'Services' in Marxian economic thought

Fiona Tregenna[†]

Faculty of Economics, University of Cambridge

Abstract

The services sector has grown as a share of GDP and employment in most countries in recent years, and there has been increasing interest in understanding this sector and in its growth potential. This article analyses the meaning and nature of the 'services sector' from a Marxian perspective. Marx did not analyse 'services' as such (although he did discuss certain types of activities that are currently classified as services), and 'sectors' are not the units of his economic analysis. From a Marxian approach, an activity needs to be analysed in terms of its location in the circuit of capital and its relationship with the production of surplus-value. The 'services sector' includes activities which are highly heterogeneous in these terms, including activities in which surplus-value is directly produced, activities which facilitate the production of surplus-value elsewhere (or increase the rate at which it is produced), and activities that stand outside of the circuit of capital. Marxian tools of analysis yield particular insights into the nature of various types of service activities, which is helpful in understanding sectoral structure and the potential implications of changes therein.

JEL codes: B14, B31, B51, L80

Keywords: Marx, services, circulation, surplus-value, sectors, commodities

[†] Contact: fmt21@cam.ac.uk, ftregenna@gmail.com. Thanks to Geoff Harcourt, Gabriel Palma, and Ha-Joon Chang for helpful comments; any errors or omissions are my own.

1 INTRODUCTION

The service sector has become increasingly important to the GDP and employment of many countries. Developments in diverse activities such as call-centres, IT, online retail, personal services, and even certain types of finance, has given rise to debates around the capacity of services to create employment, generate foreign exchange, drive technological progress, and lead economic growth.

The very concept of a 'services sector' is, however, rather alien to Marx's economics. The sectoral categories of national accounts are not the units of analysis of Marxian analysis, and sectoral structure is not integral to Marxian economics.

Marx does not devote much attention to 'services' as such (although he does deal extensively with certain types of activities that are currently classified within the services sector). Several reasons might be suggested to explain this. Theoretically, 'services' is not a particularly meaningful or useful category within a Marxian analytical framework. Empirically, during Marx's time services comprised a relatively small proportion of total economic activity, a situation very different from today where they account for most of both employment and GDP in most countries of the world. Furthermore, at that time there was a much lower degree of outsourcing of services to specialised service providers than is currently the case, as these activities were typically undertaken in-house (e.g., in a manufacturing firm) rather than falling within a distinct services sector. In addition, personal services accounted for a higher proportion of total services during Marx's time than is the case today, and these personal services were typically conducted on a non-capitalist basis.

This article analyses the meaning of the 'services sector' from a Marxian perspective. Much of the analysis is based on a close (and essentially Classical Marxian) reading of the texts. Grundrisse probably contains the most extensive discussion on personal services in Marx's work. Circulatory services are most thoroughly dealt with in Capital, which also provides the most comprehensive overall framework for analysing capitalism.

¹ When citing Marx's texts, the original date of publication is indicated since this is relevant to their interpretation. The page numbers cited, however, refer to currently available versions. Marx's works are listed in the References under both dates.

Before proceeding to the Marxian analysis, section 2 briefly considers the classification and meaning of the services sector in national accounts and in non-Marxian economics. Section 3 sets out a framework for classifying activities in terms of their relationship to the production of surplus-value, with particular attention to the meaning of a 'commodity'. From this perspective, the activities classified as part of the 'services sector' are discussed in categories that make sense in Marxian terms. Section 4 discusses capitalist commodity-producing services; section 5 discusses circulatory services; section 6 deals with productive transport and storage; and section 7 looks at non-capitalistic services. Section 8 concludes.

2 CLASSIFICATION OF THE 'SERVICES SECTOR' IN NON-MARXIAN ECONOMICS

The United Nations (UN), in its policy on the classification of economic activities in countries' national accounts, defines services as:

outputs produced to order and typically consist of changes in the conditions of the consuming units realized by the activities of producers at the demand of the consumers. By the time their production is completed they must have been provided to the consumers. The production of services must be confined to activities that are capable of being carried out by one unit for the benefit of another. Otherwise, service industries could not develop and there could be no markets for services. It is also possible for a unit to produce a service for its own consumption provided that the type of activity is such that it could have been carried out by another unit. (United Nations, 2001).

The definition notes that services 'cannot be traded separately from their production.' (ibid). The changes achieved through the consumption of services could include changes in the condition of the consumer's goods, in the physical or mental condition of persons, or in the general economic state of an institutional unit, and these changes may be temporary or permanent.

However it goes on to note – in an indication of the fluidity and potential ambiguity of these definitions – that the demarcation between services and manufacturing can be blurry:

there is a group of industries generally classified as service industries that produce outputs that have many of the characteristics of goods, i.e., those industries concerned with the provision, storage, communication and dissemination of information, advice and entertainment in the broadest sense of those terms - the production of general or specialized information, news, consultancy reports, computer programs, movies, music, etc. The outputs of these industries, over which ownership rights may be established, are often stored on physical objects – paper, tapes, disks, etc. – that can be traded like ordinary goods. Whether characterized as goods or

services, these products possess the essential common characteristic that they can be produced by one unit and supplied to another, thus making possible division of labour and the emergence of markets. (ibid).

Furthermore, the records of the UN System of National Accounts Expert Group show interesting discussions around various related issues, such as whether to distinguish goods and services as 'material' and 'non-material' respectively or as 'tangible' and 'non-tangible' respectively, as well as around the meanings of 'commodity' and of 'product'. They have also discussed the classification of domestic services, resolving that 'when a household employs a domestic servant directly it is the household that is the producer of the output and thus must be classified as a non market producer. By contrast if domestic service is provided to the household through a commercial cleaning service company that output is market production. Self-employed persons producing cleaning services also would be counted as market producers.' (United Nations, 1989).

Notwithstanding these debates, the basics of the sectoral classification of activities in national accounting are more widely accepted and standardised the world over. In addition, sectors are one of the basic units of analysis in both mainstream economics and non-Marxian heterodox economics (although there are differences in terms of the extent to which sectoral specificity matters, particularly for growth).

There are three broad (and not necessarily mutually exclusive) ways of classifying services in the existing literature. First, according to whether they are for intermediate or final demand (using IO tables, etc.); second, based on the end user where this refers to producer services, consumer services, and (sometimes included) government services; and third, between market and non-market services.

