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Between Statistical Imperatives And Theoretical Obsessions:

An Inquiry Into The Definition And Measure Of The Economy

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LIST OF ABBREVIATIONS

ABS	Australian Bureau of Statistics
ANA	Australian National Accounts
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASNA	Australian System of National Accounts
FIRE	Finance, Insurance, Real Estate industries
GCI	[Snooks']Gross Community Income
GDI	[UNDP's] Gender-related Development Index
GDP	Gross Domestic Product
GEP	[Ironmonger's] Gross Economic Product
GFP	[Marxian] Gross Final Product
GHP	[Ironmonger's] Gross Household Product
GMP	[Ironmonger's] Gross Market Product
GNP	Gross National Product
GPI	Genuine Progress Indicator
HDI	[UNDP's] Human Development Index
ISEW	Index of Sustainable Economic Welfare
MEW	[Nordhaus and Tobin's] Measure of Economic Welfare
NBER	[US] National Bureau of Economic Research
NIPA	National Income and Product Accounts [US National Accounts]
SEEA	System of integrated Economic and Environmental Accounting
SNA	System of National Accounts
TISA	[Eisner's] Total Income System of Accounts
UNDP	United Nations Development Program
WRET	Wholesale and Retail industries

ABSTRACT

This thesis inquires into the definition and measurement of the economy, critiquing the official statistics found in the national accounts and asking feminist, green and socialist questions about "the Australian economy".

The "economy", as defined by the national accounts, is a reification of neoclassical and Keynesian economic theory. It ignores non-market production, environmental costs and ecological sustainability. Yet, while extending the existing definitions and measures might make women's work and environmental issues more visible, the market based approaches hide as much as they reveal about "the economy". This is particularly evident when emotional labour is considered. The analysis of emotional labour challenges the whole notion of work as an alienable product which can be measured.

An alternative political economy which seeks to reflect these concerns faces either the co-option of its analysis if it relies on market measures, or marginalisation if it eschews measurement. Underlying this impasse are the neoclassical definitions which equate the concepts of work, production, welfare, the market and the economy. Breaking this impasse requires breaking the neoclassical nexus. This can be done by seeing the economy as a hologram: a metaphor which emphasises that what is seen in the economy is standpoint dependent. But with a hologram, the dependence on standpoint, and the existence of other perspectives, is highlighted, not hidden.

Thus, the (unmeasurable) embodied nature of work can be seen alongside, rather than in contradiction to, measures of production and welfare. Similarly a focus restricted to the production of alienable goods and services does not usurp other views. It also allows for a more consistent comparison of market and non-market production, and suggests that the latter is more important to the economy than even the (neoclassical) extended national accounts reveal.

The green measures of economic welfare also produce a different view of the economy and of economic growth, although these measures themselves could be improved by an analysis of gender [inequality] and the costs of market exchanges. Yet such revised economic welfare estimates (like the revised production measures) remain market based. This limits the proposed measures, but, because they allow for some engagement with market economics, the proposed measures provide a bridge to more transformative understandings of political economy.

DECLARATION

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my thesis being made available for photocopying and loan.

Signed: Date: 23/8/2000

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Introduction: The Official Story and the Unofficial Thesis

The Australian economy grew by 4.2% last year.[1]

The size of the economy is a fundamental economic figure from which a whole raft of economic linkages and theories are drawn, and from which public policy is negotiated and legitimated. Yet the commonplace statement, that the economy grew by 4.2%, hides a multitude of meaning about the more basic proposition of what the economy is. What is it which grew by 4.2%, and how is it measured? To ask this question is to examine the particular economic theories which underlie how the economy is defined, and to challenge the reification of those economic theories (neoclassical and Keynesian theories) into the seemingly neutral (and natural) concept of "the economy".

The definitions and measurements which form the basis of our understanding of "the economy" are found in the figures produced by the Australian Bureau of Statistics (ABS), specifically the Australian System of National Accounts (ASNA) - formerly the Australian National Accounts (ANA).[2] These accounts are based on international standards outlined in the United Nations' System of National Accounts (SNA).[3]

Production

At the heart of these official definitions of the economy is the concept of production. According to the SNA, the activity of production is fundamental, and is understood as,

> a physical process, carried out under the responsibility, control and management of an institutional unit, in which labour and assets are used to transform inputs of

---

1 Based on the GDP growth figures for the December quarter, 1999. Australian Bureau of Statistics *Australian National Accounts: National Income, Expenditure and Production*, Cat No. 5206.0. Canberra: ABS.

2 The ANA has been changed to take account of the changes to the international SNA in 1993, but the first figures for the Australian SNA were not published until April 1999. The differences between the two systems do not really impact on the principles discussed in this thesis, and the conceptual definitions of production and GDP remain the same. I will tend to rely on the ANA as the ASNA Concepts, Sources and Methods document was not yet published at the time of writing. Australian Bureau of Statistics (1999b) *Australian System of National Accounts, 1997-98*, Canberra: ABS.

3 The Australian accounts contain some variations from the international systems due to data limitations or where, because of specifically Australian circumstances, other methods were deemed to be more appropriate. Australian Bureau of Statistics (1990) *Australian National Accounts: Concepts, Sources and Methods*, Cat No. 5216.0. Canberra: ABS. pp 4 - 5. It should also be noted that the latest version of the SNA (1993) was published under the combined auspices of the United Nations, The OECD, World Bank, and the International Monetary Fund. United Nations (1993) *System of National Accounts 1993*, New York: United Nations.

> goods and services. All goods and services produced as outputs must be such that they can be sold on the market or at least be capable of being provided by one unit to another, with or without charge.[4]

The ANA carries a similar definition of production as, "the process whereby labour, natural resources, accumulated capital assets and knowledge are applied to the provision of goods and services".[5] Within this production framework, the major summary measure of the economy is Gross Domestic Product (GDP). It is GDP which grew by 4.2% last year. GDP is formally defined in the ANA/ASNA as

> the total market value of goods and services produced in Australia after deducting the cost of goods and services used up in the process of production (intermediate consumption), but before deducting consumption of fixed capital.[6]

The middle part of this definition, dealing with intermediate consumption, simply avoids double counting the production of raw materials - firstly as raw materials, and then again as part of the value of a finished product. Thus GDP is basically an estimate of the market value of all goods and services produced in a given year. GDP is also geographically defined. It is that production which takes place "in the domestic territory of Australia regardless of whether the factors of production are resident or non-resident."[7]

Up to this point then, there is a clear notion of a discrete entity which is the Australian economy. It has a summary measure, GDP, and it shares the same geographic space as the Australian nation state. But GDP is not simply a measure of all goods and services produced in a given year. It measures the *value* of production, and therefore measures primarily that production which is exchanged in the market. According to the ABS, it would not be feasible to account for all production captured under the broad definition above, and so a more restricted approach is necessary. Thus:

> The aim of the ANA is to cover the production of all goods and services which legally enter the market, and also that part of production which does not enter the market but for which it is possible to impute a value using closely related or analogous market transactions.[8]

---

4 United Nations, *op.cit.*, p 4.

5 ABS, 1990 *op.cit.*, s2.10, p 5. The ASNA definition is slightly reworded and is closer to the SNA'93 definition. ABS, 1999, *op.cit.*, p 103.

6 *ibid.*, p 6 and p 105 respectively.

7 There are further particular definitions about what constitutes the domestic territory of Australia, but these need not be considered here as I do not wish to engage in this level of definitional debate. ABS, 1990, *op.cit.*, p 6.

8 *ibid.*, s2.11, p 5.

To be clear then, GDP is not a measure of total economic activity, nor even a measure of all market exchanges. Exchanges like second hand purchases and share transactions are not counted as they are changes of ownership not new production. Market transactions like the production of illegal goods and services (eg. illicit drugs, prostitution), are also not included - due to the unavailability of adequate data. By contrast certain 'production' which is not exchanged in the market is included in GDP. Dollar values are imputed into GDP estimates for: rent where owners occupy their own homes; where value is added by owner builders to their homes; where income from production is received in kind; where people consume the goods and services they produce in their normal occupation (most notably, the food that farmers produce and consume themselves); and for some services provided by financial institutions.

The importance of these imputations in challenging the official definitions and measures will be discussed in Chapter 2. For now, it is sufficient to say in summary, that the national accounts utilise a specific, and largely (but not exclusively) market based definition of production (and therefore of the economy).

Beyond this broad definition, the national accounts employ other concepts in measuring "the economy". According to the ABS

> At their summary level, the national income and expenditure accounts reflect the key economic flows of the Keynesian system: production, income, consumption, investment and saving. At their more detailed level they are designed to present a statistical picture of the structure of the economy and the detailed processes that make up domestic production.[9]

The Keynesian flows referred to here are captured by the construction of four different types of accounts at the summary level, namely: production accounts; income and outlay accounts; capital accounts; and an overseas transaction account. Within these summary accounts economic transactions are recorded by institutional sector, namely: corporate trading enterprises (including public trading enterprises); financial enterprises; households (including unincorporated enterprises and non-profit institutions); general government; and an overseas sector. [10] However, these sectoral categories are quite secondary in the SNA/ANA[11] and the main summary accounts are the Keynesian flows aggregated across the institutional sectors.

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9 *ibid.*, s2.1, p 4.

10 *ibid.*, s3.3, p 15.

11 Dudley Seers notes that the original national accounts of Richard Stone and Colin Clark did not include this sectoral break-up and that it was only "welded on" later. Dudley Seers (1976) "The Political Economy of National Accounting" in Alec Caincross and Mohinder Puri (ed), *Employment, Income Distribution and Development Strategy: Problems of the Developing Countries*, New York: Homes & Meier Publishers. p 196.

Different Official Definitions

It should be noted that there are a range of other official accounts which define the national economy somewhat differently. Gross National Product (GNP) is a different production measure, and was traditionally used as the main summary measure of the economy in a number of countries (most notably the USA). It measures production income flowing to residents of a country (regardless of where that production takes place), rather than the production which takes place in the country itself (as in GDP). Similarly the balance of payments and foreign investment statistics, which are based on the International Monetary Fund's Balance of Payment Manual (rather than the SNA), focus on financial flows between Australia and the rest of the world. Thus, they define the economy in terms of those financial flows and the economic entities 'resident' within a national economy.[12]

Of course there is a large debate over the appropriate 'nationality' of some of these 'residents', most notably transnational corporations,[13] and this is part of a wider question of globalisation and the appropriateness of the nation as the economic unit of analysis. There are many versions of "globalisation" which focus variously on the rise of global financial markets, transnational corporations, and on an increasingly transnational production and mass media. These changes are held to suggest an increasing separation of economic and political space. If corporate business, finance and accumulation all take place on a global scale , then economic statistics which assume a national economy are bound to be misleading in terms of the dynamic of what is a global economy. [14] Yet many authors have also disputed the "globalisation thesis", either claiming that the economy is not in fact "global", or that, despite the rise of transnationals, nation states remain important economic units.[15]

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12 Australian Bureau of Statistics (1988) *Balance of Payments: Summary of Concepts, Sources and Methods*, Cat No. 5351.0. Canberra: ABS.Australian Bureau of Statistics (1991) *Foreign Investment, Australia: Summary of Concepts, Sources and Methods*, Vol Cat No. 5355.0. Canberra: ABS.

13 See for instance the exchange in American business journals: Robert Reich (1990) "Who Is Us?" *Harvard Business Review*, Vol 68, January-February; Y-S Hu (1992) "Global Firms are National Firms with International Operations" *California Management Review*, Vol 34, pp 107 - 26; Robert Reich (1991) "Who Is Them?" *Harvard Business Review*, Vol 69, March-April.

14 See for instance, Laurence Harris (1977) "Balance of Payments" in Frances Green and Peter Nore (ed), *Economics: an Anti-Text*, London: Macmillan; D. Bryan (1995) "International Competitiveness: National and Class Agencies" *Journal of Australian Political Economy*, Vol 35, June.

15 For an example of the first argument, see Paul Hirst and Grahame Thompson (1992) "The Problem of Globalization: International Economic Relations, National Economic Management and the Formation of Trading Blocs" *Economics and Society*, Vol 21, No. 4, pp 357 - 396; P. Hirst and G Thompson (1995) "Globalisation and the Future of the Nation State" *Economy and Society*, Vol 24, No. 3. For the latter, see J.H. Dunning (1993) *Multi-National Enterprises and the Global Economy*, Workingham: Addison-Wesley.

This debate over globalisation is vast and important, but it is too big to tackle in any meaningful way in this thesis. Thus, while acknowledging that the notion of a nationally defined economy is problematic in various ways, for the sake of convenience I will just accept that, to the extent that "the economy" can be defined and measured at all, then there is some use in doing so with reference to the nation.

However, even assuming a national economy, there are important differences between the official definitions - between an economy defined by production within a geographic space, and one defined by reference to the entities which comprise it. This is not just looking at the same thing ("the economy") from different angles. There is a genuine tension between different official definitions. This is shown by the example of foreign debt, where, depending on the definition of the economy, Australia's foreign debt may have nothing to with the Australian economy as it is defined by GDP. Dick Bryan provides the following example from the 1980s:

> when Bond Corp. borrows $US400m in Zurich, it is recorded in the balance of payments as a debt... But Bond Corp. may in fact utilise the credit to expand production outside of Australia and it may also service the debt out of revenue generated in its North American breweries, imposing no cost at all on the 'Australian economy'... It can be noted, moreover, that the real transaction involves no conversion into $A. The conversion into $A is purely a construction of balance of payments accounting.[16]

Thus the source of capital, the productive activity and the source of repayments are entirely outside the "Australian economy" as defined in the ASNA/ANA. Yet it is obviously ridiculous to describe Australia's foreign debt as being unrelated to the Australian economy, although in this case "the economy" which produces goods and services is different from "the economy" which owes money. This difference may or may not be important in practice, depending on the focus and approach of particular economic analyses. It might also be regarded simply as an anomoly in large, multi-purpose accounting.

Alternatively however, the tension in the official definitions and statistics might begin to suggest that "the economy" is not some sort of solid object existing "out there" - an object which can be examined from different angles, but which remains essentially the same thing. I will develop this argument further in the next chapter, suggesting that, at least to some extent, "the economy" is a product of the way in which it is defined and the questions asked about it. Indeed this epistemological assumption underwrites this thesis.

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16 D Bryan (1989) "Whose Balance of Payments" *Australian Journal of Political Economy*, Vol 24, March, pp 55 - 76. p 70.

However, having noted the differences in the official definitions and measures, in further discussing this "economy" I intend only to discuss the production based accounts. This is not to suggest that the balance of payments or foreign debt and investment statistics, or the economic processes and issues on which they focus, are any less important than the production processes highlighted in the System of National Accounts. But production is clearly important in defining the economy: the debates over what constitutes "production" have been crucial in the history of national accounting and the changing definition and measurement of "the economy". Thus, for the sake of manageability, in this thesis I will concentrate on the production based definitions and measures, although in terms of the issues to be considered here, there is little difference between GDP and GNP measures. I therefore tend to use the terms interchangeably.

Outline of Thesis

Having outlined this official definition and measure, in this thesis I want to consider various political critiques of this "economy". My project is not to engage in any of the technical debates about methods of data collection, or the reliability of particular measures within these national accounts. Rather I want first to show that what we understand by "the economy" is a creation of neoclassical and Keynesian economic theory. I then ask feminist, green, and ultimately socialist questions about the basic definition of "the Australian economy".

I have already noted that the ANA recognises that its summary measure reflects the categories of Keynesian accounting. The historical analysis in the next chapter will suggest that in fact there were *two* historical moments from which the national accounts acquired their theoretical foundations. The first, the "neoclassical moment" of the late nineteenth century, replaced the classical notion of productive labour with the current definition of production. This new definition was drawn from the utility analysis of the neoclassical/marginalist revolution of the 1870s. The second moment, the "Keynesian moment" in and after World War II, did not challenge this central concept, but saw the national accounts aggregates take on new importance in the macroeconomic management of the economy.

This historical perspective is particularly important when combined with an epistemological view which suggests that theory in part creates the objects it seeks to understand. Combined, the history and epistemology set out in Chapter 1 suggest that the national accounts not only reflect the theoretical concerns of neoclassical and Keynesian economics, but that, to a certain extent, the economy (as defined by the national accounts) is a reification of neoclassical and Keynesian theory. This has important consequences,

not least because the definition of the economy is important in constructing economic debate - legitimating certain policies and invalidating others.

However, for those whose purpose and/or political commitment is not the macroeconomic management of the economy according to neoclassical and Keynesian economic principles, the issue is doubly important. In using the official definitions and statistics, radical critiques are already arguing in contexts biased against them. Unless other definitions and measures of the economy can be operationalised, then any alternative political economy is condemned to be perennially arguing on the terrain of the enemy - and, arguably, losing. An important step then in the development of an alternative political economy is the interrogation of exactly what it is we mean by "the economy". This thesis begins such an interrogation, by asking questions predominantly from feminist economics, and ultimately, by exploring/suggesting alternative definitions and measures which draw from feminist, green and socialist political economic analysis.

Chapter 2 begins this process by looking at the feminist critiques of the "production boundary" - the line drawn in the SNA/ANA between production ("the economy"), and that which is not production (ie. not part of "the economy"). This line excludes and renders invisible most non-market production - the majority of which is produced by women via either unpaid household labour in industrialised countries, or household and subsistence production in under-developed countries. The market focus of the SNA/ANA means that even in advanced capitalist economies like Australia, somewhere in the region of half of the goods and services produced in the economy are not recorded in the national accounts.[17] This has led to a number of attempts to produce "extended national accounts" which include values for production which is not exchanged in the market.

However, both orthodox and Marxian attempts to extend the definition and measure of the economy (the parallel Marxian attempts are introduced in Chapter 3), have also been subject to critiques from feminists. The economic models which form the base of those extended accounts do not reflect the work that women do. Chapter 3 surveys a range of these critiques: the concerns over the importation of the market's devaluation of women's work; the reduction of household management roles to non-managerial 'tasks'; and the failure to capture the never-endingness of women's household work - both in terms of that work not ending at any "clock-off" time, and also its merging into other activities. The neoclassical assumptions of household dynamics which underlie the actual dollar valuation of household work are also criticised, as is the implication that the (lack of)

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17 The actual and relative size of non-market production is in fact controversial, and it is the subject of chapters 2 and 6 here.

money form of reward is not of fundamental importance in itself. In short, these critiques argue that women's household labour is not like market work and production. The attempt to incorporate that household labour into market definitions and measures hides more than it reveals.

Yet this creates something of an impasse. To include non-market production in the main definition and measure of the economy is to hide much of its difference from market work, while to focus on its difference is to render it again outside of the view of mainstream economics. To a certain extent this reflects a deeper tension within feminism over the (liberal) demand for *inclusion* in existing structures - in this case to make women's work count in market measures[18] - as opposed to a more radical or transformative feminism which seeks to change the structures (in this case, economic measures) to reflect women's roles, experiences and demands.

The "Environmental Interlude" after Chapter 3 argues that there are similar tensions in green critiques of official definitions and measures of the economy. The SNA's failure to account for environmental costs and for ecological sustainability have led to efforts to value these environmental factors in 'green' national accounts, but also, more radically, to critiques of the whole (anthropocentric) project of putting market values on the environment. There are thus important parallels with the feminist debates, but it is the feminist questions, rather than environmental ones, which I use to progress the analysis. Thus, after the short interlude, the environmental concerns are put on hold until later in the thesis.

The feminist critiques of extended national accounting noted in Chapter 3 were critiques of the attempts to squeeze non-market phenomenon into market paradigms. Chapter 4 departs from this line of criticism by beginning to ask, not how women's work can be fitted into market paradigms, but rather, what would "work" look like if we took as a starting point the work that women actually did. The analyses of domestic labour by Christine Delphy and Di Leonard, and that by Chris Beasley, and the analyses of paid work by Lisa Adkins and Arlie Hochschild, introduce a new perspective on the economy. Their analysis of emotional labour and the embodiment of labour suggests more than that there are a further range of tasks ('emotional'/caring tasks) which are not included in market based definitions of work. Work becomes understood as fundamentally sexualised and embodied. Women's (and men's) bodies and identities are integral to the notion of

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18 Hence Marilyn Waring's labelling of this demand as "conservatively reformist" Marilyn Waring (1988) *Counting for Nothing: What Men Value and What Women Are Worth*, Wellington: Allen & Unwin. p 231.

work. Among other things, this suggests that the products of that work can not be entirely alienated for sale in the market.

This analysis of (emotional) labour not only breaks the neoclassical/SNA definition of production, but it suggests that any attempt to measure work and production is flawed, because it is premised on the separation of product from producer. Thus, if we are going to begin to define the economy from women's experience - or even from the standpoint of labour more generally - rather than from market principles, we can not then measure that economy.

However, such a conclusion only cements the liberal-reform vs radical-transformation dichotomy, as feminists apparently must either ignore the embodiment of labour and women's subjective and caring work, or else abandon economic measurement and thereby step out of mainstream (malestream) political economic debate. Rather than abandoning the notion of economic measurement, I begin in Chapter 5 to explore the possibility of defining and measuring the economy in such a way as to highlight, rather than hide, the difference of women's work. I begin this exploration by revisiting the issue of emotional labour. After considering and dismissing the possibility of seeing emotional labour as a series of abstract tasks, Chapter 5 suggests that while accounting for emotional labour is impossible, this is not the core of the problem. The problem is not the inability to account for emotional labour, but is rather the insistence that *all labour should be accounted for* (in the same way) in a measure of the economy.

This insistence on sameness goes back to neoclassical economics: the presumption that where production defines the economy, any activity with a market value is by definition productive (and therefore good, ie. welfare enhancing). If labour is not productive/marketed (or marketable), it is neither work nor part of the economy. Thus, I conclude in Chapter 5 that the first step in advancing an alternative definition and measure of the economy, is to break this neoclassical nexus (work = production = economy = market = welfare), and to recognise different types of labour and economic activity. Importantly, recognising different types of economic activity need not imply incorporating them all into a measure of "the economy", so long as the measures open up rather than foreclose upon a notion of those different types of activities. This is the logic of seeing the "economy as hologram" - where what is seen is standpoint dependent, but the existence and importance of other standpoints is also apparent.

In some senses, the thesis' theoretical argument concludes as this point. Having examined various feminist and green critiques of official definitions and measures, I highlighted the problem (the neoclassical nexus) and made an argument for a different epistemological

approach. Yet politically, an argument based on critique is only the first step, and an insufficient one. There are already existing, powerful feminist and environmental critiques of mainstream measures and epistemologies (in addition to the broader existing critiques of neoclassical economics). I have no argument with these critiques, and indeed, the first half of my thesis rests on drawing them together in a particular way. But it is the next step which is crucial politically. Thus, the rest of the thesis begins to explore what could be done with such a critique, and with an epistemology of "economy as hologram".

Given that I suggested that the neoclassical nexus was crucial to creating the political impasse examined in the first half of the thesis, I begin the project of exploring alternative definitions and measures with the terms tied up in that nexus. In the analysis of emotional labour and the embodiment of labour, the thesis has already considered work/labour outside of the neoclassical nexus. Chapter 6 then begins to explore the concept of production beyond the neoclassical nexus, beginning with the existing attempts to theorise production as being different from labour, economy and welfare.

The classical/Marxian restricted definitions of production, with their distinction of productive labour and unproductive labour, provide one example of such an approach to defining production. The modern Marxian accounts presented by Anwar Shaikh and E. Ahmet Tonak are based on a classification of four different types of economic activity: production, distribution/exchange, social maintenance, and personal consumption - the first three of which constitute different types of labour. These definitions and measures are considered in some detail.

Comparison is also made between the Marxian definitions, and the accounting estimates based on Coase's notion of transaction costs. Despite the very different theoretical perspectives, the transaction cost estimates and Marxian approaches operationalise a fairly similar restricted definition of production. I argue that both frameworks are ultimately flawed. They are blind to non-market production, environmental concerns and emotional labour. However, in their differentiation of production from exchange/transaction activity, the empirical work in these estimates is instructive.

In order to further consider the possibilities and potential of such a restricted definition of production, Chapter 6a begins to put dollar values to this restricted definition by adapting existing national accounts and household data. The figures produced are by no means final, robust estimates, but they do further the discussion and highlight the usefulness of a more restricted definition of production. They provide a more consistent comparison of market and non-market production, and they suggest that non-market production makes

an even greater contribution to the economy than even the extended (neoclassical) accounts suggest.

Chapter 7 takes a very different approach to breaking the neoclassical nexus by focussing on the concept of welfare. The chapter considers a range of alternative accounts which come out of green political economy. These attempts to measure economic welfare recognise different types of economic activity, in as much as the accounting for defensive expenditures, environmental costs and resource depletion, recognise that not all economic activity is 'productive' of (social) welfare. The various measures of economic welfare provide a very different view of the economy and make a politically important critique of economic growth. However, despite the inclusion of non-market production, the green indexes remain largely gender-blind, and they do not go far enough in recognising different economic activities, most notably because they have no recognition of the difference between welfare enhancing production and exchange/transaction activity.

These shortcomings can be addressed within the frameworks of the measures of economic welfare. Thus, in the same way that Chapter 6a attempted to further the discussion of Chapter 6 by adjusting existing measures, so too Chapter 7a makes some "order of magnitude" adjustments to the Australian measure of economic welfare - the Genuine Progress Indicator (GPI). Again, the adjustments to the GPI for gender inequality and exchange expenditures are by no means final. However, the results do clarify the issues discussed in the main Chapter 7, and they give a view of the economy and economic development which is different to the original GPI - as well as being radically different from the official accounts' story of economic growth. Further detail as to how the adjustments to the GPI were made is set out in the Appendix.

While there are some overlaps, the analyses and estimates discussed in relation to chapters 6 and 7 are very different approaches to defining and measuring the economy. They are also both quite different again to the approaches, discussed in the chapters on emotional labour, which focus on the embodied labour and eschew measurement altogether. Yet these approaches sit together within the epistemology of the thesis - the logic of the economy as hologram. And importantly, the three approaches discussed here are all informed by feminist, green and/or socialist political economy, and they all serve to break the neoclassical nexus.

The different starting points of each approach offer different insights into "the economy", but in a way which allows other possibilities to be seen. Of course, the accounting for production and welfare suggested here remains, in important ways, an exercise in market accounting. As such it retains the flawed logic of that market accounting. Yet, precisely

because it is an exercise in market accounting, but one which contains a more structural and systemic analysis of political economy, it may prove a useful tool for an alternative political economy.

SECTION 1:
In the Market for a Definition

Chapter 1: The Unofficial History of the Official Story

In the introduction I outlined the official definition and measure of the economy contained in the national accounts, arguing that "production" was the central concept. Thus, for instance, when referring to economic growth, the thing which is growing is production, or more particularly, GDP, which is the market measure of the value of production. However, having stated that production is key in defining the economy, it should be noted that the definition of production is highly contestable. This chapter seeks to trace the history of the meaning of production in national accounting. From that I hope to underline the theoretical basis of the current definition, before considering wider epistemological questions of definitions and theories in general.

The History of "Production"

Paul Studenski, in his still authoritative work, *The Income of Nations*,[1] identifies three competing historical conceptions of production. The definition adopted in the SNA/ANA is what he calls a *comprehensive production concept*, as opposed to the *restricted material production concept* (associated with the classical and Marxian economists) which includes only material goods as production. Studenski also describes the *restricted market production* concept as a compromise between the two positions. It includes marketable services in the national income but does not include the services of government and other collectives not controlled by market forces.

Studenski's history of the development of national accounts over the past three centuries identifies six major stages in the development of these ideas of the nature of production and national income. This historical development, and in particular the recognition of two important "moments" in this history, is crucial to understanding debates around the official definition and measure of the economy.

The first stage of Studenski's story, which is really the pre-history of national accounting, is located in the sixteenth century when mercantilist doctrines held sway. Wealth was viewed simply as stocks of gold (thus overseas trade was the most productive industry as it could increase this stock) and there was no real conception of a national income. In the seventeenth century this changed as William Petty in England and Sieur de Boisguillebert

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1 Paul Studenski (1958) *The Income of Nations: Theory, Measurement and Analysis Past and Present*, New York: New York University Press.

in France pioneered the first real estimates of national income. They took wealth to be the stock of both consumable goods and the means of production. Petty defined the "income of the people" as "annual value of labour" and "annual proceed of the stock or wealth of the nation" (thus foreshadowing modern returns to capital and labour in the comprehensive concept).[2]

However the third phase identified by Studenski represented a step back from the comprehensive concept. The Physiocrats of eighteenth century France argued that agriculture was the only truly productive activity as it alone produced a "revenu net", that is, a return to producers which was more than their investment of capital and labour. National income was then simply the net product of agriculture. Adam Smith ushered in the next phase, extending the physiocrats' system by insisting that other "material goods production" (manufacturing, trade and transport) was also productive, that is, capable of adding to the total value of output. But Smith retained the distinction between productive and unproductive labour, restricting the concept of production to material goods, or "vendible commodities".

> 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 [ie. manufacturing worker] adds, generally, to the value of the materials which 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 ... the labour of the manufacturer fixes and realises itself in some particular subject or vendible commodity, which lasts for sometime at least after that labour is past ... The labour of a menial servant, on the contrary, does not fix or realise itself in any particular subject or vendible commodity.[3]

While the ultimate outcome of Smith's production was a "vendible commodity", value could be added to that product either directly or indirectly; that is, all the labour (including service occupations) which went into making that commodity vendible was viewed as productive. By contrast, professionals offering direct services for personal consumption were deemed "unproductive", again because their work "perishes in the very instant of production".[4] Similarly, government employees (as Smith knew them - principally officers of justice and members of the army and navy) were unproductive because,

> They are servants of the public, and are maintained by a part of the annual produce of the industry of other people. Their service ... produces nothing for which an equal quantity of service can afterwards be produced. The protection, security, and

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2 *ibid.*, p 13.

3 Smith from *The Wealth of Nations,* book 2. Cited by Studenski, *ibid.*, p 18.

4 Cited in Fyodor Kushnirsky and William Stull (1989) "Productive and Unproductive Labour: Smith, Marx, and the Soviets" in Donald Walker (ed), *Perspectives on the History of Economic Thought: Volume 1, Classical and Neoclassical Economic Thought*, Aldershot, Hants: Edward Elgar. p 87.

> defence of the commonwealth, the effect of their labour this year, will not purchase its protection, security, and defence for the year to come.[5]

Smith acknowledged that such unproductive labour was important and deserved rewards, but it represented consumption of the product of the nation, not production. However, Fyodor Kushnirsky and William Stull, following Marx's critique of Smith, argue that there was also another definition of production in Smith's work. Although never explicitly elaborated, the "hired for profit" formula suggested that any workers who were hired to earn a profit for their employers were productive. This was a broader definition in that employees of "for profit" firms that sell services directly to consumers would be regarded as productive.[6]

While the mainstream of classical economics concentrated on the vendible commodity definition, Karl Marx critiqued Smith's concept of material production and built on the hire-for-profit definition. Marx rejected the notion that the form of the product - material or immaterial - had anything to do with whether the labour was productive or not. Instead, Marx argued that what determined whether labour was productive was the social relations of production. According to Marx,

> The concrete character of the labor, and therefore its product, do not, as such, play any part in this division of labour into productive and unproductive. Chefs and waiters, for instance, are productive laborers in the sense that their labor is converted into capital for their employer. ... That labor is productive which produces capital.[7]

However, this was different to Smith's "hired for profit" definition. Smith saw salespeople, rent collectors and book-keepers as productive because they made an indirect contribution to production. By contrast, Marx saw these workers as unproductive because they only changed the form of value (use-value into exchange value) rather than adding new value (usefulness).[8]

Thus, in a capitalist system, productive labour was that which produced *value* rather than simply profit - the former ultimately determining the later according to the labour theory of value. In an important sense, Marx was not defining production *per se*, but was defining production and the economy in terms of his labour theory of value. This had a number of consequences.

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5 *ibid.*

6 Kushnirsky and Stull, *op. cit.*, pp 88 - 90.

7 Citing from *Theories of Surplus Value*, in Studenski, *ibid.*, p 22.

8 Kushnirsky and Stull, *op. cit.*, pp 93 - 95.

Firstly, Marx (and many later Marxists) precluded from the definition of production many material goods which were produced by petty-commodity producers (self-employed artisans) because they did not contribute to surplus value. Thus, the same product could be produced by either productive or unproductive labour, because, as James O'Connor notes of Marx's analysis, "productive labour in one mode of production is unproductive in another mode of production".[9] Similarly, given the focus on the capitalist mode of production, non-marketed production by definition could not be considered as "productive", even though Marx clearly recognised that use-values (things which were socially necessary or produced socially useful effects) were produced in the home and elsewhere. As we will see in later chapters, this has been criticised by some feminists, precisely because it fails to recognise that the capitalist mode of production is dependent on or articulated with non-market production of use-values.

The focus on the analysis of surplus value and capitalism was also important in defining production in relation to services. While Marx recognised that, in principle, services could be productive, in practice they were largely excluded, except in as much as they were direct inputs to material goods production (eg. goods transport). For the rest, Marx argued that it was crucial to service production that

> the production can not be separated from the act of producing, as is the case with all performing artists, orators, actors, teachers, physicians and priests, etc. Here too the capitalist mode of production is met with only to a small extent.[10]

There are echoes here of Smith's concern with the longevity of usefulness, but the point for Marx was that the nature of "services" tended to preclude capitalist production. Even where such services were capitalistically employed to produce surplus value, Marx argued that such non-material production was so "insignificant compared with the totality of production that it can be left entirely out of account".[11] Thus, while Marx rejected Smith's material product definition based on the durability of the usefulness of the product, in practice, his analysis was also built around material products. In fact, when that analysis/definition came to be operationalised in the Soviet alternative to the national accounts, it was by name and nature, the Material Product System. Studenski claims that the Soviet version was a somewhat crude rendering of Marx's analysis, [12] while Kushnirsky and Stull argue that it actually owed more to Smith's vendible commodity formula than to Marx:

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9 James O'Connor (1975) "Productive and Unproductive Labor" *Politics and Society*, Vol 5, No. 3, pp 297 - 336. p 297.

10 Marx from *Theories of Surplus Value*, cited by O'Connor, *ibid.*, p 312.

11 *ibid.*, p 313.

12 Studenski, *op. cit.*, p 22.

> [the Soviets] chose to operationalise the ideas of productive and unproductive labour on the basis of the type of product rather than the type of labour *per se*. They defined the composition of their national product first and then denoted all the labour used in the production of the included items as productive. ... the Soviets chose to include only material output in their national production aggregate. Thus, for them the productive and material spheres are the same.[13]

Kushnirsky and Stull sum up the results of the different schemas in their table 6.1, reproduced below, which categorises the different sectors into P = productive, U = unproductive and M = a mixture of productive and unproductive labour.[14] (These sectors would all be classified as productive in the SNA).

Table 1: Kushnirsky and Stull's Categorisation of Un/productive activity

Sector of Industry	Soviet	Smith	Marx
Industry	P	P	P
Agriculture	P	P	M
Forestry	P	P	P
Construction	P	P	M
Freight transportation	P	P	P
Business communication	P	P	P
Trade	P	P	U
Catering	P	P	M
Material supply	P	P	U
Passenger transport	U	U	P
Residential communication	U	U	P
Education	U	U	P
Science	U	U	P
Medicine	U	U	P
Recreation	U	U	P
Housing	U	U	M
Personal services	U	U	P
Municipal services	U	U	P
Government	U	U	U

Of course, Kushnirsky and Stull's categorisation of what might appear as productive labour in Marx's definition is contestable. Indeed within Marxism more generally there has been a voluminous debate on the definition of production.[15] Beyond the Material Product System there have been relatively few attempts to apply a Marxian definition of production to defining and measuring the economy. Anwar Shaikh and E. Ahmet Tonak

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13 The authors suggest that this categorisation results from problems of data collection if services are divided into productive and non-productive labour, as well as an historical antipathy towards white collar occupations, and/or perhaps a misreading of Marx. Kushnirsky and Stull, *op. cit.* The quote is from p 97.

14 *ibid.*, p 99.

15 Aspects of this debate will be considered in Chapter 6. For a summary of the arguments within Marxism, see Ben Fine (1991) "Productive and Unproductive Labour" in Tom Bottomore (ed), *Dictionary of Marxist Thought*, Oxford: Blackwell. p 449.

have surveyed the main attempts to measure "the economy" using a Marxian definition of production.[16] But even among the twenty-odd attempts they note, there is no consensus as to what constitutes production. Some estimates use official statistics as proxies for Marxian categories, others distinguish between necessary and unnecessary (surplus) labour as a proxy for productive and unproductive labour, and others like that of Shaikh and Tonak themselves, attempt a more orthodox Marxist value categorisation.

Perhaps more importantly though, in terms of the history of national accounting, the Marxian theory underlying this accounting has proved problematic. The lengthy debates date back to the 1890s when Otto von Bohm-Bawerk launched his famous (and still definitive) attack on Marx's labour theory of value. Essentially Bohm-Bawerk argued that Marx had not shown, and could not show, that labour value underlay or governed prices and production in capitalism. There was no mechanism to explain how this governance happened except for the laws of supply and demand. Yet these laws were sufficient of themselves and did not need a notion of labour value to explain price formation and production dynamics. Moreover, Bohm-Bawerk argued, even if supply and demand laws were not enough to explain market dynamics, there was no reason to posit abstract labour as the external measure of the 'true' value of products. Bohm-Bawerk concluded that neoclassical utility provided a better yardstick.[17]

This then was the so-called "transformation problem", the problem of how value was reflected in (transformed into) prices. Economists like Bohm-Bawerk regarded it as fatal to Marxian economics. While some Marxists rejected this "bourgeois economics", critiques of the labour theory of value from within Marxism echoed the problems highlighted by Bohm-Bawerk.[18] Such critiques were strengthened after Piore Sraffa's critique of neoclassical economics opened the way for a mathematical demonstration that technical conditions and real wage levels could determine prices and profit rate - again suggesting that the category of value was unnecessary.[19] These critiques, plus perhaps the sheer complexity of the issue, has meant that many socialists, including those claiming to be Marxists, have abandoned Marxian value analysis.

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16 Anwar Shaikh and E. Ahmet Tonak (1994) *Measuring the Wealth of Nations: The Political Economy of National Accounts*, New York: Cambridge University Press. ch 6.

17 This summary of Bohm-Bawerk's critique from A Cutler, B Hindness, P Hirst, and A Hussain (1977) *Marx's Capital and Capitalism Today*, London: Routledge & Kegan Paul. ch 2.

18 See for instance, Cutler, *ibid.*, and G A Hodgson (1980) "A Theory of Exploitation Without the Labour Theory of Value" *Science and Society*, Vol 44, No. 3.

19 The leading theorist here is Ian Steedman. Ian Steedman (1977) *Marx After Sraffa*, London: New Left Books.

The debate over the transformation problem and the labour theory of value is long and beyond the scope of this thesis,[20] except to note that abandonment of the labour theory of value by no means exhausts the Marxian contribution to defining the economy. As I will show in Chapter 6, there remains much that is still of use in the Marxian tradition, although of course there are also other problems, and later chapters will consider these. However in terms of the historical development of the official accounts, the Smith-Marxian concepts (Studenski's fourth and fifth stages) belong to a now by-gone era. While the Soviet Material Product System coexisted with later (SNA) national accounts for a time, it is now being completely replaced as former Soviet countries introduce the SNA system.

The Neoclassical Moment

In the broader history of national accounting, restricted material product definitions were replaced by the final of Studenski's six stages: the return to a comprehensive production concept. Criticism of the material production concept grew in intensity through the nineteenth century among liberal economists as Smith's distinction between durable and non-durable utilities was seen to be irrelevant to what constituted "production". The development of the "marginalist revolution"[21] initially associated with Leon Walras, William Stanley Jevons and Carl Menger in the 1870s, and later Alfred Marshall, finally buried the distinction. Marshall authoritatively claimed that,

> Everything that is produced in the course of a year, every service rendered, every fresh utility brought about is a part of the national wealth.[22]

This "comprehensive" definition of production was inextricably tied to the marginalist revolution and to neoclassical economics. Classical economics had, according to Meek,

> broadly speaking believed that if the phenomena of the market were to be fully understood, the analyst must begin by "penetrating below the surface" of these phenomena to the underlying relations between men in their capacity as producers, which in the last resort could be said to determine their market relations.[23]

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20 A good overview of the debate as it flared again in the 1970s is, Erik Olin Wright (1979) "The Value Controversy and Social Research" *New Left Review*, Vol No. 116. Foley provides a summary of the key issues, Duncan Foley (1991) "Prices of Production and the Transformation Problem" in Tom Bottomore (ed), *op.cit.*, pp 442 - 444.

21 The common description of a "marginalist revolution" has been disputed by economic historians like Mark Blaug and Jurg Niehmans who ague that Jevons, Menger and Walras simply added to and/or refined (rather than overthrew) prevailing economic orthodoxy. But, however long the 'revolution' (ie. the development of the marginal analysis of neoclassical economics) actually took, the argument here about the specifically neoclassical nature of the definition of production remains. Jurg Niehans (1993) "Revolution and Evolution in Economic Theory" *Australian Quarterly*, Vol 65, No. 1, p 501.

22 Marshall from *Economics of Industry (1879)*, cited by Studenski, *ibid.*, p 20.

23 Ronald Meek (1973) "Marginalism and Marxism" in R D Collison-Black, A W Coats, and Craufurd Goodwin (ed), *The Marginal Revolution in Economics*, Durham: Duke University Press. p 234.

By contrast neoclassical economics looked not at relations of producers but at the relations between people and finished goods. For Carl Menger, what distinguished *economic* goods from non-economic ones was a relationship where the requirement for the good was larger than the available quantity. This was a paradigm that looked not just at the production (supply) of goods and services (as classical economics had), but also at the (psychological) determinants of demand. According to Walras,

> The theory of exchange based on the proportionality of prices to intensities of the last wants satisfied ... constitutes the very foundation of the whole edifice of economics.[24]

With economic 'rationality' now being applied to both profit maximising producers and utility maximising consumers, there was no need to "penetrate below the surface" of market exchanges. Economically rational behaviour and the logic of supply and demand, observable in the market, were all that was needed to determine market exchanges. There were no deeper relations of determinancy (like the classical labour theories of value), and nothing more to the economy than that which existed in the market. Neoclassical economics thus posited a definition of production based on the preferences of (autonomous, rational, utility-maximising) individuals expressed through the market. If a good or service was exchanged in the market, then a demand had been meet and therefore, by definition, the commodity had satisfied a need (ie. had utility). The activity necessary to produce the good or service was then considered part of production. Hence, within neoclassical economics all (potentially) marketable activities were deemed production activities.

This conclusion was not without political import, not least because the concept of production carries a normative value. Commenting on a French history of national accounts, Peter Miller notes that,

> Productive is that which is active, dynamic, strong, growing, oriented towards the future. Unproductive is sterile, stagnant, weak, parasitic and backward.[25]

Anwar Shaikh and E. Ahmet Tonak further argue that:

> The ideological convenience of definition of production which treats all market activities as productive is obvious.[26]

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24 From *Elements of Pure Economics*, cited by Meek, *ibid.*, p 235.

25 Peter Miller (1986) "Accounting for Progress - National Accounting and Planning in France: A Review Essay" *Accounting, Organisations and Society*, Vol 11, No. 1, p 93.

26 Shaikh and Tonak, *op.cit.*, p 3.

Production is not just defined by the market, but the market is also positively valued by the definition of the economy based on the comprehensive (neoclassical) concept of production. But not surprisingly, there have been a long line of Marxist critiques of the marginalist revolution as bourgeois "apologetics" and "ideological illusion".[27] However, with theory drawn along lines of class interest, neoclassical and Marxian theory essentially stopped talking to each other. The fundamental differences in the definitions of production remain today.

Rather than buying into the argument here, I wish simply to note (along with Shaikh and Tonak) that in terms of defining production, all economic theories make a distinction between production and consumption. At a common sense, individual transaction, level, this distinction is obvious. One party produces a good or service, the other buys/consumes it. But in counting the product of a country, what constitutes the *final production* which is measured in national accounts estimates, is much more contentious. Production by its nature consumes intermediate products - raw materials and/or components, human labour and capital - which have been produced elsewhere. The question then is where to draw the line as to what counts as final. This is by no means obvious and different theories draw the line in different places.

The national accounts generally draw the line at the sale of goods and services to the household. The market produces, households consume - again a value loaded binary. But consider the implications of the claim by feminist scholars, that households produce human labour.[28] If households produce labour, then all the production which is consumed by the household can be regarded as intermediate production in the process of producing labour - or reproducing humanity - which is the final product of the economy. The market economy would then be cast in the role of final consumer, not producer - an assumption which would turn modern national accounting on its head.

Of course the labour produced in the household is itself consumed by the market economy or by further household production. The point is that what we have is a circular process, where each stage's production is consumed in the next stage. There is no ultimate final product other than that defined by a particular theory. The line drawn between production and consumption by neoclassical economists stems from its market based assumptions. A

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27 Marginalist theory certainly was used (including by Leon Walras) to defend free competition and to critique Marxian economics, but Meek argues that few Marxists have seriously entertained a conspiracy theory about the marginalist revolution. Meek, *op.cit.*, p 237.

28 This idea formed the basis of the domestic labour debate of the 1970s and survives in some socialist and radical feminist work. See for instance the summary of the dual systems theory by Chris Kynaston (1996) "The Everyday Exploitation of Women: Housework and the Patriarchal Mode of Production" *Women's Studies International Forum*, Vol 19, No. 3, pp 221 - 237.

Marxian theory based on capital-labour relations draws the line differently - as does a theory whose starting point is household activity, or, as we will see later, the environment. The neoclassical definition of production, and therefore its definition of "the economy", is a theoretical proposition, not something self-evident in the nature of the economy. This is why the history is important.

The triumph of neoclassical economics at the end of last century meant that, from all the competing conceptions of production, a consensus emerged - at least among those who would be key players in the history of national accounting. From such a consensus national income estimates began to appear. Studenski lists a number of such estimates, including those of M.G Mulhall who published national income estimates for 22 countries using the comprehensive production concept.[29] Perhaps more importantly, Timothy Coghlan, the New South Wales government statistician, produced estimates of the income of New South Wales in 1886/87 and of the seven Australasian colonies in 1890. These were the first official national income estimates in the world based on a comprehensive Marshallian approach (rather than the Smithian one).[30]

This then marked the completion of the "neoclassical moment" in which national accounts took on the particular concept of production which remains today. However, at the turn of the last century the accounts were still quite undeveloped. They were given much greater impetus (and government support) as a result of World War One and the need for greater economic planning. Yet it is important to note that all these statistics were largely focused on national income factor shares or industrial origin (rather than the later macroeconomic aggregates). For instance, the National Bureau of Economic Research's first study of *Income in the United States* (1920) was motivated by

> a desire to learn whether the national income is adequate to provide a decent living for all persons, whether this income is increasing as rapidly as the population and whether its distribution among individuals is growing more or less unequal...[31]

Similarly, Bowley stated of his inquiries into pre-World War One national income in Britain, that the purpose of the study was

> to show the amount and origins of the aggregate incomes of the people of the United Kingdom and the proportions of the aggregate that go to the various economic classes.[32]

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29 Studenski, *ibid.*, p 21.

30 *ibid.*, p 136.

31 Cited in Don Patinkin (1976) "Keynes and Econometrics: On the Interaction Between the Macroeconmic Revolutions of the Interwar Period" *Econometrica*, Vol 44, No. 6, p 1106.

32 *ibid.*

Although there were important continuities in terms of the definition of production, these accounts were very different from those which would emerge during and after World War Two with the advent of the Keynesian economics.[33] From the perspective of this thesis, the "Keynesian revolution" was the second significant moment in the history of national accounting.

