterwards purchase or procure an equal quantity of labour. Like the declamation of the actor, the harangue of the orator, or the tune of the musician, the work of all of them perishes in the very instant of its production.

Not surprisingly, the supposedly pejorative implication of the term 'unproductive' provoked complaint. J S Mill (1866, p.28) noted for instance that certain writers, "among whom are Mr. M'Culloch and M. Say [look] upon the word unproductive as a term of disparagement, [and] remonstrate against imposing it upon any labour which is regarded as useful – which produces a benefit or pleasure worth the cost. The labour of officers of government, of the army and navy, of physicians, lawyers, teachers, musicians, dancers, actors, domestic servants, &c . . . ought not to be 'stigmatized' as unproductive, an expression which they appear to regard as synonymous with wasteful or worthless. 'Why', they ask, 'should not all labour which produces utility be accounted productive?" Subsequent neoclassical commentators were, as might be expected, equally disapproving of Smith's terminology, and as blind to his real meaning. Thus Sir Alexander Gray (1931, pp.138 -139) dismisses the distinction between productive and unproductive labour as 'an evil legacy of the Physiocrats', remarking that 'the whole controversy . . . strikes us now as rather futile – a fertile field for suggesting insoluble conundrums which are sometimes not unamusing . . . ' and concludes by warning his readers that 'there may be all manner of occupations which are unproductive in the Smithian sense, but yet indirectly are of the highest productivity'.²

Those who took exception to Smith's description of respected members of the community as 'unproductive' were, of course, missing his point. The usefulness or otherwise (in terms of consumer satisfaction) of particular sorts of labour was not the issue with which he was

¹ Marx's comment on this is worth noting: 'The great mass of so-called 'higher-grade' workers – such as state officials, military people, artists, doctors, priests, judges, lawyers, etc. - some of whom are not only not productive but in essence destructive, but who know how to appropriate to themselves a very great part of the 'material' wealth partly through the sale of their 'immaterial' commodities and partly by forcing the latter on other people - found it not at all pleasant to be relegated economically to the same class as clowns and menial servants and appear merely as people partaking in the consumption, parasites on the actual producers (or rather agents of production). This was a peculiar profanation precisely of these functions which had hitherto been surrounded by a halo and had enjoyed superstitious veneration.' (Marx, 1862-1863, Ch.4)

² Later authorities, for example, Schumpeter (1954) and Hollander (1973) are no less hostile to the Smithian distinction. Schumpeter (pp.628-630) dismisses the whole issue as a 'dusty museum piece'; Hollander (p.147) refers to Smith's 'unfortunate choice of terminology' and seems to believe that Smith was mistakenly neglecting the importance of the service sector. Neither commentator appears to appreciate that Smith is thinking about the source from which surplus output is derived, and warning that the consequence of employing labour 'unproductively' is that less surplus output is available for investment and economic progress. On the other hand, Dobb (1973) repeats Marx's criticism, that Smith's distinction related to the nature of labour's product, rather than to a 'social relation of production': but the fact is that Smith's concern with the nature of the product may be legitimate, even if not compatible with Marx's criterion of productive labour.

concerned: as the objectors should have noticed, Smith explicitly makes the point that his classification of an activity as 'unproductive' does not imply that it is of no use or value to the community, allowing in fact that so-called 'unproductive' activities may well be 'honourable', 'useful' or 'necessary'.

The role of productive labour

If utility is not the unique characteristic and hallmark of the things produced by productive labour, what is? To answer that question we need to consider what Smith says about the role of productive labour within the economy, and what that role implies with regard to the nature of the goods produced by productive labour.

Smith brings out clearly what he sees, beyond its profit generating capability, as the 'strategic' (if we may so describe it) role – which is in fact a dual role - of productive labour within the economy. In the first place, he points to the dependence of the unproductive sector for its means of subsistence on the productive members of the community (Smith, 1776, Bk.II, Ch.III, p.266):

Both productive and unproductive labourers, and those who do not labour at all, are all equally maintained by the annual produce of the land and labour of the country. This produce, how great soever, can never be infinite, but must have certain limits. Accordingly, therefore, as a smaller or greater proportion of it is in any one year employed in maintaining unproductive hands, the more in the one case and the less in the other will remain for the productive, and the next year's produce will be greater or smaller accordingly; the whole annual produce . . . being the effect of productive labour.

'Productive hands', that is to say, produce over their own usage, a surplus, of which a part at least provides the support of unproductive labourers and all who contribute no labour. In other words, all who fall into the latter categories draw upon the surplus created by the productive sector without, through their own activities, making any contribution to its reproduction.

Secondly, just as the maintenance of the unproductive sector depends on the labour of productive workers who produce more than they consume, so also does the emergence of a surplus of resources available for investment: for saving and investment to be possible the annual revenue of society must be greater than is required merely to support the community at a basic standard of living. Although Smith doesn't explicitly say of an investible surplus that it must originate from the contribution of productive labour, he does emphasise that for the businessman to earn a profit on his investment and for the community achieve a net increase in output through that investment, it is to the employment of productive labour that the investor must direct his resources. It is only by the employment of productive labour that a net gain, in terms of money and in terms of real resources, can be made (ibid., p.266-271).

Whatever part of his stock a man employs as a capital, he always expects it to be replaced to him with a profit. He employs it, therefore, in maintaining productive hands only;

Saving, and investment directed to the employment of productive labour, are the means by which the annual produce of the economy can be increased:

Parsimony [i.e. saving] by increasing the fund which is destined for the maintenance of productive hands, tends to increase the number of those hands whose labour tends to add to the value of the subject upon which it is bestowed. It tends therefore to increase the exchangeable value of the land and labour of the country. It puts into motion an additional quantity of industry, which gives an additional value to the annual produce.