Katouzian's (1970) influential analysis classified services into three categories: 'new services', 'complementary services' and 'old services'. 'Old services' are those whose importance declined since industrialisation, owing to changes in the mode of production and its impact on social relations. He suggests domestic service as the pre-eminent example of this category of services, foreseeing a decline in the share of domestic services in total services over time. 'New services' (the conceptualisation of which roughly approximates Fisher's definition of the tertiary sector) are those whose consumption took off since the

Rostovian stage of high mass consumption of manufactured products, notably consumer durables. Before the age of mass consumption, demand for these services was limited to a minority and there were no huge shifts in demand for them. The 'new services' include medical services, education, entertainment and tourism. Thirdly, 'complementary services' are those complementary to industrialisation, and whose production normally takes a sharp upturn with the rise of the growth of output in general and manufacturing production in particular. These services would include financial services, trade, transport, and certain government services. Sabolo (1975) also distinguishes between 'new' and 'old' sectors, where the former tend to have positive income elasticity of demand while the latter are traditional types of services and often have negative elasticities of demand, such as domestic services or small trading.

Gershuny and Miles (1983) classify sectors according to the nature of activities and the factors involved in the supply and demand of the activities. They distinguish between marketed and non-marketed services, further subdividing the former into producer, distributive and personal services.

Hirsh (1989) argues that services should be classified according to the primary reason why the service is demanded. He distinguishes three categories in this regard. First, services that are demanded in order to obtain immediate benefits (for example, services such as tourism or entertainment). Second, services demanded for their capacity to enhance a user's consumption benefit capacity by reducing the cost-benefit ratio per product transaction (for example, transport or communications). Third, services demanded for their capacity to enhance the user's productive capacity by reducing the cost-benefit ratio per unit of output (for example, business services or some forms of transport).

3 'SERVICES' AND THE PRODUCTION OF SURPLUS-VALUE

We now develop a Marxian approach to sectoral structure, which informs the subsequent analysis of the services sector. Some principles of the approach are set out, in terms of the centrality of surplus-value production and the relevance of this to classifying activities, the nature of commodities, and productive versus unproductive labour.

This analysis is prefaced by briefly reflecting on a pertinent methodological and epistemological difference between bourgeois economics and Marxian economics. In the latter, an activity cannot be classified simply by 'inspection'. This difference is especially relevant to a Marxian analysis of sectoral structure. In bourgeois economics, the typological method is primarily phenomenological: observing an activity generally allows for a determination as to which sector it falls within. The classification of an activity within a Marxian schema, by contrast, is contingent on the underlying social form of the activity. The fundamental issues in analysing an activity relate less to what a person is 'doing' in an observable way, and more to generally unobservable characteristics such as the relationship of the activity to the production and realization of surplus-value. Moreover, from a Marxian perspective a commodity is classified as such not according to its physical characteristics, but rather according to the way in which it was produced. Marxian economic categories thus have a fundamentally different epistemological basis from bourgeois economic classifications as used in national accounting, in mainstream economics, and also in non-Marxian heterodox economics.

To illustrate this methodological difference with reference to the characterisation of labour, for instance, Marx clarifies that 'for *labour to be designated productive*, qualities are required which are utterly unconnected with the *specific content* of the labour, with its particular utility or the use-value in which it is objectified. Hence labour with *the same*

² Methodologically and epistemologically, this serves to emphasise the need for 'structuralist' analysis that penetrates beyond epiphenomena. Marx repeatedly stresses the imperative of setting aside surface phenomena or appearances in order to understand the true underlying dynamics. For instance, Marx explains his approach to the analysis of accumulation by observing that the real process of accumulation is obscured and therefore 'an exact analysis of the process [of accumulation] demands that we should, for a time, disregard all phenomena that conceal the workings of its inner mechanism.' (Marx, 1867, p.710). In distinguishing between surplus-value and profits he notes that 'surplus-value and rate of surplus-value are, relatively, the invisible and unknown essence that wants investigating, while rate of profit and therefore the appearance of surplus-value in the form of profit are revealed on the surface of the phenomenon.' (Marx, 1885, p.43). Marx expresses a similar point more colourfully when introducing the move from the discussion of the 'Equality, Property and Bentham' of the market to the discussion of the production of surplus-value: 'The consumption of labour-power is completed, as in the case of every other commodity, outside the limits of the market or of the sphere of circulation. Let us therefore, in company with the owner of money and the owner of labour-power, leave this noisy sphere, where everything takes place on the surface and in view of everyone, and follow them into the hidden abode of production, on whose threshold there hangs the notice "No admittance except on business." Here we shall see, not only how capital produces, but how capital is produced. The secret of profit making must at last be laid bare.' (Marx, 1867, pp.279-80).

³ The end-purpose of a commodity is relevant to the secondary classification of commodities into Departments I and II, which is not of direct relevance to our analysis

content can be either productive or unproductive.' (Marx, 1967, p.1044; emphasis in original.) The same action can be productive or unproductive labour, and may or may not generate surplus-value, and could be part of production or of circulation, depending on the (often unobservable) social form of the activity. Marx makes an example of a singer, who may – while engaging in the identical activity – be an unproductive worker, a merchant, or a productive worker, with this entirely depending on her relationship with the production and appropriation of surplus-value.

The fundamental question from a Marxian perspective in classifying an activity is its relationship to the production, realization, appropriation, and distribution of surplus-value. Indeed, the economic process in capitalism with which Marx is centrally concerned is the production and appropriation of surplus-value.

Surplus-value is not produced in either non-capitalist modes of production or in non-market activities (although surplus labour may be performed). Surplus-value is produced in some but not all capitalistic activities. The focus here on the analysis and categorisation of capitalist activities, and unless otherwise indicated, all activities and commodities being discussed are assumed to be capitalistic.

The typology and characterisation of activities derives from their location in the circuit of capital, which is the essential analytical framework of Marxian economics. The fundamental concepts that Marx introduces into political economy are set out largely with reference to the circuit of capital, and it encapsulates the basic logic of how the capitalist economy operates.

In terms of the circuit of productive capital $M-C\left\{ _{MP}^{f_{LP}}\right\} ...P...C'-M'$, value is expanded in the commodity production process P, specifically through the contribution of labour power LP. Hence the produced commodity C' has greater value than the commodities C used in the production process. It is specifically in the commodity production process P that value is added and surplus-value is generated.

The first axis along which activities can be classified is therefore between those in which surplus-value is generated (i.e. in which value increases), which is the stage P, and activities in the other parts of the circuit of capital, M-C and C'-M'. Any further distinctions

between different types of surplus-value-producing processes, or different types of non-surplus-value-producing processes, are secondary to this primary distinction between *P* and activities in the rest of the circuit of capital.⁴

It is thus in the (capitalist) production of *commodities* specifically that surplus-value is generated (and it is realized once the commodities are sold). Activities can be classified in terms of whether or not they produce commodities. At this point we therefore reflect on the nature of a commodity, with specific attention to certain sector-related issues that will become important in the subsequent Marxian analysis of sectors.