The Keynesian Moment

Several commentators have noted that wars have generally been important in the history of national accounting[34] However, what was particularly important in relation to World War Two, was the theoretical approach to the problems raised by war (and reconstruction). For Keynes the purpose of the accounting exercise was not just to pay for the war, but to do so without adverse inflationary impact. He recognised that a long war would require massive war production, raising the question of how to divert resources to the war effort when war demand would lead to sharply rising real and money wages, and therefore to increased consumer demand. This excess of demand over available goods and services would create an "inflationary gap", which could only be filled by taxation and voluntary savings at the current price levels, or by inflation or comprehensive rationing.[35]

This was set out in Keynes' (and Richard Stone's) famous 1940 pamphlet, "The National Income and Expenditure of the United Kingdom and How to Pay for the War". It argued that voluntary savings would be inadequate, rationing would be unpopular and would take up administrative resources, and inflation would be inequitable and ultimately would be offset by increased wage demands. Keynes thus favoured widening the tax base as the best means to dampen demand and secure resources for the war effort. Specifically he proposed a progressive income tax, part of which would be a direct tax and part a form of compulsory savings - interest earning deposits which would be released after the war in instalments to meet the expected post-war slump.[36] Given that this was an income tax, the

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33 Some commentators actually date the origins of national accounting from the "Keynesian revolution" and the Second World War, but this seems to ignore the importance of the history discussed above in forming crucial concepts. See Steve Dowrick and John Quiggan (1998) "Measures of Economic Activity and Welfare: The Uses and Abuses of GDP" in Richard Eckersley (ed), *Measuring Progress: Is Life Getting Better?*, Melbourne: CSIRO. p 94. Waring also sees the Keynesian moment and "paying for the war" as the pivotal event in the history, although she does note the previous history. Marilyn Waring (1988) *Counting for Nothing: What Men Value and What Women Are Worth*, Wellington: Allen & Unwin. p 45.

34 Studenski, *op.cit.*, p 158 notes the importance of war without comment; Waring, *ibid.*, posits a link between militarism, men and national accounting; while Miller argues that from the beginning national accounts were about the projection of national power. *op.cit.*, pp 101 - 2.

35 D.E. Moggeridge (1995) *Maynard Keynes: An Economist's Biography*, London: Routledge. ch 24.

36 Summary based on Moggeridge, *ibid.*

estimation of the necessary scale of taxation required some estimate of national income. The British Treasury at the time did not produce such statistics and so in collaboration with Erwin Rothbarth (and working from estimates previously published by Colin Clark), Keynes produced his own estimates. The government also began producing new statistical data resulting in the April 1941 White Paper, *Analysis of the Sources of War Finance and Estimate of the National Income and Expenditure in 1938 and 1940* .

A modified version of Keynes' tax proposal was enacted in the 1941 budget. Donald Moggeridge agrees with Keynes' assessment that the budget represented a "revolution in public finance":

> It shifted the criteria for budgetary policy from the balance or lack of balance in the public accounts to the balance in the economy as a whole, while the logic of the inflationary gap gave authorities the means of coming to their Budget judgement. It was all rather crude, relying heavily on the judgement skills of someone with Keynes' intuitive feel for orders of statistical magnitudes, but it was a beginning.[37]

This shifting of budgetary policy to a balance in the economy also occurred in the United States. In response to a request from the US Senate, Simon Kuznets produced national income figures for the year 1934. A student of Kuznets, Milton Gilbert, became chief of the National Income Division of the Department of Commerce in 1941 and was familiar with Keynes and Stone's *How to Pay for the War*. His own 1941 paper, "Measuring National Income as Affected by the War" measured GNP using the Keynesian model of consumption expenditure plus gross investment and government expenditure on goods and services. According to Waring, the argument for GNP-style accounting was won when existing national income figures did not support President Roosevelt's budget expenditure of $56 billion for the 1942/43 financial year. By contrast Gilbert's figures showed that the program was possible because extra output would come from new defence plants, the decline in unemployment and from shifts in production to higher paying areas of production.[38] Again what was key was not simply government expenditure, but the economy wide relationship between government expenditure, output, prices and employment.

Gilbert went on to be a key player in the development of US post-war national accounts and the establishment of an international system of accounts. Before the war some 33 countries had prepared some form of national income estimates and the League of Nations had been considering problems of international comparability. When the United Nations was established, it promoted the standardisation of data, based on the American and

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37 *ibid.*, p 647.

38 Waring, *op.cit.*, p 45.

British accounts which had proved useful in war and reconstruction planning, although the Soviet block countries maintained a separate Material Product System.

The standardisation of accounts culminated in a UN System of National Accounts (SNA) in 1953. This SNA has since been revised, most notably in 1968 and in 1993, but the fundamental principles of the system, at least in relation to the issues which will be discussed in this thesis, have remained unchanged. While the "production boundary" has shifted to incorporate more subsistence production, the basic principle has always been that the economy is defined by market production. Similarly the basic structure of the accounts around Keynesian aggregates which was established in the first SNA has remained.

The point here is not to give a detailed history of the development of the national accounting system, but rather to note the importance of Keynesianism in shaping the national accounts and therefore the definition of the economy. The adoption of Keynesian categories of consumption, investment and government expenditure as the constituent parts of national income meant that the national accounts became vital for managing that economy. Keynes' economic theory identified initially four, and later six, strategic factors which could be manipulated to affect the size and structure of the national income. These factors were: volume of consumption, volume of investment, quantity of money, interest rates, government spending and tax collections.[39] Rather than being merely descriptive statistics, national income indicators then became dependent variables and the subject of policy.[40]

In this sense the purpose of the accounts becomes Keynesian, although there is some debate in the literature as to whether the national accounting system is in fact "Keynesian". The history above would suggest that Keynes had a major role in the development of national income statistics. Yet Keynes' biographers are divided. Roy Harrod's well known biography attributes a major role to Keynes, while Moggeridge's more recent and minutely detailed biography makes no claim to any authorship by Keynes.[41] Different definitions and measurements of economic aggregates clearly pre-dated Keynes and Patinkin laments that, even though Keynes' *Treatise on Money* (1930) complained about the lack of statistics, Keynes himself did little to promote government sponsorship of such statistics until the war.[42]

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39 Studenski, *op.cit.*, p 25.

40 This point is made by R Adelstein (1991) "The Nation as an Economic Unit" *Journal of American History*, Vol 78, June, pp 160-187.

41 Moggeridge, *op.cit.*, Harrod cited by Patinkin, *op.cit.*, p 1111.

42 Patinkin, *ibid.*, p 1102.

On the other hand, Keynes was clearly in touch with those developing the new statistics and he certainly made use of them. The *General Theory* drew on Colin Clark's work on British estimates of national income from 1924-1931, and Keynes also made use of Kuznets' American data. Indeed during late 1936 there was substantial correspondence between Kuznets and Keynes on the reliability of Kuznets' data and the use Keynes had made of it. Yet Keynes had reservations about the reliability of the aggregate estimates of the early 1930s and Clark's figures in particular.[43]

More important than the role of Keynes himself though, is the debate concerning the nature of the accounts. Tomlinson argues that the Keynesian revolution was not as widespread as often portrayed and that there is nothing inherently Keynesian about the national accounts.[44] Miller notes that the French accounts have a quite different heritage. The overwhelming concern in post-war France was new production, while in Britain the concern was full employment. The French concern about production led them to structure their accounts around institutional aggregations (individuals, private enterprises - ie. those who would be doing the production) rather than the British/Keynesian functional aggregates of consumption, investment, etc. The French also adopted what Studenski would classify as a restricted market production concept rather than the Keynesian comprehensive production. In the French accounts, only that which was directly productive of new goods and services was viewed as production: administration, for instance, was not. This definition remained until 1976 when the importance of planning as a major force for "revitalisation" declined.[45]

While the accounting systems were different, thus questioning the claim about the inherently Keynesian nature of national accounting, the point should not be exaggerated. The French system was the exception rather than the rule in national accounting systems around the world. And again, in the Australian context, the ANA explicitly recognises its use of Keynesian categories. There is however, a more important qualification of the "Keynesian" nature of the accounts to be made in relation to later developments.

As is well known, after the war Paul Samuelson and others "synthesised" Keynesian macro-economics with mainstream micro-economics to develop the basis of modern economic theory. Of course, the end of the postwar boom in the 1970s led to a crisis of Keynesianism and its replacement by a variety of new "neoclassical" or neo-liberal

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43 *ibid.*

44 J. Tomlinson (1991) "Why wasn't there a 'Keynesian Revolution' in economic policy everywhere" *Economy and Society*, Vol 20, No. 1, p 106.

45 Miller, *op.cit.*, pp 91-96.

policies. Substantial as these shifts in policy have been, in terms of the national accounts and the definition of the economy, it is the continuity which is important. What is at issue between Keynesianism and the later theories is the nature of the links and the directions of causality between the various economic aggregates - not the more fundamental fact that there are causal relationships between the various macroeconomic aggregates. Certainly monetarist theory and later neoclassical approaches place less importance on fiscal policy and therefore income and production based figures, focussing instead on aggregates like money supply and the balance of payments statistics. Nevertheless the national accounts figures remain important in their econometric models.[46]

Few commentators argue for the abandonment of macroeconomics. Therefore, the argument I have put about the "Keynesian" nature of the national accounts can be extended to the mainstream macroeconomics approaches which came after Keynes. Ultimately macroeconomics is about managing the economy by the manipulation of certain economic aggregates which are recorded in the national accounts. This economic management is the purpose of the accounts. The fact that they also define what "the economy" actually is (or is seen to be), is incidental to the greater goal of economic management.

Again the point is not to provide a detailed history of the national accounts or of the development of macroeconomic theory, but to highlight that the national accounts are not simply a neutral reflection of an economy which exists "out there". I have identified two historic moments in which the accounts took on a particular form (which they retain), thereby defining the economy in terms of a neoclassical definition of production and the Keynesian formula of Consumption + Investment + Government Expenditure. The economy was not defined, for instance, in terms of gender or class, labour time or energy use, welfare, or any other categories which have been suggested in private studies and are the focus of much of this thesis. In this sense then, the national accounts figures represent a reification of Keynesian and neoclassical economic theories into the object of "the Economy" - capital E.

Epistemology

Again however, it should be emphasised that we are not talking here about a conspiracy of economists and/or government statisticians to give a false notion of what the economy 'really' is. Rather we are talking about the nature of knowledge production. Concepts and objects can not be known independently of human thought and social mediation, with the

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46 Paul Ormerod (1994) *The Death of Economics*, London: Faber and Faber. p 99. Also Niehans, *op.cit.*, p 505.

result that,

> theories less explain and more define and thereby help generate reality, such that the putative objects of studies are themselves partly constituted by human belief.[47]

This postmodernist notion of the "Economy" as an artefact of discourse (ie. of the theories used to explain it), is quite contrary to the understanding of "the economy" utilised by most economists working in a discipline informed by the Enlightenment tradition of absolute, universal, objective knowledge. In broad philosophical terms, the modernist tradition is described by Davies as involving a search for the fundamental "essences" of things and concepts (the essential characteristic by which one thing is separated from another) and a desire for closure, a completeness in a philosophical system which establishes clear and impermeable boundaries around concepts and theories/explanations.[48] The national accounts then reflect a "modernist" conception of the economy as object/thing - a discrete entity with clear borders defining what is and is not part of the economy. Such delineation is probably inherent in a project which seeks to provide a single measure of the economy like GDP, but it is theoretically problematic.

Modernist/essentialist conceptions have been criticised on a number of related levels. As I have already noted, objects do not simply exist "out there" independent of the theories (and words) used to describe them. Feminists in particular have argued that this binary logic (either inside the boundary or outside) reflects men's experience and/or psychology and is implicated in the patriarchal domination of women (and nature).[49] Such binary logic is also unsustainable on its own terms. Drawing on the Saussurean linguistics and the 'deconstructive' insight of Derrida, Davies argues that since language is relational, a concept can only be understood in relation to what it is not; and that the borders which distinguish concepts and construct binary opposites always break down at some crucial point. Davies' concern is jurisprudence (what is/is not "law"), but a similar argument can be made in political economy. Attempts to draw lines around "the economy" must, and, as we shall see in the next chapter, indeed do, fail. Thus Davies concludes that,

> Instead of always attempting to get at the core or essence of a concept, a process which neglects the contextuality of meaning, we should instead be asking how a

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47 Warren J. Samuels (1990) "Introduction" in Warren J. Samuels (ed), *Economics as Discourse*, Boston: Kluwer Academic Publishers. p 10.

48 Margaret Davies (1994) *Asking the Law Question*, Sydney: The Law Book Company. pp 221 - 223.

49 Chris Beasley (1999) *What is Feminism, Anyway? Understanding Contemporary Feminist Thought*, Sydney: Allen & Unwin. p 9. In a specifically economic context, see for instance, Julie A Nelson (1997) "Feminism, Ecology, and the Philosophy of Economics" *Ecological Economics*, Vol 20, No. 2, pp 155 - 162.

> concept is constituted in the system of which it forms a part, and how that system is itself constituted in the network of areas of knowledge.[50]

We have seen that the concept of 'the economy' is constituted within a discourse of neoclassical and Keynesian economics, but these theories themselves are constituted within knowledge systems which make particular epistemological claims to objectivity and scientific validity. Drawing on the valorised logic and perceived precision of mathematics, quantification (including but not limited to national accounting) becomes essential to the economic project,[51] and "the best and brightest in the profession proceed as if economics were the physics of society".[52]

The notion of economics as science goes back at least to the turn of the century. Alfred Marshall deleted the word politics from the previously named "political economy", while of course, Marxian political economy had laid its claim to 'scientific socialism' long before.[53] However, the clearest statement of mainstream economics' 'scientific' approach is Milton Friedman's classic 1953 essay "The Methodology of Positive Economics".[54] Friedman argued that what was to be focused on and what could be excluded from reference or taken as given was judged by the predictive success of a theory. If the predictions of a theory proved correct, then all the things assumed away or left out of that theory would have been proven to be irrelevant to explaining the phenomenon in question. Such a methodology well fitted the criteria of the scientific method, as understood by the dominant thinking of his time, and particularly with the falsification strategy most closely associated with Karl Popper's theory of science.[55]

The recourse to science can be seen as an attempt to legitimate particular economic knowledge through an appeal to a metanarrative - the Enlightenment metanarrative of the triumphal progress of scientific discovery. Sharp and Broomhill argue that this positivist

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50 Davies, *op.cit.*, p 235.

51 Nelson notes that if economics is not quantitative, it is scarcely viewed as economics at all. Julie A Nelson (1993) "The Study of Choice or the Study of Provisioning? Gender and the Definition of Economics" in Marianne A Ferber and Julie A Nelson (ed), *Beyond Economic Man: Feminist Theory and Economics*, Chicago: University of Chicago Press. p 26.

52 Robert Solow cited in Clive Beed (1991) "Philosphy of Science and Contemporary Economics: An overview" *Journal of Post-Keynesian Economics*, Vol 13, No. 4, p 487.

53 Frederick Engels (1941) *Socialism: Utopian and Scientific*, London: George Allen and Unwin.

54 Milton Friedman (1984) "The Methodology of Positive Economics" in Daniel Hausman (ed), *The Philosophy of Economics: An Anthology*, Cambridge: Cambridge University Press.

55 On Poppers theory of science, see Karl Popper (1974) *The Open Society and Its Enemies*, London: Routledge and Kegan Paul. Karl Popper (1983) "Historicism" in D. Miller (ed), *A Pocket Popper*, Oxford: Polity Press. Friedman and Popper also shared a common ultra-conservative politics. See Richard Cockett (1994) *Thinking the Unthinkable: Think-tanks and the Economic Counter-revolution 1931-1983*, London: Harper Collins.

scientific approach has also been the means by which economics has promoted itself as being value-free.[56] Yet there is an irony here. The writings of Thomas Kuhn, Lakatos, Feyeraband and others since the 1960s have overthrown the positivist approach to science as the dominant philosophical approach.[57] Carol Merchant, Sandra Harding and other feminists have argued that far from being value free, this science has been practised largely by men and has promoted a male world-view.[58] The irony, then, is that according to Rosenberg,

> economists are still trying to establish their discipline's scientific credentials while philosophers some time ago gave up hope of formulating such credentials.[59]

While post-positivist and postmodern critiques have become mainstream in the social sciences, they have generally had little impact on the discipline of economics. However there are some signs of change. For instance, Beed cites the post-positivist tendencies of the *Journal of Post Keynesian Economics*, and of *Economics and Philosophy*, and even some debates within econometrics.[60] The journals *Feminist Economics* and *Rethinking Marxism* testify to similar post-positivist clusters in other economic schools. However, as Milberg notes,

> It took a Chicago trained, libertarian economist to blow apart accepted views of economic methodology and introduce poststructuralism to economics.[61]

Milberg is referring to the work of Donald McCloskey who argued that economics is argument or rhetoric. Economists use rhetoric (metaphors, analogies, appeals to authority) to persuade other economists, the media, and politicians, of the rightness of their argument. The claim to truth is based, not on the existence of positivism's "method" or "facts", but on the persuasiveness of their argument.[62] In McCloskey's description we can see echoes of what Lyotard has argued (in reference to science in general) is a recourse to a "consensus of experts". In the absence of 'objective truth', this consensus legitimates, or indeed legislates, what counts as knowledge.[63] In the context of this thesis, the national accounts are the legislation of what counts as "the economy".

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56 Rhonda Sharp and Ray Broomhill (1988) *Short Changed: Women and Economic Policies*, Sydney: Allen & Unwin. p 172.

57 Beed, *op.cit.*, pp 464 - 473.

58 Nelson, *op.cit.*, p 24.

59 Rosenberg quoted by Beed, *op.cit.*, p 486.

60 Beed, *op.cit.*, p 475.

61 William Milberg (1991) "Marxism, Poststructuralism, and the Discourse of Economics" *Rethinking Marxism*, Vol 4, No. 2, p 93.

62 D McCloskey (1985) *The Rhetoric of Economics*, Madison: University of Wisconsin Press.

63 J-F Lyotard (1984) *The Postmodern Condition: A Report on Knowledge*, Mineapolis: University of Minnesota. pp 82 - 86.

However, according to Dianna Strassman, McCloskey's view remains one from within the system - a fundamentally conservative view which sought not to destabilise economic thought, but to validate actual economic practice.[64] Strassman argues that in the main,

> Economists are reluctant to consider the proposition that development in the field may not be rational but may emerge instead from the social construction of knowledge[65]

More than a reluctance, Warren Samuels argues that economists "are antagonistic to analyses that are inconclusive and demand some form of closure, however premature or presumptuous that may be".[66] In national accounting, I have argued that this closure happens around the definition and measure of the economy which posits exchange as the 'essence' of labour, production and welfare, and the market as the delimiter of what is economic and what is not. But this is not the end of the story.

Given the history and epistemology presented above, this thesis is clearly founded on the principle that "the economy" is a social or discursive construct, and one whose definition and measure are politically important and contestable. But it does not follow from this discarding of an object(ive) Economy, that it is impossible to talk about "the economy" at all, or that the economy must mean or include everything. As Gregor McLennan has argued, if we are to make any analysis or come to any explanation of the world, then some version of the "four sins" of modernist methodological theory (reductionism, functionalism, essentialism, and universalism) are not only defensible, but perhaps even inescapable.[67] Any theory involves abstracting from the chaos and multitude of factors determining any one instance. Without some level of generalisation, some reductionism to particular cause or explanation of which certain phenomena are seen to be a function, what would be required would be a "theory of everything". Such an enterprise (even if possible) is bound to be either so all-encompassing and complicated, or else so vague that it would describe nothing in particular. According to Resnick and Wolff,

> No one can think about everything imaginable, so all people necessarily narrow their mental energy to focus on some among the infinity of possible objects. ... The selection of objects for attention - for theorisation - is explained historically in terms of the events and problems that have provoked human beings to think about particular objects in particular ways.[68]

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64 Dianna Strassman (1993) "The Stories of Economics and the Power of the Storyteller" *History of Political Economy*, Vol 25, No. 1, p 150.

65 *ibid.*, p 149.

66 Samuels, *op.cit.*, p 12.

67 Gregor McLennan (1996) "Post-Marxism and the 'four sins' of modernist theorising" *New Left Review,*, Vol 218, pp 53 - 74.

68 Stephen Resnick and Richard Wolff (1987) *Economics: Marxian Versus Neoclassical*, Baltimore: John Hopkins University Press. p 11.

I think that the same is true of definitions which, as noted above, are a product of particular theories. Thus, the national accounts' "economy" is defined not as a simple description of what is observed/observable, but rather in terms of its explanatory value - in terms of the features which are useful to economic management as understood by Keynesian and neoclassical theories. If some version of the methodological sins of modernism are unavoidable in any explanatory endeavour, they are also a necessary part of any definition. Some form of modernist closure (even if temporary and qualified) *is* necessary in order to discuss and act on "the economy". In this epistemology, the issue is not that any abstraction ignores particular things, or that reality is constructed by theoretical apparatuses. These are taken as inherent in a knowledge which is inevitably partial and subjective. The real issue is whether or not the abstractions made in the theory are useful, and for whom? And what are the political implications of the particular abstraction? Who constructs the abstraction, who benefits and who misses out?

Epistemological Standpoints

These are issues of standpoint and power: a standpoint which illuminates particular parts of the picture; and power to say that this is the most important part, if not the whole picture. Yet there is a problem here for any dissident politics. If there is no objective knowledge beyond theory and standpoint, how can knowledge which is hegemonic be disputed and challenged. On what basis can alternative knowledge be judged superior or even equal to the dominant knowledge if there is no objective criteria by which to compare and judge?

In an effort to avoid a disempowering relativist bog, some theorists have argued for a "standpoint epistemology". Marx's analysis of the class base of knowledge led him to critique "bourgeois ideology" and to posit a proletarian standpoint as the position from which true knowledge can be attained (because the proletariat were, or would be, the universal class). Following this logic, Nancy Hartsock has argued that women's oppressed position in the sexual division of labour gives rise to a privileged (if not necessarily 'true') world view.[69] Ariel Salleh argues for an epistemology which takes as its focus (and its legitimation) the experience of all the "Other" - women, nature and the colonised who have been marginalised by the capitalist centre of western thought.[70] Such claims of a privileged access to knowledge have been treated with suspicion by some

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69 Nancy Hartsock (1983) "The Feminist Standpoint: Developing the Ground for a Specifically Feminist Historical Materialism" in Sandra Harding and Merrill Hintikka (ed), *Discovering Reality: Feminist Perspectives on Epistemology, Metaphysics, Methodology, and Philosophy of Science*, Dordrecht: D Reidel Publishing Company.

70 Ariel Salleh (1997) *Ecofeminism as Politics: Nature, Marx and the Postmodern*, London: Zed Books.

feminists,[71] and particularly by postmodernists who argue that there are no universal procedures for judging knowledge. As Ruccio notes,

> Running through the work of ... postmodern thinkers is a refusal to choose between the models of singular truth embodied in modernist thought.[72]

The epistemological debates here are long, complex and heated. As this thesis is not on epistemology as such, I shall sidestep the issues somewhat by simply opting for the 'overdeterminist' approach outlined by Resnick and Wolff.[73] They argue that any particular phenomenon arises from the interplay of a whole range of factors and social processes (gender, class, race, personality), all of which are integral to (and constitutive of) each other, but which nonetheless also have their own distinct logic. Given this, the purpose of theory is not to explain some underlying fundamental causation. Rather the purpose is to shed light on different aspects of a phenomenon by enabling us to understand one or more of the particular processes which are part of that phenomenon. Thus, as we will see in Chapter 3, Resnick and Wolff (with Harriet Fraad) analyse class processes in the household, not because these are somehow fundamental, but because they are one of the processes taking place alongside gender, power, psychology etc. Any phenomenon in any particular household then is the result of a (not pre-determined) coming together of these factors in a specific way in that particular instance.[74]

What is crucial in Resnick and Wolff's epistemology is that the claim is *not* that any particular abstraction gives a privileged or better knowledge, but that different theories tell us different things depending on their founding assumptions and the questions they ask. In terms of defining the economy, rather than the modernist notion of "the economy" as a single definable thing with certain objective features, we have something more like a hologram: that is, a picture where what we see changes depending on our standpoint.

It is not that the processes referred to in "the economy" are simply a trick of the light, or entirely a creation of discourse. Clearly the processes are real: people do work, produce,

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71 Nancy Folbre (1993) "How Does She Know? Feminist Theories of Gender Bias in Economics" *History of Political Economy*, Vol 25, No. 1, pp 167 - 184. See also the summary of the debates in Sandra Harding (1990) "Feminism, Science, and the Anti-Enlightenment Critiques" in Linda J. Nicholson (ed), *Feminism/Postmodernism*, New York: Routledge.

72 David Ruccio (1991) "Postmodernism and Economics" *Journal of Post-Keynesian Economics*, Vol 13, No. 4, p 500.

73 This is a "sidestep" in as much as I argue for overdeterminism because the 'burden of proof' is lower. While both overdeterminist and standpoint theories see knowledge as standpoint dependent, the former only requires a particular standpoint's knowledge to be useful, rather than privileged or 'superior'. Resnick and Wolff, *op.cit.*, ch 1.

74 Harriet Fraad, Stephen Resnick, and Richard Wolff (1994) *Bringing It All Back Home: Class, Gender and Power in the Modern Household*, London: Pluto Press.

exchange and consume goods and services, money and goods are owned, circulated and accumulated. But the picture we see (the Economy - capital E) and how we understand the multitude of processes at work is dependent on the angle of the light, that is, on our standpoint. The national accounts produce a particular picture of the economy. From other standpoints we can see a different picture.

Importantly though, different founding assumptions and standpoints not only allow us to see particular things, they also hide other things which can not be incorporated because of their focus and starting point. Thus, for instance, Resnick and Wolff argue that

> Self-interest-maximising individuals are as scarce in Marxian theory as surplus labour is in neoclassical theory. Qualifications that are central to Marxian theory - productive, unproductive [labour], relative and absolute [surplus value] - do not figure significantly, if at all, in neoclassical theory.[75]

This partialness of knowledge is particularly important where I have argued that the definition of the economy is a product of neoclassical and Keynesian economic theories. These theories (and the definitions derived from them) both hide things at the same time as they define and illuminate "the Economy". This is not without political importance. I have argued elsewhere that the definition and measure of the economy is important in constructing political economic debate, legitimising certain policies and invalidating others.[76] As Waring points out in reference to one of the things hidden (non-market production),

> if women's work as producers and reproducers is invisible as a contribution to the national accounts, women are invisible in the distribution of benefits.[77]

More will be said about the specifics of this feminist critique in the next chapter. The main point here is epistemological: all knowledge is standpoint dependent and partial (it hides at the same time as it illuminates). Resnick and Wolff use this insight to argue for a pluralist acceptance of multiple theories (and specifically for the study of Marxist theory).[78] However, in economics there is not a pluralism: there is an *official* definition of the economy. As postmodernists (and Marxists and feminists before them) recognise, power and knowledge are inseparable, and it is the official definition (the neoclassical/Keynesian definition) which structures political economy and public policy debates.

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75 Resnick, *op.cit.*, p 17.

76 See Greg Ogle (1997) "The Ghosts of Dead Economists: Marshall, Keynes and the Political Economy of National Accounting" *Policy, Organisation and Society*, Vol 14. This article traverses some of the main arguments in the first third of this thesis, but with a more explicit policy focus - although I also maintain that the production of national accounts and the way we define the economy is itself a policy issue.

77 Waring, *op.cit.*, p 77.

78 Resnick and Wolff, *op.cit.*, pp 257 - 8.

This has important ramifications for feminists, greens and socialists whose beliefs and interests are not in neoclassical and Keynesian theory - and indeed may be directly opposed to those theories. If the definition of the economy is a reification of Keynesian and neoclassical economic theories, how much should those of us who do not agree with these theories incorporate that definition of the economic into our own analysis? While abandoning the official definitions and measures may be a recipe for (further) marginalisation, my concern is that in using the official definitions, radical critiques are arguing in contexts biased against them. Just as Lyotard argued that "the rules of the game of science are immanent in that game",[79] so too the rules of economic games are immanent in the officially defined "Economy" - and they are neoclassical and Keynesian rules!

Conclusion

One part of any radical political economy then must be the development of alternative definitions (and perhaps measures) of the economy. That is the project of this thesis. However, haunted by the spectre of marginalisation and constrained by a lack of empirical data beyond the official neoclassical/Keynesian frameworks, this is no easy task. Nonetheless, having established in this chapter that the official definitions and measures are a reification of neoclassical and Keynesian theory, we can now begin to ask what "the economy" might look like if, instead of adopting a neoclassical/Keynesian framework, we adopted a view informed by feminist, green and socialist political economic concerns.

Having said that, I do not wish to imply that there is one feminist, green or socialist political position, or that the argument I will make represents a grand synthesis of all those concerns. Rather, in recognition of the plurality within these traditions and the partiality of any standpoint, I seek simply to provide the beginnings of a definition and measure of the economy which draws from these three political traditions (as well as mainstream market economics). Judged from the standpoint of any one of these traditions, my argument will no doubt seem to be less than complete, but what is lost in depth of coverage and analysis is hopefully made up for by the insights gained from an interdisciplinary and politically eclectic approach.

It should also be noted that in attempting to draw insight from these three traditions, I do not claim that there is anything inherent in feminism, green or socialist perspectives which *necessarily* suggests a unity of interests and/or perspectives. In this sense, I disagree with Salleh's standpoint of the "Other". Rather, in keeping with the epistemology outlined above, I simply aim to put forward a particular political economic argument which may be of interest and political use to those who also share (pro)feminist, green and socialist

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79 Lyotard, *op.cit.*, p 86.

concerns. More particularly, my approach will be of most relevance to those whose politics seek a fundamental transformation of the structures of society. To the extent that there is a standpoint in the thesis then, it is an eclectic politics of transforming (rather than reforming) the system(s) - exactly what the neoclassical/Keynesian frameworks of economic management are not about.

This chapter has laid the foundations for this project, firstly by demonstrating how the official definitions and measures of the economy came to be and the neoclassical/Keynesian uses to which they were put. Secondly the chapter has outlined an epistemological framework within which an alternative definition and measure might be considered.

Chapter 2: The In/visibility of Women's Work in "The Economy"

We have seen in the previous chapters that in the official national accounts "the economy" is delineated by a production boundary which is largely defined by market exchanges. I have also argued that this definition is a product of particular economic theory, but that it is only one possible way to define and measure the economy. Those whose standpoint and political commitment is different from neoclassical and Keynesian theory might well find their politics compromised by this official definition and measure. This chapter begins to consider these issues by drawing on feminist critiques of that definition.

Feminist Arguments

The feminist challenge to the national accounts definition and measure of the economy springs originally from the fact that the production boundary excludes, and thus renders invisible, much of the work and production done in subsistence production and the household. Because the goods and services produced there do not find their way into the market they are not included in contemporary national accounts, a fact of particular concern for feminists because the majority of work in those spheres is done by women.

It has not always been the case that non-market activities have been excluded from the definition of the economy. While classical political economy did not consider non-market production, wives and mothers were at least regarded as productive workers in official English censuses at the beginning of the nineteenth century. Nancy Folbre has traced the evolution of census categories in England and the US during that century showing how wives and mothers (sometimes as a separate category, at other times included with paid domestic workers) became first "unoccupied" and eventually "dependent". While this process reflects Victorian family ideology, Folbre argued that the reasons were "a mélange of theoretical, political, and practical concerns".[1] She concluded that,

> The concept of the unproductive housewife was a by-product of a new definition of productive labour that valorised participation in the market and devalorised the non-market work central to many women's lives.[2]

Crucial among this "mélange" then was economics' neoclassical moment described in the previous chapter. Indeed Folbre notes that Alfred Marshall had been a crucial player in

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1 Nancy Folbre (1991) "The Unproductive Housewife: Her Evolution in Nineteenth-Century Economic Thought" *Signs*, Vol No. 16, p 482.

2 *ibid.*, p 481.

seeing that the British census followed the German model in shifting wives to "dependents". We saw in the last chapter the significance of Marshall in national accounting history. Following Marshall, Timothy Coghlan also used the distinction between market and non-market production, between the labour of "breadwinners" and "dependents", in his pioneering work on the Australian national accounts in the late 1890s.[3]

There were of course some objections to this neoclassical market-centrism and the early years of the twentieth century saw the growth of "home economics". Much of this study was politically conservative, rationalising the confinement of working class women to the house and placating the 'new' bourgeois women who were trying to combine home duties and a restricted career.[4] However, there were also more progressive strands, leading to some attempts to measure the value of the household economy, most notably the work of Ilena Bailey (1915), Wesley Mitchell (1921) William King and L. Epstein (1930) as well as the work of Margaret Reid.[5]

It was Margaret Reid's work which provided a major conceptual breakthrough. In 1934 she published *The Economics of Household Production* articulating the "third person" criteria which provided a consistent basis for distinguishing productive activity from other non-economic activity in economies not organised for the market. The test was simply whether a given activity could be performed by a person other than the person receiving the benefit.[6] Thus cooking was a productive activity, eating was not.

Logically, if an activity can be performed by someone else, then it is theoretically possible to pay them for it: that is, there is a potential market for that good or service. For instance, it makes little sense to pay someone to watch TV for you because you will not receive the benefit. However, it is possible to pay someone to prepare food for you, or more controversially, to have sex with you. Thus these services are at least potentially marketable. This "third person" criteria has been adopted as standard in most studies which seeks to value non-market production.

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3 Lois Bryson (1996) "Revaluing the Household Economy" *Women's Studies International Forum*, Vol 19, No. 3, p 208.

4 R.W. Connell and T.H. Irving (1980) *Class Structure in Australian History*, Melbourne: Longmann Cheshire. p 204.

5 Yun-Ae Yi (1996) "Margaret G Reid: Life and Achievements" *Feminist Economics*, Vol 2, No. 3, p 18.

6 Marilyn Waring (1988) *Counting for Nothing: What Men Value and What Women Are Worth*, Wellington: Allen & Unwin. p 21. (See also footnote reference on p 272).

However, as we saw in the previous chapter, any such consideration of non-market production was irrelevant as the "Keynesian moment" cemented the market focus of the national accounts. Nonetheless, some problems were recognised. In 1947 Simon Kuznets, who had helped design and implement national accounts in the United States, argued the need for the international system to incorporate subsistence non-market production.[7] Attempts were made to include subsistence production in the national accounts of some countries in the 1950s and 1960s, but it was the push by the women's movement in the 1970s which really focused on the importance of non-market production.

Ester Boserup's foundational 1970 work, *Women's Role in Economic Development* clearly showed the key role of subsistence production in Third World economies and the pivotal role of women in those economies. She noted the inadequacy of market based accounts, stating that

> the present system of under-reporting subsistence activities not only makes the under-developed countries seem poorer than they really are ... it also makes their economic growth rate appear in a more favourable light than the facts warrant.[8]

This represented an important challenge to Western notions of development, and it was a feminist challenge in as much as Boserup showed that it was women who did most of the subsistence work. Yet her case for counting many of these women's activities was that they were part of subsistence production, not that women's household labour was productive.[9] However, this latter argument was taken up by the feminist movement. Ann Oakley's foundational work in the early 1970s was followed by a series of studies which clearly saw housework as work, as productive and as done mainly by women.[10] Nearly thirty years later, the figures still show that women do about twice as much unpaid household work as men.[11]

The arguments for including subsistence production in the measurement of the national economy had a different context to arguments about including domestic production in industrialised countries. Ultimately though, they were both about making women's work visible in the economy. Yet they have met with very different responses. National

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7 L Benería (1992) "Accounting for Women's Work: The Progress of Two Decades" *World Development*, Vol 20, No. 11, p 1548.

8 Cited by Benería, *ibid.*, p 1548.

9 *ibid.*, p 1549.

10 Baxter provides a good summary of the development of this literature. J. Baxter (1990) "Domestic Labour: Issues and Studies" *Labour and Industry*, Vol 3, No. 1.

11 Australian Bureau of Statistics (1998) *How Australians Use Their Time, 1997*, ABS. Cat No. 4153.0. p 1.

governments and international statistical agencies have been more open to including subsistence production in their national accounts than to including household production. By 1975 OECD statistician Derek Blades was able to survey some 70 countries' attempts to incorporate subsistence agricultural production into GDP. He found great variations in method and data and in the concept of production, but despite this, he supported an extension of the production boundary to include more non-market production. However, while noting that women's traditional domestic role made the division between domestic and subsistence activities unclear, he found the case for including women's domestic labour "considerably weaker" than for subsistence production.[12]

Yet, despite Blades' comments, it seems to me that the case for inclusion of household production in the official definition is just as strong as for subsistence production. Much household production, like cooking meals, washing clothes, childcare (and traditionally male household jobs like car maintenance) could be purchased on the market. As such, household production fits within the third person criteria and the SNA definition of production. The fact that this production is not exchanged in the market should not of itself exclude it. As noted in the Introduction here, values are imputed for some other non-market production. According to the ANA, these imputations are confined to,

> a small number of cases where a reasonably satisfactory basis for the valuation of the implied transaction is available, and where their exclusion could result in distortions to the accounts.[13]

However this claim is questionable. Take for instance, the imputation of a value for the production of shelter of owner-occupied houses (ie. rent). There is nothing inherent in such 'rent' to suggest that it should be imputed as production when the value of meals produced in the home is not imputed. The market value of the meal is no more or less determinable than the rental value of the house. Products similar to both could be purchased in the market, but neither *is* actually produced in the market economy. And similar distortions also arise in both cases. Rent imputations are made in the ANA because:

> if a large number of rented houses were sold to their occupiers and if estimates of imputed rent were not calculated for owner-occupied dwellings, then there would be an apparent decrease in gross domestic product without any decrease in the provision of household services.[14]

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12 D Blades (1975) *Non-monetary Activities in the National Accounts of Developing Countries*, Paris: OECD.

13 Australian Bureau of Statistics (1990) *Australian National Accounts: Concepts, Sources and Methods*, Cat No. 5216.0. Canberra: ABS. s2.13, p 5.

14 *ibid.*, s2.13, p 6.

Surely the same could be said of other household services like cooking meals. If a large number of people cooked their own meals instead of eating out, then there would be an apparent decrease in Gross Domestic Product without a decrease in the provision of services. The production boundary thus begins to look somewhat arbitrary. In terms of the consistent application of the stated definition of production, this household production should be included. Yet there has been no "feminist moment" in national accounting; no moment when the accounts were reshaped in the light of feminist concerns about the critique of the exclusion of non-market production.

The feminist critique of national accounts has been carried in various international fora, most notably with the recommendation from the UN Conference on Women in 1985, reaffirmed at Beijing in 1995, to measure and value unpaid work.[15] But it was Marilyn Waring who popularised the feminist critique of the SNA with her landmark book, *Counting for Nothing* (1988).[16] Using examples from all over the world, Waring ridiculed the system which classified as "economically inactive" women who worked long hours providing the basic necessities of life, while valuing as (welfare enhancing) 'growth' the 'work' of the men in the missile silos with their fingers on the nuclear button. The book is now in its 8th reprint and Waring has toured the world arguing her case. The central ideas and examples of the book have also been made into a video and shown on television (not a usual occurrence when talking about the national accounts!).[17]

Apart from popularising this feminist critique of national accounts, Waring's work also exposed the myths of objectivity and the 'scientific nature' of national accounts statistics. Drawing on her experience as a New Zealand parliamentarian in exchanges with national politicians and national statisticians, Waring demonstrated that the methodological and data difficulties, which were held up as being barriers to non-market accounting, were not insurmountable. Indeed, they were no more extreme than the problems which existed in cases where estimates of non-market production had been made - often by the same statisticians and agencies who argued that it was too hard.[18] Rather, Waring claimed, the problem was male power which was blind to women's work. If economics was about empirical observation, as mainstream positivist economics argued, then its failure to reflect women's reality was a damning criticism.

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15 Meg Luxton (1997) "The UN, Women, and Household Labour: Measuring and Valuing Unpaid Work" *Women's International Studies Forum*, Vol 20, No. 3. p 431.

16 Waring, *op. cit.*

17 Terre (Director) Nash (1995) *Who's Counting: Marilyn Waring on Sex, Lies and Global Economics*, National Film Board of Canada.

18 Waring, *op. cit.*, ch 4.

Yet for all Waring's importance in popularising the feminist critique and in critiquing the claimed apolitical, 'objective' nature of the national accounts, her analysis is limited by its essentialism and its conspiratorial basis. For Waring,

> two things remain constant. Those who are making the decisions are men, and those values which are excluded from this definition are those of our environment, and of women and children.[19]

These "men" (a "patriarchal conspiracy" of economists, statisticians and politicians) value war and money, as opposed to the values of women, which are apparently peace, family, community, and environment, and which appear to have little to do with concerns about money, economic stability or political power.[20] Apart from this problematic essentialism, by labelling the exclusion of non-market production simply as "patriarchal", Waring fails to consider the more specific theoretical basis of the national accounts.

Consider again the official response to the feminist critique as outlined in the SNA. The reluctance of national accountants to impute values for household production is

> explained by a combination of factors, namely the relative isolation and independence of these [household] activities from markets, the extreme difficulty of making economically meaningful estimates of their values, and the adverse effects it would have on the usefulness of the accounts for policy purposes and the analysis of markets and market disequilibria - the analysis of inflation, unemployment, etc.[21]

Elsewhere in the SNA, the concern is expressed to "prevent flows used for the analysis of market behaviour and disequilibria from being *swamped* by non-monetary values".[22] Again, as we saw in Chapter 1, the accounts are developed for use in particular market economic theories. As a consequence they tend to exclude non-market production. This is not to say that Keynesian or neoclassical economics are not patriarchal - clearly those theories are based on assumptions of what is productive which do devalue or ignore the work that women do. It is to say, however, that the picture is more complicated than Waring's analysis suggests. Indeed, by making national accountants justify their focus and the boundaries they draw, the feminist challenge has made the theoretical basis of the accounts and the definition of the economy more transparent.

Nonetheless, while the theoretical base and econometric uses of the national accounts continue to present an obstacle to the recognition of non-market production, there have

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19 Waring, *op.cit.*, p 3.

20 Waring, *op.cit.*, p 3, 77.

21 United Nations (1993) *System of National Accounts 1993*, New York: United Nations. s6.22, p 125.

22 My emphasis. *ibid.*, s1.22, p 5.

been some important changes in response to the feminist critique. While the SNA has been resistant to the changes suggested by the feminist critique, it does now at least explicitly recognise household production activities as being "productive in the economic sense" and that the production boundary it draws is a compromise.[23] Balancing this against the perceived need to maintain the integrity of the market based figures, the 1993 SNA recommended that the definition of economic activity *not* be revised to include household production. Rather the recommendation was that household production should be recorded in separate satellite accounts. However, in the Australian case, the ABS did not include the development of such satellite accounts in the timetable for implementation of the 1993 SNA changes. Satellite accounts for Australia will be produced "as data and resources permit".[24]

The failure to allocate the necessary resources suggests certain political priorities which do not hold women's work as central. But even if/where satellite accounts are developed, it should be recognised that the goal is precisely that: *satellite* accounts, which by definition are separate and peripheral. The main (Keynesian) accounts would remain intact and central to the management of the economy. Women's work would continue to be marginalised so that the historical continuity and the integrity of the accounts is preserved for economic analysis and policy making based on neoclassical and Keynesian theories.

Nonetheless, the ABS has conducted time-use surveys and made some estimates of the value of household production,[25] as have other national and multinational agencies. Most notable is the United Nations Human Development Program which found that unwaged work contributes some US$16 trillion worth of production to the world economy each year.[26] Steps have also been taken in data collection. In 1997 internationally comparable time-use surveys were conducted in a number of countries (including Australia).

Thus, while there has been no feminist moment in national accounting, these estimates and surveys (and perhaps even the 1993 SNA recommendations) do at least represent some progress in response to the feminist critique. Indeed, surveying twenty years of

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23 *ibid.*, s1.21, p 4.

24 Australian Bureau of Statistics (1997) *Implementation of Revised International Standards in the Australian National Accounts*, ABS. Information Paper Cat 5251.0. p 70.

25 Australian Bureau of Statistics (1990) *Measuring Unpaid Household Work: Issues and Experimental Estimates*, Australian Bureau of Statistics. Cat 5236.0.; Australian Bureau of Statistics (1994) *Unpaid Work and the Australian Economy*, ABS. Occasional Paper, Cat No. 5240.0.

26 UNDP (1995) *Human Development Report*, United Nations Development Program.

progress internationally in 1992, Lourdes Benería claimed that,

> conceptually at least, the battle against the invisibility of women's work has largely been won, at least among those working on the issues, the remaining difficulties appear to be mostly of a practical nature.[27]

While I suspect that this conclusion is overly optimistic with regard to the SNA, in what follows I wish to analyse some government and private attempts to measure non-market production, both in Australia and overseas. Consideration of these measures will shed light on both the magnitude of the production which is left out of official accounts, as well as the practical difficulties of measuring and valuing work which is not valued in the market.

However, while feminist concerns have incorporated a critique of the exclusion of both subsistence and household production from national accounting, for the remainder of the discussion in this thesis I wish to focus only on household production. Because of the very different contexts of the critiques, it would be difficult and confusing to deal with both subsistence and household production at once. The latter is clearly more relevant to Australia. Arguably, it is also more illuminating because the critique has had less effect. There have been many more official measures of subsistence production in national accounts than of household production. The focus on household production is also important because, as Waring notes, many of the measures of non-market subsistence production in non-Western countries still exclude much of the labour women do in those countries, because some 'subsistence' work is deemed as "housework" and therefore outside the production boundary.[28]

Thus a focus on household production will also have ramifications for the understanding of other non-market production. Indeed, for this reason (and also for stylistic ease) I tend to use the terms household production and non-market production interchangeably in this thesis, although clearly the former is only a subset of the latter - even in industrialised countries. This conflation of household and non-market production also echoes a number (though not all) of the empirical estimates discussed below.[29]

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27 Benería, *op.cit.*, p 1551.

28 Waring, *op.cit.*, p 67.

29 See for instance, Graeme D Snooks (1994) *Portrait of the Family Within the Total Economy: A Study in Long Run Dynamics, Australia 1788-1990*, Cambridge: Cambridge University Press.

Valuing Women's Work

Luisella Goldschmidt-Clermont surveyed some 120 assessments of non-market household production carried out in various countries between 1921 and 1986.[30] She classified the methods under broad headings of measurement by inputs and measurement based on outputs.

Outputs of domestic non-market production can be valued by:

- the expenditure on material inputs;
- the market value of the output; or by
- the value added, measured by
    - the price of equivalent market goods and services,
    - market enterprises producing equivalent services, or
    - an average of value added per worker in the economy or in that particular sector.[31]

In practice valuing household outputs has proved difficult and most measurements have focused on valuing the inputs into that production, especially labour. Household labour can be valued by imputing a wage for the productive work undertaken in household production. But the question then is what level of wage is to be imputed? Estimates have been made on the basis of:

- wages which would be paid to a substitute domestic worker;
- wages for a specialist substitute worker for each task undertaken;
- the wage applying in a market enterprise for performing equivalent tasks;
- the average wage for all workers in the economy generally;
- the average wage for all women workers; and
- the minimum wage.[32]

The first three of these methods are what might be called replacement cost approaches. The value is derived from what it would take to pay someone to perform the labour. The last three are opportunity cost approaches, where value is determined by the income which could be earned if the person was not engaged in non-market production. In terms of neoclassical microeconomic theory the opportunity cost is the market equilibrium price because it is the price at which market labour will be substituted for non-market labour.