On the other hand, Smith argues, the employment of *unproductive* workers consumes resources which could have been put to better use. Referring to the constraint which, he believed, had all too often been imposed on the growth of the country's wealth by profligate expenditure, Smith, deploring such wastage of resources, stresses the potential contribution which the employment instead of productive labour could have made. He notes (ibid., p.276-277) that there has occurred

much private and public profusion, many expensive and unnecessary wars, and great perversion of the annual produce for maintaining productive to maintain unproductive hands. . . . So great a share of the annual produce of the land and labour of the country, has, since the revolution, been employed upon different occasions, in maintaining an extraordinary number of unproductive hands. But had not these wars given this particular direction to so large a capital, the greater part of it would naturally have been employed in maintaining productive hands, whose labour would have replaced, with a profit, the whole value of their consumption. The value of the annual produce of the land and labour of the country, would have been considerably increased by it every year, and every year's increase would have augmented still more that of the following year. More houses would have been built, more lands would have been improved, and those which have been improved would have been better cultivated, more manufactures would have been established, and those which had been established before would have been better extended; and to what height the real wealth and revenue of the country might, by this time, have been raised, is not perhaps very easy for us even to imagine.

We find therefore that Smith credits productive labour with making a doubly significant 'strategic' contribution to the operation of the economy. Part of the surplus of output such labour produces over its own requirements supplies the maintenance of all other members of the community, unproductive workers and non-workers together; another part of the surplus may, through saving and investment, be put to the accumulation of resources, thereby developing the wealth and productive capacity of the country. By contrast, as Smith emphasises to his readers, the employment of unproductive labour has no such positive implications: no valuable surplus over costs is produced - at the end of the day when such labour is finished, nothing of substance is left to show for it.

Smith is saying that productive labour produces what may be described as 'necessary' goods – necessaries as distinct from luxuries - i.e. wage goods, materials and equipment such as are needed to 'put labour in motion' – indeed (even if he did not use the term) a *surplus* of such necessaries, over what the productive workers themselves require for support in their own employment. This surplus of necessary goods is evidently of critical social and economic importance - it supplies the means of support for all 'unproductive' members of the community, and provides also the resources which allow accumulation of capital and expansion of the productive capacity of the economy.

Thus, from what Smith says in these general terms, we can form a clear enough picture of the benefits he understands the employment of productive labour to bring – generating surplus value to the employer *and* creating goods essential to maintain and extend the productive and supportive capabilities of the economy. However, his attempts to specify more precisely just what are the properties which give productive labour its especially valuable character, have caused commentators some difficulties. What are the features which - according to Smith - differentiate productive from unproductive labour?

Productive labour: distinguishing criteria

To take stock: recalling that Smith introduced his discussion of productive and unproductive labour by attributing a value-creating property to the former, the complete set of characteristics said to distinguish productive labour is:

- (i) productive labour adds to the value of the material upon which it works, the value of its product not only repaying the cost of materials but, in addition, covering the wage bill and as well, yielding sufficient extra value to give a profit to the capitalist employer;
- (ii) productive labour 'fixes and realizes itself' (is 'embodied' we might say) in the form of the commodities it produces, commodities which possess a certain degree of durability;
- (iii) productive labour being thus 'stored up' in the commodities it produces, these commodities, or the value received for them, can 'put into motion' a quantity of labour equal to that which has gone into their production.

Unproductive labour, by contrast, possesses none of these properties: it is not capable of adding value, it is not 'embodied' in any commodity, does not endure in any form, and it cannot subsequently procure the services of other workers.

As mentioned above, it is a fact that commentators, even apart from those who failed to see beyond the utility criterion, have had problems with the distinctions Smith drew, or attempted to draw, between productive and unproductive labour. To find anomalies and to pick holes in his explanation is not particularly difficult.

For instance, he says of productive labour [criterion (i)] that it 'adds to the value of the subject on which it is bestowed'; while that may be so, that criterion appears to sit awkwardly with the condition [criterion (iii)] that productive labour, as well as producing profit, produces also commodities such as can 'put labour into motion'. By the profit criterion activities, as, for example, putting on a theatre performance, or the manufacture of items of luxury consumption - both of which may undoubtedly yield a profit to the capitalist entrepreneur - would count as 'productive', but, with respect to supplying the means of supporting labour in employment such activities are, with equal certainty, unable to perform the required role. However, there is in fact no indication that Smith had recognised and resolved the apparent inconsistency of his criteria: we are offered no clear and unique answer to the question of how labour which yields a profit to the capitalist employer, but via employment in production of luxuries, trivial or otherwise, should be classified.

The designation as 'productive' of *any* labour which generates surplus value to the capitalist employer does, however, accord with Marx's definition of productive labour. In seeking to uncover the source of surplus value, Marx, using the labour theory of value, arrived at the proposition that surplus value is created when the capitalist, having purchased, at its value, the worker's value-creating 'labour-power', employs that labour power in production for the market. For Marx it is the employment of labour by capital, its employment *per se*, that is important, as that is how he understands surplus value to emerge (and fall automatically into the hands of the capitalist as profit). As, from the Marxian perspective all labour of which the employment yields a profit to the capitalist is defined as 'productive', from that angle, therefore, the nature of the product doesn't matter: even labour which is profitably employed in

producing 'useless fripparies' counts as productive; what *does* matter is that the labour in question has generated surplus value – thereby not only renewing and maintaining, but adding to, society's stock of money 'capital' – capital which is available for employment of labour in *any* line of activity.