Commodities have use-value (that is, they satisfy some form of human wants, whether 'natural' or socially constructed) as well as exchange-value, and are produced for exchange rather than for own use.⁵ The condition that they must be produced means that they must embody human labour.

In our interpretation of Marx – and this is critical to our analysis of services – commodities are not limited to physical goods, and similarly 'production' is not limited to the physical production of a tangible object. When Marx writes about commodities it might appear as though he generally had in mind physical objects, as the examples which he uses in his exposition and numerical illustrations are usually of objects such as cotton. But his theoretical analysis indicates that commodities are not limited to physical objects. Labour power, albeit a unique type of commodity, is an example of a commodity that is not a tangible physical object.

-

⁴ Note that we are not privileging or asserting any ontological primacy to any particular stage of the circuit of capital, but are demarcating activities according to their location and role in the circuit of capital.

⁵ In Marx's own words: 'The commodity is, first of all, an external object, a thing which through its qualities satisfies human needs of whatever kind.' (Marx, 1967, p.125). It is an 'object with dual character, possessing both use-value and exchange-value.' (Marx, 1967, p.131). Elsewhere Marx defines commodities in the following terms:

These products are commodities, or use-values, which have an exchange-value that is to be realised, to be converted into money, only in so far as other commodities form an equivalent for them, that is, other products confront them as commodities and values; thus, in so far as they are not produced as immediate means of subsistence for the producers themselves, but as commodities, as products which become use-values only by their transformation into exchange-values (money), by their alienation. (Marx, 1894, p.637).

The physical properties of something neither qualify it to be a commodity nor exclude it from the realm of commodities. As Marx writes, 'the commodity form, and the value-relation of the products of labour within which it appears, have absolutely no connection with the physical nature of the commodity and the material [dinglich] relations arising out of this' (Marx, 1867, p.165). Recall our earlier remarks concerning Marx's methodological and epistemological approach: an activity or a product of an activity cannot necessarily be characterised or classified on the basis of observation.

In this respect Marx's approach differs from the physicalist approach of earlier classical economists such as Smith, Malthus, and Ricardo; who equated production with the production of physical goods and defined productive labour in terms of the labour involved in the production of such goods. This definition both includes activities that would be excluded from a Marxian definition (e.g., non-commodity goods) and excludes activities that would be included (e.g., commodity services).

The nature of commodities, and specifically Marx's non-physicalist approach to defining a commodity, is an important issue with implications for our classification of services in a Marxian schema. Were commodities to be limited to physical objects, this would exclude services from the realm of commodity production. Indeed, Smith's conflation of the goods/services and productive/unproductive labour dichotomies led him to view the services sector as a drain on accumulation and growth.

There are also 'physicalist' readings of Marx within the Marxist literature (see, for instance, Mandel (1976)). Interestingly, the measures of National Material Product (used instead of GDP) reported under the Material Product System in the former Soviet Union and eastern bloc countries included the production and distribution of physical goods but not services.

However, in our reading of Marx a non-physicalist notion of a commodity is the only interpretation that can be supported by the texts, as well as being consistent with his overall theoretical framework, for the reasons set out previously.

The discussions circuit of capital and the nature of a commodity, bring us to the issue of labour vis-a-vis the production of surplus-value. Labour is classified in the first instance in

terms of whether it is productive or unproductive, a distinction that relates directly to the question of the production of surplus-value.

For Marx, productive labour is wage labour engaged in the production of surplus-value, through the transformative activity of production. In other words, for labour to be productive it must create or transform use-values, thereby generating surplus-value, and the labour-power must be exchanged against capital. Unproductive labour, by contrast, produces neither value nor surplus-value. Unproductive workers are remunerated out of a 'fund' which ultimately derives from the surplus-value originally generated by productive workers and appropriated by the capitalists who employ them, and part of which is transferred to the employer of the unproductive worker. (Even if this is the same capitalist, these are distinct processes.)

Labour that increases the surplus-value at the disposal of a capitalist merely by transferring surplus-value from elsewhere, without increasing the overall sum of value or amount of surplus-value, is unproductive. Unproductive labour does not expand capital, even though it may be 'useful'. A component of unproductive labour might nevertheless be considered as 'surplus', in the sense that the labour can result in additional surplus for the capitalist in excess of the wages paid. However, this surplus labour is 'sterile' in the sense that it does not produce surplus-value, unlike surplus labour engaged in the production of commodities.

While surplus-value is generated only through productive labour, both productive and unproductive labour may be (and typically are) engaged in surplus-value-producing activities. That is, the fact that an activity produces commodities and generates surplus-

-

In *Theories of Surplus Value* Marx sets this out clearly as follows: 'Productive labour is therefore – in the system of capitalist production – labour which produces *surplus-value* for its employer, or which transforms the objective conditions of labour into capital and their owner into a capitalist; that is to say, labour which produces its own product as capital. So when we speak of *productive labour*, we speak of *socially determined* labour, labour which implies a quite specific relation between the buyer and seller of the labour'. Further on, Marx continues: 'Productive labour is therefore labour which reproduces for the labourer only the previously determined value of his labour-power, but as an activity creating value increases the value of capital; in other words, which confronts the labourer himself with the values it has created in the form of capital.' (Marx, 1861, p.384). Note that for labour to be productive it must not only produce surplus-value, but must do so specifically for the employer of the labour. In the first volume of *Capital* Marx states clearly that 'capitalist production is not merely the production of commodities, it is, by its very essence, the production of *surplus-value*. The worker produces not for himself, but for *capital*. It is no longer sufficient, therefore, for him simply to produce. He must produce surplus-value. The only worker who is productive is one who produces surplus-value for the capitalist, or in other words contributes towards the self-valorization of capital.' (Marx, 1867, p.644).

value does not mean that all labour engaged in the activity is productive. The productivity or otherwise of the labour depends on the particular relationship of that specific labour with the production and appropriation of surplus-value.⁷ All labour engaged in non-surplus-value-producing activities is unproductive, as discussed previously, even though such activities may well facilitate, support, or increase the realization of surplus-value elsewhere.

Labour is thus defined as productive or unproductive in terms of whether or not it produces surplus-value, with the distinction being unrelated to the eventual use to be made of the commodity. That the productive or unproductive character of labour cannot be discerned from the nature of its product is brought out in the following excerpt:

neither the special kind of labour nor the external form of its product necessarily make it "productive" or "unproductive". The same labour can be productive when I buy it as a capitalist, as a producer, in order to create more value, and unproductive when I buy it as a consumer, a spender of revenue, in order to consume its use-value, no matter whether this use-value perishes with the activity of the labour-power itself or materialises and fixes itself in an object. (Marx, 1861, pp.160-1).