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30 Goldschmidt-Clermont (1990) "Economic Measurement of Non-Market Household Activities: Is It Useful and Feasible?" *International Labour Review*, Vol 129, No. 3, pp 279 - 299.

31 Goldschmidt-Clermont's preferred valuation is the value-added method starting from the prices of market goods and services equivalent to those produced in the household. *ibid.*, p 290.

32 *ibid.*

Meredith Edwards notes that different methods of measurement reflect alternative purposes (and standpoints):

> From the point of view of the home manager, the most appropriate measure is what could be earned in paid employment [opportunity cost approach]... From the point of view of the family, the replacement cost approach would be more appropriate since this reflects what it would cost the family to replace those services.... If the purpose is to measure national income, it is most appropriate to estimate the contribution of home managers by use of the market cost approach.[33]

By market cost approach Edwards means summing the market price of household services/output produced. Yet there are further issues and choices to be considered. If the purpose is to measure household production in terms of the market, then labour inputs should be measured by wages based on average women's wages or the wages applying in the underpaid, largely feminised sectors of the market economy which approximate household labour. However, if the purpose of the measurement is to treat women's contribution to the economy equally with men's contribution, then what should be imputed is wages based on average or male wages, otherwise household labour would be devalued by the gender segregation and inequality of the market economy - a point to which I will return later.

There remains considerable dispute as to which measure is best for which purpose, but Edwards' point remains valid. The choice of valuation will depend on what questions are being asked and for what purpose. Again though, it should be emphasised that the plethora of methods and valuations which have intimidated national accountants do not represent insurmountable practical difficulties in valuing the household economy. Quite clearly, it can be valued, and if you accept the general validity of the argument for including non-market production in the measurement of the economy, then it would seem that any of the measures being debated would give a better measurement than the zero value currently placed on non-market production.[34]

Australian Estimates

The three most notable attempts to produce measurements of non-market production in Australia are the ABS estimates, Duncan Ironmonger's Input-Output model and Graeme Snooks' attempt to create a set of historical national accounts which include non-market income. Each of these will be considered in turn as they are important both in terms of

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33 Meredith Edwards "Comments on ch 2" in Duncan Ironmonger, ed (1989) *Households Work: Productive Activities, Women and Income in the Household Economy*, Sydney: Allen & Unwin. p 34.

34 As we will see in later chapters, the same arguments are made by environmentalists. See for instance, Clifford Cobb, Ted Halstead, and Jonathon Rowe (1995) "If the GDP is Up, Why is America Down?" *The Atlantic Monthly*, October, pp 59 - 77.

their methodology and findings, and also for their assumptions and limitations.

In 1987 the ABS undertook a pilot survey of time use in Sydney and calculated experimental estimates of the value of household production.[35] By comparison with later ABS surveys in 1992 and 1997, the 1987 pilot was limited in terms of its geographical and numerical base (covering 1000 households in Sydney) and its coverage of seasonal variations (the survey was conducted in a two week block in mid year).[36] However, the 1987 survey established the fundamental methods and principles for later work by the ABS and others. The activities of the household were divided into a number of categories, distinguishing between activities which were "economic production" and those which were "other" (primarily leisure, education, sleeping, eating and personal care).

The 1997 time-use survey departed from this categorisation and divided time use into four categories: necessary time (ie. necessary for physiological needs); contracted time; committed time; and free time. Contracted time broadly equates to paid work and education, while household and voluntary work is "committed" - by virtue of social or community obligations and interactions. However, as the results of the 1997 time-use survey were not published until December 1998 and little secondary work on market valuation has been published, the earlier taxonomy and estimates are more important to this thesis.

In the 1992 survey, "economic production" consisted of the following activities:

Domestic Activities

- Housework - including food and drink preparation and clean up, laundry, and other housework;
- Other Domestic Activities - including gardening, lawn and pool care, pet/animal care, home and car maintenance and improvement, household paperwork (bills etc), providing transport for other household members, and associated travel;

Child care/minding

- Of Own Children - including physical care and minding, care for sick, teaching, helping, reprimanding, playing, reading to, talking to;
- Of Other Children - including physical care and minding, care for sick, teaching, helping, reprimanding, playing, reading to, talking to, and associated travel;

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35 ABS, 1994, *op.cit.*

36 The 1997 survey was designed to cover about 3,000 households with 4 survey periods thoughout the year. Australian Bureau of Statistics (1996) "In Tune: Time Use and Events" No. 1.

Purchasing of goods and services (and associated travel)
Volunteer and Community Work, including

- Helping/caring for sick, frail or disabled relatives;
- Helping/caring for sick, frail or disabled other people;
- Community activities;
- Helping/doing favours for others;
- Associated travel.[37]

The 1987 and subsequent ABS estimates use both replacement cost and opportunity cost methods in valuing household labour. Replacement cost of household labour was estimated using the individual household function replacement method (ie. different/specialist wages for each task), and also using the cost for one housekeeper doing all productive work. Opportunity cost estimates of the value of the forgone earnings was calculated based on both award rates and average wage rates. The variety of estimates is justified by the absence of a universally accepted methodology, but the opportunity cost approaches in particular have been criticised. The ABS acknowledges the unreality of the opportunity cost assumption because in practice there is little ability to substitute paid and unpaid work at the margin. Snooks also argues that the ABS figures overestimate the value of household production by imputing a value for household labour much above the wage level which would be attained for that type of work in the market.[38] Yet, as we will see below, Snooks' own methodology which attempts to redress this 'overestimation' is also problematic.

The ABS's estimates are summarised in Table 2.1 below.[39] Clearly from the ABS figures, the size of non-market production in Australia is enormous, ranging up to 69% of GDP. However, as Ironmonger has noted, this comparison of unpaid work to GDP is not an "apples to apples" comparison. GDP includes estimates of the value of capital services in production while the ABS statistics value only household *labour*. These household labour statistics should then be compared not to GDP, but to the figure for "wages, salaries and supplements" in the national accounts. By this comparison, for 1992 the value of household *work* is 40% more than the value of paid work.[40] Thus while the ABS statistics provide valuable data and some official recognition of the value of unpaid

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37 ABS, 1994, *op.cit.*, p 3.

38 Snooks, *op.cit.*, p 197.

39 Australian Bureau of Statistics (1994) *Unpaid Work and the Australian Economy*, ABS. Occasional Paper, Cat No. 5240.0. p 24. These values of unpaid work as a proportion of GDP were higher than most surveys in other countries for each method of valuation.

40 Duncan Ironmonger (1994) "The Value of Care and Nurture Provided by Unpaid Household Work" *Family Matters*, Vol No. 37, p 192.

work, their use is limited because they remain stand alone estimates of labour only - a simple case of adding x amount of labour value to GDP.

Table 2.1: Value of Unpaid Work in the Household Sector 1987, 1992

Estimation Method	Wage Rate	Value of Unpaid House-hold Work ($billion)	Value of Volunteer and Comm'ty Work ($billion)	Total Value of Unpaid Work ($billion)	Value of Unpaid Work as % of GDP
Opportunity Cost 1987	Award Wage	143.3	8.2	**151.5**	58%
Opportunity Cost 1987	Average Wage	153.9	8.9	**162.8**	62%
Opportunity Cost 1992	Average Wage (Gross)	251.0	21.3	**272.3**	69%
Individual Function Replacement Cost 1987	Award Wage	129.0	8.3	**137.3**	52%
Individual Function Replacement Cost 1992	Person - market	209.7	18.1	**227.8**	58%
Housekeeper Replacement Cost 1987	Market Rate	123.1	8.3	**131.4**	50%
Housekeeper Replacement Cost 1992	Person - market	195.5	18.1	**213.6**	54%

Ironmonger's estimates of Gross Household Product (GHP) use a more integrated approach which treats household production similarly to market production and includes values for the contribution of household capital - the services obtained from the use of equipment, vehicles, land and dwellings.[41] This allows for a more "apples to apples" comparison with market production. But rather than a standard production account, Ironmonger's methodology derives from his earlier work with Evelyn Sonius and uses Input-Output tables for household production.[42] Like other input-output tables, these are based on value-added output measures structured around industry groups. The household is treated as an aggregate of eight different industry groups: cooking/washing up, housework, childcare, shopping, education/civic duties, gardening, other repairs and maintenance, other domestic work.

Using data from ABS household expenditure surveys Ironmonger and Sonius allocate these household purchases to various activities where those "intermediate" goods and

41 Duncan Ironmonger (1996) "Counting Outputs, Capital Inputs and Caring Labour: Estimating Gross Household Product" *Feminist Economics*, Vol 2, No. 3, pp 37 - 64.

42 Duncan Ironmonger and Evelyn Sonius, "Household Productive Activities" in Ironmonger (1989), *op.cit.*, ch 2. In the ANA, Input-Output accounts are in effect a disaggregation of the production accounts (although methodology and data sources also vary). Input-Output accounts show not just value added final production (as in GDP), but also the intermediate flows of goods and services between sectors. Australian Bureau of Statistics (1990) *Australian National Accounts: Concepts, Sources and Methods*, Cat No. 5216.0. Canberra: ABS, p 10.

services are necessary to produce a particular household good or service. For instance, the value of cooking/washing up is given by the sum of the household labour involved, plus a share of expenditure on kitchenware, household appliances, non-durables (including raw food), electricity, gas, furniture, textiles, clothing, insurance and housing costs - all the material costs which went into the production of the food in the household. Thus the value of each productive household activity is made up of all inputs, not just the value of labour.[43]

In his early estimates, Ironmonger valued household labour by opportunity cost, using the average hourly wages: women's household labour was valued by the average female wage in the market economy, men's household labour was valued using average male wages.[44] In his more recent work household labour is a residual value derived indirectly by deducting from the final market value of household production the costs of material and imputed capital inputs. The residual value of unpaid labour in 1992 was $283 billion; meaning that the average rate was $14.25 per hour. This was above the ABS estimates using replacement costs but was close to the highest ABS figure based on opportunity costs. The value of household capital was an estimated $58 billion, consisting of $25 billion from household equipment and $33 billion from owner-occupied housing. As this $33 billion was already imputed in the official GDP, Ironmonger deducts it from GDP to give a Gross Market Product (GMP). In 1992 GMP was $362 billion and GHP was $341 billion. The Gross Economic Product (the size of the economy) was $703 billion, almost twice as much as GDP.[45]

The Input-Output approach has been used in a number of overseas estimates including in Canada, Finland, Sweden and Norway,[46] and Ironmonger's work remains one of the main efforts at an integrated valuation of the "total economy" in Australia.

Graeme Snooks has taken a very different approach in constructing historical accounts which include the household economy. In a Herculean effort he developed national accounts measuring Gross Community Income for the years 1788 to 1990. These accounts are built around a division of the economy into three sectors: the market, government and household sectors,[47] with household labour valued by an opportunity

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43 Ironmonger, 1989, *op.cit.* pp 28 - 29.

44 *ibid.*, p 28.

45 Ironmonger, 1996, *op.cit.*

46 *ibid.*, p 51.

47 These sectors are defined functionally rather than by location of production. Thus paid activities which take place in the household are counted as part of the market sector. All non-market (and

cost approach - on the grounds that this best reflects the basis of economic decision making. [48]

In estimating this opportunity cost, household work is divided into the labour of primary household workers (ie. full time household workers and women with paid jobs) and secondary household labourers whose services consist of "the part-time work done in the household by males (net of those who have retired) and single people." Because primary household labourers are largely female this labour is valued by the average wage for adult females. Secondary household labour (approximately 30% of all unpaid household work) is valued by the market wage rates for adult males.[49] Finally, Snooks assumes a 'lesser efficiency' in full time household workers due to a lack of "market discipline". He thus takes the market average working week as the standard hours of primary household labour.[50]

Like Ironmonger, and following traditional neoclassical economics, Snooks sees production as a combination of labour, capital and land, and so adds value not just for household labour, but also for returns to land and household capital. These are valued using government bond rates to estimate the opportunity cost of expenditure on this household capital.[51] The result is a set of extended national accounts where the household sector contributed an average of 35.8% of Gross Community Income (GCI). The government accounted for an average of 32.4% while the market made up 31.8%. Of course the relative size of these sectors changed over time. The household sector for instance contributed only 20% in 1788, but reached a high point during the Great Depression contributing 45% of GCI in 1931. It is precisely these long run dynamics which Snooks wishes to analyse.[52]

These figures for household production are lower than Ironmonger's measures (relative to the rest of the economy) in part because Snooks' imputations for returns to household

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non-government) production, including volunteer and community work which takes place outside the houesehold, is included as part of household production. Snooks, *op.cit.*, p 162.

48 *ibid.*, p 159.

49 *ibid.*, pp 188 - 197.

50 This adjustment is not made for workers who work in both the market and the household as the time pressure this creates "must be regarded as at least as effective as market discipline". *ibid.*, p 189.

51 Sharp and Donath have argued that these historical estimates of household capital are one of the most useful contributions of Snooks' research. Rhonda Sharp and Susan Donath (1995) "Book Review of Graeme D Snooks, Portrait of the Family Within the Total Economy" *Feminist Economics*, Vol 1, No. 3, pp 128 - 134.

52 Snooks, *op.cit.*, p 18, 166-7.

capital apply only to fixed capital (white goods, lawn mowers, kitchen utensils, etc),[53] and not to "variable capital" like household fuels, cleaning agents and the like which are incorporated into Ironmonger's household expenditure based estimates.[54] The specific assumptions Snooks makes about household labour also decrease his estimate of household production. Indeed, while the historical scope of these accounts is impressive and some of the data useful, the value of the estimates for a feminist informed economics is undermined by these assumptions. For instance, the assumption of the relative inefficiency of household work which leads to Snooks cutting the length of the household working week to match the market, is never fully argued. The primary/secondary household worker distinction also leads to some bizarre conclusions, as Sharp and Donath point out:

> According to this [Snooks'] reasoning, an hour's ironing done by a married woman (even it if yields a higher output) is less valuable than an hour's ironing done by a married man. National income would increase if men took over some of the housework.[55]

Snooks' justification for his methodology is an attempt to avoid what he sees as the overestimations in other valuations which "include allowances for human capital that the average married woman does not possess".[56] While this market centred approach shows no appreciation of the training and skills (human capital) which married women bring to household labour and which are not recognised by the market (eg. emotional labour - see Chapters 4 and 5 here), it is nonetheless instructive. Snooks' assumptions may be problematic from a feminist perspective, but using different wage rates which recognise the gendered inequality of the paid labour and unpaid labour may well provide a closer approximation of the *market* value of household production, precisely because there is a gender wage gap and systemic sexism in the market. I will return to this contradiction in the next chapter. However, Snooks' uncritical acceptance of neoclassical economic explanations, the looseness of his assumptions about time use, and the subsequent underestimation of non-market production all make his accounts less useful than Ironmonger's survey-based accounts.

Market Centrism

These Australian estimates have their counterparts overseas. Robert Eisner provides a survey of six attempts to integrate non-market production into "extended" national

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53 The items are listed in Snooks, *op.cit.*, p 225.

54 Ironmonger, 1989, *op.cit.*, pp 28 - 29.

55 Sharp, *op.cit.*, p 133.

56 Snooks, *op.cit.*, p 199.

accounts for the United States.[57] The aggregate measures of "the economy" in these accounts ranged from Ruggles and Ruggles' Integrated Economic Accounts which hovered between 1.12 (1969) and 1.15 (1980) times the size of official GNP, to Jorgenson and Fraumeni's estimates (including imputations for leisure) which went up to 4.74 times the size of GNP in 1981. Eisner's own production estimates from the Total Income System of Accounts was 1.5 times the official figure.[58]

The details of these accounts are well summarised by Eisner and need not be commented on here, except to say that, like the Australian estimates discussed above, this accounting is clearly an integration of non-market production *into* the market economy and accounting. These extended accounts all share the neoclassical definition of production, and rather than present alternative definitions and measures of the economy, these authors seek simply to extend the coverage of the orthodox accounts beyond their market limitations.[59] They do not measure non-market production on its own terms, or attempt to measure the total economy by a combination of non-market and market standards.

Having made the market the yardstick of the whole economy, it is not surprising that when these authors go on to model this total economy, they find that the market provides its central dynamic. Ironmonger hypothesises a counter-cyclical interaction between the household and market economy:

> When the market is booming with a strong demand for labour, the household will do less work at home. When the market is recessed the household will do more work.[60]

Similarly Snooks concludes,

> rapid long run growth requires market leadership, but ... [d]uring these periods of slower [market] growth, therefore, the household sector plays a compensating role by expanding more rapidly than the market sector.[61]

In both cases household production reacts to or compensates for market changes. But, given the relative size of the household and government sectors, particularly in Snooks' analysis, it is not evident *a priori* that the market should be the dominant sector. Certainly, postmodern political economists like Resnick and Wolff argue against an

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57 Robert Eisner (1988) "Extended Accounts for National Income and Product" *Journal of Economic Literature*, Vol 26, No. December, pp 1611 - 84.

58 *ibid.*, p 1664, 1673.

59 Anwar Shaikh and E. Ahmet Tonak (1994) *Measuring the Wealth of Nations: The Political Economy of National Accounts*, New York: Cambridge University Press. pp 9-18.

60 Ironmonger, *op.cit.*, p 10.

61 Snooks, *op.cit.*, p 30.

analysis of any one central dynamic,[62] while Elson points out that the assumption that the "reproductive economy" (non-market production in this case) accommodates changes introduced by macroeconomic market forces is equivalent to assuming an unlimited supply of female labour (because women do most of this accommodating work).[63] Such an analysis takes for granted rather than values women's work.

Positing the market as *the* dynamic sector to which the household sector adapts is thus a limited and gender-blind analysis. This is further evident in the empirical work of Janeen Baxter and her co-authors which shows that many women choose part-time work or no paid work because of a priority for childcare. Rather than the market determining their non-market production, for these women the market economy (or at least participation in or exchange with it) is adapted to the household economy (and to a gender division of labour).[64] Further, Gibson-Graham's description of changes in the Australian coal industry in the 1980s shows how the labour market positioning of male workers (coalminers) can also be conditioned by domestic arrangements, in that case by the (sometimes) successful resistance of household production relations to market forced changes.[65] At the macro-level too, feminist scholarship has pointed to the impact of gendered employment patterns on cycles of economic growth.[66] Diane Elson, for instance, has argued that structural adjustment programs not only have gendered effects, but that gender relations also variously constitute either prerequisites of, or barriers to, the achievement of macroeconomic stabilisation policies.[67]

In all these feminist economic analyses gender becomes both a causal factor and a category of analysis. By contrast, the extended accounts discussed above are focused on the production of the household as a unit and its contribution and relation to the economy as a whole. They are not focused on gender, or work processes within the home. This is not simply a matter of focus with these valuations of non-market production being about macroeconomic relationships and gender relations being about microeconomic relations. We saw in the previous chapter that the definition of production and "the Economy" rests on neoclassical (microeconomic) notions of utility. Also we have seen above that the

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62 Stephen Resnick and Richard Wolff (1987) *Economics: Marxian Versus Neoclassical*, Baltimore: John Hopkins University Press.

63 Cited in Nilüfer Çagatay, Diane Elson, and Caren Grown (1995) "Introduction" *World Development*, Vol 23, No. 11, p 1829.

64 Baxter, *op.cit.*

65 Gibson-Graham, *op.cit.*, ch 9.

66 Çagatay, *op.cit.*

67 Diane Elson (1995) "Male Bias in Macro-economics: The Case of Structural Adjustment" in Diane Elson (ed), *Male Bias in the Development Process*, Manchester: Manchester University Press.

methodology of valuation of household production using opportunity costs and returns to capital rests on traditional microeconomic assumptions about economic behaviour. These microeconomic assumptions are thus embedded in the macroeconomic analysis, and the extended accounts are thus about market dynamics at *both* levels and *not* specifically about gender or work relations at all.

In this context the fact that most of the writers developing these extended accounts are men becomes more notable, and we begin to see that while valuing the household economy fits with the broad agenda of feminist economics,[68] it may not necessarily be "feminist" - in the sense of being about recognising women's work and putting it at the centre of the analysis.[69] While all the authors of the extended accounts discussed here recognise that women do the majority of non-market production, their agendas are primarily about improving mainstream economic analysis. For instance, Eisner argues for consideration of the total economy on the grounds that it gives a better basis for international comparisons and allows for an analysis of the substitution of non-market production by market production (and vice-versa) in cyclical fluctuations and long term structural change.[70] Similarly Snooks is primarily concerned with the interactions between the three sectors of the economy and particularly between the market and household sectors. Again, the stated purpose of including the household economy is to understand better the long term dynamics of the whole economy.[71]

Of course these are not necessarily contradictory to feminist aims. Lourdes Benería, for instance, cites the recognition of the market/non-market substitution effect and the potential for a more rigorous analysis of cyclical changes among the uses of accounting for non-market production.[72] But in her feminist reading these are coupled with a gender analysis which can also use new statistics to look at things like productivity changes in unpaid labour, the effects of cyclical change on household production and on men's and women's work, and the social costs of shifts of production from one sector to another particularly in structural adjustment. In summary, a (gender-sensitive) measuring of

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68 Martha MacDonald defines three central areas of interest to feminist economics, the first of which is the measurement and valuation of women's unpaid work. The other two are intra-household issues (distribution and power relations) and gendered processes in the paid labour market. Martha MacDonald (1995) "Feminist Economics: From Theory to Research" *Canadian Journal of Economics*, Vol 28, No. 1, pp 159 - 176.

69 Again, (as noted in Chapter 1) the definition of "feminist" here is about making women the object of analysis. Çagatay *et al* argue "Gender is the primary category of analysis used by feminist economics, as the individual is the primary category used by neoclassical economists, and class is the one used by classical/Marxian economists." Çagatay, *op.cit.*, pp 1827 - 8.

70 Eisner, *op.cit.*, p 1613.

71 Snooks, *op.cit.*, p 20.

72 Benería, *op.cit.*

unpaid work could,

> provide more systematic and accurate information for family and welfare policy and it should prepare the terrain for gender-sensitive macroeconomic models and policy making.[73]

Along with making women's work more visible, it is this potential for economic modelling and policy making which is the attraction for feminists like Benería who have pushed for such extended accounting. Thus, just as I argued in Chapter 1 that the development of the national accounts was driven by their usefulness for neoclassical and Keynesian economic management, so too a feminist economics, playing the same game, requires statistics which reflect its concern with women's work and therefore non-market production.

Conclusion

This chapter has highlighted the most basic feminist critique of the national accounts definition and measure of the economy, namely, that it ignores and renders invisible non-market production (which is predominantly done by women). I have also argued that the third person criteria can be used to define production beyond the market, and that the existence of a number of imputations in the national accounts make problematic the claim that valuations for non-market transactions cannot be made. Yet despite more than two decades of feminist activism to have women's economic contribution made visible, and despite some changes at the official level, the national accounts remain bounded by the market (or more accurately, by market economic theory). The accounts continue to ignore something which has been estimated as half of the total production in the economy.

Given this, it seems clear that any feminist informed definition and measure of the economy should, at a minimum, incorporate non-market production. This seems to me to be a bottom line for any such definition and measure, and the extended accounts discussed here provide a methodology for doing this. But, as we have seen, to create extended accounts and build feminist informed macroeconomic models requires a considerable degree of market centrism, both in methodology, and most obviously, in the goal of placing dollar values on non-market production. However, such market-centrism comes at a price. The next chapter will consider a range of problems with the extended accounts and market based measures discussed here.

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73 *ibid.*, p 1844.

Chapter 3: Feminist Debates about Accounting for Women's Work

After outlining the feminist critique of national accounting - that it ignores much of the work women do - the previous chapter considered various attempts to extend national accounting to include non-market production. The Australian estimates produced by the Australian Bureau of Statistics, Duncan Ironmonger and Graeme Snooks fitted a broad feminist agenda of making women's work visible, but they were at heart market based measures. These measures simply imposed a market logic onto the non-market production which they considered.

This chapter draws from a range of feminist critiques which suggest that importing market frameworks into an analysis of non-market production hides as much as it reveals about that production and about women's work in particular. From the basic unit of analysis (the household), to the neoclassical 'rationality' and time use categories assumed in the measurement, feminists have challenged the appropriateness of almost all aspects of the project of giving a dollar value to women's household work. These critiques argue that household work should be considered on its own terms and not squeezed into market frameworks. This chapter considers these feminist critiques in order to begin what is a much larger argument about the use of market frameworks to define and measure the economy.

Problems with the Extended Accounts

The problem with using market based measures to value household production begins with the choice of the household as the unit of analysis. As was noted Chapter 1, the choice of the household as a unit of analysis is crucial in setting the production boundary - and therefore in defining (final) GDP production, and thus "the economy". *Final* demand is defined in the national accounts by the purchase (from the market) of goods and services *by the household.*

However, if we accept the logic that non-market production is production (and therefore that the market is not the production boundary line[1]), then there is no reason to view the

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1 Of course, as we saw in Chapter 2, the imputations which exist in the national accounts make problematic the claim that the market is the delimiter of production. Again, see Australian Bureau of Statistics (1990) *Australian National Accounts: Concepts, Sources and Methods*, Cat No. 5216.0. Canberra: ABS.; and Marilyn Waring (1988) *Counting for Nothing: What Men Value and What Women Are Worth*, Wellington: Allen & Unwin. ch 4.

household as a unit. Goods and services are clearly produced and exchanged/transferred within the household. Thus, the logic of the extended accounts should posit the individual, not the household, as the final consumer. Yet in the extended accounts discussed in the previous chapter, the analysis is still in terms of the household as the unit of measurement.[2] In this sense, they posit the household as a unit of final production *and* consumption.

While this analysis may be adequate for single person households, feminists have long questioned the assumed altruism and equality which underlies the notion of the family household as a unit. Often the analysis of the household as a unit is based on a notion of different but equal adult partners making consensual decisions for the collective household good. Such assumptions have been prevalent in different schools of household studies literature from Parsons' functionalist analysis of the 1960s to more recent liberal analyses,[3] including most notably Gary Becker's work and the "New Household Economics" based in neoclassical theory.[4] But the assumption of harmonious households cuts across an understanding of relations within the household. Indeed, far from domestic harmony (and joint utility functions), radical and dual systems feminists have posited fundamentally antagonistic relations within households,[5] while 'French' and postmodern feminists have pointed to the hierarchical nature of gender difference more generally.[6]

The decision to use the household rather than the individual as the unit of measurement implies that the commonalities between members of a household are of more importance than the differences - including gender differences. Almost by definition then, focusing on the household as a unit hides the gender and work relations within households of more than one person, and is particularly problematic for any feminist-informed analysis seeking to illuminate the nature of women's work.[7] Once we look into the gender and

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2 Ironmonger makes the explicit in the opening paragraph of his book: Duncan Ironmonger, ed (1989) *Households Work: Productive Activities, Women and Income in the Household Economy*, Sydney: Allen & Unwin, 1989. p 1.

3 See J. Baxter (1990) "Domestic Labour: Issues and Studies" *Labour and Industry*, Vol 3, No. 1.

4 Lourdes Benería (1995) "Toward a Greater Integration of Gender in Economics" *World Development*, Vol 23, No. 11, p 1840. See also, Paula England (1993) "The Separative Self: Androcentric Bias in Neoclassical Assumptions" in Marianne A Ferber and Julie A Nelson (ed), *Beyond Economic Man: Feminist Theory and Economics*, Chicago: University of Chicago Press. pp 47 - 48.

5 Christine Delphy and Diana Leonard (1992) *Familiar Exploitation: A New Analysis of Marriage in Contemporary Societies*, Cambridge: Polity Press; Sylvia Walby (1989) "Theorising Patriarchy" *Sociology*, Vol 23, No. 2, pp 213 - 234.

6 Chris Beasley (1999) *What is Feminism, Anyway? Understanding Contemporary Feminist Thought*, Sydney: Allen & Unwin. ch 6 & 7.

7 In a sense this is a parallel argument to Resnick and Wolff's analysis that, because of its starting point, neoclassical economics can not identify antagonistic class relations. Stephen Resnick and

work relations within the household we see more problems in applying market frameworks, the first of which is in the imputation of market wages as a measure of the value of household labour.

I have already referred several times to the problems caused by the gender inequality in the (paid) labour market and the market's devaluation of women's work. Using the market as a yardstick with which to estimate household labour therefore results in a devaluation of women's non-market production. The dilemma for feminist economists is that they can either value women's labour as equal to men's work, and thereby seemingly sacrifice the accuracy of some of their economic tools (and possibly their professional credibility) by not imputing appropriate market values; or they can impute values closer to the market values, and thereby compromise their feminist political objectives by devaluing women's work.

However, this is only the beginning of the problems with imputing a market wage value for household labour. Such imputations assume - and perhaps more importantly *suggest* - that work in non-market production follows the same logic as market production. Time use and work value decisions are constructed as reflecting the same economic rationality posited by neoclassical economic theory: individual preference, opportunity cost, and utility maximisation by autonomous individuals. But there is a well established feminist critique of the 'rational' basis of neoclassical economics.[8] Not only can the application of such neoclassical rationality legitimise the status quo (if men earn on average more in the labour market than women, then it is rational to specialise with men working in the market and women in the home), but the whole subject of the neoclassical theory, the "rational economic man" is precisely that: a man. The autonomy and calculation based on material gain relate to men's participation in the public/market sphere rather than the 'encumbrances' of emotional ties, attachments and responsibilities in the private sphere.[9] As such, neoclassical economics fails to take account of gender, culture, institutions and power - what Folbre calls structures of constraint.[10]

Richard Wolff (1987) *Economics: Marxian Versus Neoclassical*, Baltimore: John Hopkins University Press. ch 1.

8 See Marianne A Ferber and Julie A Nelson, ed (1993) *Beyond Economic Man: Feminist Theory and Economics*, Chicago: University of Chicago Press, 1993. Prue Hyman (1992) "The Use of Economic Orthodoxy to Justify Inequality: A Feminist Critique" in Rosemary Du Plessis and Phillida Bunkle (ed), *Feminist Voices: Women's Studies Texts for Aotearoa/New Zealand*, Auckland: Oxford University Press. A good summary of the argument is also contained in the first chapter of Nancy Folbre (1993) *Who Pays for the Kids? Gender and the Structures of Constraint*, London: Routledge.

9 On this point, see England, *op.cit.*; and Nancy Fraser (1989) *Unruly Practices: Power, Discourse and Gender in Contemporary Social Theory*, Cambridge: Polity Press.

10 Folbre, *op.cit.*

However, even if neoclassical economic 'rationality' was not gendered, there would still be a question concerning valuing women's household work by the market measure, precisely because it *is non-market* production. The product of the household is not sold on the market and there is no competition or profit motive to enforce market behaviours. Similarly, household labour is not bought and sold in a labour market and market 'wage' values do not apply. As Delphy notes, unlike the fixed wage contract in capitalist production,

> [t]he services which a married woman provides ... are not paid according to a fixed scale. Her keep does not depend on her work, but on the wealth and goodwill of her husband. For the same work (for example, the rearing of three children) the wife of a business executive receives as much as ten times the benefits received by the wife of a manual worker. On the other hand, for the same benefits, a wife may furnish very different quantities and kinds of services, depending on the needs of her husband.[11]

In short, the benefits which wives receive have no relation to the services which they provide, and so any valuation which is derived from a national accounts style (imputed) income is bound to be both inaccurate (as to the 'value') and misleading as to the labour processes which it purports to reflect.

Similar arguments can also be made in relation to the extended accounts imputations for household capital. The idea of imputing a value for a flow of services for household capital may balance the comparison between market and non-market sectors in some senses. However, such imputations are based on the assumption that durable "capital" goods in other sectors generate a flow of profits analogous to that in the market sector. Market capital is invested precisely because it will produce that value flow. Yet it is not at all clear that decisions about household capital are made on the same basis, or that there is an analogous flow of profit. "Institutionalist" economists going back to Thorstein Veblen have noted the importance of social/cultural considerations and conspicuous consumption in determining the purchases of household goods.[12] Purchases might be made to flaunt wealth rather than to increase household production. This would suggest that at least some of the expenditure which Ironmonger and Snooks count as household capital investment should be regarded as consumption rather than investment.

However, even if such expenditure is regarded unproblematically as 'investment' in 'household capital', there is a further question over the basis of costing any imputed flow of 'profits'. There are crucial differences in the processes of capital formation in the

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11 Delphy, "The Main Enemy" reprinted in Christine Delphy (1984) *Close to Home: A Materialist Analysis of Women's Oppression*, London: Hutchinson. p 70.

12 Robert Heilbroner (1972) *The Worldly Philosophers*, New York: Touchstone. pp 220 - 226.

household and market sectors. Hugh Stretton and Lionel Orchard argue that, in theory, the market provides for competitive bidding for capital funds. Those who can make the most productive (profitable) use of capital can therefore pay the highest price it. In the long term, this competition ensures an equilibrium market rate for capital returns.[13]

Stretton and Orchard acknowledge that there are many real life market failures and inefficiencies, but the more important point is that this market process and rationality *cannot* be true of household capital. It cannot be true because the productive use which a household can make of its capital (house, garden, car etc) is *not* linked to the ability to pay for the capital. The household's ability to save up or to borrow capital funds depends on what its members inherit or earn from paid employment, *not* on their potential productivity using the domestic capital. The market discipline which theoretically ensures the equilibrium return on capital is absent.[14] Again, the household economy is seen to have different dynamics to the market and any valuation which rests on assumptions of market behaviour is questionable.

Time Based Alternatives

These problems with market valuation of the household economy have led some authors to argue that labour time, not money, should be the basis of comparison between market and household sectors. Lois Bryson argues that time, like money, is a scarce resource with an opportunity cost. But time is a more useful medium for general evaluation because,

> in contemporary western societies, time is measured in a standardised manner (24 hours per day) that can be applied equally and simultaneously to paid and unpaid effort.[15]

Bryson goes on to note that the 1992 ABS Time Use statistics show that Australians spend almost 18 billion hours a year doing unpaid work, by comparison with the 16 billion hours in paid labour. This statistic reverses the relationship of the value of paid work to unpaid work. When based on monetary valuations the contribution (as opposed to the actual hours) of paid/market labour is the greater. Of course, such time-use analyses could be criticised because they measure only time use and ignore the contribution of capital; they measure labour not production.

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13 Hugh Stretton and Lionel Orchard (1994) *Public Goods, Public Enterprise, Public Choice: Theoretical Foundations of the Contemporary Attack on Government*, New York: St Martin's Press. p 191.

14 *ibid.*

15 Lois Bryson (1996) "Revaluing the Household Economy" *Women's Studies International Forum*, Vol 19, No. 3, p 212.

However, in an exercise not dissimilar to the extended accounts discussed earlier, Jonathon Gershuny has constructed economic accounts for the United Kingdom which include "capital", but which are based on time rather than money.[16] Gershuny's accounts are input-output accounts based on the notion of chains of provision. To supply any good or service, Gershuny argues, a number of different production processes are possible utilising different amounts of paid and unpaid labour occurring in the formal or informal (household, community sector, and illegal) economy. Most final consumption then rests on a combination of paid and unpaid labour, which Gershuny accounts for in terms of time spent in each stage in the production process. Thus shelter/clothing is produced with:

- time use in housework;
- goods including rent, rates, power, fuel, furniture, cleaning materials, etc;
- marketed services including repairs, insurance, decoration;
- and non-market services like sewerage, refuse disposal, fire and welfare services.

Rather than giving a market money value for each of these categories of goods, Gershuny translates the money expenditure statistics into time units based on the employment time spent producing those goods and services in the economy. The result is a time-based system of accounts which he has calculated for the United Kingdom in 1961 and 1983. An abridged version of his summary table is produced in Table 3.1 below.[17]

From Gershuny's figures, we can see, for instance, that the production of shelter in 1983 accounted for almost a quarter of total economic time and required 73 minutes per average day of time outside employment, 46 minutes of paid work within Britain, and 16 minutes of work imported from foreign countries. This was a substantial decrease from the amount of time required both outside the market (93 minutes) and in paid work (61 minutes) to produce shelter in 1961.

These time statistics can show not only increases in productivity over time, (as in the housing example above), they can also show changes in the way goods and services are produced in terms of the links and inter-relatedness between various sectors, including between market and non-market sectors. For instance, in 1961 paid work contributed 42.4% of the production of food (etc) in the household, whereas by 1983 it contributed only 25.8%. This resulted from time in food related non-market work remaining fairly steady over the period, while the market time required declined.

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16 Jonathon Gershuny (1989) "Time, Technology and the Informal Economy" in R. E. Pahl (ed), *On Work: Historical, Comparative and Theoretical Approaches*, Oxford: Basil Blackwell.

17 Adapted from Table 26.2, *ibid.*

Table 3.1 A Time-Based System of Accounts (UK)

	Time Employ	Outside ment	Time Employ	in ment	All Paid Work in UK	Foreign Work from Imports
	Non-work	Work	White Collar	Manual		
	Minutes		*per*	*average*	*day*	
1961						
Shelter, house maintenance	0	93	25	36	61	14
Food, sleep etc	659	68	16	24	40	10
Home leisure, child care	268	12	7	10	16	4
Shopping, travel	0	41	6	7	13	1
Out of home leisure	45	0	8	3	11	2
Medicine, education	16	0	20	7	27	2
Background services[18]	0	0	15	14	29	1
Exports	0	0	13	25	38	6
All time use	**989**	**215**	**110**	**126**	**236**	**40**
1983						
Shelter, house maintenance	0	73	25	21	46	16
Food, sleep etc	647	63	8	8	16	6
Home leisure, child care	284	17	7	5	12	3
Shopping, travel	0	70	5	4	9	2
Out of home leisure	70	0	9	2	11	2
Medicine, education	22	0	30	5	36	3
Background services	0	0	17	7	24	1
Exports	0	0	19	21	39	10
All time use	**1023**	**224**	**120**	**73**	**193**	**43**

Gershuny's results may provide the basis for important empirical observations about the total economy. But in terms of the project of defining and measuring the economy, the more general point is that, because the basis is time rather than market values, the figures do not import the market's devaluation of women's work. Nor do the figures immediately suggest the neoclassical 'rationality' implicit in the monetary imputations in the extended accounts. As an innovative approach to the definition and measure of the economy, this time-based measure avoids many of the problems discussed above and thus has a number of advantages over traditional market measures.

However, despite this, there are a number of problems with such time based measures. I noted above the dilemma for a feminist economics that feminist concerns compromise market analysis and market valuations compromise feminist analysis. This dilemma arises because discipline/subject matter of 'economics' is so closely linked to the market. To be seen to be "doing economics" (ie. understanding economic/market behaviour - as opposed to making political/sociological estimates of women's importance or place in society) means to some extent compromising the feminist perspective which would question the

18 Background services here refers to activities which support the chain of provisioning indirectly: eg, law and order, public administration, defence. *ibid.*, p 591.

market's valuation of women's work. The same argument applies to Gershuny's time based statistics: they may be less politically compromised than market valuations, but they will be seen as marginal to mainstream economics which will continue to be built around market measures and analysis. In this sense the dilemmas for a feminist economics are postponed rather than solved by the time based measures.

I will return to the problem of marginalisation in a later chapter, but even apart from the marginalisation problem there are a range of other problems. Like the market value measures, Gershuny's accounting does not focus on gender relations and is built around the problematic "household as unit". While it may be possible to avoid some of these problems by re-jigging the time-based approach, the real problem is that the production/time nexus itself tends to hide rather than illuminate the nature of women's work in the home. This can be seen when we consider a number of (related) issues about women's time-usage in the home.

Household Time Use and the Politics of Measurement

The first problem of the production/time nexus is that housework does not divide easily into individual tasks which are performed sequentially. More likely, particularly where childcare is involved, two or more tasks will be done at the same time. In a standard sort of example, a mother may be childminding while engaged in other household chores, but she may also be ironing or sweeping while dinner is cooking or clothes are churning in the washing machine. Similarly, household work may be combined with distinctly leisure activities (having a drink while dinner cooks) or time spent childminding may consist of watching television or playing cards. Clearly any time use surveys which classified activities according to one activity (as the early ABS surveys did) both disguise the nature of much household work and risks either under or overestimating time spent.

Asking questions about simultaneous activities ("main" and "other" activities, as the ABS 1997 Time Use survey did), and weighting hours spent in household labour to discount non-productive time, begins to address this problem.[19] Similarly, output based measures like Ironmonger's approach, might be preferable because the outputs - both child minding and meal preparation for instance - are valued independently of the value of any imputed labour input (simultaneous or otherwise).[20] But these are technical solutions to data collection problems. They do not address the more fundamental question of the

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19 A method for weighting simultaneous activities is outlined in Ross Williams and Susan Donath (1993) *Simultaneous Uses of Time in Household Production*, Department of Economics, University of Melbourne. Research Paper 370.

20 Duncan Ironmonger (1996) "Counting Outputs, Capital Inputs and Caring Labour: Estimating Gross Household Product" *Feminist Economics*, Vol 2, No. 3, p 51.

appropriateness of the time/task model in analysing household work. This problem is particularly apparent when we expand the focus on women's household work to ask about *responsibility* for this work.

Doing the work, whether at home or in market work, is different from taking responsibility for seeing that it is done. By focussing largely on the physical work done in the household, time use surveys ignore firstly the managerial and secondly the timeless nature of the work. While specific management functions like budgeting and paying bills can be captured in time use surveys, the surveys do not include the decision making concerning what needs to be done, what is to be bought, cooked etc. This planning and decision making function may not take time as a separate activity, but it is important.

Jacqueline Goodnow cites studies which suggest that what women wish for is that someone else takes over a complete task - noticing that it needs to be done and doing it or seeing that it is done, rather than simply helping when asked and working to instruction.[21] Noticing that something needs to be done is not an activity which will appear in a time use survey, but it is still part of household management. Both the noticing and the responsibility for much of this work falls to women, as evidenced by the fact that where children's self-care tasks were not done, they usually reverted back to the mother.[22] This responsibility for household work means that time shares don't fully measure household equality, as time spent on tasks may be equivalent without the workload being equivalent.

The problem of lack of recording of household management is a particular problem for the money based extended accounts. In the replacement cost valuations, the household functions for which money values are imputed have no managerial components and there are no managerial wages included in the imputations. The opportunity cost approach similarly underestimates women's work. While women perform management functions in most homes, they are less likely to do so in the paid work force. Thus the wages deemed to be forgone (the opportunity cost) are less than the value of the unpaid labour which does include managerial responsibility.

The problem is not simply that women's household labour *is not* shown in time use surveys. The problem is that it *cannot* be shown. Women's household management cannot be shown because, on the one hand, management activities (noticing and/or knowing what needs to be done and asking someone to do it, or seeing that it has been

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21 Goodnow in Ironmonger, *op.cit.*, p 40.

22 *ibid.*, p 50.

done) take no discernible time. On the other hand, the responsibility is always there - there is no clock-off time.

This permanent responsibility is only one aspect of the never-ending nature of housework. Childcare is another major area. Specific tasks of childcare (cooking, bathing etc) can be captured in time use surveys, and many tasks (minding, entertaining) can be done in conjunction with other household tasks. However the more general task of child care involves things which can not be effectively captured by simple time use: being there, being responsible, being available or knowing where children are and where they need to be got to (and how).

This never-endingness of the household work day, coupled with the fact that two or more household tasks may be done at the same time, or household tasks may be mixed with leisure tasks, make the measuring of household work by time use problematic. Again, this critique applies to both time-based and money value measures. But it should also be recognised that these issues are not simply problems of data collection. These issues are a fundamental epistemological/political challenge to the principle that household labour should be measured in the way other labour is measured. Household labour is not like labour in the market where there is a clear start and finish point. Applying measures such as time spent on work hides the nature of the work women do in the home, while using market valuations heightens the problem by distorting the value of that work.

These problems can also be seen in relations to women's "emotional labour" in the household, but the issue of emotional labour raises a number of other questions about the difference of women's work and will be dealt with at length in Chapters 4 and 5. Nevertheless, enough has been said about the problems of time-use measurement of household labour to suggest serious dilemmas for a definition and measure of the economy based on labour time.

There is also a further argument which raises somewhat different, but important critiques of both time based measures and market value imputations for household labour. This argument relates to the difference in rewards between paid and unpaid work. Again this has a gender dimension. Even if men and women spend about the same amount of total time in work, which Bryson argues they do, men spend the greatest proportion of their work time in paid work, while women spend most work time in unpaid work. This makes for a considerable difference in outcome.[23]

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23 Bryson, *op.cit.*, pp 215 - 216.

Bryson argues that women's primary responsibility for childcare, the subsequent broken career paths, lost superannuation and other occupational welfare benefits, as well as the lesser status of unpaid work, amount to a considerable loss for women in relation to men. She quotes an Australian study by Beggs and Chapman which suggests that women with an average level of education and two children earn only 44% of their potential lifetime earnings in paid work.[24] Thus Bryson concludes that:

> the issue is, therefore, *not just a matter of equitable distribution of total time* spent on paid and unpaid work, but *also* of the rewards and satisfaction that are afforded. Effectively, these are issues of equal citizenship.[25]

In terms of the definition and measurement of the economy, Anne Jennings goes further. Jennings argues that the money form of market production is vital to accounting for/understanding production. Equally importantly, she draws on arguments like those above to suggest that money is a male prerogative. Money is important and men have greater access to it. The idea that money is simply a veil for production and barter values, Jennings argues, comes from Adam Smith and has been incorporated into neoclassical economics. By contrast Marx's classic formulation of production process as M-C-M' (capitalists start with money, buy commodities and produce new commodities which will return more money) suggests that the money form (and the increase in its quantity) is the purpose of production. Jennings goes on to argue that the undervaluing of women's work in the market and the "male breadwinner"/family wage nexus makes women's access to money not symmetrical with work/production. Thus she concludes that,

> barter models that banish money (because it is a veil) can recognise women's economic contributions, but the absence of money in such models obscures familial power relationships linked to the asymmetry of money, cultural dissociations of women/domestic labour from money, and women's lesser access to money.[26]

For a feminist informed economics, the recognition of the importance of money as an asymmetrical and deeply gendered form of exchange, raises important questions about the appropriateness of imputing money equivalents for non-market production. Again, the market valuations are seen to hide as much as they reveal about the economy. But this critique of barter models also applies to time-based measures which similarly ignore the importance of the money form of production. Thus, even if technical solutions could be found which overcame the problems of time measurement of household labour and the market (under)valuation of women's work, the idea of estimating a market equivalent value for non-market production would still be problematic.

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24 Quoted in Bryson, *ibid.*

25 Emphasis added. *ibid.*, p 216.

26 A L Jennings (1994) "Toward a Feminist Expansion of Macroeconomics: Money Matters" *Journal of Economic Issues*, Vol 28, No. 2, p 560.

What I am criticising here is the application of market principles to non-market production - an approach which Marilyn Waring describes as "conservatively reformist".[27] This is in contrast to the more radical demand that non-market production should be considered on its own terms. This "reformist" label is useful here because, carrying as it does reminders of older debates within socialism of reform vs revolution and wider debates within feminism over the usefulness of "the master's tools", the term highlights what is at stake in the arguments. What is at issue is more than just a political demand (to change the SNA production boundary); it is the whole understanding of society and the political program to change it. The 'reformist' critique is an appeal for women's labour to be included within the capitalist value system, the other is an appeal for a political economy separate to or beyond the existing system (capitalism and/or patriarchy - however defined).