But Smith, in specifying conditions of the productiveness of labour was evidently *not* indifferent as to the nature of the product, referring as he does both to the property of durability and to the product being able to support labour in employment. While Marx's sole condition of labour's counting as 'productive' is that its employment generates surplus value to the capitalist, Smith, by contrast, seems to be concerned also – legitimately so, we believe - with the particular nature of the commodities which labour is employed to produce. Consider an example which Marx gives (1862-1863, Ch.4):

an entrepreneur of theatres, concerts, brothels, etc., buys the temporary disposal over the labour-power of the actors, musicians, prostitutes, etc. – he buys this so-called 'unproductive labour'. . . The sale of [its services] to the public provides him with wages and profit. And these services which he has thus bought enable him to buy them again; that is to say, they themselves renew the fund from which they are paid for.

Thus, according to Marx, these 'actors, musicians and prostitutes' must be placed in the category of 'productive labour'. That would be consistent with Smith's criterion (i); but one might expect Smith - with criteria (ii) and (iii) in mind – to be uneasy with that classification - on the ground that had these same workers been employed in, say, the production of wage goods, or machinery for use in industry, the sale of such products could not only have likewise renewed with a profit the capital invested – but, *in addition*, the particular commodities produced would be available to support extra workers in employment or supply them with improved productive equipment. Smith's position on the classification of such workers seems ambiguous.

³ 'The use-value of the commodity in which the labour of a productive worker is embodied may be of the most futile kind. The material characteristics are in no way linked with its nature which on the contrary is only the expression of a definite social relation of production. It is a definition of labour which is derived not from its content or its result, but from its particular social form.' (Marx, 1862-1863, Ch.4)

Criterion (ii): Smith requires as a characteristic of productive labour that its produce must be of a material or durable nature: 'productive labour fixes and realises itself in some particular object or vendible commodity, which lasts for some time at least after that labour is past'. By contrast, labour which produces services which 'perish in the very instant of their performance' apparently fails – however useful these services may be – to qualify as productive. The (common-sense) intuition underlying this 'durability' criterion would seem to be that if productive labour is to contribute to the support of unproductive members of society and to the accumulation of capital, *by the very nature of the case*, its product (direct or indirect) must be such that it continues to exist for some time beyond the moment of production.

Interpreted quite literally as a proposal that labour be recognised as productive only if its direct product possesses physical durability, this criterion has troubled commentators. For instance J S Mill (1866, pp.28 and 30) found the requirement difficult to accept: while agreeing that labour which produces 'utilities fixed and embodied in outward objects' is necessarily 'productive', he asks 'why refuse the title (of productive) to the surgeon who sets a limb, the judge or legislator who confers security, and give it to the lapidary who cuts and polishes a diamond?' Later in the discussion Mill proposes a compromise: 'I shall not refuse the appellation productive, to labour which yields no material product as its direct result, provided that an increase of material products is its immediate consequence'. In agreeing that that seems a reasonable way of treating the matter, we may however note that, in finding this solution, Mill was in fact resolving a non-existent problem. If we look beyond the particular passage in which Smith enunciates this criterion, it seems clear that commentators who have expressed concern about this materiality criterion have taken Smith's words in too literal a sense, and have consequently misunderstood what Smith actually meant.

In discussing 'the different employment of capitals' (1776, Bk.II, Ch.V, p.287) Smith observes that 'a capital may be employed in four different ways; while the first two of these - in 'procuring' and 'preparing the rude produce' for use and consumption – are perfectly straightforward, the third and fourth may come as a surprise to the reader who has taken Smith's 'materiality' criterion of productivity quite literally. The third and fourth employments of capital are: 'in transporting either the rude or manufactured produce from the places where

they abound to those where they are wanted, [and] in dividing particular portions of either into such small parcels as suit the occasional demands of those who want them'. Given his dictum that 'whatever part of his stock a man employs as capital . . . [h]e employs it . . . in maintaining productive hands only', it is evident that Smith is fully prepared to regard as 'productive' the labour employed in providing services which constitute an essential part of the production process. Indeed, the productive status of such labour is explicitly stated (ibid., p.289):

The persons whose capitals are employed in any of these four ways [that is, in acquiring raw produce, processing it, in transporting raw materials or finished products, and in 'breaking and dividing' the product 'into such small parcels as suit the occasional demands of those who want them] are themselves productive labourers. Their labour, when properly directed, fixes and realizes itself in the subject or vendible commodity upon which it is bestowed, and generally adds to its price the value at least of their own maintenance and consumption. The profits of the farmer, of the manufacturer, of the merchant, and retailer, are all drawn from the price of the goods which the first two produce, and the two last buy and sell ⁴.

Thus Smith's understanding of the distinction between productive and unproductive labour becomes clearer: labour which, even if its own direct and immediate contribution is of an intangible character, contributes to the production of material, and thus (in some degree) durable commodities, is treated as 'productive'; it is only labour whose efforts do not, directly or indirectly, result in the production of any such tangible and lasting commodities, and which leaves nothing of physical substance behind to contribute to further production, that is classified as 'unproductive'. In other words, while 'menial servants', 'the officers both of justice and war', etc, etc, are confirmed as 'unproductive', the carter delivering materials to the factory, the retailer providing a convenient supply of consumption goods to his customers are at the same time are nevertheless placed in the category of productive labour.

⁴ Further indication that Smith did not dismiss all service activities as 'unproductive' is not difficult to find. For instance (Bk.II, Ch.III) he observes that 'In the opulent countries of Europe, great capitals are at present employed in trade and manufactures.' (If capital is invested in trade, the labour thereby employed must be considered 'productive'.)