This passage – which comes in the context of Marx's critique of Smith's physicalist approach to defining commodities, production, and the productivity or unproductivity of labour – also brings us back to Marx's non-physicalist conception of a commodity, and the relevance of this to the classification of labour. The issue is whether a commodity is produced, with the material or non-material character of a commodity being produced having no bearing on whether the labour engaged in its production is productive or unproductive. It may be inferred from this that even a service commodity, in which the 'use-value perishes with the activity of the labour-power itself', can be productive if this labour power is purchased by a capitalist for the purpose of expanding value, just as in the case of a tangible manufactured commodity in which case the labour power 'materialises and fixes itself in an object'.

The point that productive labour can be engaged in either manufacturing or services is also made explicitly and rather colourfully in Marx's explanation that a productive worker can produce either teaching services or sausages: 'If we may take an example from outside the sphere of material production, a schoolmaster is a productive worker when, in addition to belabouring the heads of his pupils, he works himself into the ground to enrich the owner of

-

⁷ Note that the Marxian conception of the productivity of labour has no relationship with the social necessity or usefulness of the labour or with any other dimension of its 'desirability'.

the school. That the latter has laid out his capital in a teaching factory, instead of in a sausage factory, makes no difference to the relation' (Marx, 1867, p.644).

The heterogeneity of activities included in services is especially striking when considered from a Marxian perspective. The services sector, as classified in national accounts and in the non-Marxian economics literature, includes activities with completely different relationships to the production, realisation, appropriation, and distribution of surplus-value. In addition to spanning both capitalistic and non-capitalistic activities, services include both commodity-producing and circulatory activities. What is common to services is arguably less important, from a Marxian perspective, than the differences among the various types of service activities.

When Marx speaks of 'services' he is generally referring to particular types of non-capitalistic services which were predominant at the time of his writing. He discusses circulatory services at some length, and also deals with transport and storage, but does not discuss commodity-producing services specifically (apart from his general discussion of the production of commodities).

We now proceed to analyse activities that are currently classified in the services sector, from a Marxian perspective. These activities are considered in categories which have an internal logical coherence in terms of the approach set out above. These categories are as follows: commodity-producing services; circulatory services; productive transport and storage; and non-capitalistic services.

4 CAPITALIST COMMODITY-PRODUCING SERVICES

As discussed in the previous section, the commodity produced in the *P* stage of the circuit of capital need not be a physical object, it may also be a service (provided the service meets the criteria of a commodity as discussed earlier). For example, a haircut performed in a hairdressing salon for a paying customer by a hairdresser employed by the owner of the salon is a commodity, and in the 'production' of the haircut surplus-value is generated through the productive labour of the hairdresser. Marx characterises commodity-producing services as 'types of work that are consumed as services and not in products separable from the worker and hence not capable of existing as commodities independently of him, but

which are yet capable of being directly exploited in *capitalist* terms' (Marx, 1867, p.1044; emphasis in original).

In elucidating the differences between productive and unproductive labour, Marx notes as instances of productive labour a writer who turns out work for his publisher in factory style, a singer employed by an entrepreneur, and a schoolmaster who works for wages in a profit-making institution. These are all examples of surplus-value-producing services. While Marx does note the existence of capitalist commodity-producing services, he regards these services as being 'of microscopic significance when compared with the mass of capitalist production' and concludes therefore that 'they may be entirely neglected' (ibid, pp.1044-5).

There seems to be some inconsistency in Marx's treatment of commodity-producing capitalist services, as he mixes important conceptual distinctions with observations about the conjunctural empirical significance of these activities. Although Marx recognises these activities as involving productive labour and producing surplus-value, he opts to neglect them and lump them together with unproductive wage-labour. This derives from his observations concerning the small scale of these activities at that time, rather than from theoretical precision or coherence.

Even if Marx's approach was justifiable at that time on the grounds of the then 'microscopic significance' of these activities, this would not hold true in modern economies. We thus follow Marx's theoretical approach rather than his empirically-based 'shortcut' categorisation. The approach taken here is also consistent with the earlier discussion on the nature of a commodity and Marx's rejection of physicalist notions of a commodity, as well as with the distinctions between productive and unproductive labour.

The key characteristic of services commodities that distinguishes them from manufactured commodities is that the production and consumption of services commodities generally cannot viably be separated in time, and in most cases in space as well. The labour power embodied in a service commodity remains present in the commodity itself, typically in a recognisable form, as opposed to manufacturing where the labour power (along with the means of production) is embodied in the commodity in a transformed form. That is, the labour power commodity is typically inseparable from the produced commodity. The labour

power embodied in a services commodity remains living labour, and not dead labour as in the case of manufactured commodities.

There are some 'intermediate' commodities, and exceptions and ambiguous cases, for which production and consumption can be separated in time and space to a limited extent, and/or for which labour power embodied in the commodity is not 'visible' in its original form in the commodity itself. For example, a meal pre-prepared in a restaurant might only be sold and consumed at a later time, and the labour power of the kitchen workers in the commodity may be indistinguishable from the means of production embodied in it. Such a process might actually be more akin to manufacturing than to services. Indeed, the preparation of the same meal by a food manufacturing company to be retailed in a supermarket would be counted as manufacturing. These are grey areas, not only in terms of the Marxian typology being developed here, but also in mainstream economics and in the practice of national accounting.

Although the production of a service commodity still conforms to the basic circuit of capital, P and C' are essentially 'compressed' in time (and usually also space) into what is effectively a single stage.⁸ This bears some similarity with the circuit of capital that Marx sets out for transport (to be discussed below). In the case of service commodities, however, there is still the commodity stage C' and payment is actually rendered against this even if it is practically inseparable from P, whereas with transport where there is no C' moment.⁹

5 CIRCULATORY SERVICES

Circulatory activities include both 'pre-production' activities such as bringing together inputs in a form suitable for entering into the production process, and 'post-production' activities associated with the realization and distribution of surplus-value. These activities thus facilitate the transformation of capital between its various forms – productive capital,

_

 $^{^8}$ In the standard circuit of capital the P and C' are connected by dotted lines rather than by a dash, where the dotted lines indicate an interruption in the circulation of capital while its circular movement continues as capital moves between the spheres of production and circulation (Marx, 1885, p.35).

⁹ This does not imply that the issues of post-production circulation are irrelevant to the case of services commodities. For instance, the problem of realization remains, but it requires resolution prior to the production stage (in order for the circuit to be sustainable on a capitalist basis).

money capital, and commodity capital. Circulatory services do not transform commodities or add any value.