Although I will refer again to these fundamental revolution/reform strategy debates, I do not intend to trace the debates within either socialism or feminism, other than to note that the longevity of the debate, and the fact that the questions are constantly reposited in new ways suggests to me that the issues are not easily resolved with reference to historical fact or theoretical authority. Indeed, I think they are unresolvable in any generalised, final sense. However, more than simply being "reformist" (or perhaps linked to it), it should also be clear that the extension of market definitions and measures is a particularly liberal reform. It is a liberal reform both because it centres the market, and because it is ultimately an appeal for inclusion in the existing structure, rather than an argument for structural change or "difference". In other fields such "equal opportunity" approaches are clearly identified with liberal feminism and so I think the label appropriate.[28]

Labelling the types of definitions and measures discussed in the previous chapter as liberal/reformist does not amount to a total rejection of such approaches and I will return to them in later chapters. It does, however, suggest that the extended accounts approaches do not exhaust the feminist possibilities and critiques of the definition and measurement of the economy. Indeed, similar debates have arisen in other political economies, and I will trace briefly the feminist debates about Marxian definitions of the economy. These socialist feminist debates are important in their own right as feminist debates about the definition and measure of the economy. But in the context of this thesis which is focused on critiques of more mainstream measures, the socialist feminist debates are also important because they parallel the liberal feminist debates in their history and structure.

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27 Waring, *op.cit.*, p 231.

28 Of course socialist feminist approaches have also been branded "equality feminism" by those seeking to focus and celebrate gender difference. Socialist feminism will be discussed separately here. For equality and difference feminisms, see for instance Ariel Salleh (1997) *Ecofeminism as Politics: Nature, Marx and the Postmodern*, London: Zed Books.

These debates therefore shed further light on feminist approaches to defining and measuring the economy.

Socialist Feminist Parallels

We saw in Chapter 1 that Marxism and neoclassical approaches to "the economy" more or less parted company last century. But in the 1970s feminists mounted the same challenges to Marxian definitions and measures as they did to the official measures. These challenges to the absence of non-market production in the Marxian paradigm initiated what came to be known as the domestic labour debate.

Domestic Labour Debate

The domestic labour debate is perhaps best described as a cluster of different arguments which aimed to understand the material basis of women's oppression as arising from women's contribution to capital accumulation. By showing that capitalism benefited from women's unpaid work in the home, these feminists hoped to show that women had a fundamental role within the socialist struggle. It is not necessary to retrace all the arguments of the domestic labour debate here, but some of the central propositions are relevant.

The crux of the debate was the value of labour power. Marx had argued that the value of labour power was determined by the labour time necessary for its production, and consequently reproduction. Women's domestic labour was part of the labour which reproduced male labour power. Wives provided the domestic services which enabled men to front up at the factory gates each day, and they raised the children who ensured the reproduction of labour power over generations. But in order to prove that women's domestic labour was exploited by capital, it was necessary to show that the cost to capital was less than the value actually produced by domestic labour: that is, that domestic labour created more value than that portion of the male (family) wage which went to maintaining the domestic labourer.[29] The result was that the debate got bogged down in complex mathematical models in which,

> surplus value is transferred from one sector of the economy to another, figures about what would be most cost effective for capital are pulled out of the air and incomparable things are compared.[30]

These concerns over the arbitrary nature of the costings, and particularly the incomparability of things, clearly paralleled the debates I have reviewed over the official

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29 Carol Johnson (1984) "Some Problems and Developments in Marxist Feminist Theory" (ed), *All Her Labours 1: Working It Out*, Sydney: Hale & Ironmonger. p 127.

30 Delphy, 1992, *op.cit.*, p 51.

definition and measures. But the attempts to measure the (Marxian) value of household labour also led to long debates about whether household labour was productive in the Marxian sense, and whether it *could* produce value and/or contribute to capitalist surplus value.[31] Molyneux also pointed out that the formulation only applied to family households, whereas the cheapest labour (casual migrant and single workers) was often reproduced without the benefit of female domestic labour.[32] The actual arguments here are not as important as the fact that the debate happened at all. At heart it was a debate about whether and how to extend traditional (in this case, Marxian) definitions and measures to non-market production - again paralleling the impulse to extend the SNA definitions.

By the early 1980s the domestic labour debate was largely exhausted. The Marxian labour value model proved too difficult to apply to domestic labour,[33] and the attempt to show capitalism's exploitation of women's unpaid labour was largely deemed unworkable. Similarly the attempt to reduce patriarchy to capitalism was shown (not just in the domestic labour debate) to be problematic. Not only was it unproven that domestic labour and gender inequality benefited capital or was a product of capitalism, but the questions being asked were suspect from a feminist perspective. The domestic labour debate generally did not examine the specific nature and extent of domestic work - only being interested in those aspects relevant to the reproduction of labour power. Similarly the debate never questioned the basis of the sexual division of labour - why it was that it was almost always women who were responsible for domestic labour. When feminists began asking these questions they generally abandoned the domestic labour debate, looking instead for patriarchy's material basis in the sexual division of labour, the segmentation and discrimination in the paid work force, and/or in women's reproductive role.[34]

Thus what we have in the domestic labour debate is a parallel to the debates over the official definition and measure: a critique of the absence of the work that women (primarily) do, and an attempt to extend the existing framework to incorporate that work.

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31 M. Coulson, B. Maga, and H. Wainwright (1975) "The Housewife and Her Labour Under Capitalism - A Critique" *New Left Review*, Vol 89, No. January-February; J. Gardiner (1975) "Women's Domestic Labour" *New Left Review*, Vol 89, No. January-February; W. Seccombe (1974) "Housework Under Capitalism" *New Left Review*, Vol 83, No. January-February.

32 M. Molyneux (1979) "Beyond the Domestic Labour Debate" *New Left Review*, Vol 116, July-August, p 11.

33 I can't resist quoting Delphy and Leonard again on the complexity of the debate: "the remarkable, contradictory and paradoxical thing about the whole interchange was that while it was going on (and still today) everyone knew it was of great importance and that passions surrounded it, but equally, almost no one understood what the heck it was actually about. Most of the literature is unreadably abstruse." Delphy, 1992, *op.cit.*, p 51.

34 A good summary of this post-domestic labour debate literature is in J. Baxter (1990) "Domestic Labour: Issues and Studies" *Labour and Industry*, Vol 3, No. 1.

Yet, like the national accounts based critiques, there were problems with the "add women and stir" extension. Much of the domestic labour debate attempted to define household production in terms of capitalism rather than on its own terms. However, there were some exceptions. In parts of the domestic labour debate and in some scholarship coming out of it there was an attempt to treat household work, if not on its own terms, then at least with recognition of the specific and different dynamics involved. This was most notable in the work of Christine Delphy and later "dual systems" theorists, and later again in the post-modern Marxist accounts of Harriet Fraad, Stephen Resnick and Richard Wolff.

Post Domestic Labour Debate Formulations

I have already quoted Delphy on the inappropriateness of valuing women's household labour by reference to a capitalist wage, but she also challenged the Marxian argument that domestic labour was not productive. In analysing French farming families Delphy showed that women's work was unpaid regardless of whether it was applied to market production or to use in the home. For women there was a continuum of labour rather than a logical break between domestic production and market production. Thus she concluded that "the domestic services provided by wives are no different from other so-called productive goods and services produced and consumed in the family."[35] Similarly, Sylvia Walby argued that the categorisation of domestic labour as "reproduction" was flawed because all the tasks typically designated as reproduction - from food production to childcare or sexual and emotional servicing - could be performed in a way conventionally recognised as production.[36]

While these may appear to be arguments about the 'sameness' of women's work (and therefore against not treating domestic labour on its own terms), in fact they both argue against a capitalist centred definition of work/production. Delphy's continuum of women's work breaks with the traditional paid/unpaid dichotomy which posits the market as the defining feature of work. Similarly, the dismissal of the notion of 'reproduction' is a dismissal of an assumption that the system which is 'reproduced' is capitalism. Instead of capitalist centred definitions, these dual systems theorists posited a separate mode of production where gender was central and men, rather than capital, exploited women.[37]

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35 Delphy, "The Main Enemy" *op.cit.* Quote from p 63.

36 Sylvia Walby (1990) *Theorising Patriarchy*, Oxford: Basil Blackwell. p 62.

37 This formulation of a dual system is different from other dual systems analysis which equates class/capitalism with "the economy" and gender/patriarchy with something else, for example, psychology. I have also chosen to discuss Delphy and Walby's work here rather than the work of Heidi Hartmann whose name is synonymous with dual systems analysis because Hartmann's foundational work, "The Unhappy Marriage of Marxism and Feminism" does not analyse production in the home in any detail. Nonetheless, the overall dual systems approach of Delphy and Hartmann is similar and the controversy over the "Unhappy Marriage" will be discussed below. See Heidi Hartmann (1981) "The Unhappy Marriage of Marxism and Feminism" in Lydia Sargent

In Delphy's early formulations this domestic mode of production was built around the marriage 'contract' which constituted women as a class in a production relation where men owned the household. [38] In later works the domestic mode of production included the production, consumption, and circulation of goods, and the transmission of (male) property from generation to generation.[39] However, Delphy's arguments were severely criticised by many writers, and Marxist feminists in particular, for the sloppy use of Marxist terms and the generalisation of marriage practices across cultures.[40] Even Stevi Jackson's sympathetic reading suggests that there is an ambivalence in Delphy's work as to whether it is women or simply wives who constitute a class.[41] Similarly, Delphy's use of the term "mode of production" was criticised as being inconsistent with the Marxian notion of a material base of oppression giving rise to definite historical epochs (eg. feudalism) and particular laws of motion of society. In this schema there could be only one mode of production, and it was capitalism.[42]

The concept of the mode of production is important because in some senses it defines the realm of the "economic". However, the concept itself is contested within Marxism,[43] and in her most recent formulation, Delphy (with Diana Leonard) relegate the term "domestic mode of production".[44] Instead Delphy and Leonard focus on family relations and argue that in male-headed households, men are exempt from some domestic labour, have priority in household consumption and have advantages in the labour market. Perhaps more importantly, Delphy and Leonard argue that men's position as head of the family constitutes ownership of the labour which takes place within the household. As will be discussed later in the next chapter, the definition of this labour has been expanded to include emotional and cultural labour, but the result remains a "direct personal system of individual men's appropriation of individual women's labour in marriage".[45]

(ed), *Women and Revolution: A Discussion of The Unhappy Marriage of Marxism and Feminism*, London: Pluto Press.

38 See "The Main Enemy" *op.cit.* The concept of women as a class was well established with the French radical feminism to which Delphy belonged, and is quite different from the sex-class category of Shulamith Firestone or other British or American radical feminists who linked class to biology or reproduction. Stevi Jackson (1996) *Christine Delphy*, London: Sage. p 92.

39 See Delphy's "Introduction to the Collection" in Delphy, 1984, *op.cit.*, p 18.

40 Molyneux, *op.cit.*, p 7.

41 Jackson, *op.cit.*, pp 111-114.

42 Molyneux, *op.cit.*, p 17.

43 Cohen has noted a variety of meanings of "mode of production" in Marx's own work, only one of which was the grand historical epoch/material base of production. G.A. Cohen (1978) *Karl Marx's Theory of History: A Defence*, London: Oxford Univeristy Press. p 82.

44 Delphy, 1992, *op.cit.*

45 *ibid.*, p 67.

Delphy and Leonard's 'new' model is still based on the existence and universality of the male headed household and on a *system* where appropriation takes place beyond and regardless of the particular household - where women help neighbours, or where divorced women raise children. As the conclusion of *Familiar Exploitation* makes clear, there is no voluntaristic escape from exploitation:

> Marriage is a relationship between a man and woman who because they are men and women ... are unequal ... Individual heterosexual couples can not get out of this. But nor can single mothers escape patriarchy: they are often poor and their situation is always difficult. Nor can lesbians escape heterosexuality: their day-to-day lives and their sexual practice are at least partially structured by it.[46]

While the universalism of this system and its erasure of differences within and between households is politically problematic, later dual systems approaches have paid more attention to such difference. In contrast to an overarching domestic mode of production (the base of patriarchy), Walby posits exploitative relations within the household as one of six related, but relatively autonomous, structures which define patriarchy. The other five structures are: patriarchal relations in paid work, in the state, in sexuality, in cultural institutions, and patriarchal coercion/male violence. Within each of these structures there are sets of patriarchal practices and any concrete situation will embody the effects of these as well as of capitalism and racism.[47]

The focus on production relations has an important advantage in terms of defining "the economy" because it constitutes a much narrower definition of the *economic* than a conception of an overarching mode of production. In Delphy and Leonard's model, factors like compulsory heterosexuality, segregation of waged work, and state policies and actions all form part of the mode of production. These factors are therefore seen as a part of "the economy". While it is important to recognise the relationship of these and other factors to "the economy", the category of "economy" soon becomes merged with everything else and impossible to define. By contrast, Walby recognises that these factors help reproduce patriarchal exploitation in domestic labour, but they are different from that labour. The domestic economy (like the market economy) can be defined (and measured) separately while still recognising the social construction of the category and the extra-economic relations implicit in it.

However, while Walby's focus on relations of production provides a more useful starting point in defining the household economy, her analysis is limited by positing the product of household production as being labour power. A wife's domestic labour produces the

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46 *ibid.*, p 266.

47 Walby, 1989, *op.cit.*

husband's labour power which he sells to an employer as if it were his own.[48] This takes a step away from considering household production on its own terms. While in Delphy's post-domestic labour debate formulation, domestic production, ownership and exploitation relate to the production of final goods and services in the household, for Walby the ownership and value of household production revolves around the sale of labour power. This makes capitalism the source of value, and therefore suffers the same problems of the domestic labour debate in measuring Marxian *value,* and in analysing household production where the husband's labour does not exchange in the capitalist market.

Chris Kynaston, who seeks to support and popularise Walby's formulation, avoids the problems highlighted above by arguing that there is more to patriarchal exploitation than just the sale of labour power. Kynaston's "patriarchal mode of production" is seen as,

> a set of social relations in which men systematically appropriate the labour of women and, in so doing, are able to secure for themselves an overall standard of living which is significantly higher than that of women.[49]

The "social relations" here are wider than simply production relations, but the conception of a patriarchal mode of production is narrower than the historical epoch mode of production.[50] Kynaston also explicitly sees the sharing of housework and the alleviation of women's double work load as having potential to shatter patriarchal exploitation. Although sceptical of the extent of changes in many non-traditional households and acknowledging the limitations of the existing alternatives to patriarchal exploitation, she nevertheless concludes that in single parent or single person households "women stand defiantly outside of the patriarchal mode of production".[51] Thus, there is an acknowledgment that patriarchal production is not the totality of non-market production - an important point to which I will return later.

Overall then, there are clearly differences in the dual systems formulations of Delphy, Walby and Kynaston. I have highlighted the differences over the scope of the patriarchal mode of production (and therefore the "economic"), and differences over the nature and base of patriarchal exploitation. However, these differences should not disguise a number of similarities which have important implications for a feminist critique of the definition

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48 Sylvia Walby (1986) *Patriarchy at Work: Patriarchal and Capitalist Relations in Employment*, Cambridge: Polity Press. p 53.

49 Chris Kynaston (1996) "The Everyday Exploitation of Women: Housework and the Patriarchal Mode of Production" *Women's Studies International Forum*, Vol 19, No. 3, p 225.

50 *ibid.*, p 225.

51 *ibid.*, p 232.

and measurement of the economy. As noted above, all these dual systems theories see the fundamental dynamic of household production as a gender dynamic. Unlike the domestic labour debate from which they evolved, they identify men (either individually or as a group), not capital, as the exploiters. Implicit in this claim is that valuing women's household labour according to a capitalist market obscures, rather than highlights, the different social relations and dynamics involved.

Moreover, the analysis that household production is *not* capitalist or market production, nor reducible to it, and the explicit theorisation of dual systems, both suggest the impossibility of any attempt to define "the economy" as a singular unit. This applies equally to the attempt of the domestic labour debate and the extended accounts noted in the last chapter. "The economy" is two distinct entities, and if it were to be measured, then it would require two separate measures, one relating to capitalist production, the other to patriarchal production within the household.

While such a conclusion is important in terms of defining and measuring the economy, it should be noted that such dual systems theories were controversial when first proposed within feminism in the 1980s and have generally fallen from favour. Partly this is a result of the more general critique of "patriarchy as system",[52] itself informed by the wider postmodern theoretical turn. In particular, Foucault's theory of power as being local and plural, rather than the structural "power over" posited by systemic analysis, has been influential. Of course Foucault has not gone unchallenged within feminism, [53] but the dual systems approaches were also seen as problematic by those committed to a systemic analysis - ironically because the analysis was not universal enough!

Iris Young argued that capitalism and patriarchy could not be considered as separate systems because women's marginalisation and secondary position in the labour market was an essential and fundamental characteristic of capitalism. If patriarchy and capitalism were manifest in identical social and economic structures they belong to one system, not two.[54] Gloria Joseph also challenged the dual systems' notion of the unity of women under patriarchy by pointing out that racism means that Black women in America have more in common with Black men than with white women, and that Black men do not

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52 Ann Curthoys, "A Short History of Feminism, 1970 - 1984" reprinted in Ann Curthoys (1988) *For and Against Feminism*, Sydney: Allen & Unwin. pp 90 - 92.

53 See for instance, Caroline Ramazanoglu, ed (1993) *Up Against Foucault: Explorations of Some Tensions Between Foucault and Feminism*, London: Routledge, 1993.

54 Iris Young (1981) "Beyond the Unhappy Marriage: A Critique of the Dual Systems Theory" in Lydia Sargent (ed), *Women and Revolution: A Discussion of the Unhappy Marriage of Marxism and Feminism*, London: Pluto Press. p 47.

have dominance over white women as the notion of a universal patriarchy would suggest.[55]

These arguments were enormously important in the decline of the dual systems approach, and (given the epistemological framework outlined in Chapter 1) I do not particularly want to defend the dual systems formulation here. Rather, I want to draw from dual systems theory, what I see as important implications for the definition and measurement of the economy. I have already noted the implicit critique of any attempt to get a singular analysis and summary measure of the economy. This critique is important, as is the attempt to focus on gender as a category of analysis, even if the latter was limited in that it was only ever a focus in one of the dual systems.

While these arguments have their parallels in mainstream debates, what is particularly important in these Marxian theories is the notion that social relations - whether gender or production relations - define work, in the sense of distinguishing one type of work from another. As noted earlier, Delphy argues that it is these social relations (not the market) which defines women's work as unpaid. In fact, as will be seen in the next chapter, it is the social relations which define women's work *as work*. These insights remain important even if the specific dual systems formulation is abandoned. Indeed, such insights also inform the post-modern Marxist attempts to consider women's domestic work in the economy. This approach was first articulated by Fraad, Resnick and Wolff and, although controversial, has been influential particularly among the scholars grouped around the *Rethinking Marxism* journal.[56]

Like the dual systems approaches, Fraad, Resnick and Wolff recognise that production in traditional male headed households is characterised by antagonistic production relations. However, they theorise these as class rather than gender relations. Fraad, Resnick and Wolff argue that the fundamentals of any class process are the production and appropriation of surplus labour. In traditional households, women perform surplus labour beyond their own consumption needs and this surplus is appropriated by the husband in the form of use-values. More specifically, they argue that the traditional household relationship in America is a feudal form of relationship.

The producer of surplus on the medieval European manor often delivered his/her

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55 Gloria Joseph (1981) "The Incompatible Menage a Trois: Marxism, Feminism and Racism" in Lydia Sargent (ed), *Women and Revolution: A Discussion of The Unhappy Marriage of Marxism and Feminism*, London: Pluto Press.

56 The analysis and critique is set out in Harriet Fraad, Stephen Resnick, and Richard Wolff (1994) "For Every Knight in Shining Armor, There's a Castle Waiting to be Cleaned" in Harriet Fraad, Stephen Resnick, and Richard Wolff (ed), *Bringing It All Back Home: Class, Gender and Power in the Modern Household*, London: Pluto Press.

> surplus labor (or its products) directly to the lord of the manor, much as the wife delivers her surplus to her husband. Ties of religion, fealty, loyalty, obligation, tradition, and force bound serf and lord much as the parallel marital oaths, ideology, tradition, religion, and power binds husbands and wives in the sort of household we are analysing here.[57]

While the terminology of feudalism may be confusing and has been criticised,[58] these "ties" sound very much like the factors constituting the patriarchal production relations in the dual system models. However the theoretical formulation is quite different. Rather than coming together to form a 'system' (a construction of a metanarrative), Fraad, Resnick and Wolff insist that the social relations in the household (as elsewhere) are overdetermined. Thus,

> one aspect of a women's life in a household may be her participation in the feudal kind of class process and/or other class processes. Another aspect will likely be her participation in power processes: having various kinds of power or control exerted over her behaviour by father and/or husband and exerting other kinds of control over children and others. Still another aspect will be her participation in ... gender processes ... None of these processes or aspects dominates, outranks or is secondary to the other.[59]

Gender here refers to *ideological* processes involving "the creation and dissemination of particular concepts of what male and female mean".[60] This is a radical departure from the dual systems analyses which saw gender as being an economic category. In Fraad, Resnick and Wolff it appears that "the economy" is about class processes while gender is about something else (ideology). This analysis has been criticised for creating a hierarchy where the material exploitation (class) is ultimately more important than gender, and also for ignoring other important power relations.[61] Fraad, Resnick and Wolff's formulation is also problematic because it repeats the problems noted earlier, that of seeing class (and capitalism) as being theoretically or potentially gender/race blind. Relatedly, Jenny Cameron notes that their analysis sees the "sexed body" as neutral, that is, that gender exists outside of the household, rather than being 'produced' by the performance of domestic labour under particular household relations - a theme I will return to in Chapters 4 and 5.[62]

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57 *ibid.*, p 7.

58 See for instance, the comments from Stephanie Coontz and Julie Matthaei in Harriet Fraad, Stephen Resnick, and Richard Wolff (1994) *Bringing It All Back Home: Class, Gender and Power in the Modern Household*, London: Pluto Press.

59 *ibid.*, p 81.

60 *ibid.*

61 This is explicit in Matthaei's, and implicit in Nancy Folbre and Heidi Hartmann's comments in Fraad, *ibid.*

62 Jenny Cameron (1999) "Throwing a Dishcloth into the Works: Troubling Theories of Domestic Labour" *Rethinking Marxism*, Vol 9, No. 2, pp 33 - 35.

However, while the narrowness of Fraad, Resnick and Wolff's articulation of production relations may be problematic, its importance is the focus on production relations which highlights different types of household production, as well as the differences between market and non-market production. Alongside traditional/feudal households, there are single adult households, and egalitarian "communist" households. According to Fraad, Resnick and Wolff, single adult households exhibit ancient class processes because the labourers appropriate their own surplus, while the latter is referred to as a communist class process because all adult members collectively produce, control and distribute their own surplus.[63]

This focus on the different production and accumulation processes in feudal, communist and ancient households, and the differences from capitalist class processes, provides another critique of attempts to define the economy by imposing a singular logic across the total economy. Of course, it also provides a critique of the dual systems approaches which seek just two logics - capitalist and patriarchal. But for both postmodern Marxist and dual systems approaches, domestic production is not capitalist market production and should not be analysed and measured as such.

However, both dual systems and post-modern Marxist approaches can themselves be criticised for importing market based definitions and measures/methodologies into the analysis of non-market production - albeit at a more generalised, abstract level. All the Marxian models discussed above are production based definitions of the economy. Some of these models stretch the market based definition of production, but production, and the ownership/accumulation of product, is the basis of their definition of "the economic". While the dual systems approaches argue that there are two economic systems in operation - capitalism and patriarchy - with their own separate dynamics, both systems are defined in the same way. The same processes (production, alienation, ownership, appropriation etc) are seen to operate in each economy even if the dynamics and outcomes of those processes are quite different. Similarly, Fraad, Resnick and Wolff's class processes are about production, ownership and appropriation defined in relatively orthodox Marxist terms (although they are not applied to capitalist production). Even the choice of names of the various types of households seems to concede that households cannot contain different class processes from those which have been analysed in the historic market economics.

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63 This is not to say that such communist households are egalitarian or free of tension as other processes may make the household very inequitable, but the narrowly defined class process remains communist. See Fraad, *For Every Knight, op.cit.*, p 38.

Conclusion

Beyond simply being parallel debates then, in this use of market-based definitions the postmodern Marxist and dual systems approaches also share important assumptions and goals with the attempts (discussed in the previous chapter) to apply market measures to non-market production. They all use production based definitions of "the economy", where "production" means the creation of goods or services which can be separated (alienated) from the producer and exchanged in some fashion. In short, production defined by the "third person" criteria. They all assume extended, but basically unchanged, definitions of work and economy. Their focus is on the activities of women which fit the standard (market) definition and therefore should be included in the measure of production. These approaches assume and legitimise a male/market-centricity, and we have seen that feminists have raised a variety of problems with such market definitions and measures. Not surprisingly then, for feminist economists there is not an accepted, unproblematic definition and measure of the economy in either socialist or mainstream economic traditions.

However, in analysing the problems of these definition and measures, we can see, not just the problems in simply extended existing approaches, but how an alternative approach might begin. Whereas the liberal and socialist feminist critiques discussed above began with the absence of non-market production from the established framework and attempted to fit women's work into that framework, an alternative approach might begin not from an established definition, but by asking what women do - either for money or unpaid - and building a definition and measure of the economy from that work. As we will see in the next chapter, when we ask what (in all its variety and similarity) it is that women do, we get a very different picture of "the economy".

But first, a word from our sponsor.[64]

64 Sponsor - in an ecological sense of the term.

Interlude: Environmental Parallels

We have seen in the previous chapters that feminists have critiqued the national accounts definition and measure of the economy for excluding non-market production. Feminists have also critiqued the attempt to expand the definition and measure to incorporate that production. These feminist concerns are the main focus of my thesis, but in this short "environmental interlude" I want to briefly suggest that there are parallel arguments in green political economy. Environmentalists have argued that the definition of the economy is too narrow because it does not take account of environmental limitations on, and costs of, economic activity. Again, the market focus of the accounts is problematic as environmental factors only enter the accounts when they enter the market economy. GDP apparently exists (or is assumed to exist) in an environmental vacuum.

As this is an "interlude" and not a chapter, I do not examine the environmental critiques in great depth. While they are important concerns in their own right and add to the overall critique of national accounting, I particularly want to focus on the parallels between green and feminist critiques. These parallels, firstly critiquing the boundaries of the official accounts, but also questioning the appropriateness of monetary valuation, provide a different standpoint from which to consider the feminist debates. They also open the possibility of expanding and strengthening the feminist critiques through the incorporation of ecological issues. Indeed, the environmental critique of the national accounts' conflation of production ("the economy") with welfare, offers valuable insights for a feminist informed economics by focusing attention on the importance, but also the limitations, of the neoclassical definition of production.

The environmental critique of national accounts can be considered under two headings: the treatment of defensive expenditures and environmental costs; and, the concern for sustainability.

Defensive Expenditures and Environmental Costs

The concern over defensive expenditures and environmental costs arises from the fact that there are no negative entries in national accounts. Any economic activity which results in a market exchange makes a positive contribution to GDP and economic growth. Thus, to use a popular example, the infamous voyage of the Exxon Valdez was, in Marilyn Waring's words, "one of the most productive voyages ever".[1] The production and

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1 Speaking in Terre (Director) Nash (1995) "Who's Counting: Marilyn Waring on Sex, Lies and Global Economics." National Film Board of Canada.

transport of the oil it was carrying was counted as part of GDP, but when it ran aground spilling that oil and creating an ecological disaster, that too added to economic growth as the clean-up, insurance and legal wrangles were also counted as productive activities (because they created marketed services). The general problem here is that polluting and environmental damaging activities are counted twice in GDP, once as the original production and again in the costs of environmental restoration - in a sense making them more 'valuable' than environmentally friendly activities.

However, if these activities are counted twice, other costs of economic activity are not counted at all. Thus for instance, if swamps are drained and wetlands are lost, there is no accounting for the loss of the wetlands' natural 'production' of fish, birds and purified water.[2] Values for more abstract phenomena like loss of biodiversity or habitat are even further from a national accounting which is both anthropocentric and market-centric. The bottom line of the accounts is that whatever happens, "the GDP spirals ever upward by adding everything, making no distinction between costs and benefits, well-being or decline".[3]

In response to this one directional accounting, green critics have been concerned to identify and account for both defensive expenditures and environmental costs. These are different but related concepts. Defensive expenditures have been defined as,

> outlays with which the attempt is made to eliminate, mitigate, neutralise or anticipate and avoid damages and deterioration that the economic process .... has caused to living, working and environmental conditions.[4]

Classic examples of such defensive expenditures are police and security (which "defend" against crime), spending on pollution control/mitigation (eg. sewerage treatment or water filters), and health and transport costs associated with industrialisation and urbanisation. These expenditures are welfare enhancing in that the consumers and/or the public are made better off by that expenditure. But because they only prevent or repair social and environmental costs they do not represent an overall increase in welfare. By contrast, environmental costs like loss of wetlands, arable land, habitat, or air and water quality are outright losses of welfare. Yet they are not necessarily associated with dollar costs because, unlike defensive expenditures, the loss is not necessarily directly related to actual expenditures.

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2 Clifford Cobb, Ted Halstead, and Jonathon Rowe (1995) *The Genuine Progress Indicator: Summary of Data and Methodology*, Redefining Progress. p 27.

3 *ibid.*, p 8.

4 C Leipert (1989) "National Income and Economic Growth: The Conceptual Side of Defensive Expenditures" *Journal of Economic Issues*, Vol 23, September, p 844.

Thus defensive expenditures and environmental costs are conceptually different. In relation to defensive expenditures the green critique is about *the way* defensive expenditures are recorded (as positives). With environmental costs, the problem is that they are not included at all in the national accounts. However in practice the concepts overlap, not least because the imputed value of environmental costs is often an estimate based on projected or actual defensive expenditure necessary to ameliorate the cost (the so-called maintenance cost approach).

More will be said below (and in Chapter 7) about the measurement of defensive expenditures and environmental costs, and the various critiques of such valuations, but it should be noted here that there are also arguments about the concepts themselves. Some more traditional economists have challenged the whole notion of "defensive expenditures", arguing that concepts of "welfare" are the domain of philosophers rather than statisticians.[5] However, this argument seems untenable given the welfare assumptions which, I argued in Chapter 1, are foundational in the neoclassical concepts of utility and production.

There are also practical demarcation issues around what expenditures are defensive, and what constitutes an 'environmental cost". Should, for instance, loss of biodiversity and the psychological losses experienced by people when they see an old-growth forest destroyed, be considered economic costs?[6] Yet such demarcation issues, while important, cannot be considered to be insurmountable. As I argued in earlier chapters (and again, as Waring convincingly demonstrates), the official demarcation lines are also arbitrary - or at least determined by the concerns of the theories underlying the accounts.

A more solid argument is that, if such defensive expenditures are deducted from national accounts, then some measure should be (or should have been) added for the original welfare created. Thus, if a deduction is made for loss of leisure, or the cost of repairing beach pollution, then an addition should be made for the utilities 'produced' by leisure time or clean beaches.[7] Such estimates probably produce insurmountable data problems,

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5 H Adler (1982) "Selected Problems of Welfare and Production in the National Accounts" *Review of Income and Wealth*, Vol No. 28, p 124.

6 Swaney and Olsen give a critical review of attempts to value environmental phenomenon like biodiversity. J.A. Swaney and P.I. Olson (1992) "The Economics of Biodiversity: Lives and Lifestyles" *Journal of Economic Issues*, Vol 26, No. 1.

7 Adler, *op.cit.*, p 125; Michael Young, Paul Walker, Mallawaarachchi, and Robert Smyth (1995) "National and GIS-Based Regional Resource Accounting in Australia" in J. Walter Milon and Jason Shogren (ed), *Integrating Economic and Ecological Indicators*, Westport: Praeger. p 172.

and even if estimates could be produced, their magnitude would overwhelm the accounts.[8]

What this highlights is the problem of applying the economic logic of double entry accounting to issues of welfare. Underlying this is the conflation of welfare and economy. Notions of defensive expenditures and environmental costs are explicitly about measuring economic welfare. They are not about income and expenditure and need not be bound by the logic of double-entry production accounting. More importantly though, the conflation/confusion of production and welfare is not a product of the notion of defensive expenditures and environmental costs. Rather the conflation arises in the official accounts, both in their theoretical underpinnings and their uses.

GDP as a Welfare Measure

The point of the green critiques of national accounting in relation to environmental costs and defensive expenditures is not so much about the measure of production, but the fact that GDP - a production measure - is used as a de facto measure of welfare. As noted in Chapter 1, the term "production" carries a positive normative value and is tied at an epistemological level with the notion of welfare via the neoclassical definition. Production creates utilities and satisfies needs, and therefore adds to (individual) welfare. Economic growth - the production of more goods and services - then means more welfare. Growth is therefore, by definition, good, and becomes an (almost) undisputed goal of public policy. GDP, as a measure of that growth, then becomes, by implication, a measure of welfare.

Of course, when pressed national accountants and economists recognise that GDP is not a welfare measure. However such statements are often limited to an initial nod in this direction, followed by an uninterrupted analysis proceeding on the assumption that growth is the unquestioned goal.[9] This mirrors the national accounts' treatment of non-market production: acknowledging non-market production as part of production/the

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8 For instance, to take just one example where the original product has been included in extended national accounts, the additional product attributed to leisure time was 48.7% of GNP for Zolotas' 1965 measurement, 96.6% for Kendrick's 1984 measure, 101.5% for Nordhaus and Tobin in 1972 and 115.5% for Jorgenson and Fraumeni in 1982. All figures cited in Anwar Shaikh and E. Ahmet Tonak (1994) *Measuring the Wealth of Nations: The Political Economy of National Accounts*, New York: Cambridge University Press. p 14.

9 Samuelson's classic economics text is a good example of this. The "not a measure of welfare" rider is actually on p 138. The rest of the book continues with the discontextualised, scientific behaviour of markets - which of course militates against more 'subjective' concepts like welfare. Paul Samuelson, William Nordhaus, Sue Richardson, Graham Scott, and Robert Wallace (1992) *Economics: Volume 2 Macroeconomics*, 13th ed., Sydney: McGraw Hill Book Company.

economy, but then reifying the narrow GDP definition as "The Economy".[10] Thus, it is with some justification that Waring dismisses the defence of national accountants and economists who claim that GDP was never meant to be a measure of welfare. Despite the denials, it *is* used to measure welfare and they do little to set the record straight.[11]

In as much as the green critique of GDP in relation to defensive expenditures and environmental costs (as opposed to resource depletion) is about GDP as a welfare measure, the critique is not a direct parallel with feminist critiques which are about the 'proper'/extended measure of production. Yet these green critiques remain relevant to this thesis for a number of reasons.

Firstly, the green critique is important in its own right. Leipart estimated that defensive expenditures constituted more than 20% of economic growth in Germany.[12] Similar orders of magnitude are evident in other industrialised countries.[13] These shortcomings in national accounting impact on our understanding and representation of the economy and economic development (see Chapter 7). Secondly, and more directly, this green critique has also been adopted and forwarded by (some) feminists in their critique of official accounting, perhaps most notably by Marilyn Waring. Waring's work was crucial, not only in popularising the feminist critique of national accounts, but also in attempting to draw feminist and green critiques together. Despite my criticisms of Waring's arguments,[14] her work remains important.

Moreover, others have given more depth to the linkage between feminist and environmental concerns. Ariel Salleh for instance, draws links at an epistemological level where Western dualistic thinking positions man as centre and women and nature as Other. This androcentric, binary logic is what makes it possible to conceive of the acontextual "Economy" which is defined by the national accounts. It is an economy centred on men's work and clearly delineated and cut off from the Other.[15] By contrast, many feminists (and greens) have posited the (GDP) "Economy" as resting on the Other - the unvalued

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10 Again, see Introduction here, and Australian Bureau of Statistics (1990) *Australian National Accounts: Concepts, Sources and Methods*, Cat No. 5216.0. Canberra: ABS. p 5.

11 Marilyn Waring (1988) *Counting for Nothing: What Men Value and What Women Are Worth*, Wellington: Allen & Unwin. pp 45 - 47.

12 Leipert, *op.cit.*, p 854.

13 See the measures of economic welfare discussed in Chapter 7 here.

14 See chapter 2 here, and Greg Ogle (1997) "The Ghosts of Dead Economists: Marshall, Keynes and the Political Economy of National Accounting" *Policy, Organisation and Society*, Vol 14, pp 116 - 117.

15 Ariel Salleh (1997) *Ecofeminism as Politics: Nature, Marx and the Postmodern*, London: Zed Books.

reproductive contributions of nature and women. Thus, they have tried to envisage more holistic models of the economy. [16]

Most importantly though in terms of this thesis, the concern with defensive expenditures and environmental costs also begins to question the neoclassical notion that anything that is exchanged in the market contributes to welfare. The homogeneity of the neoclassical definition (what I will later refer to as the neoclassical nexus of production = market = economy = welfare) is challenged by the differentiation of economic activities into those that on net add to the welfare, those which simply repair the damage of other economic activities, and those which reduce welfare outright.[17] The notion that production does not necessarily add to or equal welfare also begins to challenge the individualist standpoint of neoclassical economics. The collection of individual market purchases define production and welfare in the neoclassical paradigm, but some of these activities translate into environmental problems faced by the whole community. The green concepts of defensive expenditures and environmental costs, by definition, suggest a different, more collectivist or structural analysis. Individuals are seen to exist in social and ecological relations, rather than as the autonomous, decontextualised 'men' of neoclassical theory.

As we will see below and in Chapter 7, not all green critiques transcend the neoclassical paradigm. However, the collectivity implied in the green critiques opens the space for a more systemic or structural approach to political economy. In as much as the concept of gender is itself collective and/or structural, then the opening of this theoretical space is also a pre-requisite for a feminist informed economy. Thus, the collision with the individualism of the neoclassical framework is a particularly important parallel between green and feminist debates. This argument will developed further in the second half of the thesis.

Resource Depletion/Sustainability

The second area of the environmental concern about the definition and measure of the economy relates to issues of sustainability: resource depletion and the environmental limits on production and the economy. Attempts to incorporate these factors into economic consideration are not new. Thomas Malthus may lay claim to such an endeavour, and Juan Martinez has documented the different efforts from Serhii

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16 See for instance, Waring, *op.cit.*, ch 12; Marem Jochimsen and Ulrike Knobloch (1997) "Making the Hidden Visible: The Importance of Caring Activities and their Principles for any Economy" *Ecological Economics*, Vol 20, No. 2, pp 107 - 112.; Sabine O'Hara, (1997) "Towards a Sustaining Production Theory" *Ecological Economics*, Vol 20, No. 2, pp 141 - 154.

17 There are further links here with feminist analyses of emotional labour, but this will be argued more fully in the next section of this thesis.

Podolinsky and Edward Sacher in the 1880s through to Harold Hotelling's pioneering "modern" work on the economics of exhaustible resources in 1931.[18] However, the issue of sustainability came to the fore with the "energy crisis" of the early 1970s and the report by the Club of Rome which produced mathematical predictions of the exhaustion of the earth's resources.[19]

In terms of national accounting, the focus on recording market flows means that there is no accounting for resource depletion or the (un)sustainability of production/economic growth. Thus, a nation could use up all its productive natural resources (its 'natural capital') in a year, but such unsustainable development would be included unproblematically as part of the current production (and welfare). This apparent absurdity, plus the growing environmental awareness at popular and official levels, has led to a general acceptance of the need for 'sustainability'. The question then is, what does "sustainability" mean? The ensuing debate has revolved around two concepts: so-called "weak" and "strong" sustainability.

Weak sustainability is a concept of economic sustainability based on a proper measure of income as the maximum value which can be consumed in a given period without leaving a person or country worse off than before.[20] In practice, this means that in deriving national income from gross production,[21] the deductions for consumption of human produced capital should be extended to incorporate the consumption (depletion) of natural capital.[22] Weak sustainability then is about sustaining income flows, not necessarily about sustaining/conserving the environment. It is more than possible for rapid natural resource

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18 G A Smith (1990) "Review of Juan Martinez, *Ecological Economics: Energy, Environment and Society*" *History of Political Economy*, Vol 22, No. 4, pp

19 (1972) *Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*, Sydney: Pan. This was the first attempt to use computer modelling to extrapolate possible economic and environmental scenarios, although Barry laments its "broadly 'reformist'" approach, the general thrust being "more technical than political". John Barry (1994) "The Limits of the Shallow and the Deep: Green Politics, Philosophy and Praxis" *Environmental Politics*, Vol 3, No. 3, pp 370 - 371.

20 This Hicksian income (after the British economist John Hicks) is by definition sustainable and a similar concept is employed in the United Nations' landmark Brundtland Report, which famously defined sustainable development as that which "meets the needs of the present without compromising the ability of future generations to meet their own needs". John Cobb and Herman Daly (1994) *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*, Boston: Beacon Press. pp 69 - 76.

21 "National income" is officially derived by deducting the consumption of fixed capital (and net income paid overseas) from GDP. ABS, *op.cit.*, p 12.

22 Similar arguments could also be made about human capital and social capital, but El Serafy argues that for national accounting purposes the sustainability of environmental capital "far outweighs in importance" the other forms of capital. Salah El Serafy (1997) "Green Accounting and Economic Policy" *Ecological Economics*, Vol 21, pp 217 - 229.

depletion to be weakly sustainable if the income gained in the immediate usage or other savings outweigh estimated future income.[23]

Strong sustainability, by contrast, focuses on maintaining stocks of resources: natural and human produced. This does not mean that no non-renewable natural resources can ever be used, but rather that total capital should be kept intact. Any reduction in one form of capital (eg. natural capital) must be offset by accumulation of another type of (produced) capital.[24] This strong sustainability might begin to approach a notion of ecological sustainability, but only on the assumption that human produced capital can be substituted for natural capital. This substitution may be possible in terms of income flows, but not necessarily in terms of ecological use and preservation.

In both weak and strong sustainability definitions, the focus on natural capital/resource depletion ignores environmental factors like biodiversity, wilderness, endangered species and maintenance of eco-systems - the values of which never directly enter the market. This *economic* focus is then still really about measuring the point at which the environmental limits impact upon economic growth. It is not about how economic growth impacts upon the environment. Martinez-Alier argues that this means that the economic paradigm's blindness to the environmental cost of mass production remains.[25] In this sense, both weak and strong sustainability are about extending existing economic measures and reforming rather than changing economic systems.

Measurements

Nonetheless, the desire to incorporate some measure of sustainability into the economic framework has led to a whole literature concerned with the valuing of resources and all manner of environmental costs and effects. As with non-market production, there is considerable debate among those attempting the measurement exercise as to how best to value environmental phenomena in the absence of observable market prices. Broadly speaking, environmental phenomena are 'valued' in one of the following ways:

- *Actual market values* based on actual loss of output of industry or actual costs borne by consumers resulting from environmental changes;
- *Maintenance cost* based on the hypothetical cost of keeping environmental standards intact;
- *Contingent valuation* based on what people say they are willing to pay to

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23 J Martinez-Alier (1995) "The Environment as a Luxury Good, or "Too Poor to be Green"?" *Ecological Economics*, Vol 13, p 8.

24 El Serafy, *op.cit.*, p 220.

25 Martinez-Alier, *op.cit.*, p 9.

conserve or repair the environment; and

- *Hedonic pricing* which is the value of the impact of environmental change on existing market prices (usually on property values, or risk factors in wage rates).

Even future costs and losses can be valued by "discounting", that is, positing a present value for a future cost/loss based on the amount of money needed to be invested today at current interest rates in order to grow to equal that future cost/loss. This procedure is particularly useful in valuing resource depletion, but it is fairly controversial among economists and environmentalists.[27]

The technical debates over the merits and shortcomings of the various methods are not my concern here, except in as much as they reflect different theoretical assumptions. In this context, another parallel to debates around non-market production can be drawn. Just as each of the schools of economic thought attempted to assimilate non-market production into their existing framework and value that production according to their specific assumptions and interests, so too with the environment. The above valuation methods all attempt to use the tools and assumptions of neoclassical economics to place dollar values on 'environmental externalities', although it should be noted that not all neoclassical approaches assume that the environment can or should be incorporated into accounting measures.[28] And again, there are parallel attempts to incorporate the environment into an extended Marxian political economy.[29]

Most of the mainstream work on environmental valuation is concerned with microeconomic analysis and is beyond the scope of this short interlude (and indeed this thesis), but there is also a macroeconomic dimension with a range of attempts to directly expand or revise national accounting systems. El Serafy notes that these 'greening' attempts fall into two categories: those concerned with accounting for change or depletion

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26 Summary from J P Barde and D Pearce (1991) *Valuing the Environment*, London: Earthscan. p 5; and Peter Bartelmus (1995) "Toward a System of Integrated Environmental and Economic Accounts" in J. Walter Milon and Jason F. Shogren (ed), *Integrating Economic and Ecological Indicators*, Westport: Praeger. pp 145 - 148.

27 Cobb and Daly, *op.cit.*, p 155.

28 Jacobs provides an interesting taxonomy here beyond the simple market approach versus state regulation dichotomy. Market economic tools like tradeable pollution rights can be seen as tools within an overall state regulated framework, and they have no direct relation to cost-benefit analyses which apply market values as the regulatory framework. Michael Jacobs (1995) "Sustainability and 'the Market': A Typology of Environmental Economics" in Robyn Eckersley (ed), *Markets, the State and the Environment: Towards Integration*, Melbourne: Macmillan.

29 See for instance, James O'Connor (1991) "On the Two Contradictions of Capitalism" *Capitalism, Nature, Socialism*, Vol 2, No. 3; James O'Connor (1988) "Capitalism, Nature, Socialism: A Theoretical Introduction" *Capitalism, Nature, Socialism*, Vol 1; Teresa Brennan (1997) "Economy for the Earth: The Labour Theory of Value without the Subject/Object Distinction" *Ecological Economics*, Vol 20, No. 2.

of environmental assets; and those concerned with the effect of environmental change on welfare.[30]

The most obvious of the first type of 'greening' attempt is the System of integrated Economic and Environmental Accounting (SEEA), associated with the 1993 revision of the official SNA. This was the first major revision of the SNA since 1968 and it recognised (in principle) many of the environmental problems with GDP. As with non-market production, the revised SNA recommended that a structure of "satellite accounts" be established to measure non-market production and environmental factors. These satellite accounts are designed in various modules or "building blocks" capable of being phased in when statistical resources become available. Thus SEEA Version II 'simply' requires the segregation of all environment related flows and stocks in traditional accounts, Version III establishes physical resource (stock) accounts, while SEEA Version IV incorporates money valuations (using three different methods) with the ultimate possibility of an Eco-Domestic Product - an environmentally adjusted GDP.[31] However, El Serafy notes that the proposed measures remain fundamentally *economic* accounts, and they are not well adapted to measuring ecological changes. The two concepts (economy and environment) remain analytically distinct, and he argues that,

> the ostensible *integration* of the environment in the national accounts is actually never effected, and the so-called economic accounts remain unadjusted and, however flawed, continue to be used for the purposes of economic analysis.[32]

This echoes the concerns noted with regard to the measurement of non-market production: the concerns have been adopted, but marginalised - relegated to "satellite" accounts which by definition are peripheral. It should also be noted in this context that there is no attempt in the SNA revisions to integrate non-market production into the revised 'green' national accounts. The proposals for satellite accounts are parallel but not combined, they are seen as separate satellites relating to the core accounts, but with little or no necessary relation to each other.

In Australia, the Australian Bureau of Statistics is undertaking work toward accounts which will show changes over time in physical rather than monetary units. There is no timetable for the implementation of the monetised "satellite accounts" recommended in the

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30 El Serafy, *op.cit.*

31 Bartelmus, *op.cit.*, pp 142 - 143; Asbjorn Aaheim and Karine Nyborg (1995) "On the Interpretation and Applicability of a "Green National Product"" *Review of Income and Wealth*, Vol 41, No. 1, pp 57 - 58.