Marx, it may be noted, was critical of Smith's 'durability criterion' – of productive labour being 'realised' in the form of a tangible commodity - and suspected him of being confused by a Physiocratic residue in his thinking. Marx argues that it is mistaken to suppose that the production of durables is necessarily the mark of productive labour, or that production of services is indicative of unproductive labour, the point of his criticism being that Smith should not have been giving attention to the character of the output produced by labour – for the reason that, in terms of his (Marx's) definition of productive labour, the same commodities might, according to circumstances, be produced sometimes by productive labour, on other occasions by unproductive labour.⁵ In other words, the validity of Marx's objection to Smith's durability criterion depends on acceptance of Marx's proposition that, in distinguishing productive from unproductive labour, all that matters is whether or not employment of the labour in question yields surplus value to the capitalist employer.

There still remains a difficulty with this criterion. As with the value-added criterion of productivity previously discussed, in this instance also, with labour (including service labour) regarded as productive if 'fixed or realized in' some physical commodity, it would appear that no account is taken of the particular type of goods produced. As regards its classification by Smith's definition as productive, whether or not labour is engaged in the manufacture of goods such as can support the non-working population or other workers in employment, or is employed in the production of durable items as useless as, for example, Petty's 'pyramids on Salisbury Plain', does not seem to matter. It rather looks as if Smith did not quite manage to express what he really wanted, or needed, to say about his durability criterion.

It would seem to be the case, therefore, that neither the value-added criterion, nor the durability/materiality criterion – as actually specified by Smith - fits altogether comfortably

⁵ The cook in the hotel produces a commodity for the person who as a capitalist has bought her labour – the hotel proprietor; the consumer of the mutton chops has to pay for her labour, and this labour replaces for the hotel proprietor (apart from profit) the fund out of which he continues to pay the cook. On the other hand, if I buy the labour of a cook for her to cook meat, etc., for me, not to make use of it as labour in general but to enjoy it, to use it as that particular kind of concrete labour, then her labour is unproductive, in spite of the fact that this labour fixes itself in a material product and could just as well (in its result) be a vendible commodity, as it is in fact for the hotel proprietor. The great difference (the conceptual difference) however remains: the cook does not replace for me (the private person) the fund from which I pay her, because I buy her labour not as a value-creating element but purely for the sake of its use-value. (Marx, 1862/1863, Ch. 4)

with, as described above, Smith's focus on the role of productive labour as the producer of goods necessary for the support of non-productive members of the community or essential for building up the economy's stock of productive resources. Labour may add value in production and labour may produce durable commodities such as (to cite another Smithian example) statues and pictures for the adornment of the 'houses or country villas' of the propertied classes – but despite the fact that these products can do nothing to support people who do not, or cannot, work, nor can in any way be employed as tools or equipment to 'aid and abridge' labour, by the criteria Smith proposes (value added and durability) that labour nevertheless appears to fall into the 'productive' category.

We turn now to Smith's third criterion [(iii) above] for the identification of productive labour – to the effect that labour is productive if its product not only 'lasts for some time after that labour is past' but 'can put into motion a quantity of labour equal to that which had originally produced it'. This criterion seems to point to a further requirement of productive labour which is not necessarily implied by the previous two criteria, and furthermore, seems to accord, better than they, with Smith's description of the dual role of productive labour. While criteria (i) and (ii) - require of productive labour the property of making possible the accumulation of wealth, both financial and real, this latter criterion suggests that the employment of productive labour should do something more: specifically, if labour meets this criterion, its employment not only adds to the wealth of the individual or the community, but puts in place the resources for further growth of output. This third criterion cannot be neutral with respect to the type of goods produced by labour which is deemed productive. If productive labour is indeed such that its product can 'put into motion a quantity of labour', that product must then consist not of commodities of just any sort, but of the sorts of goods that are capable of supporting labour in production by providing both the necessary equipment and materials to work upon, and also, the means of subsistence to maintain the workforce over the production period.

Consider (even if we seem to be labouring the point) the differing implications of two alternative investments. Suppose a saver puts resources into, on the one hand, the support of labour in the manufacture of luxury goods (such as fine porcelain, sedan chairs or wedding hats) and, on the other, invests in the production of more mundane consumption goods (e.g.

working clothes, porridge oats) or, producers' goods (say, improved spinning machines). In either case, by Smith's first two criteria, (presuming of course that operations go according to plan) the labour employed counts as productive – its employment rewards the investor with a profit (surplus value) and it also results in output which 'fixes or realises itself in some particular object or vendible commodity'. But as regards the growth potential of the economy, the outcomes are by no means the same. While the luxury items can do nothing to enhance the productive capacity of the economy, the wage goods are available to support the employment of additional labour, and installation of new capital equipment will increase productivity in the industry for which it is destined. The output of each industry increases the stock of wealth, but it is only the product of the labour employed in the producer goods sector (wage goods and machines) that adds to the productive base – to the productive capability - of the economy.

Recall what Smith says about increasing national output (ibid., p.275):

The annual produce of the land and labour of any nation can be increased in its value by no other means, but by increasing either the number of its productive labourers, or the productive powers of those labourers who had before been employed. The number of its productive labourers, it is evident, can never be much increased, but in consequence of an increase in capital, or of the funds destined for maintaining them. The productive powers of the same number of labourers cannot be increased, but in consequence either of some addition and improvement to these machines and instruments which facilitate and abridge labour; or of a more proper division and distribution of employment. In either case an additional capital is almost always required. It is by means of an additional capital only, that the undertaker of any work can either provide his workmen with better machinery, or make a more proper distribution of employment among them. When the work to be done consists of a number of parts, to keep every man constantly employed in one way, requires a much greater capital than where every man is occasionally employed in every different part of the work. When we compare, therefore, the state of a nation at two different periods, and find, that the annual produce of its land and labour is evidently greater at the latter than at the former, that its lands are better cultivated, its manufactures more numerous and flourishing, and its trade more extensive, we may be assured that its capital must have been increased during the interval between these two periods . . .