Marx explains the nature of costs of circulation as follows:

Costs of circulation, which originate in a mere change of form of value, in circulation, ideally considered, do not enter into the value of commodities. The parts of capital expended as such are merely deductions from the productively expended capital so far as the capitalist is concerned. (Marx, 1885, p.139).

No surplus-value is produced in circulatory services and all labour engaged in them is unproductive. However, these activities may facilitate the realization of surplus-value by industrial capital or increase the velocity of circulation. In exchange for this, circulatory services are funded out of surplus-value generated elsewhere.

The general law is that all costs of circulation which arise only from changes in the forms of commodities do not add to their value. They are merely expenses incurred in the realisation of the value or in its conversion from one form into another. The capital spent to meet these costs (including the labour under its control) belongs among the faux frais of capitalist production. They must be replaced from the surplus-product and constitute, as far as the entire capitalist class is concerned, a deduction from the surplus-value or surplus-product, just as the time the labourer needs for the purchase of his means of subsistence is lost time. (ibid, p.152; emphasis in original).

Insofar as circulatory activities might superficially appear to 'transform' a commodity or its use-value, this is only in terms of its ownership (i.e., the circulation of titles to the use-value) but not a commodity's use-value. Service activities in the circulatory sphere may raise the price of a commodity above its underlying value, creating a façade of value-creation, but without actually creating any new value. For instance, marketing activities may allow a higher price to be realized in the sale of these commodities than would otherwise be the case, but do not themselves transform the commodities in a value-creating process.

The classification of circulatory services is relatively straightforward in a Marxian schema, as is their relationship to the production of surplus-value. Marx does deal with these activities quite comprehensively (especially in Volume 2 of *Capital*), although he does not approach them as part of a 'services sector' as such.

6 PRODUCTIVE TRANSPORT AND STORAGE

In addition to the pure or genuine circulation costs discussed above, Marx identifies two additional types of costs of circulation: transport costs and costs of storage. As already discussed, pure circulation costs facilitate the transformation of value into or between its money and commodity forms, without any new value being added or any surplus-value being generated. In the case of productive transport the value of commodities increases as new surplus-value is created, while storage preserves the value that has already been created and which would otherwise diminish.

Marx deals with the nature of transportation and its role in the circuit of capital in the second volume of *Capital*. The *raison d'être* of the transport sector is that 'the use-value of things is materialised only in their consumption, and their consumption may necessitate a change of location of these things, hence may require an additional process of production, in the transport industry.' (Marx, 1885, p.153). Transport of commodities is a productive process in which surplus-value is generated, as 'the productive capital invested in this industry imparts value to the transported products, partly by transferring value through the labour performed in transport' (ibid). Accordingly, some of the labour employed in transport is productive.

Transport of commodities prior to their sale, although nominally part of the circulatory phase, is thus actually a continuation of production in the sphere of circulation. 'The transport industry forms on the one hand an independent branch of production and thus a separate sphere of investment of productive capital. On the other hand its distinguishing feature is that it appears as a continuation of a process of production *within* the process of circulation and *for* the process of circulation.' (ibid, p.155; emphasis in original).

A distinctive feature of transport is that the 'useful effect' of transport is inseparable from the productive process, with no separate commodity being produced:

...what the transport industry sells is change of location. The useful effect is inseparably connected with the process of transportation, i.e., the productive process of the transport industry. Men and goods travel together with the means of transportation, and this travelling, this locomotion, constitutes the process of production effected by these means. The useful effect can be consumed only during this process of production. It does not exist as a utility different

from this process, a use-thing which does not function as an article of commerce, does not circulate as a commodity, until after it has been produced. (ibid, p.54)

Nevertheless, this 'useful effect' has some properties in common with a commodity, in terms of the determination of its exchange-value as well as in terms of what happens to its value once it is consumed:

But the exchange-value of this useful effect is determined, like that of any other commodity, by the value of the elements of production (labour-power and means of production) consumed in it plus the surplus-value created by the surplus-labour of the labourers employed in transportation. This useful effect also entertains the very same relations to consumption that other commodities do. If it is consumed individually its value disappears during its consumption; if it is consumed productively so as to constitute by itself a stage in the production of the commodities being transported, its value is transferred as an additional value to the commodity itself. (ibid).

Marx sets out a specific formula of the circuit of capital applying to the transport industry, $M-C\binom{LP}{MP}$...P-M', where M' represents the converted form of the useful effect created during the process of production. He notes that 'it is the process of production itself that is paid for and consumed, not a product separate and distinct from it' (ibid).

Marx also deals with storage in Volume 2 of *Capital*. He notes that 'the abidance of the commodity-capital as a commodity-supply in the market requires buildings, stores, storage places, warehouses, in other words, an expenditure of constant capital; furthermore the payment of labour-power for placing the commodities in storage' (ibid, p.141). While storage shares some characteristics with transport, it differs in that the value of the commodities being stored does not increase.¹⁰

On the one hand, storage costs share the same character as standard costs of circulation in that they are necessitated merely by 'the particular social form of the production process (i.e., are due only to the fact that the product is brought forth as a commodity and must therefore undergo the transformation into money)' (ibid, p.142). But on the other hand,

-

¹⁰ Except in cases where what appears to be 'storage' is actually transformative in nature, such as in the aging of wines. This aspect of storage can actually be considered a full part of the production process of the wine commodity and not storage in *strictu sensu*.

storage costs differ from the pure/genuine costs of circulation in that their purpose 'is not a change in the form of the value, but the preservation of the value existing in the commodity as a product, a utility, and which cannot be preserved in any other way than by preserving the product, the use-value, itself' (ibid, p.142).

The following passage brings out this dual character of storage activities. Storage is unproductive in that it needs to be funded out of the surplus-value generated elsewhere, yet it does enter into the value of the commodities being stored:

[the costs of storage] enter to a certain extent into the value of commodities, i.e., they increase the prices of commodities. At all events the capital and labour-power which serve the need of preserving and storing the commodity-supply are withdrawn from the direct process of production. On the other hand the capitals thus employed, including labour-power as a constituent of capital, must be replaced out of the social product. Their expenditure has therefore the effect of diminishing the productive power of labour, so that a greater amount of capital and labour is required to obtain a particular useful effect. They are *unproductive costs*. (ibid, pp.141-2; emphasis in original).