32 El Serafy, *op.cit.*, footnote, p 218.

SEEA. [33] However, prior to the SNA recommendations, Michael Young of the CSIRO produced a "green GDP" for Australia taking into account resource depletion in agriculture, fishing, forestry and mining. These adjustments had only minimal impact on GDP. Total production was reduced by less than 1% in each year of the survey (1980 - 1989), although it was a very narrow measure of sustainability. [34] It did not include all non-renewable resources, nor other environmental losses and defensive expenditures. These may well have changed the outcome considerably.

The other category of attempts to green the national accounts are the economic welfare indicators. Unlike the national accounts, these welfare indicators do not assume that production equals welfare, or that economic growth is necessarily welfare enhancing. And unlike the SEEA type greening attempts noted above, they focus on the impact of environmental changes on economic welfare, rather than on economic stocks and/or flows. Importantly, these welfare indicators also incorporate estimates of non-market production as well as accounting for defensive expenditures and issues of sustainability.

As these measures form the basis of Chapter 7, I shall not elaborate further here, except to note that, possibly because of the far-reaching implications of their results in challenging the benefits of economic growth, these economic welfare measures have not enjoyed the same level of official support as the SNA legitimised accounts. However, private researchers and institutions have now produced measures of economic welfare for some nine countries. These are of particular interest as they represent perhaps the most developed attempt to synthesise concerns about non-market production and the environment into a revised system of national accounting.

Again, these issues and measures will be discussed further in Chapter 7, but in terms of this "Interlude", it is simply important to note that, whatever the promise of these alternative definitions and measures, they remain measures based in market economics and expressed in dollar values, and as such, are open to criticism.

Critiques of Valuation

Just as we saw that there were serious feminist objections to incorporating non-market production into extended national accounts, so too there are important green critiques of the project of attempting to apply market values and market economics to the environment.

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33 Paul McCarthy (1994) *Prospects for Environmental Satellite Accounts*, Australian Bureau of Statistics. Discussion Paper, p 5.

34 Young, *op.cit.*, p 171.

There are green critiques both of the (neoclassical) assumptions inherent in valuation and of the results gained. For instance, there is concern about whether the requisite knowledge of natural processes exists to estimate possible outcomes/costs, and there is a particular concern about the process of discounting because it tends to "benefit modest but immediate gains more highly than the cost of ecological catastrophe in a few hundred years".[35] Similarly, there are concerns that the values/results gained do not reflect the extent of the environmental problems, nor do they furnish the policy directions desired by environmentalists.[36]

On a broader scale, there is concern with the whole project of (dollar) valuing the environment. Again, Waring regards the project as necessary, but conservatively reformist: still bounded by the myopic (male) economic view. She cites Schumacher approvingly:

> To press non-economic values into the framework of economic calculus ... is a procedure by which ... the priceless is given a price.... All it can do is lead to self-deception or to the deception of others; for to undertake to measure the immeasurable is absurd ... what is worse and destructive of civilization is the pretence that everything has a price or, in other words, that money is the highest of all values.[37]

Yet even this remains an anthropocentric approach, with its concern for what is best for human society - "civilisation". "Deep ecologists" have argued that such anthropocentrism is itself the problem, and they argue that an ecocentric approach is required to put ecological not human need at the centre of analysis.[38] Clearly an approach which applies market measures to the environment is based on anthropocentric assumptions: what counts is what is of use/value to human society. Yet both deep ecology and human scale "real life economics" have often proven to be gender blind, at best, if not a haven for masculine assumptions and experiences.[39] For ecofeminists like Mellor and Salleh, the issue is phallocentricity rather than anthropocentricity. Hence:

> If feminists seek justice through a revision of the UN System of National Accounts, they give in to the masculinist logic of accumulation. Meanwhile the separation of production and consumption fragments and mystifies women's awareness of the consequential loops between labour, resources, time, and so-called ecological waste.[40]

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35 Swaney, *op.cit.*, p 6.

36 Aaheim, *op.cit.*; Young, *op.cit.*, p 170.

37 Cited by Waring, *op. cit.*, p 298.

38 Various deep ecology positions are summarised critically by Barry, *op.cit.*

39 Mary Mellor (1997) "Women, Nature and the Social Construction of 'Economic man'" *Ecological Economics*, Vol 20, p 134.

40 Salleh, *op.cit.*, p 124.

Again, the act of measurement requires the epistemological separation of man from the environment. According to the ecofeminist critique, it is that separation which is the core of the problem - allowing not just measurement but the use and domination of nature and/or women.

Of course, as with arguments over valuing non-market production, such critiques do not go unchallenged. Barde and Pearce have argued that, like it or not, the environment does have a dollar value - every time a decision is made. They cite the example of the destruction of environmental values to construct a key section of the M3 motorway in Britain. It would have cost 92 million pounds to avoid the damage. That the government chose not to spend this money *implies* that the destroyed area was not worth 92 million pounds.[41] The authors of an American economic welfare measure go further, arguing that unless environmental factors are included in national accounting, the implied value given is zero. In this context, even estimates based on fairly arbitrary assumptions are a better reflection of reality than the GDP figures.[42]

Clearly then, there are parallels with the arguments over 'valuing' non-market production. The critique of the official definitions and measures leads to a call to extend those measures. It also leads to objections to the whole project of extending market accounting and to a demand that the environment/non-market production be considered on its own terms - or be incorporated at a foundational level of a new paradigm, that is, not tacked on or squeezed into existing paradigms.

Conclusion

Underlying these debates is a fundamental problem for both feminist and green movements. The national accounts indicators (and GDP in particular) continue to be regarded as "objective" measures of economic performance, and as de facto measures of welfare. Public policy is made (and/or legitimised) on the basis of the national accounts, and its success is ultimately measured by economic growth recorded as an increase in GDP. Feminists and greens can then simply accept that GDP will continue to be "the crucial statistic" and try reform it to include their environmental concerns - to measure total, environmentally sustainable production: or alternatively, they can adopt the more radical approach and argue that policy be formed, not just on the basis of such narrow economic outcomes, but in equal consideration of social and environmental factors. Such a change in the way society makes decisions would be a direct challenge to those whose

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41 Barde, *op.cit.*, p 1.

42 Cobb, Halstead and Rowe, *op.cit.*, p 45.

economic base is the market and the public domain, implying a fundamental shift in the power structure of society.

Again then, what is at issue here is a strategic political problem with echoes of 'reform' versus 'revolution' debates. It is for this reason that I have taken up Waring's characterisation of the reformist position and categorised the debate in terms of radical and reformist positions. However, the issues are never as simple as market measures being equated with reformist strategies within the system, while the rejection of market measures constitutes a revolutionary strategy aimed at changing the system. The reform/revolution dichotomy was never straightforward within socialism,[43] and Barry has criticised the 'revolutionary' deep ecology's lack of structural analysis. He argues that greens could take on board useful insights from market economics, "seeing this as an *immanent* critique of orthodox economics [rather] than the first step on the slippery slope of revisionism."[44] Thus, the so-called 'reformist' tool of market measurement takes on transformative meaning - an approach I will return to in the second half of the thesis.

In any case, even if the reform/revolution dichotomy was straightforwardly applicable, I have already noted that the arguments are unresolvable in any final way. Again, a full consideration of the question is beyond the scope of this thesis. Rather than attempting to come to any political conclusions here, the purpose of this "interlude" has been simply to introduce the environmental arguments, and to draw parallels between the feminist and green debates around the definition and measure of the economy. And as I have argued above, there *are* clear parallels, despite the different content of the debates. Both debates proceed from the problem of the narrowness of the official definition and national accounts measures. Yet in both cases, there is concern about extending these orthodox definitions and measures, either because of the specific neoclassical assumptions used, or because of the politics or epistemology of the whole project.

These parallels are important because, where the same sorts of problems are seen in different areas, the green and feminist critiques reinforce each other. Thus drawing parallels broadens the critique of national accounting definition and measures, but as I

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43 Marcel Liebman (1986) "Reformism Yesterday and Social Democracy Today" in R. Miliband, J. Saville, M. Liebman, and L. Panitch (ed), *Socialist Register 1985/86*, London: Merlin Press. Ralph Miliband (1977) *Marxism and Politics*, Oxford: Oxford University Press. ch 6. It should also be noted that, at least before the fall of the Eastern European communism, some socialists argued for "revolutionary reforms" - reforms possible within the system, but whose logic can not be contained within the system and which build pressure for further change, a proposition I read as being similar to Barry's arguments above. Connell approvingly cites Stuart Hall and Andre Gorz in reference to 'revolutionary reforms'. Bob Connell (1982) "Socialism and Labor: An Australian Strategy" *Fabian Newsletter*, July - August, p 12.

44 Barry, *op.cit.*, p 373.

have argued, it also begins to focus on the problems which arise from the individualist neoclassical starting point of the official definitions. By suggesting the need for a more collectivist/structural approach which focuses on the different types and economic outcomes at a community or national level, the green and feminist parallels do begin to suggest important themes in developing alternative approaches to defining and measuring the economy. Yet, in considering the politics of these critiques (the rādical v reform debates), the difficulties of developing alternative definitions and measures are also highlighted.

However, having introduced these environmental issues and drawn these parallels, I will leave the environmental critiques for now. For reasons of manageability, in the next section of the thesis I will focus only on feminist concerns about women's work. This narrower focus will allow for a more coherent analysis of the problems of the neoclassical definitions and the problems and possibilities of economic measurement. The environmental concerns will then be reintegrated into the thesis in the discussion of alternative strategies.

Section 2:
Crossroads - Emotional Labour

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Chapter 4: Emotional and Embodied Labour

We have seen in the analysis of the importation of market definitions and measures into non-market production that non-market work is quite different from waged labour, and that the tools of market analysis hide as much as they reveal about women's work in the home. The analysis of what I will call emotional labour is one further and particularly crucial problem for applying market definitions and measures to non-market production. It is also a challenge to those market measures even when they are applied to market production.

The analysis of emotional labour comes out of what might more traditionally be called a sociology of work and there are now a variety of feminist analysis of it under various names. It suggests not simply that the market based definitions ignore women's work, but that work/production - and indeed the economy - might mean something quite different within a feminist perspective.

Household emotional labour

What I take to be included in a concept of emotional labour goes under various names, but a useful starting point is Delphy and Leonard's definition of emotional work as,

> work which establishes relations of solidarity, which maintains bonds of affection, which provides moral support, friendship and love, which gives people a sense of belonging, of ontological strength, of empowerment, and thereby makes them feel good. This too requires effort and skill. It is not just a question of thinking about someone, but of doing actual activities: talking to them about things that interest them, fetching them things that give them pleasure, smiling at them, cuddling them, and stroking their bodies and their egos.[1]

They go on to note that this emotional work "is an especially important component of women's domestic work".[2] However in their analysis this emotional labour is only one of five types of women's domestic work. Apart from the obvious production of visible goods and services, they note women's cultural work, that is, work which is done for display as part of maintaining or promoting the status of the household (or its head). There is also sexual work and reproductive work (narrowly defined as child bearing).[3]

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1 Christine Delphy and Diana Leonard (1992) *Familiar Exploitation: A New Analysis of Marriage in Contemporary Societies*, Cambridge: Polity Press. p 21.

2 *ibid.*

3 *ibid.*, pp 21 - 27.

Chris Beasley adopts a similar, though more detailed categorisation with six categories of unpaid work. These are:

- service support labour including travel, education and civic duties;
- housework;
- body work/body management including organising diet, exercise, maintenance of beauty, childbirth, activities related to menstruation and health;
- sex;
- childcare; and
- emotional labour including "husband care", care for friends, relatives and neighbours.[4]

In the more usual definitions of work like those noted in Chapter 2 and 3 only "housework" and some aspects of both "service support" and "childcare" would be regarded as part of household production. That the rest of this list should be considered as work is perhaps surprising. Including these very subjective labours, that is, labour which cannot be separated from the labourer, clearly contravenes the third person criteria. Someone else could not be paid to perform the services. However the issue is revealing of both the inconsistencies in the application of the third person criteria, and the problems of such a definition in the household economy.

Perhaps most controversial is the inclusion of sex and reproduction as domestic work, not least because traditionally sex has been seen (in the male gaze) as clearly leisure - a break from and opposite to work. (Similarly, reproduction has been seen as a natural part of being a 'woman', not something requiring work.) Prior to the second wave of feminism, economists and national accountants could jokingly refer to the inclusion as production of "matrimonial services" on the grounds that these could be substituted by the paid services of prostitutes.[5] The suggestion was seen as too ludicrous to be taken seriously, but feminists have long questioned the assumption that family and heterosexual relations were 'natural institutions' free of coercion and exploitation. Feminists have then applied various analyses of power and politics to the household.

In the context of sex and work, it would seem that if we accept the fairly basic proposition from the sociology of work that there is no objective meaning to "work" and

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4 Chris Beasley (1994) *Sexual Economyths: Conceiving a Feminist Economics*, Sydney: Allen & Unwin. p 33.

5 Paul Studenski (1958) *The Income of Nations: Theory, Measurement and Analysis Past and Present*, New York: New York University Press. p 178.

"production". [6] Rather, as we saw in the last chapter, social relations define work, and therefore, within patriarchal social relations, sex may well constitute work. Delphy and Leonard argue that,

> Marriage is defined by sexuality and often also by reproduction. For a marriage to be consummated (that is, for the contract to be fully and finally sealed) requires a particular kind of sexual intercourse to take place, and the whole weight of culture makes clear that having sex and having children (sons in particular) are things wives owe their husbands.[7]

Sex (and motherhood) is work precisely because of the institutional arrangements of marriage/heterosexism which define the role of women in the household and ensure that sexual and reproductive work takes place regardless of the emotional attachment. In many cases sex is simply "part of being married" - as opposed to "part of being in love". Of course it may be both, but for Delphy and Leonard questions of pleasure and/or attachment are not the point. Most people in our society enter paid work willingly and get some pleasure from it, and it often gives a sense of self-fulfilment and self-worth. This is perhaps most evident in the fact that unemployment is seen to be a "crisis" and is often associated with lack of self-esteem. Both paid work and household work are exploitative according to Delphy and Leonard's Marxist schema, but the fact of choice or pleasure does not mean that it is not work being undertaken in both instances.[8] When thus stripped of emotional ties, sexual services (and other forms of emotional labour) should clearly be classed as production activities according to the third person criteria - someone else could be paid to perform the services.

Beasley explicitly criticises Delphy's abstraction of work from emotional ties, and criticises the narrow third person criteria definition of work. She argues that these 'services' can not be separated from the person providing them *because* of the emotional ties involved. Much of women's labour in the household is inextricably linked with emotional ties, creating a different sort of economy:

> In this complex interweaving of the creation of services/goods with the expression of love/affection/care one sees the formulation of an *emotional economy* which cannot be reduced either to Marx's narrow definitions of labour as (a) 'production' of food and objects, or (b) 'production' of commodities under capitalism, or even (c) his broader definition of all activities necessary to human survival, since 'activities' still tend to be described with little reference to, for example, invisible, emotional and psychic aspects of labour.[9]

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6 See for instance, Keith Grint (1991) *The Sociology of Work: An Introduction*, Oxford: Polity Press.; Herbert Applebaum (1992) *The Concept of Work: Ancient, Medieval, and Modern*, Albany: State University of New York.

7 Delphy, *op.cit.*, p 22.

8 *ibid.*

9 Emphasis in the original. Beasley, *op.cit.*, p 13.

In critiquing this Marxian model, Beasley is criticising the feminist appropriation of the contract exchange model of labour which Marx used to analyse capital-labour relations.[10] While Beasley concedes that there may be some elements of contractual exchange in the household, she argues that the separation of product and producer, and of exploiter from exploited in the (Marxian) contract exchange model, is an inappropriate way to conceptualise an economy "so deeply infused by gratification and self-identity".[11]

Beasley argues that emotional labours, including activation of subjectivities, that is, the 'production' of personal and social identities, is fundamental to the household economy. This is not a one-off production of a social role, but as Jenny Cameron points out, subjectivity is constantly being constructed through the daily performance of household labour.[12] Given this 'production' of subjectivity, neither women, men nor children - the objects of the emotional labour - are entirely "thingified" in the process of production. Nor is women's labour entirely removed from its authors. This subjectivity is inherent in all housework when it is viewed as a labour of love, but particularly in sex and emotional labour (and husband care and mothering) which are most clearly about the particular person doing them. They are not the same if a third person substitutes.

Indeed, Susan Himmelweit argues that the *inability* to directly substitute market labour for women's caring labour is pivotal. It reinforces the tendency in economics (based on the process of commodification) to render invisible domestic activities and needs which do not take the form of work/consumption. This commodity fetishism places a money/material needs nexus at the centre of society and devalues those not involved in the material/'work' process (ie. carers). As we shall see further on, Himmelweit then claims that the feminist attempt to show that household work is like paid work has reached the limit of its usefulness and needs to be challenged if women's work is to be fully recognised.[13]

The point is not just that caring activities are ignored by the definition of production (although this is certainly the case), but that this subjective/emotional labour is inherent in all household labour. This makes problematic any distinction which rests on a third party criteria - the ability to pay someone else to do the particular job. This has further

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10 In particular Beasley refers to the Delphy's work, but also critiques the Marxian frameworks of Ferguson, Hartsock, MacKinnon, Young, Jagger and Hartmann. *ibid.*, p13.

11 *ibid.*, p 14.

12 Jenny Cameron (1999) "Throwing a Dishcloth into the Works: Troubling Theories of Domestic Labour" *Rethinking Marxism*, Vol 9, No. 2, pp 34 - 35.

13 Susan Himmelweit (1995) "The Discovery of 'Unpaid Work': The Social Consequences of the Expansion of 'Work'" *Feminist Economics*, Vol 1, No. 2, pp 1 - 19.

implications for any measurement of this economy based on notions of time, efficiency and productivity. In the emotional economy there is no set working day and market notions of work intensity and productivity do not translate well. For instance, Beasley notes that involving children in household work/activities may intensify work but decrease productivity (measured in simple input-output terms). This is not economically irrational. Rather in this case the meaning and social relation significance of mothers being with children is more crucial than the actual goods and service produced or the time taken.[14] And in an emotional economy where women's personal/sexual labour is relatively impervious to technological improvement, notions of productivity are not easily applicable. In terms of traditional economic measurements of time, efficiency and productivity, *the emotional economy is unmeasurable.*

These authors, in their different ways, all argue that women's emotional labour is work (ie. productive - part of the economy). In doing so they expose fundamental problems in the definition of work (and therefore the economy) which is used in the attempts to account for non-market production noted previously. If "work" is simply meant to include only physical tasks and service provision in line with the third party criteria, then the subjective elements of emotional labour may not qualify, but the provision of sexual services for example, should then be included in the household production. Stripped of their emotional ties, these sexual services clearly have market substitutes. On the other hand, if these 'services' can not be separated from the person providing them because of the emotional ties involved, that is, the emotional ties make it a different activity to a market activity (and therefore prostitution is not a simple substitute), then all women's labour in the household is suspect because it too is interwoven with emotional ties. To exclude all this household work from the definition of the economy because it does not fit a market based criteria of exchange-ability and potential sale-ability (the third person criteria) would be to render invisible again (still) much of what women do. But equally as important, to include the work women do simply as a list of tasks which could be provided through the market hides the real nature of household production. Inevitably, it also ignores much of that production which is beyond a task list.

Emotional Labour in Paid Work

Of course emotional or subjective labour is not limited to the household, as is evident in Arlie Hochschild's groundbreaking work on the emotional management tasks of air-hostesses. Hochschild defines emotional labour as "the management of feeling to create a publicly observable facial and bodily display", and she see it as a commodity which is

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14 Beasley, *op.cit.*, p 18.

exchanged on the market.[15] Or more accurately,

> In the absence of an English language name for feeling-as-contribution-to-the-group (which the more group-centred Hopi culture called *arofa*), I shall offer the concept of gift exchange.[16]

Thus muted anger, conjured gratitude, and suppressed envy, etc are offerings back and forth between people, an exchange regulated by "feeling rules" which provide standards of what is owed to another person. In the case of airline stewardesses this "gift" is alienated from the workers and employed by capital as a necessity of capitalist competition. The airlines compete on the basis of the quality of service they offer and they promote this by relying on the emotional labour of flight attendants. This is clear in the training and appearance regimes in the US airlines Hochschild studied,[17] and in the airline advertising which is based on their service, often a particularly sexualised service.[18]

While Hochschild's focus was on the airline industry, she also looked briefly at debt collectors and other jobs which involved emotional labour. Such jobs, she argues, have three characteristics in common. They require personal contact with the public, they require the worker to produce an emotional state in another person (gratitude, fear, ease) and they allow the employer, through training and supervision, to exercise a degree of control over the emotional activities of employees. Hochschild estimated that 1/3 of all employees in the US engage in some form of emotional labour (which she clearly distinguishes from work which places emotional burdens on employees) while about 1/2 of women in the paid work force do emotional labour.[19]

Implicit in these figures and explicit in her analysis of emotional management of debt collectors is a consideration of the emotional labour of men - something largely absent from the feminist writing on household emotional labour. The issue of men's emotional labour is in fact a vexed question and is taken up below and in the next chapter. For now I propose to leave it aside as none of the other authors discussed here analyse it.

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15 Arlie Russell Hochschild (1983) *The Managed Heart: Commercialisation of Human Feeling*, Berkeley: University of California Press. p 7.

16 *ibid.*, p 18.

17 *ibid.*, p 93.

18 The classic example here is the "Singapore Girl". See Geraldine Heng (1997) "'A Great Way to Fly': Nationalism, the State and the Varieties of Third-World Feminism" in M. Jacqui Alexander and Chandra Tolpade Mohanty (ed), *Feminist Genealogies, Colonial Legacies, Democratic Futures*, New York: Routledge.

19 Hochschild, *op.cit.*, p 147, 11.

Hochschild's study was followed by studies relating to what might be termed emotional or sexualised labour in other areas of paid employment. Lisa Adkins noted the studies of Williams into the Australian airline industry, and MacKinnon and Stanko's analysis of sexual harassment as an integral part of the workplace for women.[20] Similarly, Rosemary Pringle's well-known examination of secretaries also showed that their work involved considerable emotional labour: for example, a certain necessary deportment and dress, welcoming visitors, and generally "looking after the boss". Even tea and coffee making also involved elements of what in Delphy and Leonard's classification would be cultural display as the task was saturated with symbolism of the boss'/man's power. [21]

Pringle in fact had considerable difficulty in identifying the actual tasks and skills of a secretary, partly because the role of the secretary was seen as a thoroughly sexualised job. That is, the job of secretary was synonymous with being 'woman' - a subordinate other defined primarily by her relations to men/the boss.[22] This is obviously problematic in that it undervalues women's work and skills as secretaries. But it is also clear that elements of subjectivity, of being a particular sort of woman, looking a particular way, and being in a particular one to one relation with the boss (often including negotiating his emotional and family needs) are all part of the job.

This is a theme taken up by Lisa Adkins' in her study of the British tourist industry.[23] She showed not only that women continued to perform unpaid labour in the market sector, but also that "sexuality" is implicated in the very organisation of the labour market. Adkins' view of sexuality here is fairly narrow as she does not raise questions of homosexuality or even masculinities at work. Instead, her focus and understanding of the sexuality of "gendered work" is in terms of labour which is about women's bodies as objects of desire, rather than about the tasks of work. Her study of two sites in the tourist industry (a leisure park and a large hotel) shows that part of the job of women is as objects of sex entering into a sexual exchange with customers, bosses and other workers.

This sexualised labour is built into women's work by recruitment practices, job requirements, and often by dress codes which place women as sex objects and women's

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20 However Adkins is critical of these studies, particularly MacKinnon and Stankos, for positing aspects of this emotional labour (my term) as being about gender rather than work - gendered work. Lisa Adkins (1995) *Gendered Work: Sexuality, Family and the Labour Market*, Buckingham: Open University Press. ch 2.

21 Rosemary Pringle (1988) *Secretaries Talk: Sexuality, Power and Work*, Sydney: Allen & Unwin. See especially, pp 24 - 25.

22 *ibid.*, pp 1-5.

23 Adkins, *op.cit.*

bodies therefore as *sites* of work. In the hotel the personnel specifications for the 'female' jobs of waitress, receptionist and domestic were all the same: employees should be "attractive", "average weight and height" and "must have [a] helpful enthusiastic attitude".[24] By contrast the specifications for the predominantly male occupations (chef/cook, barman, porter, kitchen hand) had varied, more job related specifications and certainly did not require attractiveness. Similar scenarios were evident in the leisure park, and Adkins concluded that,

> women workers were subject to a set of criteria relating to appearance regardless of occupation, while men were not. These criteria can be said to exist regardless of occupation in two senses. First, they existed not because the occupation 'needed' its workers to possess these qualities - you do not have to be pretty to make sandwiches - but because women workers were constructed as somehow needing these appearance qualities *to be workers*. .... [Second] women became operatives precisely because of the existence of appearance criteria. In other words, these criteria (as far as the catering assistants and the women operatives were concerned), to some extent at least, determined the gendered constitution of the occupations themselves.[25]

This attention to appearance is not an isolated case. Adkins argues (citing a range of studies), that, "such appearance criteria operate across the commercial service sector for women."[26] This echoes what Delphy and Leonard describe as cultural display and Beasley implies in the work category of body work/management.

Adkins also described other forms of emotional labour: sexual banter with customers and the submission to sexual harassment by customers. This was so much "part of the job" that Adkins reported that the women she spoke to were

> blasé about it and somewhat surprised that I was even bothering to ask questions about this part of their work.[27]

Not only did management not intervene, but uniform requirements at the leisure park actively promoted this sexualisation of the women workers. Just as Hochschild described airlines competing on the basis of a sexualised service to customers, so too Adkins noted that the women workers in the leisure park - and indeed in the British hotel industry - served as sexual attractions for men customers.

It is important to note that the penalty for not playing the sexual role is dismissal - that is, the women's status as workers depends on the sexualisation of their work. Thus the

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24 *ibid.*, p 110.

25 *ibid.*, p 107 - 108. Emphasis in the original. The quote refers to the leiasure park, although it is consistent with the hotel Adkins examined.

26 *ibid.*, p 124.

27 *ibid.*, p 130.

sexual work is implicated in the capitalist-wage relation. This suggests that the capitalist wage relation is gendered through sexual labour so that men and women doing the same tasks are different sorts of workers.[28] Because sexual labour is compulsory for women in service industries, then gender and sexuality can not simply be seen to be outside of the "economic". They are integral to the construction of capitalism and must therefore be included in any definition of the economy.

Differences, Definitions and Critiques

Adkins, Pringle and Hochschild's work clearly shows that emotional labour is not limited to the household. Having said that, there are some important differences between the various analyses in terms of the subjectivity of emotional labours in the family and in the paid work force. While part of the construction of gendered work (Adkins) is about being a woman - or more accurately, a particular type of woman (a particular subject) - the particularity required is still more general and less subjective/personal than in the home. For instance, the sexualised requirements that Adkins notes in relation to bar staff at the workplaces she studied - that they be attractive, wear make-up, keep their hair off their face, etc - are restrictive and obnoxious, but they could still be filled by a considerable number of women. By contrast, the subjective requirement in the family is that it is the particular person, the particular wife/mother, who is doing the emotional labour. While not wishing to support a romanticised and oppressive notion of monogamy and the nuclear family (the "one true love"), it does seem to be significant that an inherent and important part of the emotional labour in the home is that it is done by a unique individual: unique in their relation to the labour and the 'product' produced (the caring, supporting, and ego and body stroking). In this I think Delphy and Leonard's abstraction in terms of simple tasks misses a unique feature of women's domestic labour.

It should be stressed that these differences between 'public' and 'private' types of emotional labour relate to questions of alienation of the product from the labourer and the substitutability of work, but they have little to do with questions of payment or market versus non-market production. The emotional labour which Beasley and Delphy and Leonard identify in the home is clearly unpaid. By contrast the emotional management identified by Hochschild and the sexualised labour identified by Adkins in waitressing and the tourist park employment is clearly "part of the job", that is, part of what women are being paid for. Janet Finch has also documented a variety of male professions like politicians, diplomats, clergy, army officers and doctors, where wives' emotional labour

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28 *ibid.*, p 141.

was an expected part of the husband's job.[29] The wives' emotional labour then is performed in the market or 'public' sector but it is not paid.

Thus there are three different analyses of various types of emotional labour. At one end Delphy and Leonard see emotional labour as a series of tasks which are done by women because those tasks are socially constructed as a wife/mother's job. They are unpaid because of the nature of the institution of marriage (and heterosexism) and exist regardless of the subjective emotional component. Beasley too sees emotional labour as being done by wives and mothers, not simply "women", but argues that it is therefore inherently subjective and should not be considered simply as abstract tasks of disembodied labour. Somewhere in between these two are the cases Adkins focuses on where such labour is definitely *embodied* and not simply *tasks*, but this embodiment is more generic: ie. women rather than a particular woman, (although notions of "attractiveness" in practice may also mean particular types of women - including particular races of women).

In terms of the issues relevant to this thesis, there is sufficient similarity in the analyses to suggest a broad conception of "emotional labour". Emotional labour, as I will use it, refers broadly to all the phenomena considered by Adkins as constituting sexualised labour, Hochschild as emotional management, Beasley and Himmelweit as subjective/caring labour and Delphy and Leonard as emotional labour (more narrowly defined) and cultural display work. However, in contrast to Delphy and Leonard and Hochschild, I would frame all these phenomenon in terms of an embodied labour with higher or lower degrees of particularity and subjectivity, although I will return to these crucial issues below.

Of course any understanding of all these emotional activities as labour or work (and therefore as productive) has its critics. I will leave aside objections based on the simple assertion that emotional activities breach the third person criteria and therefore can not be work - as if such categories were pre-ordained and immutable. Such arguments are outside the epistemological framework and concerns of this thesis. Of more concern are the objections raised within a feminist framework to the construction of emotional labour as work/production. Miriam Glucksmann accepts a social construction of work standpoint, but criticises theories of emotional labour for collapsing everything into

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29 Janet Finch (1983) *Married to the Job: Wives' Incorporation in Men's Work*, London: George Allen & Unwin., esp ch 8. More recently, Germaine Greer has noted the same displays are necessary of a "First Lady", even where, as is the case with the 'wife of' Bill Clinton and Tony Blair, the women had successful careers in their own right. Germaine Greer (1999) *The Whole Woman*, London: Doubleday. pp 252 - 253.

"work".[30] It is not that she does not recognise the emotional tasks undertaken by women particularly, but she does not see that these are best analysed as "work". Similarly she recognises the emotional ties in household labour and the way sexuality organises social space, including work, but she sees this in terms of work being "embedded" in other social patterns - embedded in non-work.

Glucksmann argues that emotional labour theorists lose sight of what is unique and important about work and economic relations. Thus for instance, she argues that the most basic and unique feature of the formal economy in industrial societies (as opposed to the household economy) is that

> people come together in offices, shops, factories or schools ostensibly to 'work' and earn a living. This inevitably affects the range, quality, duration, etc. of the personal relations of paid employment which, in the first instance, are those of people as incumbents of particular posts, located at particular positions in a division of labour.[31]

What is at issue here is the nature of the theoretical abstraction from the multitude of factors and processes around work. Glucksmann is insisting on maintaining (analytically separate) notions of economy, gender and sexual relations. Not surprisingly, given the epistemological framework of this thesis, I share Glucksmann's concern over the collapsing of "work" and "the economic" into everything else, but I can not agree with her that emotional labour should not be seen as work and a fundamental part of the economic. For Glucksmann, work refers to

> activity necessary for the production and reproduction of economic relations and structures in a particular total social organisation of labour, irrespective of how or where it is carried out. The outside parameter would thus be an economic one of production and reproduction, *mainly* of the material conditions of life.[32]

However, Glucksmann concedes that this outside parameter might include much that was non-material. It then becomes unclear on what basis she excludes emotional labour. Indeed the approach she advocates of not starting with an idea of an economic system and then deciding what is economic and non-economic, but rather starting from how activities connect together is precisely the relational approach with which Beasley and Delphy and Leonard define emotional activity as labour/work/economic. It is the particular social relations which define such emotionality and subjective activity as work.

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30 Miriam A Glucksmann (1995) "Why 'Work'? Gender and the 'Total Social Organization of Labour'" *Gender Work and Organization*, Vol 2, No. 2, pp 63 - 75.

31 *ibid.*, p 66.

32 My emphasis. *ibid.*, p 69.

Given this and the strength of the analyses of emotional labour, for now I am unwilling to give up the notion of emotional labour as part of the economy. If ultimately it is an argument over where to draw the line (the production boundary) in terms of which non-material aspects of life to include/exclude, then I would want to include emotional labour, not least because the political price of excluding it is to render women's work invisible. Moreover I have not given up hope of the possibility of a useable definition of the economy which includes emotional labour.

Importance of the Analysis

However, it should be clear that the argument is not *simply* over where to draw a line on a continuum of activities which could be work. The recognition and understanding of emotional labour is important not just because it expands the activities of work, but because it represents a fundamental challenge to the prevailing definitions and measures of the economy. As Beasley argues, emotional labour is fundamental to the household economy and requires an analysis which begins from the specificity of that labour and of the sex relations of which it is a part. However, the fact that emotional labour also happens in the market means that the problem of emotional labour is not simply a problem related to including non-market production in the definition and measurement of the economy. The "problem of emotional labour" is *also* a problem of the way orthodox economics and the national accounts reflect women's work in the market sector.

Again the issue is not simply one of measurement - of finding a value for work which has no clear market substitute. It is a basic conceptual problem. The third person criteria would see much emotional labour as being outside the definition of production because a "third person" could not be hired to do it.[33] But if emotional labour is work and productive of a service, then the problem is not that this work does not fit the definition of production, but rather that the definition of production does not fit the work women do. In this analysis, what is meant by production and the economy might not be recognisable to traditional economics. As Beasley states,

> The very meaning of the category economics, whether perceived positively (in mainstream/Liberal analyses) or negatively (in Marxist 'conflict' theories) as the 'efficient', sparing, concise regulation and use of labour and resources, must, it would seem, undergo a sea change to take account of the particularities of labour in sex relations.[34]

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33 The possible exception here is Hochschild's notion of "gift exchange" which may be squeezed into a third person criteria model, but she did not apply this to the 'private' sphere where the third person criteria is more problematic.

34 Beasley, *op.cit.*, p 20.

The analysis of emotional labour then represents a fundamental challenge to the definition of production and economy. As such it reopens the debate (although on very different terms) which has been closed since the neoclassical moment at the end of the last century, namely, that over the definition of "production".[35] Yet, as we shall see below, it re-opens the debate in complex and contradictory ways. The analysis compounds the problems noted in the previous chapter around the differences of market and non-market labour, and shows that women's work is different to that measured and understood in market/commodity production terms. But more than 'simply' challenging existing market definitions and measures (of production and the economy), the analysis of emotional labour also opens up to question the whole project of economic accounting.

The recognition in the previous chapter of the problems of time and money measurement of women's unpaid labour was problematic enough for measuring the economy, but the analysis of emotional labour as inherently embodied labour makes measurement impossible. By definition, measurement requires delineation, the separation of the producer from the product - a separation not evident in the analysis of emotional labour. The problem is that any quantitative measure then must overlook, or indeed hide, the embodiment of women's emotional labour. If emotional labour must be included in the definition of the economy, then it would seem that we must accept that we can not measure this economy.

However, this questioning of economic accounting goes beyond feminist economics (narrowly defined). I have noted parallel environmental debates about economic valuation. But in reference to the analysis above of the subjectivity and embodiment of labour, the critique is wider still because the notion of *embodied* labour is not limited to the category of emotional labour. Carole Pateman argues that the idea of alienated labour - whether thought in liberal terms of a wage contract or as the commodified labour power in the Marxist version - is fundamentally flawed.

> Labour power, capacities or services cannot be separated from the person of the worker like pieces of property. The worker's capacities are developed over time and they form an integral part of his self and self-identity; capacities are internally not externally related to the person. Moreover, capacities or labour power cannot be used without the worker using his will, his understanding and experience, to put them into effect. The use of labour power requires the presence of its 'owner'.[36]

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35 In some senses, the debate was 're-opened' by the feminist critiques discussed in Chapter 2. However, as I have argued, this was more by way of extending and more consistantly applying the existing definitions than opening the possibility of a different meaning.

36 Carole Pateman (1991) *The Sexual Contract*, Cambridge: Polity Press. pp 150 - 151.

The problem of the 'embodiment' of labour (and its unmeasurability) applies to all labour, not just to emotional labour and the jobs identified by Hochschild. This embodiment of labour also clearly applies to men's work - and even to the most archetypal Fordist commodity production where labour is unskilled and most fungible. Mike Donaldson, who draws from traditional Marxist labour process theory, nonetheless argues that "what is sold at the point of production is a pair of hands, a back, a set of muscles, a body".[37] For such workers, the commodity labour power cannot be alienated from themselves - their bodies. After describing the physiological strain of manual labour and the long term health and economic costs for such working class men, Donaldson concludes that,

> it is not only that workers sell the daily use of their bodies to employers, but that employers actually consume their bodies, use them up.[38]

Clearly from these workers' perspectives, labour is about their individual bodies, but Donaldson also argues that these labouring bodies "must bear the weight of the creation and maintenance of social masculinity" or rather, in the context of the whole book, he argues that social masculinity is constructed in the relation between the experience of men at work and in the home.[39] In this sense, Donaldson echoes Beasley's analysis of women's labour - that what is produced by labour is not just goods and services, but also (gendered) subjectivity. There is thus a subjectivity and embodiment in all work, even the work of the archetypal unskilled wage labourer, which is ignored by a definition and measure of the economy which sees production in terms of exchangeable commodities.

Standpoint

Yet it should also be clear that this view of the subjectivity and embodiment of this manual work is the view of the worker whose body is consumed, not necessarily the view of capital/management. Donaldson is right that what is bought is a back, a pair of hands, etc, but at least for capital employing unskilled work, one back/hand *is* exchangeable for another back/hand. When one wears out, capital (unlike labourers), can buy new ones. For capital, in relation to unskilled work requiring little or no training time (human capital) such labour and such bodies are fungible.

For skilled and semi-skilled labour the market is more limited, but I would argue that for most employers labour is nonetheless fungible: no-one is irreplaceable. The public service organisation I was employed by when first writing this thesis had a work force stratified by grades of 'competency' which relate to abstract content, process and skills of the job

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37 Mike Donaldson (1991) *Time of Our Lives: Labour and Love in the Working Class*, Studies in Society, Sydney: Allen and Unwin. p 17.

38 *ibid.*, p 18.

39 *ibid.*, The quote is from p 17.

rather than the particular knowledge of a specific activity/information area. When combined with a comprehensive filing system which functions as the collective memory of the organisation - including the specific knowledge of individual projects, events etc - the staff become fungible within their competency range. Given that you have certain competencies, it is possible (indeed encouraged) to change from job to job, position to position and pick up where the previous occupant left off.

Even human capital theory which attempts to explain labour market and economic dynamics through an understanding of skills and knowledges held by particular workers or groups of workers, still ultimately sees those skills as alienable. Workers 'exchange' the skills and knowledge they have for increased wages, and the value of that labour is determined in that exchange (ie. in the process of alienation).[40] This is a commodified rather than embodied model of skills/knowledge, and it does not reflect the concern of Pateman and the analysis of embodied labour above - quite apart from the feminist concerns about the gendered nature of what constitutes skill (and who gets the training) in the human capital model.[41]

While from the point of view of the worker, their individual embodiment of the strength, skills, etc, is important to the way they earn their living, to the employer the embodiment is generic - the particular person is incidental to the labour provided. From that point of view, even the embodied labour is replaceable, exchangeable. This is particularly important because it suggests that defining production as that which is exchangeable (the third party criteria), is a definition from the standpoint of capital - from the experience of being able to buy and replace labour. It is a particularity of the capital-wage relation that labour is alienated as an exchangeable product. For self-employed workers (Resnick and Wolff's 'ancient' production relation), labour is entangled with capital so that labour is generally not sold on its own. Similarly, we have seen that the neverendingness of household work makes the measurement of household labour a foreign concept. Arguably, it is only in the wage contract that the use/consumption of labour takes on the particular form of alienable/exchangeable labour. And it only takes that form from the perspective of capital.

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40 Ronald Ehrenberg and Robert Smith define human capital as "a term that conceptualises workers as embodying a set of skills that can be '*rented out*' to employers". [My emphasis] They go on to say that "the value of this amount of productive capital is derived from how much these skills can earn in the market". Ronald G. Ehrenberg and Robert S. Smith (1994) *Modern Labour Economics: Theory and Public Policy*, 5th ed., New York: Harper Collins. p 279, 280.

41 A foundational work of these latter types of critiques, although refering largely to Marxist economics, is Anne Phillips and Barbara Taylor (1986) "Sex and Skill" in Feminist Review (ed), *Waged Work: A Reader*, London: Virago. (Reprinted from 1980)

This suggests that, if alienability criteria are necessary in order to measure production, then the whole project of measuring production - the project of national accounting - is based on and reflects the experience of capital, not the experience of those who labour.[42] The project of even a revised national accounting then appears to be a dead end, at best, for a radical political economy. At worst, it is a Trojan horse sneaking the standpoint of capital into what appears to be a progressive political economy. If, in line with the project and epistemology of this thesis, one wanted a view of the economy which reflected the experience of those who labour, and the gendered embodiment of that labour, then the logic of the argument suggests that we should abandon the third person criteria as a basis for definition. The "economy " then could not, and should not, be measured. End of argument ...

except ...

42 Even Marxian accounting which has as its purpose a critique of capital still falls into this capital-centric framework, although in some Marxian theory there is an appreciation that the political economy of labour may be different from the political economy of capital. See for instance, Michael Lebowitz (1991) "The Significance of Marx's Missing Book on Wage Labour" *Rethinking Marxism*, Vol 4, No. 2, pp 105 - 118.

except that politics and the consideration of the social construction of knowledge are rarely that straightforward. The argument culminating above is itself one-sided because, perhaps ironically, the analysis of emotional labour which provides such a powerful feminist critique of market economics, also raises as many problems for a feminist informed definition of the economy.

The Problem of Emotional Labour Revisited

The analysis of embodied and emotional labour provides a problem for a feminist informed economics precisely because it makes the third person criteria problematic. For all its problems, this third person criteria definition of production has been of great historical importance to feminist economics precisely because it provided a clear measure of commodity like production which was analogous to market production. As such the third person criteria provided the basis of the feminist critique of the national accounts definitions and measures of the economy. The argument was that women's unpaid work should be included in the definition of the economy because it is basically like paid work: it can be (and is) substitutable for paid work. As noted in Chapter 2, the claim that the official production boundary was arbitrary (or sexist) rested on a demand for a rigorous and full application of the third person criteria.

The historic importance of women's work being seen to be like commodity production is further emphasised by Susan Himmelweit. She argues that the "discovery" of unpaid work by feminist and neoclassical economists (Becker and the Chicago "new home economics" school) in the 1960s and 1970s was, in part, a result of changes in domestic work which made paid and unpaid work much closer and comparable.[43] From the late nineteenth century, she argues, the sexual division of labour meant that the idea of individual choice, of women *choosing* to do domestic duties which were their 'natural' station in life, was not considered. Thus there could be no economic notion of opportunity cost to measure alternative choices. But in the second half of the twentieth century the mutually reinforcing tendencies of the growing entry of women into the paid work force and the increasing market availability of substitutes for the products of domestic labour meant that choice was possible and opportunity cost (ie. economic cost) was thinkable.

In this environment, Himmelweit argues that the third person criteria was a useful appropriation by feminists from a model of work which was based on capitalist manufacturing. When feminists adopted this definition of work in the 1970s it helped to break down myths of natural roles and to show that domestic work was like 'real' work,

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43 Himmelweit, *op.cit.*, pp 6 - 10.

it was purposeful activity not leisure - and it could be done by men. Yet despite this historic importance, Himmelweit argues that the situation has now changed. Just as feminists challenged concepts like "rational man" because they represented dualistic categories which did not apply to women, so too she argues that feminists need to deconstruct the commodity production concept of work (based on the third person criteria) - hence the analysis of emotional labour.[44]

However, while supporting the recognition of emotional labour, I question Himmelweit's conclusion here. Certainly in terms of feminist scholarship the situation has changed as recognition of emotional labour makes the third person criteria untenable, but in terms of a feminist agenda of recognising and including women's work in the definition and measurement of the economy, many crucial things have not changed. There remains a marked gender division of labour in all western countries, such that any definition and measure of the economy which does not include unpaid work has clearly gendered outcomes. It also remains the case that, although there have been a variety of official and non-official attempts to measure non-market production, these remain marginal. The market based GDP remains the key measure of production and a definitive measure of "the economy".

In short, while feminist scholarship has changed since second wave feminists took up the third person criteria as a tool for critiquing the official definitions of production, much has not changed. The struggle for recognition of women's work and its inclusion as an uncontroversial part of "the economy" has yet to be won. Given this, there is a danger that a challenge to the third person criteria may undermine feminism's critique of the exclusion of women's work from the official definition of the economy. By this I do not mean that feminists may give credence to the traditional conservative arguments against the inclusion of women's work in the national accounts (because of its difference). The argument has at least moved on from there. The problem is rather that insistence on the difference of women's work (work not definable by the third person criteria) runs a risk of marginalising the feminist critique from mainstream (and indeed much radical) economics and government policy. This abandons the field to those very measures which exclude women's work, which demote emotional labour to a sociological and psychological 'other' and which promote policies not helpful to women.

For, or perhaps because of, all its faults in reflecting the nature of women's work, a third person criteria based definition of production maintains a bridge to traditional economic analysis. The economy remains about something recognisable to traditional economics -

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44 *ibid.*

the production of commodities rather than emotions and subjectivities.[45] The analysis of emotional labour which suggests that a feminist analysis might mean something quite different by concepts of "production" and "the economy", or that labour's embodiedness and timelessness makes it unmeasurable, means that it will hold little interest to a market based economics. It will also then be of less relevance to government economic policy - which from the perspective of a Marilyn Waring is exactly the reason why women's work must be counted (so it is visible to government policy).[46]

Perhaps the problem of unmeasurability applies less to Hochschild's model of gift exchange or Delphy and Leonard's abstraction of emotional labour tasks which might be squeezed into a third person criteria model. But as we will see in the next chapter, even if it were possible to create such a list of tasks, it would be far removed from the concerns of orthodox (and most radical) economics. The inclusion *as production* of activities long considered as leisure or consumption (including some like putting on make-up, exercise, sexual banter or sex or dieting which are almost definitive of leisure/consumption) seems sufficiently radical as to safely be considered as marginal to mainstream economics for the foreseeable future.

Those like Chris Beasley who argue for an analysis based on the specificity of women's work recognise the danger of marginalisation, but see a greater danger in the co-option of the analysis to the market paradigm - or at least they argue that the limits of such a market based project are short of what is ultimately politically desirable. Again, this is 'simply' one instance of a wider debate in feminism over the appropriateness of paradigms based on predominantly male experience.

Given all the criticisms I have made of the application of market economics to non-market production, I must agree that a new paradigm is ultimately necessary: the problem of co-option outweighs the danger of marginalisation. Indeed as a general proposition I would argue (in contrast to the usual use of the word) that it is *utopian* to expect an outcome (eg. post-patriarchy or post-capitalism) which is logically precluded by the tools one wishes to use to create it (eg. the capitalist state or patriarchal economics). Such tools certainly have their uses. However, if the project is not about managing a market economy according to Keynesian/neoclassical theory, but rather is about transcending the current order and

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45 These subjectivities are of course part of mainstream economics, but they are incorporated into the founding assumptions of "rational economic man" and are therefore not subject to interrogation. Stephen Resnick and Richard Wolff (1987) *Economics: Marxian Versus Neoclassical*, Baltimore: John Hopkins University Press. pp 43 - 46.