Thus, in Smithian terms, to achieve growth it is necessary to increase the number of productive workers or to increase their productivity. To do so requires additional capital either in the form of wage goods or of machines and instruments. Such additions to capital require the production of particular producers' or 'necessary' goods. Certain products have a key role, but not everything which would pass by criteria (i) and (ii) as products of productive labour will perform that role. Criterion (iii) identifies as productive labour *only* that labour which produces an investible surplus of wage goods and equipment. On the other hand, labour which passes the test of criterion (iii) and is engaged in the production of goods such as may constitute an investible surplus must automatically meet the requirements of criteria (i) and (ii) – wage goods and other producers' goods pass the durability test and their production can certainly be profitable to the employer.

It is evident therefore that the three criteria suggested by Smith for the differentiation of productive from unproductive labour are not wholly consistent with each other, with the consequence that the reader is faced with a variety of puzzles – particularly as regards the status of labour whose employment in production yields a profit to the capitalist, but whose output either 'perishes in the instant of its production' (the aria of the opera singer) or, if more lasting (a Fabergé Easter egg) fails to qualify as a good necessary either for the support of the non-working population or as a piece of equipment which 'aids and abridges' labour in production.

Smith – in two minds about productive labour?

Why did Smith not succeed in enunciating a more satisfactory statement of the distinguishing characteristics of 'productive labour'? Our interpretation of the situation is simply this: Smith - in seeking to identify a category of labour which, unlike the labour of 'menial servants', etc., created *something*, in the form of goods or purchasing power, which could not only replace that labour's maintenance but add to the productive or supportive capacity of the economy – was in effect, without realising that to be so, trying to describe two different conceptions in terms of which this strategically important category of labour might be envisaged as 'productive'. As a result Smith's proposed criteria which, while actually appropriate to the definition of

alternative notions of productive labour, appeared confused and inconsistent when presented as means of identifying a *single* category of productive labour.

Let us now separate out what we understand to be the two distinct conceptions of productive labour which would appear to underlie Smith's discussion, although not, we believe, perceived by him as being in fact separate principles by which labour could be categorised as productive or unproductive. Both these bases of classification may be considered, in themselves, reasonable and acceptable – but as alternatives, rather than run together as if equivalent to each other. As it happens, each has, in later years, appealed to subsequent theorists as appropriate for their particular purposes.

On the one hand - as denoted by criterion (i) - Smith recognises that to earn a profit, funds have to put labour into action in producing commodities for the market, the sales proceeds from which will more than recover the capitalist's outlays. If one wants to make a profit, or to maintain one's capital, that is the way to act – employment of 'menial servants' and other labour for the direct consumption of the services they provide, will simply use up funds in their maintenance with nothing coming in at the end of the day to replace the initial outlay. From this perspective any employment of labour in production of goods or services for sale (provided of course that production is consistent with market demand) will yield a *value* surplus. That surplus value provides funds for further investment and also (via taxes and rent) the funds for the maintenance of the non-producing sector. Thus, of the two notions of productive labour which Smith seems to have had in mind, one is that productive labour is simply any labour which returns a profit (surplus *value*) on the capital invested in 'putting it into motion'. That interpretation evidently accords with Marx's later definition of productive labour.

On the other hand Smith combines that appreciation of the profit yielding capability of certain employments of labour – i.e. criterion (i) - with recognition that a particular category of labour – which is also described as productive – performs the dual role of sustaining and extending the supportive and productive capabilities of the economy. Smith's criteria (ii) and (iii) relate specifically to that role. That labour is classified as productive for the reason that it produces,

over its own requirements, a surplus of those wage goods and other producers' goods required for the performance of that dual role – i.e. a surplus of necessary commodities such as serve both to maintain and support labour in employment and to supply the subsistence of all whose activities do not directly provide for their own support. These also are the physical resources required for economic growth. As Smith says, growth can be achieved only by increasing the number of productive labourers or by increasing the productivity of these workers, neither of which can be brought about by increasing the production of luxury consumption goods, whether trivial or valuable. This second conception of productive labour again envisages labour as 'productive', but in this case productive of a surplus of real commodities, of those necessary goods which provide subsistence and support for labour in employment. What Smith does not seem to have appreciated is that while all labour which produces the commodities in question will be productive also of surplus value, it is not the case that all labour whose employment yields surplus value is labour engaged in producing commodities which accord with his criteria (ii) and (iii). Although the concept of labour as productive because it produces surplus value and the concept of labour as productive on account of its producing a surplus of those 'necessary' commodities which can 'put labour into motion' relate to overlapping categories of labour, these categories do not exactly coincide.

With the benefit of hindsight, the present-day commentator can 'stick his neck out' and suggest the options as regards defining 'productive labour' which *could* have been available to Smith - had he succeeded in sorting out in a more consistent manner his insights and ideas on the nature of productive labour. In suggesting these possible definitions of productive labour, we must make it clear that we are not arguing that Smith had grasped these concepts – only that the basis of each of these categorisations of labour is there to be found in Smith's discussion, even if Smith did not himself appreciate the full implications.

On the one hand, Smith – confining himself to his criterion (i) - could simply have defined productive labour, as Marx would later do, as that labour whose employment by capital not only renews the capital invested but creates an additional (surplus) value. On that basis, *all* labour the employment of which generates surplus value is reckoned as productive – essentially because by creating surplus value it is replacing and extending the stock of free or

liquid capital in the hands of the capitalists - a stock of purchasing power which has the potential for use in whatever application the capitalist owners chose to employ it, developing or extending productive capacity in any sector of the economy. From this point of view, as Marx says, there is no need to get bogged down in worrying about the nature of the product, its materiality, its durability or the uses to which it may be put – none of that matters. Let us call this the 'surplus value' criterion of productive labour'.