Unlike transport, with storage 'the use-value [of the commodity] is neither raised nor increased here; on the contrary, it diminishes' (ibid, p.142) and no new surplus-value is created. However, the value already created is preserved as far as possible in that the attenuation of the commodity's use-value is minimised through the storage process. Despite the fact that value does not increase through storage, 'new labour, materialised and living, is added' (ibid). Storage is a special case in that productive labour is engaged in it and surplus-value is generated, but the value of the commodity being stored does not increase:

Inasmuch as labour-processes are necessary in this stage, they add to the cost of the raw material, etc., but are productive labour and produce surplus-value, because a part of this labour, like of all other wage-labour, is not paid for. The normal interruptions of the entire process of production, the intermissions during which the productive capital does not function, create neither value nor surplus-value. (ibid, p.125).

Marx's approach to storage, as discussed above, is based on the premise that the value of commodities does not rise through storage, but rather that the diminution of their value is less when they are stored than would otherwise be the case. An interesting issue that arises in the current period is whether there are cases in which the value of commodities can actually increase through storage, in ways which would not have been possible in Marx's time. For instance, technology now allows for certain types of fresh produce to be cold

stored over extended periods and sold at a higher price than would initially have been the case, or may even allow for the realization of the surplus value-embodied in the commodities when this might not otherwise have been the case (e.g., because of excess supply in a particular season). This could be considered analogous to the productive aspect of transport, in the sense that the transformation of commodities in space that is facilitated by productive transport creates surplus-value and similarly the transformation of commodities in time that is facilitated by certain types of storage could be considered productive of surplus-value.

In addition to the storage of commodities between the points of production and sale, storage plays a further role in the continuity and seamless flow of the circuit of capital in terms of the storage of means of production. Part of productive capital is latent as it is held ready for production. The fallowness of this portion of capital is itself a precondition for the uninterrupted flow of the productive process, although this capital creates neither products nor value (while in its latent form). 'The buildings, apparatus, etc., necessary for the storage of the productive supply (latent capital) are conditions of the productive process and therefore constitute component parts in the preliminary stage' (ibid, p.125). In this sense storage, like transport, might be considered as moments in an extended productive process; yet unlike in production no commodities are produced and in the case of storage no new surplus-value is generated.

Marx's approach to storage, as discussed above, is based on the premise that the value of commodities does not rise through storage, but rather that the diminution of their value is less when they are stored than would otherwise be the case. An interesting issue that arises in the current period is whether there are cases in which the value of commodities can actually increase through storage, in ways which would not have been possible in Marx's time. For instance, technology now allows for certain types of fresh produce to be cold stored over extended periods and sold at a higher price than would initially have been the case, or may even allow for the realization of the surplus value-embodied in the commodities when this might not otherwise have been the case (e.g., because of excess supply in a particular season). This could be considered analogous to the productive aspect of transport, in the sense that the transformation of commodities in space that is facilitated by productive transport creates surplus-value and similarly the transformation of

commodities in time that is facilitated by certain types of storage could be considered productive of surplus-value.

7 NON-CAPITALISTIC SERVICES

As with other sectors, services can also be provided on a non-capitalistic basis. This category tends to be much more significant in the case of services than for any other sector (with an exception of agriculture in some developing countries). These services may be circulatory or may deliver use-values. But the distinguishing feature of this category of services is that they are provided against revenue rather than against capital.

Workers engaged in non-capitalistic services are unproductive. In the case where personal services are provided directly by an individual rather than by a worker employed in a service-providing capitalist firm, the individual does not generate surplus-value and is paid by the purchaser of the service in a simple flow of revenue. In meeting the needs of the purchaser of his services, the worker depletes rather than expands the mass of surplus-value. The money laid out to pay for the service is revenue, not capital.

One of the major categories of non-capitalistic services is unpaid household labour.¹¹ A second empirically significant category of non-capitalist services are public services such as education or healthcare that are provided by the state (or other institutions) on a not-for-profit basis. A third major type of non-capitalistic services are those in which an individual is paid in exchange for performing a personal service, without being employed in a capitalistic enterprise. For example, a domestic servant hired directly by a household without any capitalist intermediary. This third category – which we term here 'personal services'¹² – is the central focus of Marx's treatment of services, as will be discussed below. All of these activities create use-values but no surplus-value, and none of the labour engaged in them is productive.

¹² This does not have the same meaning as 'personal services' in national accounts, which are a subsector of 'other community, social, and personal services' and have a limited and specific meaning. Here personal services refer to services exchanged against revenue rather than against capital.

¹¹ We do not analyse unpaid household labour here, but for Marxian analyses of household labour see, for instance, Benston (1969), Kuhn and Wolpe (1978), Hennessy and Ingraham (1997), Collins and Gimenez (1990), Vogel (1983), Delphy (1984), Fox (1980), Gardiner (1975), Malos (1995), Gerstein (1973), Menon (1982), Fraad et al (1994), Meulenbelt (1978), and Seccombe (1974).

Grundrisse contains a relatively extensive discussion of services, focussing on personal services that are provided on a non-capitalist basis. This category was a significant component of total services during Marx's time. Marx states that 'the exchange of objectified labour for living labour does not yet constitute either capital on one side or wage labour on the other. The entire class of so-called *services* from the bootblack up to the king falls into this category' (Marx, 1857, p.465; emphasis in original). Such services may nominally involve the same activities as certain commodity-producing services, yet here the services are remunerated out of revenue rather than from capital laid out in a capitalist circuit of capital.

Marx discusses personal services as part of 'the relation of simple circulation', which in this context is essentially the purchase of personal services which are rendered on a non-capitalist basis.¹³ These are activities in which 'A exchanges a value or money, i.e. objectified labour, in order to obtain a service from B, i.e. living labour'. Here,

both [A and B] in fact exchange only use values with one another; one exchanges necessaries, the other labour, a service which the other wants to consume, either directly – personal service – or he furnishes him the material etc. from which, with his labour, with the objectification of his labour, he makes a use value, a use value designed for A's consumption. (ibid, p.465).

Marx states clearly that 'labour as mere performance of services for the satisfaction of immediate needs has nothing whatever to do with capital, since that is not capital's concern.' (ibid, p.272). He illustrates this with an example of a woodcutter hired as an individual to provide a personal service to a capitalist in his capacity as a consumer:

If a capitalist hires a woodcutter to chop wood to roast his mutton over, then not only does the wood-cutter relate to the capitalist, but also the capitalist to the wood-cutter, in the relation of simple exchange. The woodcutter gives him his service, a use value, which does not increase capital; rather, capital consumes itself in it; and the capitalist gives him another commodity for it in the form of money. (ibid).