46 See also, Nilüfer Çagatay, Diane Elson, and Caren Grown (1995) "Introduction" *World Development*, Vol 23, No. 11, p 1829.

understanding the economy in terms of feminist concerns - or the wider and different concerns of those who labour - then issues of marginalisation, while important, must be secondary. Ultimately market tools can not deliver the transformative goal.

Yet, even given this perspective, there are still major problems with including emotional labour and abandoning accounting in a new paradigm of economics. It is not at all clear to me what the economy would look like in this paradigm. If we abandon the notion of the economy as a thing, a "metallic object with clear cut sheer faces and no fuzzy edges", as Beasley suggests,[47] it is still unclear what "economics" would entail. As outlined in the first part of this chapter, the analysis of emotional labour sees production and the economy as being both *more than* the traditional (third person criteria) concept of production and being *different to* it - formulations which both have their problems.

More Than Commodity Production

The first set of problems relate to emotional labour as meaning that there is more to the economy than commodity production measured by market or third person criteria. Delphy and Leonard argue to an extent, that what is produced is gender/patriarchy; Beasley (and Cameron and Donaldson) argue that the product of such labour is in part (or inseparable from) subjectivity itself - the particular identity of women and men.[48] In different terms, Hochschild and Adkins argue that such emotional labour is part of work and capitalism, although it could also be suggested from their work that what is created is also an artificial or sexualised subjectivity.

What all this suggests is that emotional labour is about the production of gender, capitalism, psychology and socialised subjectivities. And if, as Adkins and Hochschild suggest, emotional labour is part of the job, and as Delphy and Leonard argue, it is part of marriage/the family/parenting/being a woman, then it becomes unclear what *the economic* is here. Hence, in the more traditional efforts to account for household production, a clear distinction is drawn between the emotional relations of the family and productive activities which are to be counted - usually a list of commodity production types jobs. [49]

As noted in Chapter 1, the exercise of trying to define "the economy" and to mark out the territory of "economics" in this way is a distinctly modernist one. The quest to delineate

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47 Beasley, *op.cit.*, p 110.

48 Donaldson, *op.cit.* p 17; Cameron, *op.cit.*; Beasley, *ibid.*, p 13.

49 Duncan Ironmonger, for instance, explicitly distinguished "family research" which he sees as being based in psychology and sociology from "household research" whose base he claims is economics. Duncan Ironmonger, ed (1989) *Households Work: Productive Activities, Women and Income in the Household Economy*, Sydney: Allen & Unwin, 1989. p 3.

"the economy" and "the economic" from "the other" (to create closure around "the economy") is a reversion to a dualist epistemology with all the problems of arbitrariness and exclusivity which that implies. But the problem is what happens when we move beyond the postmodern insight that all categories (like labour or the economy) are socially constructed with problematic and contestable boundaries (and possibly centres). This is precisely what concerns Glucksmann in her critique of the "deconstruction" of work. When all activities are collapsed into the category "work" or where work has no distinctive features, then "work" becomes synonymous with "activity". Categories and definitions can then be dissolved *ad infinitum*,

> so that we will no longer know what we are talking about when we talk about work, since there is no way of distinguishing between 'work' and 'activity', and work becomes no more than a word for an essentialist concept whose only future lies in its abandonment.[50]

Such an abandonment, Glucksmann implies, would be mistaken because something called work is an important and distinctive feature of the social terrain.

I think the same argument applies to the notion of "the economy". If we accept that "the economy" is about subjectivity, psychology, gender, etc, then the notion of "the economic" becomes a "theory of everything" and "the economy" a pseudonym for society. This collapsing of definitional boundaries may be logical and useful in arguing against the 'non-theoretical' or 'scientific' definitions of the economy which still lurk in positivist economics, but I think ultimately it is an unhelpful deconstruction. It is still not clear what the economy might mean once we accept that the analysis of emotional labour means that the economy is more than production and the market dynamics of the official definition. If it is about gender, subjectivity, culture, psychology, etc., in short, if it is about life the universe and everything, then as Douglas Adams points out, the answer is 42. Which is to say that the definition may be clear, but the meaning is no clearer.[51]

Difference From Commodity Production

In the alternative to a new, all-embracing and absolute definition and measure of the economy, there is little choice but to accept a number of different definitions of the economy. Each definition has its own starting point and ability to reveal something different about the economy. This would be consistent with the epistemological approach outlined in Chapter 1, and it escapes the problem implicit in a unitary definition of the

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50 Glucksmann, *op.cit.*, p 64.

51 In Adams' *Hitchhikers Trilogy*, the universe's most powerful computer, "Deep Thought", was asked the meaning of life, the universe and everything. It's answer was 42. Douglas Adams (1980) *The Hitchhikers Guide to the Galaxy*, London: Pan Books.

economy as requiring a theory of everything - production, prices, gender, psychology, etc.

Ironically, there is some precedence for this in the official definitions of the economy. As I noted in the Introduction here, there is a clear difference in the way "the economy" is defined between the production/territory based national accounts and the financial and ownership based balance of payments and foreign investment figures. In the national accounts framework, this is an anomaly of no great consequence, rather than an epistemological statement. Nevertheless, it does support a case for the possibility of simultaneously holding multiple definitions of the economy. However, there are problems with such an argument.

While the argument for "the economy as hologram" suggests that there is more to the economy than is seen in the official definition, in practice the argument ends up similar to one which says that women's work is different to the official definition. Thus for instance: Adkins only talks about gendered work, not say, the relationship of prices to demand; Delphy and Leonard only talk about the domestic mode of production, not the capitalist one or the relationship between the two; and of course orthodox economics (and much Marxian economics) says a great deal about price and production, but nothing about gender.

Again the point is not that there is anything wrong with necessarily partial knowledge, but that while we might acknowledge multiple definitions of the economy, in practice we only talk about one at a time. As argued in Chapter 1, this is inherent in the nature of knowledge: the impossibility of talking about everything and the need to abstract from the factors overdetermining any given situation. But the more important point here is that inherent in any given epistemological standpoint is the *hiding* of other aspects of a phenomena because of the particular construction of objects and the focus of inquiry.

Just as the market focus on exchangeability hides not only non-market production, but also emotional work and the embodiment of labour, so too the concern with embodied and different labour hides the quantification, dollar valuation and exchange of labour (including emotional labour) which does happen in both market and non-market economies. Given this, a feminist informed economics might still (or also) want to say something about prices, aggregate production and macroeconomic models of growth and restructuring. These are legitimate subjects of a feminist economics, but in the absence of a feminist framework for quantifying the economy, feminists must then use malestream economic measures. Thus, rather than freeing a feminist economics from the constraints of market economics, in this case the suspicion of the quantifiable, lands feminist

economics back on the terrain of GDP, the SNA and other measures which hide the specificity of women's work.

Thus, despite the feminist critique of the assumption and rigidities of the 'scientific' model of economics based on mathematical abstraction and 'precision' noted in Chapter 3, there may still be a role for some form of accounting for women's work.[52] If we think about the economy as a hologram where we see different things depending on our approach, then what we see and can use from *one* of these perspectives may be quantifiable production and a mathematical model of the economy. Given this, we might be tempted to ask, not, should we measure the economy (with the answer being no - as in the first part of this chapter), but rather, *can we define and measure the economy in such a way as to keep open the view of the hologram, of women's work, and the possibility of an unquantifiable 'product'.*

Conclusion

In this sense, the role for a feminist informed national accounting is the traditional one of making visible women's work, although with the analysis of emotional labour the nature of this project is somewhat different. How such an accounting might be done is the subject of the next chapters. This chapter has set the context for that discussion, firstly by bringing to the foreground the strongest arguments against the third person criteria definitions and measures of production (namely the analysis of emotional and embodied labour), and secondly by turning those analyses back on the political project of making visible women's work.

The unwieldiness of an economic "theory of everything" and the marginalisation of a "theory of difference" reshapes the question implicitly posed in this and previous chapters: should the economy be measured? Instead of a yes or no question relating to a singularly defined economy, we can now begin to search for a less final or less complete definition and measure which might recognise emotionality, subjectivity and product beyond the simple economic/non-economic binary. It is to this project I now turn.

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52 Even Beasley, whose focus is the subjective nature of emotional labour, argues for a plurality of approaches including quantitative measures, thus suggesting that economic modelling might have *something* to contribute to feminist economics. *op.cit.*, p 113.

Chapter 5: Measuring the Hologram (and the Neoclassical Impasse)

The last chapter recast the question which was underlying much of the previous two chapters: the question of whether or not non-market production and the whole economy could and should be measured. The analysis of emotional labour and the embodiment of labour suggested that measurement of this 'economy' was neither possible nor desirable. The delimitation and alienation of production required for any measurement reflected the standpoint of capital over the (gendered) embodied experience of labour. However, for a variety of pragmatic and epistemological reasons, I nonetheless argued the need for a (different sort of) definition and measure of the economy. I suggested that what was required was an approach which, unlike the monodimensional malestream measures, opened up (rather than foreclosed upon) a vision of the economy as being both more than, and different to, the production of goods and services. Where better a place to begin the project of moving towards such a definition and measure than with what I have hitherto identified as the most intransigent problem with the official measures: the problem of emotional labour.

Problems in Measuring Emotional Labour

Clearly from the perspective of a definition and measure of the economy informed by feminism, not only must non-market production be included, but issues of emotional labour and the embodiment of labour must also be included. But, as we have seen, there are major problems in doing this. The first of these problems has been dealt with at length: the seamlessness and unmeasurability of much of women's work, and of emotional labour in particular. However, I also noted there are various different analyses of emotional labour, including those of Hochschild, and Delphy and Leonard, which to some extent dealt with it as disembodied labour, as abstract tasks or actions. I criticised this analysis because it did not take account of the particularity of the labour and the labourer - that certain activities were quite different to their generic description when they were done by a particular person, a particular wife/mother/woman.

Nonetheless, these analyses do have a significant advantage if we are interested in (or forced into) measuring the economy. Because labour is not viewed as uniquely embodied, it can fulfil the third person criteria. Or at least, given the above criticisms, it approximates the sort of production which might be measured on a par with commodity-like production. Thus, for instance, the emotional labour of wives of executives and public figures, while embodied and specific to 'the wife' (or indeed, as Finch notes, an

obligation of being the wife of those particular paid workers[1]) could nonetheless be seen as performance. Such an act/performance may bear no necessary relation to the emotional attachment between marriage partners. It is a performance for a particular duration while in the public sphere. Similarly, in other contexts the unpaid nurturing of partners and friends - listening, advising, supporting, ego building - things which might appear part of a relationship, can be abstracted as counselling activities. These have a particular duration and, when stripped of their emotional ties, they have market substitutes or can be seen as analogous (though not necessarily identical) to market work. And again, the tasks which Delphy and Leonard identify as building solidarity in and between households - the work of building friendships, organising common activities and mutual supports, can all be counted as emotional labour. Indeed, Donaldson argues that such networking provides an important base of economic support and welfare, especially for working class women.[2]

By the nature of the abstracted analysis, all of the tasks of emotional labour could be measured by time use and imputed wages. Again, this is not a perfect measure, or a measure of emotional labour taken on its own terms. The approach is inherently a compromise in order to produce the possibility of an accounting for emotional labour. But though compromised, it does represent a pushing of the production boundary to include more of the tasks which form part of women's work (particularly) and a greater recognition of women's economic contribution.

Of course even if an accounting were possible based on this definition, it could not overcome many of the problems with time and money measurements noted in Chapter 3, nor would it include all elements or all tasks of emotional labour. Some aspects of cultural display, being attractive, bright, middle-class, neat, etc, *could* perhaps in theory be measured by accounting for the time inputs into such cultural display - the body management and exercise, making up, shopping, etc. But, other activities contributing to this display, like dieting, not being hung over, and having a 'proper' accent defy time measurement. It is also an open question whether the *preparation time* here is really the same as *the activity* of emotional labour. The cultural display is not the getting made-up or the exercising, but the effect.

Similarly problems arise in relation to smiling, whether it be as an air hostess to customers (Hochschild) or a wife to a husband (Delphy and Leonard). It is an activity of emotional labour. Yet it is hard to measure the time of a smile or of a husband/partner's or

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1 Again see Janet Finch (1983) *Married to the Job: Wives' Incorporation in Men's Work*, London: George Allen & Unwin. pp 90 - 92.

2 Mike Donaldson (1996) *Taking Our Time: Remaking the Temporal Order*, Nedlands: University of Western Australia. pp 42 - 43.

customers' appreciative look. And there is no getting around the embodiment of a smile by considering it as an abstract task which is theoretically capable of measurement. Smiles can not be measured in practice. But even if, in the most intrusive of workplace regimes, the length of smile a worker gives to a customer is regulated and trained into the 'service', the point is not really the time it takes. Rather the point in recognising the smile as emotional labour is to make visible the social relations presupposed and perpetuated by it: the gendered relations between worker and customer, between employee and employer, and perhaps, an effect on a corporate bottom line - an issue to which I shall return later.

The more immediate point here is that these aspects of cultural display raise not only questions of how they might be measured, but also perhaps a greater problem of precisely what activities to include and count. This is more than just a question of which acts can practically be measured and which still need to be excluded. The definitions in the last chapter were very broad, but useable enough in terms of a conceptual discussion of the issues involved. However, the activity of measuring such labour requires a much more precise definition. Indeed, the concern to abstract the tasks of emotional labour from their subjective context suggests that what is aimed for is a standardised list of tasks which are to be counted in any measure. Indeed, such a (Taylorist) approach is ultimately necessary for a national accounts style measurement, so that the time spent on emotional labour can be logged and a money value imputed as a 'wage' for that activity.

Clearly from the above discussion, some of these tasks might not be measurable in a practical sense. But there are also broader conceptual issues concerning which tasks might be included, particularly in relation to which, if any, tasks undertaken by men might be included as emotional labour. As in the last chapter, the example of sex or sexual services as an activity of emotional labour might again be useful in clarifying the issues.

The argument of Delphy and Leonard and others is that sex is work for women because it is part of an institutional obligation which a wife owes a husband. It is exploited work because of the patriarchal nature of the institution of marriage. In a sense, the wife produces sexual services and the husband consumes those services. Presumably though, as a conjugal obligation, sex might also be considered as work for husbands. However, as Delphy and Leonard's focus is on exploitation (not work *per se*), they do not consider whether *his* sex is work. Similarly, Beasley considers women's emotional labour to include husband care, but does not comment on men's caring role and whether this would qualify as work.

Obviously though, if emotional labour is broadly defined as certain types of tasks, then men do emotional labour in the home - as well as the emotional management which

Hochschild identified in paid work. Apart from family caring activities, men's emotional labour might also include forms of masculine cultural display, encompassing possibly sport (body work) and elements of conspicuous consumption (bread-winner performance). There would then be little or no human activity outside this definition of work/production. Again we drift into an unusable theory of everything which makes measurement impossible or meaningless.

But apart from this pragmatic consideration, there are real questions as to whether men's activities here are emotional labour and production. If, as for Delphy and Leonard, it is the exploitative relations which define emotional activities as work (as productive of a service provided by one party to another in some form of institutionalised contractual exchange), then it may be that some activities/tasks are emotional labour when done by women, but not by men, because those tasks are done under different social relations. However, even if this is accepted, it is not a final answer to the issue of men's emotional labour. It is one thing to say that sex is not work for men/the male head of a household, and another to say, for instance, that a father's role in emotional management of children, even an archetypal disciplinary one, is not work in the same way that a mother's different emotional labour towards children is.

Of course it may be that a feminist economics can simply claim not to be interested in men's work (which is implicit in Beasley's approach), or alternatively that the amount of emotional labour which men do is not significant in terms of national production. The conceptual issue can therefore be sidestepped simply for practical reasons. This would be a move similar to the one noted in Chapter 1 where Marx conceded that service labour could be productive if capitalistically employed, but in practice he ignored it because (at the time he was writing) it was economically insignificant.[3] However any claim which precluded men's emotional labour on the grounds of statistical insignificance would have to be argued empirically rather than asserted. And I suspect that if masculine performance labour was included as above, it would be difficult to claim it as statistically insignificant.

The problems around whether men's 'emotional' activities can be included in a definition of production/the economy are replicated and made more intractable when we apply the same social relations considerations to the emotional labour of some women. Even if we were to argue that the social construction of work in a patriarchal society was such that only women's emotional labour was work, there would still be problems around the differences in what might constitute work for women.

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3 James O'Connor (1975) "Productive and Unproductive Labor" *Politics and Society*, Vol 5, No. 3, p 313.

As noted in Chapter 3, the *system* of social relations which defines emotional activities as work is for Delphy and Leonard a total one - a dominant system of monogamous heterosexism to which there is no outside.[4] If all women's work was subsumed under the same system, then perhaps a consistent list of emotional activities done by women could be constructed. All women's activities would be performed within the same social relations. While this might allow for consistent measurement of such activities, we have seen that this totalising analysis of *the system* is itself problematic. It either ignores the production of 20% of non-male-headed households (by Delphy and Leonard's own figures[5]) or it erases the differences between production in male-headed and these other households.

However the acknowledgment of difference comes with its own problems. If emotional labour is defined as productive work because of the patriarchal social relations under which it is undertaken, but some households are not subsumed under those overarching social relations, we clearly should not count the same emotional activities (and perhaps other 'productive' activities) as "work" in those 'other' households - thus rendering that activity invisible in the accounting. This is not problematic for those interested primarily in the social construction of work. Miriam Glucksmann is happy to argue that

> It is not the actual activity, or task, that determines whether or not it constitutes work, since all depends on the social relations in which it is undertaken. ... the identical activity may constitute 'work' in some situations and not in others. ... Depending on circumstances, baking a cake might or might not be considered as work.[6]

This categorisation of work and non-work may be the logical end product of the social construction of work argument, but it is problematic in terms of a national accounting definition and measure of "the economy". Sometimes a particular activity will be counted as production and at other times the same activity will not be counted.[7] A feminist definition of production might then exclude from "the economy" the emotional activities of men and of women in non-male headed households, but this exclusion is problematic in terms of a national accounting which seeks to make visible women's economic activity.

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4 Christine Delphy and Diana Leonard (1992) *Familiar Exploitation: A New Analysis of Marriage in Contemporary Societies*, Cambridge: Polity Press. p 266.

5 *ibid.*, p 4.

6 Miriam A Glucksmann (1995) "Why 'Work'? Gender and the 'Total Social Organization of Labour'" *Gender Work and Organization*, Vol 2, No. 2, p 65.

7 As I noted in Chapter 1, this is the case in Marxian economics where only labour which creates surplus value for capitalists is counted as productive, often meaning that the output of the self-employed is not included in the national accounts. See for example, the accounts in Anwar Shaikh and E. Ahmet Tonak (1994) *Measuring the Wealth of Nations: The Political Economy of National Accounts*, New York: Cambridge University Press.

As the feminist critique of the SNA production boundary shows, it should not matter for the measurement of national product whether work activities are done for pay or not, in the home or private enterprise, or in patriarchal feudal or communal households (to use Fraad, Resnick and Wolff's terms).

There is also the problem that Kushnirsky and Stull noted in reference to Marxian accounts, that making a consistent measure of the amount of goods and services produced in an economy requires a standardised list of activities,[8] in this case including the emotional labour which can be counted as production. But constructing a nationalised, standardised list of tasks of emotional labour cuts across the idea of the social construction of work, an idea which is crucial to positing emotional labour as work/production in the first place.

Without a notion that social relations define/construct "work", there is no foundation to Delphy and Leonard's or Beasley's claim for emotional labour as "work" - as opposed to Glucksmann's claim that such activities are about (or are best analysed in terms of) family, kinship, coercion or non-economic relations.[9] The statistical imperatives of measurement are completely at odds with the theoretical analysis of emotional labour being put forward. Even using the already compromised definition of emotional labour as tasks abstracted from their subjective/embodied performance, the measurement of emotional labour which is the focus of this chapter looks doomed.

The Impasse

Again then, it appears that a feminist informed economics must abandon the notion of economic measurement (or lose its analysis of emotional labour). Yet such a conclusion is itself problematic. In the previous chapter I cited a number of reasons for wanting to measure emotional labour - principally in order to get it recognised as work and as important. These remain strong arguments despite the overwhelming problems of actual measurement. But the conclusion as to the impossibility of a national accounting incorporating emotional labour is also problematic because, in a rather ironic play on the problems above, some emotional labour is already included in the national accounts. More than that, we currently have a situation, not just where some emotional labour is included as some is not, but where the same emotional tasks are counted as production in some instances, and not in others.

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8 See the discussion in Chapter 1 here, and Fyodor Kushnirsky and William Stull (1989) "Productive and Unproductive Labour: Smith, Marx, and the Soviets" in Donald Walker (ed), *Perspectives on the History of Economic Thought: Volume 1, Classical and Neoclassical Economic Thought*, Aldershot, Hants: Edward Elgar.

9 Glucksmann, *op.cit.*, p 70.

The emotional labour which is counted is of course that which takes place in the market as paid work. As was noted in the last chapter, Hochschild saw airline stewardesses' emotional management as "part of the product" which is sold - indeed, it was the basis of advertising the production of air travel services. It is therefore part of the product and income measured in the national accounts. Similarly, in Adkins' research, emotional labour is "part of the job" of waitressing and work in the tourist industry. Being part of the job here refers to a general embodiment of labour, separate from the tasks required if a man had the same occupation, but nonetheless, a required part of employment for women.

While emotional labour is clearly part of the national product, ie. income earning activities, the embodiment of such emotional labour and its fusion with other tasks of work and with the whole of work creates particular problems in terms of measuring this emotional labour. In national accounts style measures, the total value of the labour, including emotional labour, is the wage/salary and the value of the product is its price. But this does not tell us the value of the emotional labour which went into it. As noted in Chapter 3, it is possible to measure labour which is done in conjunction with other work by weighting the time use/income. [10] For instance, a proportion of a waitress' wage could be allocated as payment for drink delivery, and a proportion assigned as the value of the emotional labour.

However, the actual figures used in this type of measure are quite arbitrary. How could we decide whether the smile or subordinate friendliness to customers constituted 20% or 60% of the tasks involved in serving drinks? Then again, in terms of the more traditional household labour Williams and Donath were studying, is watching TV while you cook 20% or 60% of the cooking time? In both cases the figure is arbitrary and does not reflect the seamlessness of the work. Nevertheless, it does suggest that if emotional labour is considered as a series of abstracted tasks, it could be measured in extended national accounts even where it is thoroughly embedded in the rest of work.

Of course, these examples are the difficult ones. In terms of emotional labour which is measured when it takes place in the market, it is also clear that there are a range of jobs which include discrete and explicit tasks of emotional labour. Here I am thinking of professions like doctors and nurses who must deal with the emotions of patients and relatives as well as bodily care which is the focus of their work. Indeed, human resource

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10 See the discussion of their work in Chapter 3 here, or in the original, Ross Williams and Susan Donath (1993) *Simultaneous Uses of Time in Household Production*, Department of Economics, University of Melbourne. Research Paper 370.

management models used in major hospitals measure emotional labour (time talking to patients and relatives) as a discrete unit in accounting for nursing time, although obviously some of this activity is mixed with other patient care activities.[11] In addition there are a range of jobs where the whole of the job itself (or near to it) consists of emotional labour. Professional counsellors and psychologists would fit this category, but so too would those fashion models and perhaps some actors whose 'performance' is about *looking* rather than acting, that is, cultural display.

Clearly then there is a large amount of emotional labour which is valued in the official definitions and measures of the economy. This is a problem if we wish to have a consistent measure of the economy when we have already accepted that, even when considered as abstract disembodied tasks, emotional labour can not be measured in the home because no list of emotional labour tasks can be produced. If we are to abandon measuring emotional labour altogether, or accept that only some emotional labour can be measured, then again we don't have an "apples to apples" comparison of market and non-market production. Rather, non-market production is ignored or devalued while the same work in the market is counted and valued. We are back to (a different version of) the most basic problem of the official accounts discussed in Chapter 2. The implicit message here is again that work is really only considered work when it is paid - with all the gendered consequences which follow from that.

From this point of view, and despite the seemingly insurmountable problems already discussed, some measure of emotional labour would seem to be desirable. Yet this in itself does not make the project any more possible. Even using the inherently compromised definition of emotional labour as disembodied tasks, a consistent list of tasks is still elusive and at cross-purposes with the argument about the social construction of work on which the analysis rests. And again, given the fusion of emotional labour with other work, any measurement would be arbitrary.

What we have then is an impasse in trying to measure emotional labour, although in fact I think in many ways it is simply a more acute version of the general problems highlighted in the contradictions between the feminist analyses noted in Chapters 2 and 3. In order to recognise and value women's work, that work needs to be included in a mainstream definition and measure of the economy. But those very measures hide as much as they reveal about the nature of women's work. The predicament is particularly acute in terms

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11 Eileen Willis (1999) "The Timing of Nursing Work Using EXCELCARE: Task Based Real and Virtual Lean Production" Seminar Paper to the Department of Social Inquiry, University of Adelaide. (Unpublished)

of emotional labour because the measures hide both its existence and the specific embodiment of that labour.

While this impasse may seem intractable, there is a further dimension to the problem of accounting for emotional labour, the analysis of which not only throws more light on the impasse, but is important because it begins to open up a way through (or at least around) the impasse.

The 'Value' of Emotional Labour

Thus far I have simply discussed whether and how emotional labour might be measured, but a further dimension is opened up by asking a different sort of question about measuring emotional labour. This other question is simply asking, assuming that emotional labour could be quantified, what would be its value. There are two aspects to this. Firstly, whether emotional labour has a separate value of itself, and secondly, if it has, should it be included in a measure of the economy as a positive or a negative value. In orthodox national accounting these questions do not arise, because all contributions which earn an income are given a positive value. Thus, in asking these questions, I am clearly drawing on arguments from different traditions, in particular from the classical and Marxian traditions (and the "Coasian" analysis of transaction costs), and from the environmental economics discussed earlier. Indeed, ultimately I want to argue that, in as much as it facilitates production in a patriarchal capitalist system(s), emotional labour is closer to the notion of social maintenance or exchange/transaction labour in the Marxian tradition and to defensive expenditure and social costs in green political economy than it is to 'production' as defined in the national accounts. I will consider these ideas more fully later and in the next chapters. For now I simply want to argue that even where emotional labour is a separate activity and may have a 'value', it is not necessarily a positive one.

Consider Hochschild's air stewardesses. While Hochschild calls emotional labour a commodity,[12] I question whether it adds value to the product of air travel. People fly because they want to get from A to B, not because they want to have their egos stroked by attractive women - if they wanted that, they could more easily get that service in local upmarket clubs and hotels. Certainly they may expect that service when they fly, but that is not the issue. The particular emotional labour would not exist as a commodity separate from the air travel, but nor is it essential to that travel. Customers would still fly if they wanted to get from A to B regardless of the nature of the service. As an example, I am tempted to say that I and others still flew Aeroflot despite legendarily poor service! More

12 Arlie Russell Hochschild (1983) *The Managed Heart: Commercialisation of Human Feeling*, Berkeley: University of California Press. p 14.

to the point though, it simply can not be believed that, except in exceptional cases, people fly somewhere (as opposed to choosing a particular airline) because they know they will be smiled at. And if emotional labour is not really necessary to the production of air travel, then it can not be said to add value in the sense that production adds value by creating a utility to fill a need.

Of course what is actually sold by airlines is not just air travel, but air travel with emotional services. However, it is unclear what the value of the emotional service component could be, given that people would still fly without it and the emotional labour would not have taken place without the air travel. Underlying this valuation problem is the real issue, which is a question of standpoint.

As was noted previously, emotional labour is important in the job of air stewardesses and even forms the basis of competition between airlines. But to count this as 'production' (and therefore as socially necessary) is to adopt a particularly individualistic (neoclassical) perspective. For the individual worker the emotional labour is part of the job, and for the capitalist (in this case the airline) such emotional labour *is* necessary because otherwise *they* would not provide the service - a competitor would. The emotional labour is productive for capital because it fills a need. It brings market shares and profit to the airline, and ensures that the production of air travel happens at a particular site - their company. Hence, the employer pays for the service to be provided, thus proving its 'necessity' and making it productive in the neoclassical framework.[13]

When we move beyond the individual and consider the economy as a whole we see a different picture. If people would fly from A to B regardless of such emotional labour, then the same amount of air travel would still have been produced without emotional labour. This challenges not only the 'necessity' of the emotional labour, but also the appropriateness of the liberal/neoclassical assumption that the economy is simply the totality of individual preferences expressed through the market. The apparent individual demand for emotional labour, and stewardess' work which supplies it (which together define production in the neoclassical framework), turn out to be irrelevant to the quantum of air travel produced at the national level. And at that level I would argue that, to the extent that the emotional labour is about a necessity of airlines competing in a (patriarchal and capitalist) market, that labour does not produce new goods and services. It facilitates production and determines (in part) its social location (in a particular company). But that is not the same as actually producing the product.

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13 On the necessity = production link in neoclassical economics, see the discussion below and in Chapter 1. Also see Shaikh and Tonak, *op.cit.*, p 3.

The same argument holds for many instances where a particular commodity might not be *purchased* at all but for the emotional servicing. For instance, a meal may be bought at a restaurant because people enjoyed "good food and service" - or because of the emotional labour (ie. cultural display and perhaps child care) of a red and yellow clown masking socially and ecologically undesirable practices.[14] Nevertheless, the key point in terms of economic production is that a meal would generally still have been produced regardless - it might just have been produced at a different establishment, or perhaps not in the market. For many instances of emotional labour, the product would still be produced somewhere without the emotional labour (or with different types of emotional labour).

In both the airline and McDonald's examples, the emotional labour is 'necessary'. It is necessary, either to ensure that a particular brand of product is consumed (in the airline example), or that a particular product is produced and consumed in the market rather than in the non-market economy (as in the McDonald's example). However, the emotional labour does not create a new product. Nor does it change the usefulness of the original product in a way which would necessitate a change in the measure of aggregate production. The emotional labour only changes the social location of production, including its location in either market or non-market production. In Marxian terms, it changes the use value into an exchange value. While this is important, I am arguing that this does not make that labour productive in itself.

Consider an analogous argument. A government passes an Act to nationalise/privatise a utility like electricity production, or replaces a child care centre with a subsidy for stay-at-home parents. In both cases the social location of production is shifted, but neither the Act nor the labour which went into drafting and passing the Act produces electricity or child care - obviously. And nor does the clown produce the Big Mac. The argument may be that the government's Act created the environment and preconditions for such electricity or child care production, but this does not make it productive of electricity or childcare. As Shaikh and Tonak point out, consumption of product is a prerequisite for future production, but this does not make consumption productive, unless the terms production and consumption become meaningless.[15] If *facilitating* production is indeed different to production, then the emotional labour considered above can be seen as non-production

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14 The practices and the effect of the Ronald McDonald in prompting children to eat at McDonald's is documented in the film, Franny Armstrong (1998) *McLibel: Two Worlds Collide*, London: One-off Productions.

15 Shaikh and Tonak, *op.cit.*, p 25. Breaking such binary oppositions (production/consumption) may be of significance for a post-structural reading which challenges the privileged place of production, but again, in terms of constructing national accounts, some definitional lines must be drawn and some line between production and consumption is necessary even if conditionally constructed.

labour - labour necessary for production to happen in a particular economic system, but not production of itself.

Of course, there are instances where emotional labour may appear to improve a particular product or provide a service of itself. The emotional labour of psychologists, counsellors, sex workers and the equivalent (ie. abstracted) tasks in the household often provide new products or services - quite separate from the production of other goods and services. But even where emotional labour is entwined with other goods and services, it is still possible that it creates a new (changed) product. To return to the airline example: while emotional labour may not be necessary to physically fly people from A to B (as opposed to flying *customers*), it may nonetheless improve the quality of the trip, that is, it might change the (utility of the) product consumed and add value to the trip. In both cases a separate, valuable product would seem to be created.

But here, a feminist informed standpoint would have to ask about the content of that 'value'-added. In a similar fashion to the environmental critique of the national accounts treatment of what might be considered "social costs", I want to argue that positively measuring (as production) much emotional labour represents the valuing of what should be considered as unnecessary (and undesirable) labour. As Belinda Probert argues in reference to attempts to value socialised 'feminine' skills like tact, communication and emotional management in award wages,

> Even if it were possible to measure feminine skills like smiling a lot or even flirting and reward them, would it be desirable to do so? It is one thing to recognise what women do as requiring real skills, ... but another to be cultivating traditional forms of femininity by demanding recognition of these skills as women's skills.[16]

Such a recognition, according to Probert, simply legitimises gendered stereotypes and the sexual division of labour. The same may be true of recognising some emotional labour as 'production'.

More generally, I would argue much emotional labour is very specifically *created by* gendered roles in a patriarchal society where women's bodies are sexual objects and women are service and sex providers. The bodily management functions Beasley refers to, Delphy and Leonard's "stroking egos", Adkins' sexualised work and much of Hochschild's "managing emotions" all result from an expectation that women do particular things and they do them in a particular (subordinate/appeasing) way. It is not

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16 Belinda Probert (1992) *Clerical Work and Award Restructuring: Questions About Skill, Training and Pay Equity*, Centre for International Research on Communication and Information Technologies. Policy Research Paper 22. p 12.

simply that the patriarchal social relations define such activity as work, but that, at least in some cases, the 'service' is only provided because of those relations. If we could imagine a non-capitalist, non-patriarchal world, then perhaps the same activity (the manicured neatness and artificial smile of the air hostess, or the suggestive clothing of the bar workers in Adkins' study) might be viewed as offensive (to both men and women) and not as a service at all. Similarly, the display Pringle noted of secretaries' work which is in part about presenting the boss in a particular way is the product of a gendered work relation not of the administrative tasks involved. More importantly, this labour is undesirable as it constitutes the secretary, not simply as subordinate in terms of line management, but also a particular sexualised subordinate.

A similar argument can be made in relation to household production. In the traditional household it is also possible to argue that much emotional labour is expended not just *in* a system of monogamous heterosexuality, but *because* of those particular patriarchal social relations. The traditional wedding ceremony which formalises many such household arrangements is a public commitment to the institution of monogamous heterosexuality, but the ceremony is itself also a product of enormous amounts of emotional labour. The cultural display of parents, grooms and most particularly brides and bridesmaids, is one aspect, the care taken over the politics of guest lists, seating arrangements and gifts is another (building relations of solidarity between households in Delphy and Leonard's terms). Beyond (or without) the wedding ceremony itself, the emotional labour continues and again, in some cases, is produced by and because of the institution of the marriage. The 'cultural display' which Finch noted of particular executive wives,[17] is only one example of where that labour is only conceivable because 'the wife' is considered to belong to/with and reflect on the man.

Of course feminism is far from a consensus in the analysis of monogamy.[18] But if we assume that there are at least substantial arguments against it, then we must also question whether the emotional labour which supports that institution is best considered as socially necessary, productive labour. The 'necessity' here is a product of a patriarchal system/patriarchal social relations. If we are seeking an accounting incorporating feminist insights, we must ask whether such labour should be recorded as a positive contribution to society, and for women (and the answers may not be the same for these two cases).

However, any claims made about 'unnecessary' emotional labour must be seen as

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17 Finch, *op.cit.*, ch 8.

18 Victoria Robinson (1997) "My Baby Just Cares for Me: Feminism, Heterosexuality and Non-Monogamy" *Journal of Gender Studies*, Vol 6, No. 2, pp 143 - 157.

speculative as we can not see what emotional labour might look like in a society without the institutional and social pressures which place enormous expectations and pressures on homosexual and non-monogamous household relations.[19] Some form of emotional support and subject formation presumably would still be necessary in a world not characterised by patriarchal sex relations, but the nature of this activity (which may not be "work") would be very different to the emotional labour now practiced.

In any case, I am not claiming that all emotional labour is oppressive. Some labours, like aspects of parenting, role-modelling, community building, or nurses dealing with patients' emotions, may well be positive contributions to any society. Other emotional labour, like counselling and ego stroking, might be necessary defensive activities in this society. Indeed, it should not be difficult to see that, however we might characterise the system(s), much emotional labour is spent repairing humanity damaged by racism, homophobia, the alienation of wage labour or the shallow materialism of ruling classes[20], or by other processes in a competitive individualistic society. This is (in part) why many of the activities traditionally associated with 'leisure' involve emotional labour (eg. exercise, sex, friendship forming, family bonding). It is because they are recreational - ie. re-creational. The 'necessity' of this emotional labour then is, at best, a product of a 'defensive' discourse from within an oppressive system, that is, necessary and 'productive' only because of the nature of those systems.

Again, (and analogously to the green critiques of social costs and defensive expenditures) if the term "production" carries a positive connotation, the danger is that in seeking to recognise emotional labour, feminists may find themselves positively valuing the manifestations of the system of oppression they seek to change. If emotional labour is to be viewed as work, as productive of a service, and therefore incorporated into national accounts style economic measures, then it is these negative processes (eg. the creation of subordinate feminine subjectivities, of hegemonic masculinity), or the necessary mitigation of those processes, which are being positively valued via the measurement of emotional labour.[21]

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19 While Delphy and Leonard's analysis of a system from which there is no voluntaristic escape may be too universalistic, from my own experience of pushing these boundaries, I must agree with them that the dominant institutions still constrain and structure even politically informed alternative arrangements. See Delphy and Leonard, *op.cit.*, p 266.

20 By the latter, I mean the type of process Freire described, whereby the ruling classes are formed by the necessity of their oppressive roles in a system where life becomes empty of meaning - filled only by having/owning/consuming. Paulo Freire (1984 (1968)) *The Pedagogy of the Oppressed*, New York: Continuum. pp 44 - 45.

21 Of course this may not be very different from Marxists measuring the production of wage labour, except that at least when employing Marxian notions of productive and unproductive labour in a labour theory of value, the different categories of analysis make it clear that they are measuring exploitation.

Overall then I want to suggest, firstly, that if emotional labour could be separated from production activity, it might not be new production; and secondly, that even if it were new production, then it might not be desirable to normatively value it by incorporating it into a national accounting measure of the economy. The issues here are similar, but interestingly different from those identified by Marilyn Waring in her critique of the national accounts: not only do they exclude much women's work, they value (ie. make valuable/worthwhile) things she (and I) find abhorrent, like militarism and the destruction of the environment. I have already suggested that Waring's analysis is flawed, in part because of its conspiratorial overtones, but the underlying concern remains valid. Military production and the consumption/destruction of goods and services in war (or the preparation for war) is "valued" in the national accounts and makes a positive contribution to economic growth.

Yet, like many of Waring's criticisms of the System of National Accounts, this criticism relates to the use of GDP as a measure of welfare rather than as a measure of production and/or economic activity. But this is the crucial point here. It is certainly arguable that military production and destruction should not be positively valued, but (unlike some emotional labour) it is much harder to say that manufacturing weapons is not "production". The image of a vehicle (a car usually, but a tank will suffice) rolling out of the factory door or a ship sliding down the slipway is almost a definitive image of industrial production. If the purpose of national accounting is to measure production (economic activity), then it would seem that military production should be included with all other production regardless of whether or not it added to welfare or warfare.

While the issue in relation to emotional labour is confused by questions of whether it is new production, there is no confusion in relation to military production. And with this clarity, we can argue, as I began to in the "Environmental Interlude", that we need to choose between measuring welfare or measuring production. But again, the national accounts conflate these concepts so that it is impossible to include activities like war and environmental destruction in the national accounts as anything other than welfare enhancing production. Similarly, it would be impossible to recognise emotional labour without also valuing the obnoxious aspects/tasks of that labour. Again we are at an impasse, but importantly here, I want to argue that this impasse is a product of the neoclassical definitions which underlie the national accounts.

The Neoclassical Nexus

We saw in Chapter 1 that the economy was defined by production, and that in the neoclassical framework production was about the creation of new utilities: goods and

services which satisfied real needs and wants - ie. were socially necessary and added to welfare. The measure of "socially necessary" in this individualist framework was that someone was prepared to pay for them. Thus, any production sold in the market and any income earned, by definition fulfilled a need and was therefore part of production.[22] This nexus between production, the market and welfare was the core of the neoclassical moment in the history of national accounts, but it is also the core of the problem here. In this equation of production, market and welfare, there is no way to distinguish production from welfare, but also no way to separate work and production. Work is productive if it gives rise to a market income, if not, it is not part of the economy. The extended accounts discussed in Chapter 2 broke this equation in terms of the market, but left the rest of the equation intact. Indeed it is even debatable how much they broke the equation in terms of the market. The third person criteria is about exchangeability (read marketability), and in the extended accounts it serves as a proxy for the market in the neoclassical equation.

However, as we have seen, the analysis of emotional labour challenges this exchangeability production criteria and asserts a view of a different type of labour - a labour which is never entirely alienable and which is a product, not of individual demand for more utility, but rather (in many cases) it is a product of a specific social system. This, plus the argument that emotional labour is *work* because of the social relations within which it is performed, takes the analysis beyond the individualist (neoclassical) standpoint because it requires some level of social/structural understanding. And with this, the notion of social necessity and the production (of utility) is questioned, no longer definable or guaranteed by the simple fact of a market purchase (or equivalent). The neoclassical nexus is stretched to breaking point.

More than being stretched, I am arguing that the nexus *should* be broken, precisely because there is no way within this neoclassical equation to view work except as exchangeable and productive. Its monodimensional definition does not allow for different sorts of work , as conceptually there is only one type of economic labour - that which earns (or is capable of earning) an income and is therefore productive. If it doesn't (or couldn't) be exchanged for an income it is not work, not part of the economy. Thus if we want to count emotional labour as work (and as part of the economy), it must be exchangeable and it must be deemed productive. If we do not want to give such value to particular forms of emotional labour (or military expenditure) because they are wasteful or obnoxious, we can not do so unless we pretend that they are is not really work, thereby rendering invisible a large part of the economy. There are no other choices because the

22 Shaikh and Tonak, *op.cit.*, p 3.

neoclassical nexus joins all the terms into one work = production = market = welfare = economy, giving an "everything or nothing" choice.

This is in marked contrast to the analysis of environmental defensive expenditures and the green definitions of economic welfare which see that labour and economic activity can produce more or less welfare, or simply maintain the status quo by repairing damage caused by other economic activity. The neoclassical nexus is also in marked contrast to the logic of the more limited definition of production used by the classical economists. The classical definition clearly signalled that there were whole areas of economic activity which were work (and deserving of income), which were part of the economy, but which were not productive. In Adam Smith's words, included in these non-production areas were

> some both 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[23]

This is not to say that non-market production or emotional labour per se were valued prior to the neoclassical revolution. They were not. However, the point is not what they did, but what could be done. I will argue more fully in the next chapter that the classical style 'restricted' definition of production at least opens the space to consider different types of labour, precisely because it breaks the work and production, production and economy, and work/production and welfare links. By contrast, the neoclassical/Keynesian definition does not and can not create such a space because the equation of work = production = market = economy = welfare is inherent in its definition of production and economy.

Thus, while ever we have an economic theory and a definition of the economy which assume or imply such an equation, we have not only a bias against the inclusion of non-market production, we have an impasse. This impasse was seen in the contradictions between the feminist critiques discussed in Chapters 2 and 3, and again in the Environmental Interlude, and again in relation emotional labour. It is an impasse in both wanting to see household work, the environment and emotional labour as part of the economy, and not wanting to lose sight of its specificity or to value things which are abhorrent to the political analysis which pushes for their inclusion (be it feminism, anti-militarism or the green critiques noted earlier). But what I am arguing here is that, to a large extent, it is the neoclassical definition which creates this impasse by its unitary definition of work/production and ultimately "the economy". Thus, if we are to measure emotional labour - or if we are to measure the economy in such a way that emotional

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23 Cited in Kushnirsky and Stull, *op.cit.*, p 86.

labour is included, we need to unravel the concepts which the neoclassical revolution tied up. As I said in the previous chapter, the analysis of emotional labour re-opens debates which have been closed for nearly a century.

How to go about breaking this neoclassical nexus in defining and measuring the economy is the subject of the next four chapters which begin to explore the choices refused by neoclassical national accounting. In making the choice between measuring production (Chapter 6) and measuring welfare (Chapter 7), the thesis opens up two different views of the economy as a hologram. But it is also important to note that these are only two of the terms tied up in the neoclassical nexus and only two views of the hologram. In this sense, we have already begun breaking the nexus by focusing on the difference of emotional labour, and separating it from the requirements of measuring production imposed by the national accounts framework. The analysis of emotional labour which comes out of the sociology of work and labour process literature is also then an approach to defining the economy. It is a definition with a particular starting point of gendered and embodied labour, and it is a non-quantitative view of the economy. This is as legitimate an approach to defining the economy as the national accounts' approaches, and thus tends to reflect and support the feminist view that quantitative approaches should not hold a privileged position in the economy.[24]

But breaking the neoclassical nexus here means more than simply legitimising multiple approaches to economic analyses. The focus on different types of economic activity holds out the hope that, in taking any one particular approach, the possibility of other approaches is not hidden in the way that it is by the closure inherent in the neoclassical definition and measures. Thus, when considering the views of production and welfare in the next chapters, a key element will be the extent to which the approaches discussed really break the neoclassical nexus and recognise economic difference. Without this recognition there is no way to open to view the emotional and embodied labour which defies measurement.

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24 Again, see for instance, Nilüfer Çagatay, Diane Elson, and Caren Grown (1995) "Introduction" *World Development*, Vol 23, No. 11, p 1829, Beasley, *op.cit.*, p 113.

Section 3:
Breaking the Neoclassical Nexus

Chapter 6: Breaking the Nexus I: A Restricted Definition of Production

In previous chapters I have argued the need to recognise different types of labour and to break the neoclassical nexus between labour, production, welfare and the market in defining the economy. This nexus not only could not cope with an analysis of embodied labour, it obscured the existence of such embodiment. One way of breaking this nexus would be to refocus on production - to measure production without equating this with labour, welfare or "the economy". In this chapter I want to explore that possibility further by considering the alternative, more restricted definitions of production which begin to recognise different labours.

I noted in Chapter 1 that the classical definitions of production were very restricted and based largely on material goods. I am not arguing for a return to this material product definition, nor do I wish to enter the long and dogmatic debates in Marxism over what constitutes productive labour. My goal is less to outline a complete definition of production and/or the economy, so much as to explore any potential benefits of a move back in the direction of a more specific (narrower) definition as a way of recognising different types of labour - and thereby opening new possibilities for a feminist informed economics. In this chapter then I examine two different frameworks for doing this: the Marxian definition of production, principally as argued by Anwar Shaikh and E Ahmet Tonak; and the transaction costs approach developed by John Wallis, Douglas North and their followers.

Feminist Concerns

But before considering these approaches, it should be acknowledged that any move to a more restricted definition of production seems counter-intuitive, given the long struggle by feminists to extend the definition of production to include non-market production. Indeed such restricted definitions do not have a great history in terms of recognising the work women do. Glucksmann argues that from the beginning, classical economics took a view from within the exchange system. It ignored unpaid work precisely because it was unquantified, ie. not exchangeable. According to Glucksmann, unpaid work could not be considered as part of this quantified economy because economic theory had constructed a hermetically sealed "economy" where everything that was not within the theory was

deemed irrelevant or an exogenous variable.[1] The result was that "the economy" meant the market and paid work: in other words, a classical equation of work = economy = market.