Alternatively, focusing on the nature of the product of labour, Smith could have identified as productive that labour which produces a surplus of what we described as 'necessary' commodities - necessary for the maintenance and support both of these workers themselves and for the maintenance and support of all other members of the community, as well as for capital accumulation and expansion of the economy. While this definition of productive labour comprehends only some of the labour identified as productive under Smith's criterion (i), labour which accords with his criteria (ii) and (iii) fits squarely under this definition of productive labour.

We believe that here we have another – feasible – basis for an unambiguous definition of productive labour – as that labour which produces, and reproduces, period by period, the resources on which the continued operation, and the possible growth of the system, depend. If the economy is to continue in operation, period after period through time, what is produced in each period must be such as to meet the requirements of continued production, i.e., must be able to put labour into operation in the next period, otherwise the system breaks down for want of necessary inputs. For the economy to grow over time, it is a matter of putting into motion a greater quantity of labour, or of supporting that same labour with more effective 'machines which aid and abridge labour'. It is perfectly sensible to describe the labour which supplies these necessary goods (wage goods and equipment) as 'productive labour'. Let us, at least for the moment, refer to this as the 'necessary goods' criterion of productive labour.

This 'necessary goods' criterion points to an interesting theoretical link. What we suggest is that, even without specifically identifying this 'necessary goods' criterion as independently defining 'productive labour', Smith, in groping in this direction for a characterisation of

productive labour, was heading towards recognition of a distinction introduced years later by Sraffa – the distinction, that is to say, between the 'basic' and 'non-basic' sectors of an economy. It looks very much as if the 'necessary goods' criterion of productive labour suggested by Smith's analysis can be read as applying the description 'productive labour' to the labour employed in what Sraffa would describe as the basic sector of the economy. In Sraffa's model, the basic sector of industry supplies to itself and to the rest of the economy 'basic' goods - essential commodities without which no industry within the economy can operate. The surplus of basic goods supports all non-basic or non-producing sectors of the economy, and supplies the investment goods essential for capital accumulation and growth. The interpretation of Smith that we are suggesting, therefore, is that the goods produced by labour identified by the 'necessary goods' criterion as productive, are in fact analogous to Sraffa's 'basic' goods, and correspondingly, the labour which in Smith's analysis produces these necessary goods is equivalent to the labour employed the basic sector of the Sraffa system. In the Appendix we provide a simple illustration of the Sraffa concept of the basic sector, and what in terms of the 'necessary goods' criterion would constitute productive labour. Let us now alter our terminology, and, emphasising the Sraffa connection, rename the 'necessary goods' criterion the 'basic goods' criterion.

Given that Smith was thinking along the lines of identifying productive labour by reference to the nature of the product, it is interesting that, although not regarding all labour which produces items of a lasting character as productive, he does allow that durable consumer goods do form an addition to the material wealth of the community, even if they increase neither the productive nor supportive capabilities of the economy. It is noteworthy that while Smith had no time for spending on 'baubles and trifles' he took a much more sympathetic view of consumption spending on things of more lasting value. Thus (1776, Bk.II, Ch.III, p.278):

As frugality increases, and prodigality diminishes the public capital, so the conduct of those whose expense just equals their revenue, without either accumulating or encroaching, neither increases nor diminishes it. Some modes of expense, however, seem to contribute more to the growth of public opulence than others.

The revenue of an individual may be spent, either in things that are consumed immediately, and in which one day's expense can neither alleviate nor support that of another; or it may be spent on things more durable . . . As the one mode of expense is more favourable than the other to the opulence of an individual, so it is likewise to that of a nation. The houses, the furniture, the clothing of the rich, in a little time become useful to the inferior and middling ranks of people. They are able to purchase them when their superiors grow weary of them, and the general accommodation of the whole people is thus gradually improved. . . . What was formerly a seat of the family of Seymour, is now an inn upon the Bath road. The marriage bed of James the First of Great Britain, which his queen brought with her from Denmark, as a present fit for a sovereign to make to a sovereign, was, a few years ago, the ornament of an alehouse in Dunfermline. . . .

What this suggests is that, going beyond the issue of the appropriate criterion of 'productive labour', and viewing the matter from the broader perspective of 'the wealth of nations', Smith may have had in mind a hierarchy of activities: at the one extreme (of 'unproductiveness'), we may place the labour of 'menial servants' and of those who produce superfluous luxuries which, after the banquet, are 'thrown on the dunghill'; workers, such as a subsistence farmer who simply supports his family from harvest to harvest with no possibility of saving and accumulation, are in a neutral position; the producers of durable consumer goods (such as the royal bed in the Dunfermline alehouse) are not 'productive' (in terms of the 'necessary goods' criterion), but they do make a positive contribution in building up the stock of material wealth; workers producing investment goods for the luxury sector are in a similar position; and finally, the labour which satisfies Smith's criterion (iii), does - at least by the 'basic goods criterion' – uniquely count as 'productive'.

Conclusion

Thus, we believe, implicit within Smith's not fully resolved discussion of what differentiates 'productive' from unproductive labour, strands of thought may be identified which point to the directions in which subsequent investigators were take the issue of productive and unproductive contributions: the essence of both the Marxian differentiation between productive and unproductive labour (with respect to generation of surplus value) and of Sraffa's

distinction between the basic and non-basic sectors of industry (which relates to ability to produce a surplus of basic goods) are to be found, albeit muddled up together, in Smith's search for the defining characteristics of productive labour. It may be noted that, of these concepts of productive labour discernible within Smith's discussion, one (that which presages the Sraffa distinction) relates to the production of a surplus of particular commodities, rather than, as does productive labour in the Marxian system, to the generation of a value surplus.