¹³ In this context Marx also discusses a second type of 'service' workers, found 'in periods of the dissolution of

only a veiled purchase of alien labour for immediate consumption or as use value.' (ibid, p.469). We do not dwell on this category of service workers given their historical and institutional specificity.

pre-bourgeois relations'. These are 'free workers whose services are bought for purposes not of consumption, but of production; but, firstly, even if not on a large scale, for the production only of direct use values, not of values; and secondly, if a nobleman e.g. brings the free worker together with his serfs, even if he re-sells part of the worker's product, and the free worker thus creates value for him, then this exchange takes place only for the superfluous [product] and only for the sake of superfluity, for luxury consumption, is thus at bottom

He generalises such a relationship to all services 'from whore to pope' which are purchased for their use-value and are exchanged against revenue rather than capital. No capital is laid out, no surplus-value is generated, and all labour engaged in such services is unproductive.

The same relation holds for all services which workers exchange directly for the money of other persons, and which are consumed by these persons. This is consumption of revenue, which, as such, always falls within simple circulation; it is not consumption of capital. Since one of the contracting parties does not confront the other as a capitalist, this performance of a service cannot fall under the category of productive labour. From whore to pope, there is a mass of such rabble. But the honest and 'working' lumpen-proletariat belongs here as well; e.g. the great mob of porters etc. who render service in seaport cities etc. He who represents money in this relation demands the service only for its use value, which immediately vanishes for him; but the porter demands money, and since the party with money is concerned with the commodity and the party with the commodity, with money, it follows that they represent to one another no more than the two sides of simple circulation. (ibid)

Marx castigates as 'horse-piss' the arguments from bourgeois economists that regard any labour that in some way indirectly contributes to surplus-value as being productive.

A. Smith was essentially correct with his productive and unproductive labour, correct from the standpoint of bourgeois economy. What the other economists advance against it is either horsepiss..., namely that every action after all acts upon something, thus confusion of the product in its natural and in its economic sense; so that the pickpocket becomes a productive worker too, since he indirectly produces books on criminal law (this reasoning at least as correct as calling a judge a productive worker because he protects *from* theft). Or the modern economists have turned themselves into such sycophants of the bourgeois that they want to demonstrate to the latter that it is productive labour when somebody picks the lice out of his hair, or strokes his tail, because for example the latter activity will make his fat head – blockhead – clearer the next day in the office. (ibid; emphasis in original).

Marx deliberates on examples of personal services such as a wandering tailor who is taken into a peasant's house in order to make clothes with material that the peasant provides, or a doctor who is paid to deal with health problems. He argues that there is no real difference in this respect between the purchase of the services or of the 'end-products', and we quote at some length:

The man who takes the cloth I supplied to him and makes me an article of clothing out of it gives me a use value. But instead of giving it directly in objective form, he gives it in the form of activity. I give him a completed use-value; he completes another for me. The difference between previous, objectified labour and living, present labour here appears as a merely formal difference between the different tenses of labour, at one time in the perfect and at another in the present. It appears in fact as a merely formal difference, a difference mediated by division of labour and

by exchange, whether B himself obtains the necessaries on which he has to subsist or whether he obtains them from A and, instead of producing the necessaries himself, produces an article of clothing, in exchange for which he obtains them from A. In both cases he can take possession of the use-values possessed by A only by giving him an equivalent for it; which, in the last analysis, always resolves itself into his own living labour, regardless of the objective form it may adopt, whether before the exchange is concluded, or as a consequence of it. Now, the article of clothing not only contains a specific, form-giving labour — a specific form of usefulness imparted to the cloth by the movement of labour — but it also contains a specific, form-giving labour — a specific form of usefulness imparted to the cloth by the movement of labour — but it contains also a certain quantity of labour — hence not only use value, but value generally, value as such. (ibid, pp.465-6).

Where the services are purchased for the fulfilment of a personal need and not for the purposes of generating surplus-value, what is relevant for the purchaser is the use-value that is delivered directly by the service. No new value is generated in the commission of the service. The use-value is merely consumed as the service itself is consumed, with no surplus-value remaining behind. (ibid, p.466).

But this value does not exist for A, since he consumes the article, and is not a clothesdealer. He has therefore bought the labour not as *value-positing* labour, but as an activity which creates utility, use value. In the case of personal services, this use value is consumed as such without making the transition from the form of movement [*Bewegung*] into the form of the object [*Sache*]. (ibid).

Personal services may superficially involve the same types of activities as certain commodity-producing services. However, they are remunerated out of revenue rather than from capital laid out in a capitalist circuit of capital in order to generate surplus-value.

...even given that A pays money for the service, this is not a transformation of his money into capital, but rather the positing of his money as mere medium of circulation, in order to obtain an object for consumption, a specific use value. This act is for that reason not an act which produces wealth, but the opposite, one which consumes wealth...The money which A here exchanges for living labour – service in kind, or service objectified in a thing, is not *capital* but revenue, money as a medium of circulation in order to obtain use value, money... Exchange of *money as revenue*, as a mere medium of circulation, for living labour, can never posit money as capital, nor, therefore, labour as wage labour in the economic sense. (ibid; emphasis in original).

Marx goes on to generalise this characterisation to all personal services that are exchanged for revenue:

In the bourgeois society itself, all exchange of personal services for revenue – including labour for personal consumption, cooking sewing., garden work etc., up to and including all of the unproductive classes, civil servants, physicians, lawyers, scholars etc. – belongs under this rubric, within this category [of exchange of services not for capital but for revenue]. All menial servants

etc. by means of their services – often coerced – all these workers, from the least to the highest, obtain for themselves a share of the surplus product, of the capitalist's *revenue*.' (ibid, p.468; emphasis in original).

This discussion of personal services in *Grundrisse* pertains only to personal services provided on a non-capitalist basis, where an individual exchanges his or her services directly for revenue. It does not apply to the case in which a capitalist lays out capital to employ wage labourers who provide personal services for which the capitalist is paid and appropriates surplus-value. The latter form of activity would be a capitalist commodity-producing service, as discussed earlier. For instance, Marx's discussion of personal services would apply to a maid employed directly by a household, but would not apply to someone employed by a domestic service agency that bills the household and pays the wages of the maid (even if the two maids perform identical physical tasks). A service commodity is produced and surplus-value generated in the latter case but not in the former.

8 CONCLUSION

Sectors are not the units of analysis in Marxian economics. What is most fundamental to a Marxian classification of economic activities is the relationship of an activity to the production, realization, and appropriation of surplus-value. This relationship can be understood in terms of an activity's location in the circuit of capital, and specifically as to whether or not surplus-value is directly produced in the activity. Marxian and non-Marxian typological approaches also differ epistemologically, in the sense that in a Marxian approach an activity cannot necessarily be classified simply by observing it, given that the relevant characteristics of the activity are typically not phenomenologically apparent.