Similarly, Beasley critiques Marxian economics for *its* equation of economy/production/labour and the capitalist market. This, she argues following Linda Nicholson, is created by a constant slippage of terms from "production", meaning all activities necessary for human survival, to the narrower definition noted in Chapter 1 here. The result is that a trivial claim based on the first meaning (that the foundation of society is all activities necessary to survive) becomes tied to an analysis which posits production (from the point of view of capital - the second definition) as being the foundation or base of society. "The economy" and "the revolution" is then fundamentally about capitalism/class, (and not gender) - an analysis which, not surprisingly, has been regarded with suspicion by many feminists.[2]

However, even if this slippage in definitions were true of Marx and many Marxists, and the subsequent theory of history unsustainable, I am not sure that the problematic equation is inherent in the classical or Marxian definitions of production. Indeed, what I am arguing is that, because the classical or restricted definition of production (which need not imply exactly Smith's or Marx's definition) recognises different types of labour at the conceptual level, it creates a space where we can talk about emotional labour as being a different type of labour. With space to recognise conceptually different labours, we might be able to retain some sense of the embodiment of emotional labour without having to squeeze it (as abstract tasks) into a third person criteria in order for it to count as 'production'. Similarly, as I have argued in earlier chapters, the space opened by this difference in labours offers the possibility of recognising that some labour is destructive, oppressive or wasteful, and/or that some activities simply repair the damage or protect the systems which cause them.

Crucial here is the notion of the economy as hologram, not least because a hologramatic view may not necessarily need a quantitative measure for each of its views. It may be that, recognising the difference (the embodiment) of emotional labour, we can conceive of an economy where commodity-like production is measured, but emotional labour and other labour isn't. In a hologram type measurement, this is not the same as simply ignoring whatever can't be quantified. Rather it is about recognising that some activities can not be measured or should not be valued, and then defining the economy in a way which

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1 Miriam A Glucksmann (1995) "Why 'Work'? Gender and the 'Total Social Organization of Labour'" *Gender Work and Organization*, Vol 2, No. 2, pp 66 - 67.

2 Chris Beasley (1994) *Sexual Economyths: Conceiving a Feminist Economics*, Sydney: Allen & Unwin. pp 3 - 9.

includes, but does not measure or value them. The key here is to measure those aspects which are amenable to quantification in such a way that other views are seen and not excluded from view by the measurement. Or, to put it another way, the fact that emotional labour can not and sometimes should not be valued in money terms may mean changing the definitions and measures of what is measurable to reflect and incorporate the emotional labour analysis. For instance, if, as argued in the last chapter, emotional labour is not measurable, then a value for it should not be included in the measure of the economy (as it is in the case of professional psychologists, models etc) simply because that labour takes place in the market. To include such emotional labour only when it takes place in the market, as GDP and the extended accounts do, is to privilege the market perspective over the recognition of emotional labour.

Paradoxically then, what I am arguing is that the frameworks which Studenski implied were less than comprehensive definitions of production, which exclude considerable areas of concrete economic activity (social 'reproduction' activities, emotional labour), come closer to this hologramatic approach than the neoclassical definition (Studenski's 'comprehensive definition'). The recognition of conceptually different types of labour in the restricted definitions of itself indicates that there is more to the economy than commodity production - something which necessitates a different angle of inquiry. Thus, while the restricted definitions of production might not measure these other types of labour (because they are not "production"), they at least indicate both the existence and the difference of other labours.

To be clear, I am not arguing that a more restrictive, classical definition of production automatically solves all the problems of accounting for emotional labour or of creating a feminist definition of the economy. However, I am arguing that the recognition of different categories of labour at the theoretical level (as well as at the obvious concrete level) does create a less compromised space to begin to define a measure of the economy.

Of course, the notion of different and unproductive labour can and has been used to delegitimise much of women's work. This was certainly the case in parts of the domestic labour debate and in other Marxist and socialist writings.[3] However, it should be recognised that the domestic labour debate was a discourse within Marxism and was about, in part, women's place in the socialist revolution. Reappropriated from that now

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3 Again, my overall interpretation of the domestic labour debate here comes primarily from summaries in Janeen Baxter, Diane Gibson, and Mark Lynch-Blosse (1990) *Double Take: The Links Between Paid and Unpaid Work*, Canberra: AGPS Press.; Christine Delphy and Diana Leonard (1992) *Familiar Exploitation: A New Analysis of Marriage in Contemporary Societies*, Cambridge: Polity Press.

no longer hegemonic discourse, it may be possible to re-think the notions of production and non-production labour. Emotional labour and other non-production labour may be viewed as important labour alongside Smith's intellectuals, lawyers and physicians (well, maybe not lawyers!) who enjoy a high social status in the general discourse (if not in the Marxian one).

Alternatively, given that I have argued that some emotional labour, (like other labours) *should* be considered as a negative (unproductive) it may be possible to see/include such activities *without* legitimising that activity as "productive". Just as Smith's churchmen, lawyers, physicians, etc were seen to work and be part of the economy without being "productive", so too we might be able to consider emotional labour (and other types of labour) as work and as part of the economy without necessarily legitimising that labour. Emotional labour itself might constitute both Smith's "gravest and most important" work, but also the most frivolous and wasteful.[4]

In this analysis it is also important to note that a narrow definition of production need not imply a binary category of productive/unproductive. We have seen that Christine Delphy, although committed to a Marxist methodology, avoids the notion of productive/unproductive labour with an analysis based around 5 forms of domestic labour: housework, emotional labour, cultural display, sex, and reproductive work. In Shaikh and Tonak's modern adaptation of the classical/Marxian definition of production, "labour" is divided into the three categories, production, distribution, and social maintenance. There is nothing in these terms which is normatively bad or devalued.

Thus, despite well-founded feminist criticisms and suspicions of Marxian and restricted definitions of production, I think the potential of those definitions is such that they can not simply be dismissed *a priori*. Given that I have argued the need to break the neoclassical nexus in order to recognise different types of labour, then at a minimum, such restricted definitions, with their long histories, may open up space for different perspectives and provide useful empirical data toward a feminist informed definition and measure of the economy.

Whether these possibilities can be realised in practice is another question. In what follows then I want to examine concrete examples of restricted definitions of production to see whether they do open up or make operable new possibilities. In doing this, Shaikh and

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4 See Smith, quoted in last chapter, from Fyodor Kushnirsky and William Stull (1989) "Productive and Unproductive Labour: Smith, Marx, and the Soviets" in Donald Walker (ed), *Perspectives on the History of Economic Thought: Volume 1, Classical and Neoclassical Economic Thought*, Aldershot, Hants: Edward Elgar. p 86.

Tonak's *Measuring the Wealth of Nations* is a good place to start. This is not to suggest that their definition is perfect, and I will discuss the problems with such an approach later, but their work does provide perhaps the best developed definition and argument for an alternative, more restricted definition of production.

Marxian Definitions

Like the neoclassical definition, the definitive purpose of production is the satisfaction of human needs, but Shaikh and Tonak begin from the proposition that production utilises certain use values and creates new use values (ie. useful effects). These new use values represent more socially useful products in quantum, and/or a more socially useful product (ie. one of improved, greater value). But to be "new" and "socially useful" implies for Shaikh and Tonak that the use values created by production are distinct from materials (including the labour) which went into their production - less they not really be new. They are clearly then talking about exchangeable commodities, and not about embodied labour or the 'production' of subjectivities - a point to which I will return later.

Apart from the obvious manufactures, in this definition a haircut, a song or the transport of an orange from field to market (but not the warehouse) is production. All these create new value - a haircut provides greater comfort than previously existed, a song greater enjoyment and the transport to market makes the orange more useful than it would have been if left in the field. By contrast, warehousing, and the transport to the warehouse does not make the end product more useful. No new use value has been created, and therefore that activity is not "production".

Based on this definition of production, Shaikh and Tonak specify four fields of economic activity: production, distribution (of ownership not of goods), social maintenance, and personal consumption. The first three constitute labour, but distribution and social maintenance are not production, they are a form of (social) consumption. According to Shaikh and Tonak this is not a moral judgement, simply a recognition that some labour creates new wealth while other

> types of labor share a common property with the activity of consumption - namely that in their performance they use up a portion of existing wealth without directly resulting in the creation of new wealth.[5]

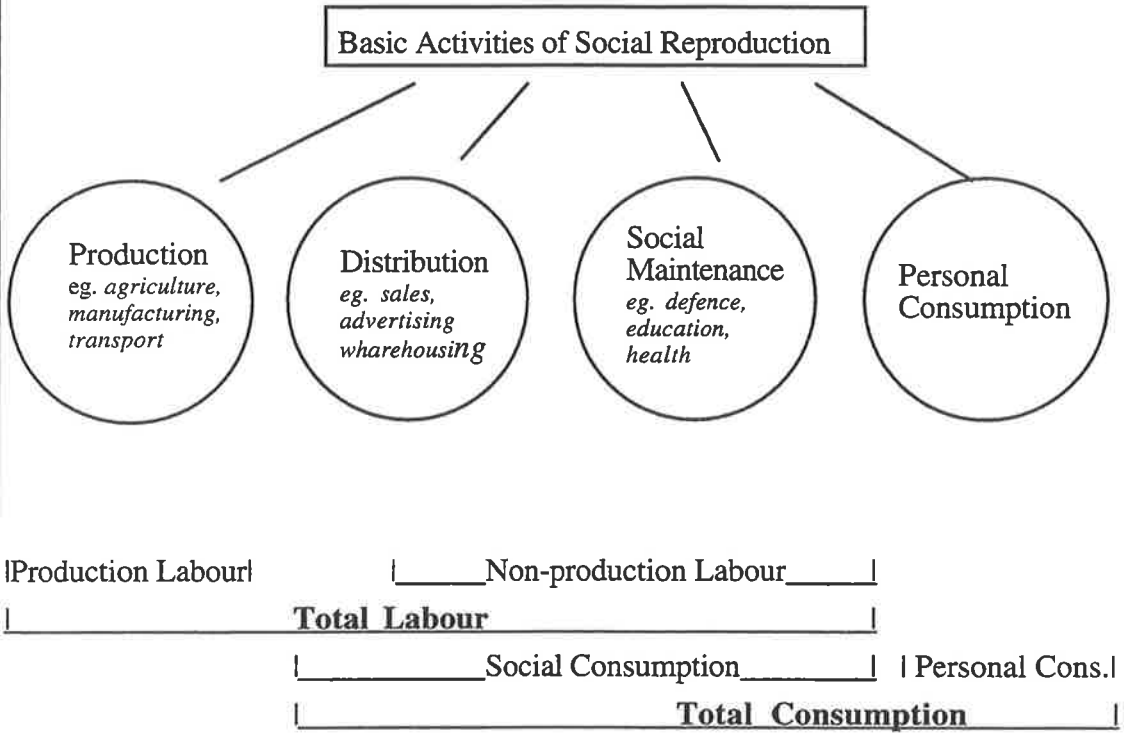
Again, "wealth" here appears to refer to the quantity of goods and services which can be exchanged, re-distributed, accumulated and/or consumed generally by whoever has the power to control such processes. Shaikh and Tonak are clear that even such labours that

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5 Anwar Shaikh and E. Ahmet Tonak (1994) *Measuring the Wealth of Nations: The Political Economy of National Accounts*, New York: Cambridge University Press. p 25.

use up wealth may be necessary, and result indirectly in production, but this in itself does not constitute production. Labour does not necessarily equal production. Their taxonomy is summed up in the following diagram, with the lines at the bottom (referring to the activities represented in the circles above) showing the distinction between labour and production, and the overlaps of labour and consumption.

Figure 6.1 Shaikh and Tonak's Economic Taxonomy[6]



From this base Shaikh and Tonak develop accounts to analyse the US economy in terms of total product, surplus value and appropriation. Their Gross Final Product (GFP) is about 15% smaller than the official GNP, while the rate of surplus value is almost four times as large as the ratio of profit income to employee income in the US national accounts[7] - hence their criticism of using official figures as proxies of these Marxian categories.

However it should be stressed that this GFP is not a measure of the total production in the economy. While their definition of production is about the production of use values, their measure of Final Product is only of capitalist production. The distinction between production and the other economic activities says nothing about different relations of

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6 Adapted from Figures 2.1 and 2.2 in *ibid.*, p 22, 29.

7 *ibid.*, p 221.

production. Production, distribution and social maintenance activities can all be undertaken for profit, for income (petty commodity) or for direct use.[8] Shaikh and Tonak acknowledge that this non-capitalist productive labour (including household production) is important to people's standard of living, but they do not include it in their measure because it is not productive *of capital.* It does not contribute to the pool of surplus value which Marxism posits as the limit of aggregate profit and wealth consumed in the other spheres of social reproduction.[9] Shaikh and Tonak's accounts then define and measure not so much "the economy", but the capitalist economy - or more accurately, they define production and measure only capitalist production.

Apart from other political concerns with such capitalocentric constructions,[10] in the context of this thesis, where the concern is not limited to capitalist (or even market) production, clearly any such restricted production definition would need to be expanded to include non-capitalist and non-market production. Nonetheless, the definition could still be "restricted" in the sense of not including as production that labour which did not create new use values under Shaikh and Tonak's definition. There would remain the sense of different types of labour, although defined by purpose and outcome rather than by different production relations or by market and non-market locations.

Transaction Costs

Interestingly this taxonomy of different labours, and the particular categorisation of activities in the Marxian estimates, has echoes in another 'restricted' definition of production. This definition derives from a very different philosophical framework to Marxism (and indeed a very different politics), coming out of the literature on transaction costs. This literature takes its starting point not from any macroeconomic theory, but rather from Coase's understanding of the economy in terms of contract, and the efficiency of resource use brought about by the market exchange of legal/contract entitlements. This

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8 It should also be stressed here that the categorisation of productive labour is not about questions of exploitation and class membership. Shaikh and Tonak maintain that all capitalistically employed labour, whether productive or not, is exploited as exploitation arises from the extraction of surplus labour (ie. from its employment in capitalist wage relations) not from its purpose. This move separates the question of productive/unproductive labour from questions of who is/is not part of the working class - a source of great tension and confusion in Marxian politics and debates. The debate is largely one from the 1970s and Ben Fine cites major contributors as Ian Gough, Nicos Poulantzas, Lawrence Harris with Fine himself. Ben Fine (1991) "Productive and Unproductive Labour" in Tom Bottomore (ed), *Dictionary of Marxist Thought*, Oxford: Blackwell. p 449.

9 Shaikh and Tonak also allow for a "profit on alienation" which arises from unequal exchange between different capitalist and non-capitalist spheres. *op.cit.*, p 25. This is part of their solution to the transformation problem, but is not relevent to their definition of production discussed here.

10 Gibson-Graham argue that such constructions ignore or subsume as dependent all non-capitalist productions - a construction which is empirically dubious, epistemologically flawed, and politically disempowering. J K Gibson-Graham (1996) *The End of Capitalism (As We Knew It): A Feminist Critique of Political Economy*, Cambridge: Blackwell.

overall framework is less important (for this thesis) than the specific notion of transaction costs, broadly defined as,

> any use of resources required to negotiate and enforce agreements including the cost of information needed to formulate a bargaining strategy, the time spent higgling, and the cost of preventing cheating by the parties to the bargain.[11]

While Coase's work dates from the 1920s and 1930s, it was not until the 1960s that the term transaction costs was coined. It was another twenty years before the first attempt to define and measure aggregate transaction costs. In 1986 John Wallis and Douglas North produced measures of transaction costs in the American economy from 1870 to 1970.[12]

Wallis and North divide economic activity into "transformation functions" and "transaction functions", each representing a cost to producer and consumer. Transformation functions are those associated with transforming inputs (land, labour, capital and entrepreneurial skill) into outputs. By contrast, as noted above, transaction costs are the costs associated with making exchanges, the costs of performing the transaction functions in the economy. Despite the different philosophical frameworks, these definitions are not dissimilar to Shaikh and Tonak's distinction between production and distribution/social maintenance. And like Shaikh and Tonak, while they recognise the importance of non-market activities (or at least, non-market transaction costs), they ultimately only measure the transaction costs which result in the exchange of a marketed good or service.[13]

To account for transaction services, the authors have two basic types of measures. First they identify certain types of industries as "transaction industries" where the entire output of the industry are transaction services. These are the official National Income and Product Accounts (ie. the national accounts) categories of Finance, Insurance, Real Estate; Wholesale Trade, and Retail Trade. Transportation is not considered a transaction service as it transforms the (usefulness of) items by moving them. Apart from the different categorisation of the retail sector, there are similarities here with Shaikh and Tonak's definitions of distribution labour.

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11 Robert D Cooter (1987) "Coase Theorem" in John Eatwell, Murray Milgate, and Peter Newman (ed), *The New Palgrave: A Dictionary of Economics*, London: MacMillan. p 457.

12 John Joseph Wallis and Douglas C North (1986) "Measuring the Transaction Sector in the American Economy, 1870-1970" in Stanley L Engerman and Robert E Gallman (ed), *Long Term Factors in American Economic Growth*, Chicago: University of Chicago Press.

13 In their case, this is based on the claim that only market transaction costs can be observed. *ibid.*, pp 97 - 99.

The second types of transaction services Wallis and North identify are those incurred within firms. This is based on Coase's notion of a firm as a "bundle of contracts" where the firm 'buys' output from the workers who actually transform inputs into outputs (ie. those who provide "transformation services"). Thus all the intermediate occupations (supervisors, clerks, managers) are transaction costs in much the same way as they are regarded as a claim against revenue produced by production workers in Marxian accounts. In both cases the extent of these transaction services is measured by dividing occupations into those that primarily provide transaction services (non-production labour) and those that primarily provide transformation services (production). The wages of the former provide the estimate of transaction costs (unproductive labour) within transformation/production industries.

In Wallis and North's measure a similar approach is adopted across public and private business sectors, although the government sector presents particular problems. The authors claim that a function of "governing" is to provide the sociopolitical assets which underlie all economic activity. Therefore all government costs might be considered as transactional. However, a more limited approach is taken to measuring public transaction costs by only including the costs of those activities which are about enforcing contracts (courts, police) and property rights on a larger scale (defence). Wallis and North admit the line here is somewhat arbitrary as a range of government services ("Social Overhead Capital") like education, health, sanitation, housing and urban services contain elements which are transaction related and other activities which are transformative.[14]

These and other government activities are excluded from the measure of transaction costs (ie. they are regarded as transformative/productive). This makes the measure empirically very different from Shaikh and Tonak's measure of production, but conceptually the transaction costs and the "Social Overhead Capital" which Wallis and North identify are similar to Shaikh and Tonak's social maintenance. What these conceptual similarities suggest is that the transaction cost approach may not be far from a (different) restricted definition of production. Indeed, Wallis and North's definition of *transformative* activity as being about transforming inputs into different outputs is very close to the official definition of production as being about "a physical process ... in which labour and assets are used to transform inputs of goods and services [into outputs]".[15] Yet unlike the official (neoclassical) definition, the transaction cost analysis recognises the difference between producing/transforming goods and services, and the transaction labour and costs of organising that production in a market economy. But the transformation/production

14 Wallis and North, *op.cit.*, p 114 - 8.

15 United Nations (1993) *System of National Accounts 1993*, New York: United Nations. p 4.

nexus is important because it means that by simply deducting Wallis and North's estimates of transaction costs from GNP, we could get an empirical measure of "production" narrowly defined as transformation costs.

Unfortunately, Wallis and North themselves focused only on measuring transaction costs and not transformation/production. However, Scott M Fuess and Hendrik Van Den Berg have extended the analysis to a more holistic new definition and measure of the economy. They have adjusted GNP growth rates for the US for the years 1950 - 1989 to take account of *both* non-market production and transaction costs. The method of economic modelling they use to measure non-market production is not important here, other than to note that their statistics confirm that ignoring non-market production over a long period tends to overstate economic growth as measured by GNP (again, because GNP ignores the substitution of paid/counted labour for unpaid/uncounted work).[16] Similarly, the adjustments for transaction costs also change economic growth rates where those costs have risen at a faster rate than GNP.

Fuess and Van Den Berg found that over the postwar period, actual annual output growth per capita in the United States was between 0.18 and 0.37 points lower than GNP figures suggested. Perhaps more importantly, the adjusted figures represent a significant challenge to the story of postwar economic growth told by the GNP figures. For the period 1950-60, the growth of Fuess and Van Den Berg's measured "actual output" was lower than GNP, but it was much the same as the official figures through the 1960s. For the 1970-73 period growth in actual output outstripped GNP growth, but the crisis that followed that boom was also of greater magnitude than GNP figures record. The latter suggest sluggish growth through the late 1970s, whereas Fuess and Van Den Berg's figures suggest that per capita output was not growing at all. The "recovery" of the 1980s was also exaggerated by GNP figures as increasing amounts of this growth was the result of the substitution of market for non-market work.[17]

Thus, Fuess and Van Den Berg argue (citing North) that,

> If it costs more to exchange a given amount of output, then recorded GNP will rise although goods consumed will not increase. Therefore, the inclusion of transactional activities makes national product accounts misleading.[18]

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16 Rather than the extended accounts (generally time use based) estimates, Fuess and Van Den Berg use an econometric model based on extrapolations of factor productivity. Scott M Fuess and Hendrik Van Der Berg (1996) "Does GNP Exaggerate Growth in 'Actual' Output? The Case of the United States" *Review of Income and Wealth*, Vol 42, No. 1, pp 35 - 48.

17 *ibid.*, pp 42 - 44.

18 *ibid.*, p 35.

This phenomenon of the US economy having to "run to stand still" is also a theme in the economic welfare measures I examine in Chapter 7. More immediately though, the figures also show the possibility and the potential importance of including non-market production in a definition and measure of the economy based on a narrow definition of production. By breaking the neoclassical nexus not only are differences recognised between particular economic activities (in this case between market production, transaction costs and household production), but a different view of 'the economy' is gained.

Emotional Labour

Yet despite this importance and the fact that these restricted definitions of production are predicated on an analysis of different types of labour, it is unclear how such definitions relate to the issue of emotional labour - which I argued was a key reason to explore these restricted definitions. An analysis of emotional labour is noticeably absent from all of the restricted definitions of production considered above. Not only that, both Shaikh and Tonak's Marxian definition and the transaction cost literature appear to specifically preclude any interest in or visibility for emotional labour. Shaikh and Tonak's definition is explicitly about the production of exchangeable goods and services - a definition which precludes a consideration of the embodied nature of labour. Similarly Wallis and North are explicitly concerned only with measurable costs and services, which again precludes emotional labour.

However, despite these unpromising signs, I want to suggest that the broad framework of different types of labour (as opposed to the particular authors' analyses above) does create possibilities for the analysis of emotional labour. I have already argued that the restricted definitions of production may open the space to include emotional labour within the definition of the economy (as opposed to production) without requiring it to be measured. But the restricted definition of production also gives us clues as to how such labour might be considered in relation to other labours. One of the feminist objections to market measurement of household labour was that it was different to paid labour - that it was particularly embodied and took place in an "emotional economy" (Beasley's term[19]) rather than in a market economy. But perhaps we could also argue that, to use Wallis and North's language, emotional labour is a transaction cost of the household economy - a labour which makes possible the organisation of exchange within the household and between people and households. Or in Shaikh and Tonak's terms, emotional labour may be seen as social maintenance - the reproduction of household and/or patriarchal production relations.

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19 Beasley, *op.cit.*, p 13.

I would not want to push the analogy too far, but again, it does allow us to think differently about the activities of emotional labour, and to think in a way precluded by the neoclassical nexus where all work is productive (or it is not work). With a narrower definition of production, the subjectivity and inherent embodiment of emotional labour can be seen as important and necessary in the household economy (because of the [patriarchal] nature of the social system), but that labour does not represent new production, nor is it valued/legitimised as such. Rather the effort of emotional labour is seen as a form of social consumption of product.

The same argument applies to emotional labour which takes place in the paid workforce. This is best seen in Hochschild's analysis of airline stewardesses considered in the previous chapters. While the emotional labour Hochschild documented is essential for an airline to attract customers and stay in business, this of itself did not make it productive. In a sense, the emotional labour is similar to the advertising which promotes it. Both are transaction costs or non-productive labours. Both that labour, and managements efforts to extract it (through training and discipline), are costs of having to compete in the market, not a necessary part of travel by air per se.

More generally, and remembering that it is patriarchal production relations which define much emotional activity as "work", it could be argued that emotional labour is the transaction cost of production which takes place *in a patriarchal context* - in the same way as exchange labour is a transaction cost of capitalist production. But again I would not push the analogy too far. There remains Beasley's objection about the inappropriateness of the whole exchange/contract paradigm, and positing emotional labour as a transaction cost (or social maintenance labour) may imply that it is somehow measurable and alienable/exchangeable. This clearly contradicts the analysis of the previous chapters.

Emotional labour then might best be considered as a different category of labour rather than subsumed under the heading of transactions or social maintenance, particularly as it does not really fit into a schema where exchange labour or social maintenance are seen as social consumption - as in Shaikh and Tonak's schema. (See Figure 6.1 here) While in the examples above the emotional labour could be considered as a form of social consumption, this is not always the case. In the various analyses discussed in Chapters 4 and 5, emotional labour was seen to 'produce' subjectivities and to some extent cultural artefacts - gendered labourers and perhaps 'gender' itself. These are not always alienable product, and therefore (as we have seen) the emotional labour can not be subsumed under the heading of "production" (in the restricted sense) or transformation services even though it may 'produce' or 'transform' people. Nor is that labour "consumption". Again, a separate category may be needed.

Thus for instance, where Shaikh and Tonak propose a taxonomy of four types of economic activity, this might be extended to five: production, distribution, social maintenance, emotional labour and private consumption. The first four in this schema could be viewed as labour, but, only the first as production. The inclusion of a separate category of emotional labour which is neither production nor consumption would create the space to recognise its specificity, and it would also further break the production/consumption binary in the definition of economic activity - the binary which I have argued underpins the neoclassical nexus and the impasse in recognising women's work. However, this category of emotional labour would not impact on the category of production, narrowly defined as being explicitly about alienable goods and services. The analogy with transaction costs and/or social maintenance reinforces the notion that emotional labour is different and need not be included in a measure of production. But in contrast with the national accounts and the extended accounts, it is clear that what is being measured as production is *not* the totality of all labour, or of all socially useful labour in society.

However, even the notion of a separate 'category' is confusing. We have seen that much emotional labour (eg. cultural display) is embodied and embedded in other labour and therefore exists as part of, rather than separate from, other categories of economic activity. In this sense, and in keeping with the epistemological approach outlined in Chapter 1, the restricted definition defines not a discrete set of activities, but an epistemological entry point into economic definition and measurement. Of course the same is true of the neoclassical definition, but I have argued that it is a less useful starting point because of the problematic nexus of its founding assumptions. Again, the key is that, as an entry or standpoint, the narrowness of the definition allows the other - the "not production" activities - also to be visible. Having said that though, there are specific problems with both transaction cost and Marxian definitions of production which need to be considered before any consideration of the usefulness of the restricted definition of production could be made.

Problems in Transaction Cost and Marxian Frameworks

While I have discussed the importance of the empirical data generated by the transaction cost analysis for understanding and measuring economic growth, it should be noted that doubts are raised in the literature over the validity of Coase's theorem, and over the usefulness and applicability of the measure of transaction services generally.[20] But particularly relevant to this thesis, there are also problems with the definition of "production" operationalised in these estimates.

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20 See for instance: Cooter, *op.cit.*; Lance Davis "Reply" in Wallis and North, *op.cit.*, pp 149 - 159.

Firstly there appears to be considerable confusion over what constitutes production in the transaction cost framework. Davis sums up the approach as dividing economic activity between "production" and "transaction costs"[21] - a not unreasonable comment given the similarity noted above between the definition of transformative activity and the SNA definition of production. However, Wallis and North emphasise that transaction services are not unproductive. They represent the cost of making exchanges which still, on net, made the parties better off, even with the transaction costs included - otherwise the parties would not have paid for the transaction services. [22] But this suggests that the transaction services measures have not broken the neoclassical nexus of work = production = welfare. And it is here that their definition becomes problematic. If transaction activities are productive, this would appear to suggest that the definition of what is production is both transformation and transaction costs: that is, GDP. But if transformation activities are defined as basically what is recognised as production (transforming inputs into outputs), and if transaction services are different and are not transformative, how can GDP (which includes transaction costs) also be the measure of production?[23]

If this confusion is not problematic enough, it should also be recognised that the actual calculations of transaction costs include activities which are clearly transformative. For example producing a television commercial or a billboard transforms physical inputs into different, more 'valuable' outputs, but the cost of advertising is deducted from GDP (ie. not counted as a transformation function) because the entire content of advertising industries is counted as a transaction cost. This approach is in fact similar to Kushnirsky and Stull's description of the Soviet Material Product System which designated productive/non-productive labour on the basis of the type of product produced. All labour and capital used in producing that product was thereby classified as productive or unproductive.[24] Thus, the billboard manufacture would be viewed as unproductive. By contrast, in Shaikh and Tonak's accounting, the billboard would count as production, and only the cost of advertising would be distribution labour.

The approach of measuring all transaction expenditure as a transaction cost is problematic when simply deducting transaction costs from GDP to obtain a measure of transformation/production (narrowly defined). Again, the archetypal tank rolling off the

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21 Davis in Wallis and North, *ibid.*, p 151.

22 Wallis and North, *op.cit.*, pp 103 - 104.

23 The issue is further confused by Fuess and Van Den Berg's use of the term "actual output" to describe what it is that GNP exaggerates. "Actual output" is never explicitly defined, but appears to mean transformative activities or production. GDP presumably can not mean production because surely anything which is production is an output.

24 Kushnirsky and Stull, *op.cit.*

assembly line is not production (it is a transaction cost), and nor are many other manufactures which end up in the transaction industries. This seems somewhat counter-intuitive when manufacture (production) is so obviously taking place.

But perhaps more importantly, I would also want to challenge the politics of the whole transaction cost framework. Coase's theorem has been characterised as arguing that "misallocation of legal entitlements by law will be cured in the market by free exchange"[25] which sounds suspiciously like capitalist apologia. This suspicion is heightened when Wallis and North view transaction costs, in part, as an investment in the institution of the market and as a necessary part of realising the gains from trade.[26] Such approaches not only take the market as a given, but they glorify the market and legitimise unequal property relations. This hardly sits well with either socialist economics or the need outlined in previous chapters for a feminist economics to decentre the market.

Because of the question as to the usefulness of the analysis at the micro level,[27] and the confusion over the meaning of "production" at the macro level, and also for these political reasons, in the following discussion of restricted definitions of production, I will refer mainly to definitions and measures associated with Marxian political economy. However the transaction costs literature will not be forgotten as its empirical work and the resonances of its taxonomy with the Marxian measures is important - a fact I will return to in my own empirical considerations in Chapter 6a.

Yet, while I wish to focus on Marxian definitions and measures, there are real questions as to whether these can be meaningfully or usefully separated from the analysis of capitalism and Marx's labour theory of value which I have already argued is problematic. In Chapter 1 I noted the transformation problem in Marx's labour theory of value, and in Chapter 3 I discussed the problems of applying that framework to non-market production, most notably in the domestic labour debate. Perhaps more importantly, I have also noted Carole Pateman's critique of the fiction of labour power as an exchangeable commodity - an exchangeability which implies an impossible separation of labour from the labourer. It is similarly clear that the whole notion of "abstract labour" as a generalisable form of labour (and measure of value) is also built on the theoretical disembodiment of labour - the very notion which takes the standpoint of capital and hides much emotional labour (and therefore much of the work women in particular do).[28]

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25 Cooter, *op.cit.*, p 457.

26 Wallis and North, *op.cit.*

27 Again, see Davis' comments in reply to Wallis and North, *op.cit.*

28 Even in the Sraffian Marxist focus on a concrete labour embodied in production, labour is still not embodied in the sense of the body of the labourer. In fact Steedman claims that his post-Sraffian

The problem then is not simply that there is no place for emotional labour in the labour theory of value, but rather that the fictions of labour power and abstract labour directly contradict the analysis of the embodiment of labour. This then does not fit with the approach to defining and measuring the economy as hologram. It closes down rather than opens up the view of the other. Indeed, it is hard to see how the labour theory of value fits with the epistemology underpinning this thesis at all. While Richard Wolff has used the notion of overdetermination to address the transformation problem,[29] and Resnick and Wolff accept that the Marxian entry point is just one viewpoint, the whole notion of a labour theory of value as an explanation of some *underlying* dynamic of capitalism would seem to give epistemic primacy to a particular view. This is especially evident in the base superstructure model implicit in Shaikh and Tonak's accounts, where only capitalist production is measured because it is this production which creates the surplus which underpins all other activity.

Given all these problems with a labour theory of value, it is well to be suspicious of any definition and measure of the economy based on the principles of a labour theory of value. And more so given that I have argued, as a matter of epistemology, that any such principles must be reflected in the construction of definitions. Although Shaikh and Tonak seem to present their definition of production as prior to a consideration of the labour theory of value, that theory is implicit in the definition. Their point of defining production (the economy) is to understand the dynamic of capitalism. The question of what constitutes production for them is not a moral one (we must include women's work) or even a logical one (what is a rational definition of production which can be applied to all situations), but rather what creates value for capital. Marxism's definition of production is just as tied to the (problematic) labour theory of value as the official accounts' definition is to the neoclassical and Keynesian theories which created "the Economy" as we know it.

Thus I am forced to conclude that, if we were to argue for a return to a more restricted definition of production, we would need to do so outside of the Marxian value framework. This parallels my conclusion with regard to the Coasian transaction cost framework. While we can gain insights from the operationalising of a restricted definition of production, the theoretical frameworks offered by such malestream theories need to be abandoned. Yet, this then raises a major epistemological and practical question: if a narrow definition of production is stripped of its theoretical context, what does it mean?

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critique of the labour theory of value leaves the Marxian concepts of labour power "quite untouched". Ian Steedman (1977) *Marx After Sraffa*, London: New Left Books. p 206.

29 R Wolff, A Callari, and B Roberts (1993) "A Marxian Alternative to the Traditional Transformation Problem" in John Cunningham Wood (ed), *Karl Marx's Economics: Critical Assessments*, London: Routledge.

It may be that the claim that economic activity which simply changes ownership or (indirectly) facilitates production is not production is important in its own right. As Shaikh and Tonak (and other Marxists) point out, the distinction between productive and unproductive investment and labour resonates with common sense understandings of production and the economy. The term "unproductive" survives in common usage, including among business economists, even if it is obfuscated by mainstream economic theory.[30] But the question remains, how does the restricted definition help us understand "the economy"? Or to put the question more generally, what is the purpose of a national accounting built on such a definition of production?

What is the Purpose of Accounts?

Clearly given everything that has been said so far, the purpose of such an accounting is not to provide a new comprehensive definition and measure analogous to GDP. The definitions and measures envisaged here can not provide information for econometric modelling to assess, for instance, the impact of a particular tax rate on government revenue and national production (as the neoclassical/Keynesian accounts purport to do). Nor can this accounting carry the claim of helping to understand the development of capitalism (as the Marxian labour theory of value purports to). In this sense, utilising a narrow definition of production seems to have little purpose in terms of the traditional goals of national accounting.

Moreover, while I have critiqued the narrowness and gender blindness of neoclassical and Marxian accounts, the purpose of an accounting based on a restricted definition of production is not to provide some super new or 'objective' definition and measure which can make known all aspects of the economy. I have already argued that this is epistemologically impossible. To take just one example, the restricted definition of production is clearly problematic from the standpoint of the green critiques discussed earlier in this thesis. Such a definition and measure does not tell us anything about the sustainability or desirability of the production measured. It still includes as production such things as accidents, the manufacture of tanks and guns, the clearfelling of old growth forests and the mining of uranium. All of these add to economic growth in the Marxian paradigm (as well as in neoclassical national accounting).

While Shaikh and Tonak note that some defensive expenditures are removed from their category of production (being social maintenance),[31] by and large, they simply say that

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30 Shaikh and Tonak, *op.cit.*, pp 4 - 5. See also John Ure (1994) "Productive-unproductive labour in Marxist economics" in Philip Arestis and Malclom Sawyer (ed), *The Elgar Companion to Radical Political Economy*, Aldershot: Edward Elgar. p 314.

31 Shaikh and Tonak, *op.cit.*, p 17.

the environmental critiques are beyond the scope of their work. But more than a practical issue of a necessarily limited focus for a book, I want to suggest that there are different agendas and standpoints operating here. While they may be socially undesirable, the tank or the household burglar alarms are clearly commodities produced, even if their purpose is guard labour. Production of alienable goods and services need not (and does not) imply a social benefit, unless we wish to re-enter the neoclassical nexus (production=welfare). Again, production and social benefit should be measured separately.

So an accounting based on a restricted definition of production must be seen as one among many starting points and a one among a plurality of different measures - befitting the "economy as hologram". But the question still remains, what does this particular entry point tell us? Why do we want to measure the production of alienable goods and services?

Consistent Comparison

I have already suggested in a general way that the aim is to provide a view of the economy which incorporates non-market production and opens a vision of different ways to see the economy. In this sense, the purpose of such an accounting is a fairly traditional feminist one of making visible the nature and extent of non-market production, and therefore to make women and women's work visible in policy making and the distribution of benefits in society.[32]

In this context the utilisation of a restricted concept of production is important because, unlike the more extended definitions and measures, it allows for a more consistent comparison between market and non-market production. Recall Ironmonger's concern that the measures of household labour as a percentage of GDP did not give an "apples to apples" comparison because the latter included not just labour, but also returns to capital - hence his efforts to account for household capital use.

The same type of imbalance is evident where some emotional labour is included in the national accounts - either directly (counsellors, psychologists etc) or indirectly because it is "part of the job" in other economic activities. There is an inconsistency between the extended accounts treatment of market production, and non-market production where such labour is not counted. In this context, the purpose of a definition of production restricted to alienable goods and services is to provide a consistent measure between market and non-market production. Where emotional labour is not (and I argue can not

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32 Again, Waring most clearly articulates this agenda, although with considerable reservation. Marilyn Waring (1988) *Counting for Nothing: What Men Value and What Women Are Worth*, Wellington: Allen & Unwin. ch 11.

be) counted in the household, then nor should it be valued in market production. With the category of social maintenance in Marxian accounts (or defensive expenditure in the green accounts) being considered separately to 'production', the restricted definition of production does exclude much explicitly emotional labour in the market (eg. counselling).

More than that, it excludes other types of activities (social maintenance and distribution) which mirror some of the activities of emotional labour in the household. For instance, the "transaction cost" of negotiating and continuing a contract is not included as production, regardless of whether it is a business or a marriage contract, and nor is the cost of advertising - the market equivalent of Delphy and Leonard's cultural display. Again the analogies here are not direct comparisons because the household economy *is* different to the market. But household and market are much more comparable when simply dealing with the production of alienable goods and services than when dealing with their whole gamut of different economic activities and dynamics.

The greater consistency of comparison is also evident when we recall the feminist objection to valuations based on household time use studies which do not take account of household management. It is not simply that these surveys and valuations do not always record household management, but that such activities can not adequately be captured by time measures. This creates an imbalance in the extended accounts which (under the neoclassical definition) include management wages in the market sector. However, the restricted definitions of production regard the management of market firms as either transaction services in Wallis and North's analysis, or as unproductive labour in the Marxian schema.[33] Thus again, by excluding from the category "production" management functions in both market and non-market spheres, it might be possible to provide a more consistent yardstick for comparison using a restricted definition of production than by using the neoclassical based definitions.

The claim that the restricted definition of production provides some form of consistent measure of what can be measured (commodified production) across economic space does have important political economic uses. It allows us to ask questions, not about macroeconomic aggregates, but about basic issues regarding what Julie Nelson calls the "provisioning of society."[34] What is the [market] value of production in society? What

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33 However, the accounting outcome is somewhat different here as management costs would not appear in the production/transformation services figures of Wallis and North, but would still appear as part of the final product [as surplus value] in Shaikh and Tonak's accounts.

34 Julie A Nelson (1993) "The Study of Choice or the Study of Provisioning? Gender and the Definition of Economics" in Marianne A Ferber and Julie A Nelson (ed), *Beyond Economic Man: Feminist Theory and Economics*, Chicago: University of Chicago Press.

sectors (market, government, non-market) are they produced in, or in what proportion are the different sectors of the economy contributing to this production? And following from this, how reliant are we on the market (or any other sector) and where and how should resources be allocated to increase the production of goods and services?

These questions and this greater consistency of comparison is particularly important because it is likely (and the empirical estimates for Australia in the next chapter show) that, when defined in a restricted way, non-market production is statistically much more important relative to the market than is recognised in conventional extended accounting. While the Marxian and transaction cost estimates both show that social maintenance and distribution/transaction activities are an important and increasing percentage of measured production (GDP), such activities (and emotional labour) are proportionately less important in the household economy. Or more accurately, the activities which fill those functions are a smaller proportion of the activities which have been included in the estimates of household production.

The flip-side of Himmelweit's analysis that much of women's work is rendered invisible by the third party criteria of production, is that accounting for household production has always been based on an approximation of a restricted definition of production. Most of the household activities usually counted in the extended accounts are productive under Shaikh and Tonak's narrow definition. Consider again Ironmonger's list of productive activities in the household.[35] The categories of meal preparation, laundry and cleaning, repairs and maintenance, and much of the "community work" and "other domestic work" categories are clearly productive of new services. Perhaps more controversial are the transport and shopping categories, and that of childcare.

Shaikh and Tonak argued that transport may be either production or distribution depending on the purpose of the transport activities. While warehousing was unproductive, transport to the customer/retail outlet was productive because it created new useful effects (utilities), ie. the use value of the object was transformed by being transported to where it was more useful. In this definition then, much of the household transport could be regarded as an extension of the productive transport to the retail destination (ie. transport to where the good or service is more useful). Similarly, most shopping labour can be regarded as productive as it is about delivering products to their point of consumption, that is, changing the usefulness of the objects in space/time. Indeed O'Connor noted that this labour was productive when done by paid staff. The change in

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35 Duncan Ironmonger (1994) "The Value of Care and Nurture Provided by Unpaid Household Work" *Family Matters*, Vol No. 37, p 191.

retail practice towards more self-service shopping (eg. supermarkets replacing stores where sales clerks formerly got the product and handed it to the customer), represented an attempt to replace the labour of those sales clerks with the unpaid labour of the customer.[36] The change from paid to unpaid work, while important, should not affect the categorisation of shopping as productive labour.[37]

Childcare is perhaps more problematic. At one level it is straightforward that this is a service (a use-value) provided (to parents) which is clearly separable from the child-care worker themselves and so is productive labour. Shaikh and Tonak exclude from their measure of total product the activities of "maids, chauffeurs, and baby-sitters" because it is not normally capitalistically employed (or if it is, it would appear elsewhere as a productive service in their accounts). However, they explicitly see those activities, including childcare, as production activities.[38] Thus any adaptation of their restricted definition to move away from their capital centred definition would clearly include childcare as a productive activity.

Yet the issue is complicated when education is considered as social maintenance rather than productive activity. It seems counter-intuitive, if not quite illogical, that minding children is viewed as productive, as long as the child carer does not teach them anything! This might simply be a recognition that teaching and child-minding are different activities, one productive, one not, somewhat similar to the distinction between the retailer's distributing (production) and selling (non-production) of goods noted above. But arguably, inherent in any adult-child relation is at least some degree of learning either by example or directed mental stimulation (eg. reading, questioning, talking, some games, etc). In this case the distinction between childcare and education is impossible to maintain. Even if the activities could be distinguished, then we would have also to admit that much formal education produces the use-value of childcare, so at least part of the labour provided in the formal education sector should be regarded as production rather than non-productive social maintenance.

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36 James O'Connor (1975) "Productive and Unproductive Labor" *Politics and Society*, Vol 5, No. 3, pp 302 - 3, 315.

37 However, where O'Connor, and Shaikh and Tonak, distinguish between the presentation of goods to the customer (productive labour) and the labour associated with changing ownership (the unproductive actual receipt of money), then presumably, from the other side of the cash register, the proportion of household shopping time taken up by actually paying for items is not productive. In practice though, and notwithstanding long supermarket checkout queues, I suspect that this unproductive exchange work is not the majority of shopping time. That is, most shopping time is productive activity and the figures used by Ironmonger can be left as an estimation.

38 Shaikh and Tonak, *op.cit.*, pp 70 - 73.

While these are important problems, they are not terminal. At one level I suspect that it must simply be accepted that any system of classification will have some anomalies, and this one is no larger than the many which plague the official definitions. Again, we are back to the epistemological point that any abstraction of a process of production from other social processes is problematic. But if we want to talk about production at all, then (as I argued in Chapter 1, along lines suggested by McLennan) some generalisations and "lines of best fit" must be drawn. Of course this does not make Shaikh and Tonak's classification unproblematic, but the consideration of the narrower definition of production need not be limited to their model. Indeed, the argument I am making here could be made with a straight material product definition which excluded consumer services.

As noted above, the definitions of productive labour have been the subject of long debate, but Shaikh and Tonak's model is useful as the best developed restricted market product alternative. However, as Gibson, Graham and Shakow note (and their methodology does draw heavily on Shaikh's)

> In our view, no one transformation procedure should be seen as final or 'right'. For example, in this [Gibson, Graham and Shakow's] study the health sector is left out of the productive sub-matrix on the rather traditional grounds that this industry does not produce clearly defined commodities for exchange. If, however, we take the view that the health industry produces the use value of healthier bodies under increasingly capitalist conditions of production and exchange we must include it in our calculations.[39]

Clearly the same argument could be made about education. In both cases though, I would argue against their inclusion as production - but not for (what Gibson-Graham would now recognise as) the capitalist-centric reasons of the above arguments. Rather than a concern with specifically capitalist production, I would argue that the 'use-value' of healthier or better educated bodies (however produced) is not an alienable product. To posit these healthy, skilful bodies as a product is again to take the standpoint of capital (labour power, human capital theory). And because this measured 'product' would include elements of embodied labour, it also undermines the restricted definition's claim not to be talking about emotional or embodied labour. Again, it is the narrow focus of measuring only alienable goods and services that leaves open space for a different analysis of emotional and embodied labour. The inclusion of embodied (non-alienable) 'product' then confuses definitional entry points and takes a step away from the notion of the economy as a hologram.

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39 Katherine Gibson, Julie Graham, and Don Shakow (1989) "Calculating Economic Indicators in Value Terms: The Australian Economy and Industrial Sectors" *Journal of Australian Political Economy*, No. 25, pp 23 - 24.

If activities like health and education are excluded from the definition of production, then major areas of GDP are excluded from the accounting for (restricted) production. Of course some activities recorded as household production in the time-use surveys and in Ironmonger's valuations would also not constitute production narrowly defined. Activities categorised as "care for sick or disabled children", "teaching children" and "helping/caring for sick or disabled" are closer to Marxian "social maintenance" activities and are outside the narrow definition of production. Similarly, "household paperwork, bills etc" should be excluded as a version of the market's "finance services". Yet notwithstanding these household activities and the reservations about grey areas and overlaps, the basic point remains that virtually all the activities recorded in household accounts are productive (narrowly defined), while not all those in the market are, thus producing a mismatch of data.

I have argued in this and the previous chapter against the attempt to include everything in a super-comprehensive (extended) definition of production. The narrow definition allows for a consistent measure across market and non-market production because it does not include in the measure of market production activities which are not counted as production in the household. Or put another way, it allows a feminist perspective on non-market production to shape the view of the market, rather than an implied add-on model where feminism leaves the market view intact and adds non-market production.

Making Women's Work Visible

Again I will save the empirical estimates of production (narrowly defined) until the next chapter, my purpose here being a more conceptual consideration of the problems and possibilities of employing a narrower definition of production. However, the fact that the household or non-market economy contributes relatively more to production than is represented in the extended GDP-style accounts provides a tempting reason for preferring the narrower definition. This increased importance relative to market production might make women's unpaid work more visible and more economically important. However, it should be stressed that this preference is not simply self-serving. It is the result of a more consistent comparison between market and non-market production.