We believe that a case may be made in defence both criteria - of the surplus value criterion of productive labour, and of the basic goods criterion as logical and illuminating ways of differentiating between different categories of labour. We incline to the position, however, that of these two criteria, the 'basic goods' criterion of productive labour is perhaps more in accord with Smith's focus on saving, capital accumulation and growth. Smith certainly left his readers in no doubt that he saw the character of the product as relevant in determining whether labour should be classified as productive or unproductive. While the surplus value criterion directs attention to the source from which the capitalists' profits derive - which indeed provide both incentive and potential for capital accumulation - the basic goods criterion puts the emphasis directly on the specific nature of the goods which must be available if that potential is to be realised; there is no getting away from the fact that as 'the annual produce of the land and labour of any nation can be increased in its value by no other means, but by increasing either the number of its productive labourers, or the productive power of those labourers who had already been employed' the possibility of 'increasing the number of productive labourers' or their 'productive power' depends on – is constrained by - the availability of what we are describing as basic goods. We do think that Smith – with his criteria (ii) and (iii) - was trying to grasp and emphasise the importance of the production of commodities of the sort that Sraffa, much later, and with a clearer insight into the structural relationships of a surplus-producing economic system, would classify as 'basic' goods.

Finally, we may wonder at the blindness of neoclassical critics who supposed Smith, in attempting to distinguish between productive and unproductive labour, to be talking nonsense; the fact is quite the opposite: although he wasn't able completely to disentangle the ideas involved, Smith's intuition was sound. With respect to differentiating between the two

categories of labour, one strand of thought identified the source of surplus value which constitutes the profits of capital; another line of thinking (with regard to the production of necessary or basic goods), took him close to uncovering a distinction essential to understanding the material basis of the social order and the growth potential of the economy

APPENDIX

An illustration **

Let us see if we can bring into sharper focus these alternative criteria of productive labour which we believe to be lurking in Smith's discussion. To that end we set up a simple (Sraffa-type) representation of a surplus-producing economic system, in terms of which we may interpret these different identifications of productive labour. This system is depicted in Table 1, below.

We suppose the core of the economy in question consists of four interdependent industries, all of which produce goods and services essential for the functioning of the system: these industries are IRON (representing manufacturing industry), COAL (representing energy and fuel), CORN (standing for agriculture, including food production), and TRANS (transport services); in addition, a further industry (LUX) is devoted to the production of luxury (non-essential) manufactures; there exists also within the economy a *non-industrial* sector of domestic services (D-SER) whereby labour directly – not through the market – serves well-to-do households. We understand members of the community to be either (well-to-do) *capitalist employers*, who derive profits from their industrial operations, *industrial workers* who receive a standard wage, or *domestic employees* - "menial servants" – of the capitalist class, who are paid the same wage as the industrial workers. The total population is taken to be 5,300 "labour units" (or families), comprising 3,800 dependent on industrial employment, 1,000 employed in domestic services and 500 well-to-do employers. It is supposed that the real wage per unit of labour (as received by all wage earners, those in industry and those in domestic employment) over the period in question consists of a commodity package made up of 2 iron + 1 coal + 4 corn + 1 trans; only the employers can afford luxuries and domestic services.

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^{**} The model now presented (February 2009) is a slightly elaborated version of that originally appended (March 2008) to this paper.

The input-output relationships amongst the sectors of this economy are as shown below. In the table, the rows show a sector's inputs as required to produce the current volume of output, while the columns show the lines of production to which each produced resource is applied. Each sector uses, per period of time, certain physical quantities of inputs (measured, as appropriate) in tons, ton-miles or manhours). In each period of production the economic system produces (i.e. *reproduces*) the total industry usage of inputs (including necessary subsistence (or wage) goods as required for the maintenance of industrial employees); in addition, a surplus of such subsistence goods over industry's requirements is supplied for the support of employers and domestic servants, together with a quantity of luxury (non-wage) goods which are purchased by employers; furthermore, domestic services are supplied to those sufficiently well-off to afford them.

Table 1

IRON COAL CORN TRANS LUX LABOUR

```
IRON uses 2340 + 2800 + 0 + 1200 + 0 + 668 to produce 18400 IRON

COAL uses 1000 + 2000 + 0 + 700 + 0 + 474 to produce 15800 COAL

CORN uses 750 + 660 + 4000 + 800 + 0 + 858 to produce 29200 CORN

TRANS uses 800 + 4000 + 2000 + 600 + 0 + 800 to produce 10000 TRANS

LUX uses 2910 + 1040 + 2000 + 1400 + 0 + 1000 to produce 18000 LUX

D-SER uses 0 + 0 + 0 + 0 + 0 + 1000 to produce miscellaneous non-marketed services
```

0

Commodity usage of *industrial sector*:

IRON COAL CORN TRANS LUX

material inputs (excluding wage goods):

7800 10500 8000 4700

wage goods (with labour usage in industrial sector = 3800)

7600 3800 15200 3800 0

total material inputs (including wage goods) of industrial sector

15400 14300 23200 8500

Surplus output of industrial sector (over all material usage including subsistence of the labour employed therein):

maintenance of servants.