The difference between a Marxian and a non-Marxian approach to classifying activities comes through particularly strongly in the case of services, as this sector includes completely different types of activities in Marxian terms. Whereas the common denominator of the services sector might be the inseparability of production and consumption, from a Marxian approach some of the activities included in this sector do not even produce commodities at all. In terms of the characteristics most important from a Marxian standpoint – specifically, the location of an activity in the circuit of capital and the relationship of the activity to the production of surplus-value – what is common to the

activities included in the services sector is less significant than the differences between these activities. The notion of a 'services sector' is thus not a particularly useful or relevant analytical construct in a Marxian approach.

This clarity is important not only for typological reasons, but from a broader analytical perspective in terms of understanding sectoral structure and the implications of changes therein. For instance, deindustrialisation — referring to a decline in the share of manufacturing in the economy, typically a shift towards services — is regarded in the non-Marxian heterodox literature (especially a-la-Kaldor) as being likely to have negative effects on economic growth. In a Marxian approach, taking account of the heterogeneity of the 'services sector' implies that a more nuanced approach is needed than simply treating services as a somewhat unitary sector, as a shift towards commodity-producing services is likely to have different implications from a shift towards circulatory services or non-commodity-producing personal services. Similarly, in terms of the 'hype' about the potential of the services sector to drive growth, referred to at the beginning of this article, from a Marxian angle a more complex approach would be needed that takes account of the heterogeneity of services.

REFERENCES

Barclay, W. and Stengel, M. (1975) 'Surplus and surplus value' *Review of Radical Political Economics*, 7(4): 48-64.

Benston, M. (1969) 'The political economy of women's liberation' *Monthly Review*, 21(4): 13-27.

Collins, J. and Gimenez, M. (eds.) (1990) Work Without Wages, New York: SUNY Press.

Daniels, P.W. (1993) Service Industries in the World Economy, Oxford: Blackwell.

Delphy, C. (1984) *Close to Home: A Materialist Analysis of Women's Oppression*, London: Hutchinson.

Fine, B. and Harris, L. (1979) Rereading Capital, London: Macmillan.

Fine, B. (1989) Marx's Capital (3rd edn.), London: Macmillan.

Fox, B. (ed.) (1980) *Hidden in the Household: Women's Domestic Labour Under Capitalism*, Toronto: Women's Educational Press.

Fraad, H., Resnick, S. and Wolff, R. (1994) *Bringing it all Home: Class, Gender, and Power in the Modern Household*, London: Pluto Press.

Gardiner, J. (1975) 'Women's domestic labour' New Left Review, 89(1): 47-58.

Gershuny, J. and Miles, I. (1983) *The New Services Economy: The Transformation of Employment in Industrial Societies*, London: Pinter.

Gerstein, I. (1973) 'Domestic work and capitalism' Radical America, 7(4-5): 101-28.

Harcourt, G.C. and Kerr, P.M. (2002) 'Marx, Karl Heinrich, 1818-1883' In Warner, M. (ed.) *International Encyclopedia of Business and Management, Volume 5* (2nd edn.), London: Thomson Learning.

Harvey, D. (1999) Limits to Capital, London: Verso.

Hennessy, R. and Ingraham, C. (eds.) (1997) *Materialist Feminism: A Reader in Class, Difference, and Women's Lives*, New York: Routledge.

Hirsch, S. (1989) 'Services and service intensity in international trade' *Weltwirtschaftliches Archive* 125: 45-60.

Houston, D. (1997) 'Productive-unproductive labor: rest in peace' *Review of Radical Political Economics*, 29(1): 131-147.

Hunt, E. (1979) 'The categories of productive and unproductive labor in Marxist economic theory' *Science and Society*, 43(3): 303-325.

Katouzian, M.A. (1970) 'The development of the service sector: a new approach' *Oxford Economic Papers*, New Series, 22(3): 362-382.

Kuhn, A. and Wolpe, A. (eds) (1978) Feminism and Materialism: Women and Modes of Production, London: Routledge and Kegan Paul.

Kuznets, S. (1965) Economic Growth and Structure: Selected Essays, London: Heinemann.

Laibman, D. (1999) 'Productive and unproductive labor: a comment' *Review of Radical Political Economics*, 31(2): 61-73.

Malos, E. (ed.) (1995) *The Politics of Housework* (3rd edn.), Cheltenham: New Clarion Press.

Mandel, E. (1976) 'Introduction' In Marx, K. *Capital: A Critique of Political Economy, Volume* 1, London: Penguin.

Marx, K. (1857) Grundrisse, London: Penguin, 1973.

Marx, K. (1861) Theories of Surplus Value, Part 1, London: Lawrence & Wishart, 1956.

Marx, K. (1867) Capital: A Critique of Political Economy, Volume 1, London: Penguin, 1976.

Marx, K. (1885) *Capital: A Critique of Political Economy, Volume 2*, Moscow: Progress Publishers, 1986.

Marx, K. (1894) *Capital: A Critique of Political Economy, Volume 3*, London: Lawrence & Wishart, 1984.

Menon, U. (1982) 'Women and household labour' Social Scientist, 10(7): 30-42.

Meulenbelt, A. (1978) 'On the political economy of domestic labor' *Quest: A Feminist Quarterly*, 4(2): 18-31.

Murray, P. (1998) 'Beyond the "commerce and industry" picture of Capital' In Arthur, C. and Reuten, G. (eds.) *The Circulation of Capital: Essays on Volume Two of Marx's Capital*, London: Macmillan.

Resnick, S. and Wolff, R. (1987) *Economics: Marxian versus Neoclassical*, Baltimore: Johns Hopkins University Press.

Sabolo, M.Y. (1975) *The Service Industries*, Geneva: International Labour Organisation.

Seccombe, W. (1974) 'The housewife and her labor under capitalism' *New Left Review*, 83(1): 3-24.

Shaikh, A. and Tonak, E.A. (1994) *Measuring the Wealth of Nations: The Political Economy of National Accounts*, Cambridge: Cambridge University Press.

United Nations (1989) 'Report of the SNA Expert Group Meeting on Production Accounts and Input-Output Tables', Vienna, 21-30 March 1988 http://unstats.un.org/unsd/sna1993/history/EGM production accts and IO.pdf.

United Nations Department for Economic and Social Affairs Statistics Division (1999) *Handbook of Input-output Table Compilation and Analysis* Studies in Methods Series F, no. 74. New York: United Nations.

United Nations (2001) System of National Accounts 1993 Geneva: United Nations.

Vogel, L. (1984) *Marxism and the Oppression of Women: Toward a Unitary Theory*, New Brunswick: Rutgers University Press.