Note: the above surplus output of the industrial sector is available for use, directly or indirectly, by the employers, as they choose, for their own consumption, for investment or for the

Let us now turn to the question of which workers, according to Smith's concept or concepts, may be identified as "productive labour". In the most general sense of the term as he uses it, all labour the employment of which yields a value surplus is deemed productive. Assuming that all industrial operations currently being carried out are profitable to the capitalist employers, the workers in all five sectors of the industrial system – iron, coal, corn, transport and luxuries – evidently fall into the productive category. In fact, the only employees within the economy that do not, by this criterion, qualify as productive are the domestic servants, whose employment must necessarily constitute a drain on income, without offering any prospect of replacement of the wages paid out.

Having presented a general picture of a surplus-producing economy, we now introduce Sraffa's (1960) differentiation between what he calls the "basic" and the "non-basic" industries within such a production system. Following Sraffa, we identify the IRON, COAL, CORN and TRANS industries as forming an interdependent set of industries which together comprise the "basic" sector of this economy – "basic" in the sense that these industries provide essential inputs, *including inputs of wage-goods for the support of the workers*, as required for the support of *every* industry operating within the economy. The point is that *all* the industries of the economy are dependent for necessary inputs on this sub-set of "basic" industries; by contrast a "non-basic" industry (the LUX industry in the industrial system here modelled), while itself dependent on the output of the basic sector, makes no contribution to the production of that sector.

The basic sector is itself surplus-producing, replacing not only its own current use of resources, but supplying inputs to non-basic activities and producing necessary subsistence goods for all members of the community - for employers as well as for employees. The surplus of the basic sector is of course comprised of the excess of the various basic goods it produces over the quantities it uses up in production. Maintaining the supposition that each unit of labour is paid per period a real wage package consisting of [2 iron + 1 coal + 4 corn + 1 trans], the *total material inputs* (inclusive of wages paid) of the basic sector, its *output* and the *surplus* it produces, are as shown below (Table 2).

Table 2

10490 6100 [2800] 12260 17200

The surplus produced by the basic sector =

```
[(18400 \text{ less } 10490) = 7910 \text{ IRON}, \text{ together with}]
 (15800 \text{ less } 12260) = 3540 \text{ COAL}, together with
 (29200 \text{ less } 17200) = 12000 \text{ CORN}, together with
 (10000 less 6100) = 3900 TRANS].
```

In the circumstances assumed (with given real wages and pattern of production), the surplus is utilised as indicated below.

IRON surplus: 2000 as wage goods for labour in LUX sector;

3000 as basic consumption for employers and servants;

2910 as material inputs to LUX sector.

COAL surplus: 1000 as wage goods for labour in LUX sector;

1500 as basic consumption for employers and servants;

1040 as material inputs to LUX sector.

CORN surplus: 4000 as wage goods for labour in LUX sector;

6000 as basic consumption for employers and servants;

2000 as material inputs to LUX sector.

TRANS surplus: 1000 as wage goods for labour in LUX sector;

1500 as basic consumption for employers and servants;

1400 as inputs to LUX sector.

In this instance the surplus produced by the basic sector supplies workers' subsistence and material inputs to the LUX sector, together of course with the direct provision of basic goods to employers and servants. The 500 employer families enjoy, in addition to the same basic subsistence as the rest of the population, the whole output (18,000) of the luxury sector plus the services of 1000 domestic servants.

It will be observed that the basic sector reproduces, in each period of production, not only its own input requirements (including the wage goods for the maintenance of the workforce) but in fact produces more output than is required to replace all materials it has used up in production, i.e. it produces a **surplus**. The basic sector, i.e., is not only self-sustaining but capable, from its surplus product, not only of providing for its own expansion but also of supporting the operation other, non-basic industrial activities within the system, as well as supplying the means of subsistence of those members of the community (e.g. employers and servants) who do not directly contribute to the provision of their own subsistence.

As the basic sector is of central importance to the operation of the whole economy, and to its possible expansion, we can say that, *in an exactly equivalent manner*, the *labour* employed in the basic sector has a key role to play in producing the essentials on which not only all current operations but future development also depends.

This takes us back to Adam Smith. Although, as we have seen, Smith's efforts to specify exactly what differentiated productive from unproductive labour were not entirely satisfactory, it does seem that one interpretation of 'productive labour' of which, we believe, Smith had some intuition, corresponds to the labour which in the Sraffa system is engaged in the production of basic goods. It must, however, be emphasised that we are not claiming that Smith had in mind a fully worked-out conception of what Sraffa was to call the basic sector. Given the inconsistencies and ambiguities that mar Smith's attempt to provide a precise characterisation of productive labour, it has to be admitted that Smith did not have anything so well-defined in mind. But what we think we can say is that Smith had sensed something akin to Sraffa's concept of a basic sector, and that that understanding underlies one strand of his thinking with regard to "productive labour".

If we employ the 'basic goods' criterion of productive labour the 2800 labour employed in the iron, coal, corn and transport sectors are classified as 'productive'. Note that the transport workers, although producing a service rather than a durable commodity, are clearly an integral part of the basic sector, and must accordingly be regarded as productive, in that they play an essential part in supplying the means by which labour throughout the economy is 'put into motion'. The remaining industrial workers, i.e. the 1000 in the luxury sector, must however (by this criterion) be classified as 'unproductive' as the output they produce, no matter how great the satisfaction it gives its purchasers, is not necessary to support the

workforce in employment, or capable of being used to expand the productive capacity of the economy. The 1000 "menial servants" who produce nothing "by which an equal quantity of labour could afterwards be procured" necessarily join the luxury sector workers in the category of unproductive labour.

To summarise: by the "surplus value criterion" all 3800 industrial employees, including those in the transport sector, count as productive; by the "basic goods criterion", the 1000 workers in the luxury sector are excluded from the productive category. Under both criteria the 1000 domestic employees ("menial" workers) are classified as unproductive.

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