Just as Ironmonger argued for the inclusion of capital expenditure flows in the household accounting to enable an "apples to apples" comparison between market and household sectors, so too the narrower definition of production allows an even better "apples to apples" comparison. It allows a comparison of Granny Smiths to Granny Smiths rather than Ironmonger's Grannys to Jonathons comparison. Importantly, it also allows us to see that we are comparing Granny's (ie. one type of apple[labour]), and that we are not talking about all apples or all fruit (ie. we are not talking about all labour or all economic

activity). The vision of other fruit (other economic activities) is opened up rather than precluded by the narrow definition.

If then one of the primary purposes of defining and measuring the economy is to make visible women's work, then an accounting based on a restricted definition of production takes an important step in this direction. It begins to open a vision of different labours simply by the obviousness of the other's (apples/labour) exclusion. Moreover, the recognition that non-market production is a bigger part of the economy than even the orthodox extended accounts suggest, may also make politically easier the project of decentring the market - a project which I have argued is necessary to breaking the neoclassical nexus and to recognising the nature, as well the extent, of women's work.

Conclusion

I return to the quantitative measurement of production in the next chapter. The focus of this chapter has largely been on the potential of the restricted definitions to open up possibilities for thinking about different types of labour in the economy, and the subsequent possibility of defining and measuring the economy in a way which incorporates not just non-market production, but also an understanding of emotional labour. While I have argued that the actual Marxian and transaction cost theoretical frameworks were ultimately flawed, their discussion and empirical estimates are important nonetheless. The distinction between production and other labour is important in creating the space and legitimacy to recognise activity like emotional labour not as production/the same, but as a different type of labour.

This of course is a long way from the traditional goals of national accounting in terms of managing the economy or understanding its dynamics, but this should not be an issue because that claim itself is problematic. To repeat the critique of earlier chapters, you can't manage an economy (as governments and economists claim to do), if you can't see half of it (for instance, because you don't include non-market production). Nor can you understand the economy if your definitions and measures construct sameness (labour = production) when there are different labours. The restricted definitions of production thus highlight the shortcomings of mainstream definitions and measures. But more importantly, in recognising different types of labour by decentring the market as the yardstick (for instance, in favour of more feminist concerns about emotional labour) the restricted definitions take the first step towards breaking the neoclassical nexus.

Chapter 6a: Empirical Estimates of 'Production'

The previous chapter argued that a definition of production restricted to alienable goods and services opens up the possibility of breaking the neoclassical nexus and recognising different types of economic activity. I also suggested that an accounting based on such a restricted definition could provide insight into the "provisioning of society" through a greater consistency of comparison in comparing market and non-market production. The neoclassical based definition of production includes some activities (most notably emotional labour) when they take place in the market, but not when they are done in the household. The more restricted definition can potentially treat each sector equally – at least in as much as the definition of production is applied in a consistent manner (even if the concept of value is derived from and expressed in terms of the market). Indeed, I suggested that (having abandoned both the labour theory of value and transaction cost theories which underlie existing restricted definitions) this consistency of approach was a key consideration and outcome in adopting such a restricted definition.

In this "chapterette" I want to further consider these issues, but in more quantitative terms. It should be stressed that what is being attempted here is not a thorough accounting of production (narrowly defined). As Shaikh and Tonak have shown in their *Measuring the Wealth of Nations*,[1] and as much of the discussion in this chapter will verify, such an accounting is a major research undertaking in its own right. It is well beyond the scope (and interest) of this thesis. Instead, as the chapter numbering suggests, what is attempted here is an extension of the discussion in the last chapter. Rather than producing new, robust estimates, I want simply to point to the orders of magnitude involved so as to shed further light on the conceptual issues and on the possibilities and usefulness of such an alternative view of production – particularly in comparing the size of market and non-market production.

Existing Estimates

Unfortunately even making "order of magnitude" estimates of market and non-market production using a restricted definition of production is made difficult by the lack of existing data. We have seen in Chapter 2 that most measures of non-market production simply extend the national accounts definitions to non-market production. Thus, even if,

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

as I suggested in the previous chapter, there is little empirical difference in the various definitions and measures when dealing with household production, the extended accounting still compares that fairly restricted (commodity-like) non-market production to a market production defined by the neoclassical definition.

Conversely, the Marxian measures, which do utilise a restricted definition in accounting for market production, do not deal with non-market production (because their interest is in capitalist production). The closest they come is the *conceptual* recognition of non-market production in Shaikh and Tonak, and their estimate of the US economy where they borrow Eisner's estimate of household labour to get a total production figure comparable to existing extended accounts. In doing this, Shaikh and Tonak estimate a Gross Final Product of $933.8billion in 1966, of which $267.9billion, or 28%, was household labour.[2] This is less than Eisner's own estimate of household production being 35.1% of total income,[3] but the figures are skewed because Shaikh and Tonak reject the imputation of a value of returns to investment in household capital which forms a part of Eisner's and other extended accounting. Notwithstanding the objections to such imputations discussed in Chapter 3 and raised again below, excluding returns to capital does make an "apples to apples" comparison difficult.

Adding Eisner's full estimate of household production (including the imputed capital returns) to Shaikh and Tonak's GFP figure gives us a total final product of $1086.7billion with the household economy contributing some 38.7%.[4] However, this figure is itself problematic. On the one hand, it exaggerates the share of non-market production because Shaikh and Tonak's measure of market production does not include non-capitalist market production (ie. the self-employed). On the other hand, it understates household production because Eisner's estimates of household capital are based on "durables" (eg. whitegoods) and "semi-durables" (clothing, furnishings) and does not include expenditure on other (variable) capital inputs into household production.[5]

Australian estimates are even more difficult to find. There has been little interest in Marxian national accounting. Kathie Gibson, Julie Graham and Don Shakow began a research project in the 1980s to calculate economic indexes in Marxian value terms.

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2 These are figures in 1966 dollars and are adapted from Shaikh and Tonak's Table 5.4 which gives figures in 1982 dollars: Marxian Gross Final Product production for 1966 = $1902.69 in 1982 dollars. *ibid.*, p102.

3 R Eisner, E Simons, P Pieper, and S Bender (1982) "Total Income in the United States, 1946-1976: A Summary Report" *Review of Income and Wealth*, Vol 28, No. 2, p 172.

4 Figures adapted from Eisner, *ibid.*, and Shaikh and Tonak *op.cit.*

5 Eisner, *ibid.*, p 135. See also discussion of Ironmonger and Snooks' estimates in Chapter 2 here.

Unfortunately, they only published limited data and focused on the organic composition of capital and rate of surplus value, rather than figures for national product. They produced data for two years, 1974/75 and 1978/79, but the work was not continued and there has been little interest since then.[6] While I will return to their taxonomy and method later, their empirical work is now dated and of little help in establishing even the order of magnitude figures required here.

Thus there is little assistance in the existing literature to estimate production (narrowly defined) across both market and non-market sectors. In order to produce such a measure for Australia it is necessary to either start from scratch with raw data collated using Marxian categories or to adapt the existing official figures. While the former is more accurate, again it is beyond the scope and intent of this thesis (even if it were possible given that ABS collection systems and categories are built around neoclassical definitions). The estimates produced here are broad adaptations of existing official figures.

In the next section I focus on market production and the types of changes to national accounts production estimates which can be made to reflect the more narrow definition of production. "Ball park" figures are then produced to show the order of magnitude of these changes and preliminary results are discussed. The following section similarly adapts Ironmonger's figures for household production to reflect a restricted definition of production. Finally, having made ball park estimates of restricted production in both non-market and market spheres, we are able to compare the results and tentatively (given the roughness of the estimates) support the arguments of the previous chapter as to the relative import of market and non-market production.

Market Production

At a broad conceptual level, producing a measure of market production as defined by a restricted definition is quite straightforward. It is simply a matter of defining which industries or activities are "production" of new goods and services (narrowly defined - as opposed to social maintenance or exchange) and then summing the production figures in the national accounts for those industries. This is essentially the same as GDP minus the value 'produced' by industries defined as social maintenance or exchange industries.

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6 Katherine Gibson, Julie Graham, and Don Shakow (1989) "Calculating Economic Indicators in Value Terms: The Australian Economy and Industrial Sectors" *Journal of Australian Political Economy*, No. 25, pp 17 - 43. It should be noted that Gibson and Graham themselves have since rejected the type of analysis implied in this work. See J K Gibson-Graham (1996) *The End of Capitalism (As We Knew It): A Feminist Critique of Political Economy*, Cambridge: Blackwell.

However, as some exchange and social maintenance activities take place within the production industries, not all distribution/exchange and social maintenance activities are captured by this method. For instance, the wages of a salesperson or an accountant employed by a metal manufacturer remain part of the income or value added in that manufacturing sector, despite the fact that those activities are about exchange not production. In the transaction cost framework the value of such workers' wages would be considered a transaction cost. The estimate of transformation services (production) would be the value of production less the wages of the transaction occupation workers. However, in the Marxian framework, sales people and accountants are similarly viewed as non-production labour, but the final product figures of the metal manufacturer remain the same. Those workers' wages are seen as a claim on the surplus created by the production workers, but are still part of the (market) value of the final product.

Where the purpose here is to measure the (market) value of production (narrowly defined), an approach like the Marxian one may seem preferable because, despite including some exchange activities, the final production figures are nonetheless the market value of those goods and services produced and consumed. However, while this is appropriate for a measure of production, it is problematic when comparing market and non-market production. Some activities that could be viewed as the 'exchange activities' of the household (eg. paying bills = accountancy) are included in the estimates of household production, but as noted in Chapters 2 and 5, many analogous activities are not (eg. household management and emotional labour). This again creates a problem of an "apples to oranges" comparison between market and non-market production, as the value of market production is the production activity plus internalised exchange labour, while the value of non-market production is simply the production activity.

For a consistent measure it is thus not only necessary to delineate industries which are exchange activities, but also to delineate those occupations which perform exchange activities, and then deduct the value of wages of those occupations in the production sector. This would require knowing the number of people in all occupations deemed as exchange activities within the production sectors. Unfortunately the data for this is not published by the ABS. ABS labour statistics do record the numbers of people in different occupational groups in the economy, but the calculation here also requires figures on which industries those workers are employed in. For instance, many people employed as clerks are likely to be employed in the finance sector, which has already been included in the accounting for exchange activities. To simply estimate the wages of all clerical staff as an exchange expenditure would then double count the value of the wages of those clerical

staff working in the finance sector. The ABS no longer publishes the "Industry by Occupation" figures necessary for the proper calculation of exchange activity.[7]

Because of this unavailability of necessary statistics I propose here to simply ignore the value of exchange labour within the market production sectors. This is clearly not ideal, although the scale of the mismatch of data between market and non-market production is much less than in the neoclassical extended accounts precisely because the restricted definition does exclude some exchange activity from its estimate of production.

Defining Non-Production Activities

Having adopted the comparatively simple method of accepting the national accounts final product by industry figures as the basis of our revised estimate, the important task remains to designate which industries are "production", and which are not. We have seen in Chapter 1 and in the previous chapter that there are marked differences in definitions of production (and by implication exchange activity) between the various Marxian measures, and between them and the transaction cost approaches. Yet these differences and the perennial debates they reflect are not the fatal problem they might at first seem. If one is trying to analyse the economy by macro-economic modelling based on the labour theory of value (or neoclassical/Keynesian economics) then the definitional issues and the precision of the measures used may be highly important. But given that this is not the purpose of the revised production measures, then these issues may not have the same currency. Again, drawing boundaries is always arbitrary in places, but as argued earlier, it is also a necessity of measurement. However, as long as the taxonomy is basically consistent, then it should be possible to incorporate an analysis of some broad differences between production, and social maintenance and exchange activities into an accounting. This will then provide some measure of their magnitude and changes over time.

This focus on simply getting some ball-park figures is important because I argue that within Marxism and the transaction cost literature there *is* broad agreement on core activities which are exchange or transaction costs. By implication they also define production (narrowly defined). However, it is probably easier to discuss which activities are exchange or social maintenance - ie. which industry sectors appearing as production in the national accounts will be left out in an accounting for a more restricted definition of production. Principal among the exchange activities are the "FIRE" industries: finance,

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7 The ABS did publish the appropriate labour market "Industry by Occupation" figures for the years 1966 to 1984, but these have not been published since. The current series only provides the aggregate numbers of workers in various occupations, not their industry location. Australian Bureau of Statistics *Labour Force Australia*, Canberra: ABS.

insurance, real estate.[8] Most Marxian measures see these as non-production (read exchange) activities.[9] Similarly, regarding the problem of which industries are transaction industries, Wallis and North note that

> Three cases that seem clear are real estate and finance, whose role is primarily to facilitate the transfer of ownership; banking and insurance, whose role is to intermediate in the exchange of contingent claims; and the legal profession, whose primary role is to facilitate the co-ordination, enactment, and monitoring of contracts.[10]

There is more divergence of views on wholesale and retail trade. While Kushnirsky's analysis of Adam Smith's categories and Soviet accounting (cited in Chapter 1 here) suggests that retail and wholesale activities are not production, (as did Gibson, Graham and Shakow's Australian figures), the orthodox Marxian view, as articulated by Shaikh and Tonak (and supported in this case by O'Connor, and Kushnirsky and Stull), suggests that retailing at least is a trade activity belonging in the production circuit. Recall that conceptually Shaikh and Tonak (and O'Connor) distinguish between sales clerks presenting goods and services for sale (production), and those clerks actually ringing up the purchase (exchange). They regarded all of wholesale as being unproductive. To this disagreement, we could also add the transaction cost literature. Fuess and Van Den Berg actually give estimates of transaction costs based on including all of wholesale and retail trade as transaction services, and other estimates only including half of wholesale and retail trade. The second set of estimates (1/2 of wholesale and retail trade) is produced on the grounds that not all services associated with wholesale and retail are necessarily transaction services: shopping, for instance, may provide some entertainment value while transport is clearly a transformative activity.[11]

Given the disagreement within the Marxian literature and the practical difficulties of distinguishing exchange activity from productive activity in these sectors, and more

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8 Note here that "real estate" refers to real estate services (which are about facilitating real estate transactions) rather than the value of rent and housing services (which are payments for housing). However, if we are interested in activities which are about ownership/exchange, then in a more thorough accounting we would need to go further, as Shaikh and Tonak do in distinguishing between exchange activity revenue arising from ground rent (ie. an unproductive claim on surplus), and that arising from capital improvements (eg. buildings and infrastructure [rather than land] which is a return to productive capital). However, such accounting is beyond the scope of the bald estimates being attempted here. See Shaikh and Tonak, *op.cit.*, p 254.

9 See for instance, Shaikh and Tonak, *op.cit.*; Gibson, Graham and Shakow, *op.cit.*; and Paul Baran and Paul Sweezy (1967) *Monopoly Capital: As Essay on the American Economic and Social Order*, New York: Monthly Review Press.

10 John Joseph Wallis and Douglas C North (1986) "Measuring the Transaction Sector in the American Economy, 1870-1970" in Stanley L Engerman and Robert E Gallman (ed), *Long Term Factors in American Economic Growth*, Chicago: University of Chicago Press. p 101.

11 Scott M Fuess and Hendrik Van Der Berg (1996) "Does GNP Exaggerate Growth in 'Actual' Output? The Case of the United States" *Review of Income and Wealth*, Vol 42, No. 1,.p 39, 43.

importantly, given that the purpose of these estimates is simply to incorporate *some* analysis of the difference between exchange activity and production, then the choice of including an (admittedly arbitrary) half of the Wholesale and Retail sector in the estimate of exchange activity is not a bad one.

The estimates are more confused when we consider the various other activities which some authors have suggested constitute exchange labour or transaction costs, namely, advertising and legal services. Again there is broad agreement between Marxian and transaction cost literature that such services do constitute exchange activity, but they tend not to be listed as separate industry sectors in the official production accounts. Rather they come under a more general heading of "Property and Business Services". But even if we accept that advertising and legal services are unproblematically exchange industries, the general "Property and Business Services" classification of these industries is problematic because it also includes activities which are not exchange activities. Thus, architectural, engineering and computer services appear alongside advertising and legal services in the classification of business services.[12]

Even using more disaggregated figures does not necessarily solve the problem. Production industry categories like computer servicing may also contain activities dedicated to accounts and marketing (witness the expansion of direct mail marketing), which would be exchange activities. As is explained more fully in Appendix 2, ABS statistics do not allow for a meaningful (for our purposes) disaggregation of the category of business services. Short of a major research project using other statistics, an accurate reckoning of exchange business services can not be made.

For the purposes of the bald estimates being constructed here, I have deemed the whole category of Property and Business Services as an exchange industry. Obviously this is not ideal, but can be justified on three grounds. Firstly, legal and advertising services (along with accounting services which, being largely about ownership are also [relatively] uncontroversially exchange activities) are the biggest single component of the category of business services.[13] Secondly, the difficulties caused by category changes (again, see Appendix 2) make any disaggregation impossible. Finally, the inclusion of this whole industry category (despite its inclusion of some production activity) would seem

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12 Australian Bureau of Statistics (1993) *Australia and New Zealand Standard Industrial Classification*, Cat 1292.0. Canberra: ABS.

13 In the 1992/93 Input-Output accounts, the first with a relevant disaggregation of business services, "Legal, accounting, marketing and business management services" made up 50.5% of the output of business services, and with "Other Property Services", these exchange activities are 71% of the broader I-O category of Property and Business Services. Calculation derived from Australian Bureau of Statistics *Australian National Accounts: Input Output Accounts*, Canberra: ABS. 1992/93. p 43

reasonable given that the overall estimate here of exchange industries is a large understatement of exchange activities in the economy (for reasons discussed further below).

Thus the national accounts industry categories of "Finance and Insurance" and "Property and Business" plus one half of the value of Wholesale and Retail Trade are excluded from the restricted definition of production as they represent predominantly exchange activities. However, other industries might also be excluded as they relate more to social maintenance than to the production of new goods and services for consumption.

In the previous chapter I argued that health and education should be excluded from production (narrowly defined) as they did not produce alienable products. In terms of a categorisation, they are arguably more about maintaining the people and socio-economic system than about production. Similarly, industry categories like defence are clearly about social maintenance and there is a consensus in the Marxian and transaction cost literature that defence and other "guard labour" (including police and courts) is about protecting (the system of) property rather than production.

Other government expenditure is more complicated. Again, as Wallis and North noted, in some senses all government activity is a transaction cost (ie. not production) because it is about underpinning a system of production (ie. social maintenance).[14] However, I noted that Wallis and North did not follow this through and adopted a narrower definition of transaction costs. The Marxian accounts are similarly of little help here as government expenditure is excluded in large part because it does not create value for capital – a concern irrelevant to my accounting project. Overall, I suspect that the national accounts category of "Government Administration and Defence" is just too broad an aggregation. Even more than the grey areas in other categories, government activities probably stretch across a number of categories. Yet again, more empirical work than is possible here is required to go below the national accounts aggregates.

For the sake of convenience I propose here to simply exclude all of Government Administration and Defence from the estimate of production. Clearly this is not ideal, but equally clearly much government administration is indeed about regulation or redistribution of existing production rather than being about the production of new goods and services. And of course when it comes to comparing market and non-market

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14 Wallis and North, *op.cit.*, p 114. In this context it should be remembered that government owned business or trading enterprises are classes under their industry group in the national accounts, not under government. Australian Bureau of Statistics (1990) *Australian National Accounts: Concepts, Sources and Methods*, Cat No. 5216.0. Canberra: ABS. p 15.

production, the distribution of resources and governance within the household economy (through negotiation, custom, emotional labour or violence) is not included in the accounts of non-market production. Thus the decision to exclude all of Government Administration and Defence, while even more arbitrary than most, can be justified on the grounds of consistency with accounting for non-market production.

Estimating Market Production (Narrowly Defined)

The end result of excluding from the restricted definition of production all these industry sectors is a listing of production sectors as incorporating:

- Agriculture, forestry and fishing;
- Mining;
- Manufacturing;
- Electricity, gas and water supply;
- Construction;
- Accommodation, cafes and restaurants;
- Transport and Storage;
- Communication services;
- Cultural and recreational services;
- Personal and other services; and
- one half of Wholesale and Retail Trade.

This is essentially the same classification used by Gibson, Graham and Shakow in their Australian Marxian measures: the differences being the inclusion of one half of Wholesale and Retail Trade (which they excluded), and categories like "Entertainment", "Restaurants, Hotels and Clubs" and "Personal Services" which they regarded as productive, but which were excluded from their measure due to lack of reliable data.[15] Again, this similarity suggests that, despite the perennial debates, there is enough consensus in radical political economy on what constitutes production – even if the reasons and other categories are more contentious – to produce an order of magnitude estimate of production (narrowly defined).

Having designated which industry sectors are to be counted as production, it remains then to sum the production figures in the national accounts for those industries in order to arrive at the estimate of gross market production (narrowly defined). The figures used here are the Chain Volume Measures provided by the ABS for the years 1975-1999.[16]

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15 Gibson, Graham and Shakow, *op.cit.*

16 The Chain Volume Measures in the new Australian System of National Accounts replaced the Constant Price estimates in the old ANA, but serve the purpose here of providing an industry

Table 6a.1 gives the total estimates of restricted product as against GDP, as well as growth rates in both. The original ABS figures and the calculations behind this table are contained in Appendix 1.

Table 6a.1: Restricted Market Product and GDP

Year	Restricted Product $m	Restricted Product Growth p.a.	GDP $m	GDP Growth p.a.	Gross Market Product $m	Restricted Product % of GMP
Jun.1975	156241		270576		248663	62.8%
Jun.1976	159627	2.2%	278159	2.8%	255291	62.5%
Jun.1977	165301	3.6%	287943	3.5%	263898	62.6%
Jun.1978	166292	0.6%	291211	1.1%	265805	62.6%
Jun.1979	174032	4.7%	306536	5.3%	279787	62.2%
Jun.1980	177258	1.9%	314200	2.5%	286036	62.0%
Jun.1981	181439	2.4%	323949	3.1%	294251	61.7%
Jun.1982	187874	3.5%	335833	3.7%	304901	61.6%
Jun.1983	178459	-5.0%	327778	-2.4%	296149	60.3%
Jun.1984	189047	5.9%	346017	5.6%	313727	60.3%
Jun.1985	198068	4.8%	361840	4.6%	328803	60.2%
Jun.1986	204352	3.2%	376960	4.2%	342666	59.6%
Jun.1987	206848	1.2%	387354	2.8%	351932	58.8%
Jun.1988	217805	5.3%	408191	5.4%	371675	58.6%
Jun.1989	228442	4.9%	424832	4.1%	386982	59.0%
Jun.1990	234482	2.6%	440584	3.7%	401314	58.4%
Jun.1991	231368	-1.3%	439783	-0.2%	399301	57.9%
Jun.1992	230793	-0.2%	441458	0.4%	399860	57.7%
Jun.1993	236874	2.6%	457735	3.7%	414822	57.1%
Jun.1994	248234	4.8%	476556	4.1%	432131	57.4%
Jun.1995	258319	4.1%	498113	4.5%	452007	57.1%
Jun.1996	272397	5.4%	520669	4.5%	472929	57.6%
Jun.1997	282194	3.6%	540379	3.8%	490765	57.5%
Jun.1998	293762	4.1%	565881	4.7%	514648	57.1%
Jun.1999	306001	4.2%	591546	4.5%	538585	56.8%

Source: ABS Time Series. Reference Year for Chain Volume measures in 1997/98.

It is clear from the figures in Table 6a.1 that restricting the definition of production has a major impact on the quantum of the national product. On average the restricted production measure was 59.6% of Gross Market Product (GMP) - which, borrowing from Ironmonger's categories, is the national accounts GDP minus the category "Ownership of Dwellings" which in an extended accounting is part of non-market production. This is to say that just over 40% of what is currently measured as new production is in fact not additional goods and services available for consumption (the material provisioning of

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disaggregated time series of production. Australian Bureau of Statistics (1999a) *Australian System of National Accounts, 1997-98*, ABS. Cat 5204.0. p 2.

society), but is rather the necessary cost of living in and reproducing an advanced capitalist economy and society.

Again, while this order of magnitude is important, it should be recognised that this is a particular definition of production – just one view of the hologram. There are clearly other aspects of the economy and even other "productions", for instance, some aspects of emotional labour which produces subjectivities, social institutions and even people. There are also other issues surrounding the provisioning of society: health, education services for instance, which might also be regarded as important to such a provisioning. Nonetheless, when we take the particular view of the hologram which is concerned with the production of new, alienable goods and services for consumption, it is clear that the market economy produces much less than the orthodox national accounts figures suggest.

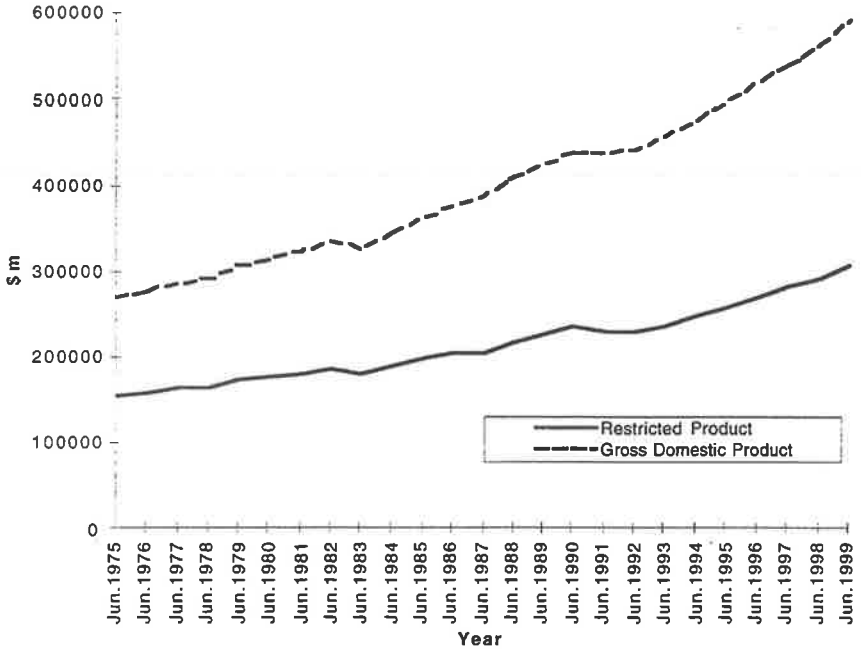
More than that, when we take this view, we can see that the proportion of this production (narrowly defined) relative to the production measured in GDP is declining: from 62.8% of GMP in 1975 to 56.8% in 1999. This is perhaps not surprising given the restructuring of the Australian economy (including the decline of old manufacturing industry). It is also consistent with the US data which points to the consistent growth of transaction costs. [17] But while the trend may not be surprising, the figures change the view of economic growth over the past 25 years. If economic growth actually means growth in production, then the Australian economy has not performed as well as the neoclassical accounting would have us believe. While the GDP 'economy' more than doubled between 1975 and 1999, growing at an average of 3.3% per year, production (narrowly defined) grew at an average of only 2.9% per year.

The difference in magnitude and growth can be seen in Figure 6a.1 below. Again however, given the bald nature of the estimates, any conclusions should be treated very tentatively. More importantly though, it should be remembered that while this different view of (market) economic growth might be significant, the primary interest of this thesis in the restricted definition of production is in its application across market and non-market production. Thus, having produced bald estimates of production (narrowly defined) for the market, it will also be necessary to produce similar estimates for non-market production.

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17 Wallis and North, *op.cit.*, p 121.

Figure 6a.1: Production: Restricted v GDP



Household Production

Chapter 2 discussed various estimates of household production in Australia, but none of these used a restricted definition of production. Thus, to get a consistent definition of production across market and non-market sectors requires not simply changing the market estimates to a restricted definition as above, but also modifying the estimates of non-market production. In what follows I propose to make estimates of household production based on three different methods of measurement. As with the market estimates above, the procedure is more one of making order of magnitude adjustments to existing measures than producing new estimates from original data.

As noted in Chapter 2 the ABS has produced measures of household labour based on time use surveys in 1987 and 1992. Dollar value estimates were derived from these surveys by the ABS using a variety of methods: replacement costs based on each individual function in the household, replacement costs based on hiring one person to do all household work, and opportunity cost based on the average market wage.[18] However, these estimates deal only with household labour (and therefore do not provide for a consistent comparison with market estimates which include capital services). In the estimates here these ABS

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18 In 1987 the ABS also made estimates using opportunity cost valued at award rates, and for 1992 based on both gross and net average wage. Australian Bureau of Statistics (1994) *Unpaid Work and the Australian Economy*, ABS. Occasional Paper, Cat No. 5240.0. p 24.

labour value figures are supplemented by the figures for returns to capital contained in Snooks' estimates. Most of the specific problems with Snooks' accounting which I discussed in Chapter 2 were about his assumptions of time use, rather than his capital estimates.[19] Thus, the base for the estimates here draws on the strengths of both ABS and Snooks' data.

In making revised estimates though, I have used only two methods of valuing household labour: opportunity cost at average wages, and general housekeeper replacement costs (rather than replacement for individual function). These are the highest and lowest of the ABS estimates respectively, and so provide the outside parameters for comparison with market production. They also provide a useful comparison with Ironmonger's Input-Output based accounting which is revised here to produce the third measure of non-market production.

As with the estimates of market production above, the first step in revising household production estimates is to identify which household activities included in the original estimates should not be regarded as the production of alienable goods and services for consumption in the restricted product sense. Or alternatively put, it is necessary to decide which household activities are more equivalent to the market categories identified as "social maintenance" or "exchange" than production. However, because much of the capital base of the household (principally house and land) is the same or overlapping for both production and non-production activities in the household, it is difficult to estimate the capital services to production activities with any accuracy. Thus, unlike the market estimates above which were derived from summing the value of product of those industries still identified as production industries, in estimating household product I start from the other end and simply deduct a value for designated non-production activities. The ball-park figure to be deducted is derived from the proportion of labour time spent on non-production activities.

In summary then, the method for estimating household production (narrowly defined) is to identify the proportion of time spent on non-production activities which are incorporated in existing measures of household production, and to reduce the existing estimates (ABS+Snooks, and Ironmonger's GHP) by the same proportion.

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19 Again, see discussion in Chapter 2, and also Rhonda Sharp and Susan Donath (1995) "Book Review of Graeme D Snooks, Portrait of the Family Within the Total Economy" *Feminist Economics*, Vol 1, No. 3, pp 128 - 134.

Defining Non-Production Activities

As noted in Chapter 2, the ABS adopts a taxonomy of production activities in its Time-Use surveys built around categories of domestic activities, child care, purchasing of goods and services, and voluntary work and community participation.[20] Time use is recorded for a range of activities under these headings, and it is at this level that we can begin to distinguish production from non-production labour.

"Domestic activities" includes things which are unproblematically regarded as production, like food preparation, laundry, ironing, and other housework, as well as other household labour like garden, pool and pet care, home and car maintenance, and transporting of other adults. The only category of work here which might not be regarded as production labour is "household management" (paying bills, filing, etc - ie. not actually running production in the household). In 1992 this activity took on average 8 of the 144 minutes per day which people spent on domestic activities.[21] This activity is clearly analogous to exchange activity in the market, being about keeping track of ownership/finance rather than production of new goods and services. Accordingly I have included it in the deduction for non-production activities.

This revision does create a problem however in the comparison with market production. While such clerical activities are clearly exchange activities, they were nonetheless incorporated into the estimate of market production when they took place within a production industry - because the relevant statistics were not available. If we view the household as being engaged in production, then for consistency with market estimates, we should leave this exchange labour in the estimate of household production. I have not done so, partly because by this logic, no deductions would be made from the ABS and Ironmonger's household production figures. We would then have household production defined by the neoclassical definition, and market production defined by a restricted definition. This is not an "apples to apples" comparison either. With currently available statistics, a completely consistent comparison is impossible, but in making a deduction for such household labours, the estimate of non-market production becomes conservative, understating it relative to the market.

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20 These headings are as they appear in the results of the 1992 time-use survey, although the headings (though not the calculations) change slightly in other publications. Australian Bureau of Statistics (1994) *How Australians Use Their Time, 1992*, ABS. Cat No. 4153.0. pp 8 - 9. Ironmonger also uses the ABS categorisation for his work. Duncan Ironmonger (1994) "The Value of Care and Nurture Provided by Unpaid Household Work" *Family Matters*, No. 37, pp 46 - 51.

21 ABS, *ibid.*, p 8.

Child care presents many more problems than the relatively straight-forward categorisation of domestic activities. The ABS category is divided into care of "own children" and "other children", and then further divided into physical care, care for a sick child or a child with disability, teaching, playing, and minding. Some of the issues here were discussed in the previous chapter in relation to health and education more generally. While the line between "teaching" and "minding" is fairly arbitrary, and while it seems silly to distinguish caring for a sick child and a healthy one, following the discussion in the last chapter and the treatment of education and health in the market sector, I have excluded care of sick children and teaching from the list of productive activities in the household. Perhaps fortunately given the arbitrary nature of the distinctions involved, the figures are of little import anyway, reducing total time spent on child care as a *main* activity from 32 to 30 minutes per day.[22]

The category of "purchasing goods and services" (and associated travel) also provides difficulties in estimating household production (narrowly defined). As argued in Chapter 6 (proper) in relation to transport, the travel component (which is approximately one-third of the time use in this category) is relatively unproblematically classified as production. But where Shaikh and Tonak distinguish between the production of goods and services in retail trade, and the actual ringing up of the services (exchange activity), so too the household production category "purchasing of goods and services" contains both production and exchange activities. While the measure here is arbitrary, for consistency with the market estimates above I have deducted as exchange/non-production half the time-use for purchasing goods and services (but not for the time for the associated travel). This deduction takes away 15 of the average 45 minutes per day spent on purchasing activities.[23]

Finally the ABS category of "voluntary work and community participation" needs to be disaggregated in estimating production - and indeed in the 1997 time use survey it is broken up so that voluntary work and care stand as one category, and the religious activities and community participation goes to its own separate category.[24] Following this break-down, I use only the time spent on voluntary work and helping able adults as part

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22 Figures used here are for main activities rather than for all activities (which include time spent doing activities simultaneously) because the latter figure add up to more than 24 hours in the day and would therefore double count much household production. It is also arguable that work done in the market records/values only "main" activities, not all the other activities (including non-work) which workers might also do in a day - either simultaneously with, or squeezed in between, production activities. Figures are from ABS, *ibid.*, p 8.

23 *ibid.*, p 8.

24 Australian Bureau of Statistics (1998) *How Australians Use Their Time, 1997*, ABS. Cat No. 4153.0. p 18.

of the total time spent on non-market production activities. (Helping sick adults or those with a disability is again deducted as per the treatment of health in the market sector).

Estimating Household Production (Narrowly Defined)

The result of these classifications is that on average in 1992 some 234 minutes per day were spent on productive activities defined by the neoclassical definition, but 28 minutes or 12% of this was on activities not regarded as production of new goods and services in the restricted sense of the term. Accordingly then, in estimating the restricted product of the household sector, I have reduced the ABS+Snooks estimates (for each year) and Ironmonger's 1992 estimate by 12%. The final estimates for household product are listed in Table 6a.2 below.

Table 6a.2: Gross Household Product (restricted)

Valuation Method	1987 $b	1992 $b
Opportunity Cost Estimates		
ABS Household Labour	162.8	272.3
Snooks' Household Capital	25.4	38.1 (a)
Gross Household Product (Neoclassical)	188.2	310.4
Gross Household Product (Restricted)	165.6	273.2
Housekeeper Replacement Cost Estimates		
ABS Household Labour	131.4	213.6
Snooks' Household Capital	25.4	38.1 (a)
Gross Household Product (Neoclassical)	156.8	251.7
Gross Household Product (Restricted)	137.9	221.5
Ironmonger's I-O Estimates		
Gross Household Product (Neoclassical)		341
Gross Household Product (Restricted)		300

(a) This figure is an understatement as Snooks' estimates stopped at 1990. The figure here is Snooks' 1990 estimate adjusted to 1992 prices.

Combined Results

Having adjusted the estimates of household production to utilise a restricted definition of production, we are now in a position to compare this with the estimates of market production (narrowly defined) produced earlier. The results for each of the measures of household production considered above are set out in Table 6a.3 below. As expected, in each case when a restricted measure of production is considered, the proportion of production contributed by the household sector is greater than that revealed using

neoclassical based extended accounting. The order of magnitude of this difference is between 8.5 and 10.5 percentage points relative to total production, or, put another way, non-market production is up to 25% more important relative to the market than previous estimates have revealed.[25]

Table 6a.3: Comparing Market and Non-market Production

	1987	$b	1992	$b
	Neoclass.	Restricted	Neoclass.	Restricted
Gross Market Product (a)	247.7		368.3	
Restricted Market Product (a)		145.6		212.6
Opportunity Cost Estimates				
Gross Household Product	188.2	165.6	310.4	273.2
Gross Economic Product	435.9	311.2	678.7	485.8
GHP as % of GEP	43.1%	53.2%	45.7%	56.2%
Householeeper Replacement				
Gross Household Product	156.8	137.9	251.7	221.5
Gross Economic Product	404.5	283.5	620.7	434.1
GHP as % of GEP	38.7%	48.6%	40.5%	51%
Ironmonger's Estimates				
Gross Household Product			341.0	300.0
Gross Economic Product			703.0 (b)	530.7
GHP as % of GEP			48%	56.5%

(a) These figures are derived from Table 6a.1 adjusted to current dollars using the implicit price deflater for GDP(E). See Table 7a.3 here.
(b) Figure is Ironmonger's original based on an estimate of GMP at $362b, rather than the $369b derived from Table 6a.1 here. The difference in terms of household share of production is only 0.5%

As noted in Chapter 6 proper, this increased relative importance of household production is politically important in making women's work more visible. This visibility stems most obviously from the results which show the increase in quantum of non-market production relative to the market. But in some ways the difference between the neoclassical and Marxian measures also points to the nature of the different work regimes involved. What the figures show is that the activities which are about social maintenance and exchange are a proportionately greater part of what is measured in the paid economy than in the

25 It is even more important relative to the ABS comparisons of household labour and GDP which show household labour as up to 69% of GDP, or about 40% of the total economy. ABS estimates relative to GDP in ABS, *Unpaid Work, op.cit.*, p 24.

household. This suggests that either the household is more efficient in terms of the production of new goods and services for consumption, or that we need to look for other activities beyond "production" which govern, sustain and reproduce the household. As argued in Chapter 5 and 6, by not counting significant parts of the (market) economy, we may open up the space to see that there are also significant parts of the household economy which are not counted even in the extended accounts. By excluding the labour of doctors, lawyers and the powerful market operators, we might also destigmatise and recognise the labour in other excluded categories, like household emotional labour.

The figures which show the increased relative importance of household production may also assist in making women's work more visible by contributing to the greater feminist/green/(postmodern) Marxist project of decentring the market. At a symbolic or rhetorical level, it is important that in all but one of the measures above, the household and community sector actually 'produces' *more than half* of the economy's new goods and services. This may be rhetoric rather than analysis, but as McCloskey notes about economic argument generally, rhetoric and imagery are important. [26]

The figures above actually go further in showing the importance of non-market production than the neoclassical figures which some feminists use to argue for a decentring of the market. For instance, Hilkka Pietilä's well-known eco-feminist attempt to visualise the economy as being based on a free (ie. non-monetary) core, still uses GNP figures to calculate the proportion of the whole economy occupied by this free sector (37.5% of the Finnish economy in 1990).[27] Other strands of "green economics" which also seek to decentre the market and visualise an economic structure as containing many different (market and non-market) sectors, might also benefit from a more consistent comparison which decreases the relative importance of the market.[28]

However the figures and analysis above may be particularly telling within a Marxian discourse. Those like the *Rethinking Marxism* school, and J.K Gibson-Graham in particular, have sought to highlight non-market and non-capitalist production so as to offer a 'glimpse' or a vision of a different political economy. The results presented in this

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26 D McCloskey (1985) *The Rhetoric of Economics*, Madison: University of Wisconsin Press.

27 Hilkka Pietila (1997) "The Triangle of the Human Economy: Household-Cultivation-Industrial Production: An Attempt at Making Visible the Human Economy in toto" *Ecological Economics*, Vol 20, No. 2, pp 118 - 119.

28 Here I am particularly thinking of the "New Economics" followers of Schumacher and Max-Neef. See, for instance, Jane Wheelock (1992) "The Household in the Total Economy" in Paul & Max-Neef Ekins, Manfred (ed), *Real Life Economics: Understanding Wealth Creation*, London: Routledge.; Paul Ekins, ed (1986) *The Living Economy*, London: Routledge and Kegan Paul, 1986.

chapter are particularly valuable to this project because the increased size of the non-market economy stems from Marxism's own definitions. To assert, as Marxian critics of Gibson-Graham (and others) do, that the focus on non-market production is idealist (as opposed to materialist), is at one level to ignore the greater 'material base' of society in non-market production, or alternatively, to argue for the superiority of neoclassical over Marxist definitions and accounting![29]

Of course, this is all still at the level of rhetoric, and Marxists can (and do) still posit capitalist production and accumulation as the fundamental dynamic of the economy, regardless of the relative size of the production.[30] But the assertion of the hegemony of capitalist production relations/capitalist economy must be argued for theoretically and empirically, not simply asserted as if it is self-evident. Given the relative size of non-market production I see no reason why the capitalist sector's input into the household should *a priori* be deemed more important than the household sector's input into the market via the production of labour. Nor though, do I assert that my figures suggest that the non-market sector is 'really' hegemonic, or otherwise more important than the market simply because of its greater size.

What I am suggesting is that the existing (neoclassical) figures do not give a consistent comparison on which to even consider the different sectors' relative sizes, and that a restricted definition of production both gives a more consistent comparison and shows that in quantum, the non-market sector(s) produce more new goods and services than does the market. The question of hegemony is a different matter to the relative size of the various sectors. Ultimately I suspect that the issue of hegemonic Capitalism v deconstructed "capitalism" is in part about different assumptions and standpoints (and therefore different views of the economy/hologram). Hopefully though, the increased importance of household production (judged by Marxism's own definitions) might at least

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29 Cox et al., argue that Gibson-Graham generally fail to take account of the unequal power relations between capitalist and non-capitalist activity, although the charge of idealism is more particularly about Gibson-Graham's alleged locating of capitalism in Marxist discourse rather than in material political economic events. While, as outlined in Chapter 6, the notion of a material *base* is problematic, if "material base" means production of goods and services (the material provisioning of society), then there is greater reason for Marxists to consider non-market production. Cox et al.'s critique of Gibson-Graham does not consider non-capitalist production as a subject of analysis at all. Brian Cox, Demetriou Demetrakis, Mike Donaldson, Rene Leal, and Richard Southall (1999) "Katherine Gibson and the Antinomies of Post-modern Socialism", in *Rethinking Marxism in Australia in University of Wollongong*.

30 Again, see Cox, *ibid.* However, the same analysis also applies to market production, so that for instance, Andrew Wells critiques the mainstream view of economic history in nineteenth century Australia, arguing that the key centres of accumulation remained in the rural sectors, regardless of the relatively greater share of commodity production (as measured by neoclassical/Keynesian accounting) of urban based construction and manufacturing. Andrew Wells (1989) *Constructing Capitalism: An Economic History of Eastern Australia, 1788-1901*, Sydney: Allen & Unwin.

open the necessary view of the "economy as hologram" in a discourse largely fixated on a monolithic entity: "the Capitalist system".

Chapter 7: Breaking the Nexus II: Economic Welfare Definitions

I have argued in this thesis for the need to break the neoclassical nexus and separate what should be regarded as different concepts: work, production, market, economy, and welfare. In Chapters 4 and 5, I considered a view of work unencumbered by neoclassical definitions and the statistical imperatives of national accounting. In Chapter 6, I considered a different view of 'production', namely, a restricted concept of production, which I argued opened up the possibility of seeing different types of labour and economic activity. However, while the analysis of emotional labour tells us something about work, and the restricted definition of production tells us something about the quantum of production of new goods and services, these views exhaust neither the concepts tied up in the neoclassical nexus, nor the possible views of the economy as hologram. And, of necessity, these entry points must hide or ignore other aspects of the economy.

Thus for instance, the restricted definition and measure of production tells us nothing about the desirability or ecological sustainability of that production. Tanks, uranium, timber from old growth forests, and the 8 zillionth watt of coal powered electricity are all recorded as production and growth – precisely because the definition and measure is concerned with production, not with sustainability or economic welfare produced. This is not a fundamental problem with the production measure proposed, it is simply an outcome of seeing production and welfare as different concepts. Since I have argued that production and welfare *are* different concepts (and that it is a mistake to conflate the two), I now propose to consider what the economy might look like (what the view of the hologram is) when we take welfare as the epistemological entry point.

In separating welfare from production and the rest of the neoclassical equation, this chapter will consider the economic welfare definitions and measures which are drawn from green political economy. In one sense these green approaches take the opposite path to those discussed in the last chapter. While those "production" approaches attempted to restrict the definition to enable the 'other' (eg. emotional labour, social maintenance) to be seen beyond "production", the green approaches discussed in this chapter attempt to expand the definition and measure of the "economic" in order to include the 'other' (the range of activities and effects of concern from an environmental perspective) *within* the definition and measure.

In doing this they offer an alternative way through the neoclassical nexus by disentangling and making primary the concept of economic welfare. They do not assume that labour, production, the market and welfare mean the same thing or have a uniform relation to each other. They are interested as much in the effect as the quantum of production.

As noted in the Environmental Interlude, the green economic welfare indicators I am concerned with here represent only one of a range of approaches to 'greening' the national accounts. However, in the context of this thesis which has been primarily concerned with feminist approaches to the economy, they are the most interesting because they include non-market production and go some way toward breaking the neoclassical nexus and recognising different types of labour and economic activity. I will also suggest that these measures have important potential for finding common ground between feminist, green and socialist politics.

Economic Welfare Indicators

One of the earliest and best known of these measures is William Nordhaus and James Tobin's 1972 Measure of Economic Welfare (MEW). This measure attempted to expand the consideration of economic welfare beyond that which is provided through the market (and recorded in traditional national accounts). It included measures of government and household capital formation, non-market work and leisure, but deducted output regarded as "regrettables and intermediate", that is, defensive expenditures and costs incurred in producing welfare.[1] The results suggested to Nordhaus and Tobin that the secular trend of their MEW was so similar to that of GNP growth that a separate economic welfare measure was redundant.[2]

However, there were other measures, although the details of these have been well summarised in various places and I do not propose to discuss these older measures here.[3] Rather I want to focus on the indexes which, on the back of a new wave of environmental concern in the 1980s and 1990s, have sprung up since the publication of John Cobb and

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1 Summarised in Robert Eisner (1988) "Extended Accounts for National Income and Product" *Journal of Economic Literature*, Vol 26, December, pp 1611 - 84.

2 Cobb and Daly actually dispute Nordhaus and Tobin's interpretation of the MEW results. Cobb and Daly claim that the trends in economic welfare were significantly different to GNP growth when the time period was considered in smaller spans rather than just over the whole MEW period. John Cobb and Herman Daly (1994) *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*, Boston: Beacon Press. p 80.

3 The main measures here are from: Zolotas (1971); Jorgenson et al - various measures; Kendrick (1984); Ruggles (1982); and Eisner (1978, 1982). For summaries from mainstream, green and Marxist perspectives, see respectively: Eisner, *op.cit.*; Cobb and Daly, *ibid.*; and Anwar Shaikh and E. Ahmet Tonak (1994) *Measuring the Wealth of Nations: The Political Economy of National Accounts*, New York: Cambridge University Press. pp 9 - 17.

Herman Daly's Index of Sustainable Economic Welfare (ISEW) in 1989. Cobb and Daly's index for the United States has been adapted and ISEWs (or alternatively named, Genuine Progress Indicators) have been produced for England, Germany, Austria, Sweden, Chile, Italy, Australia and the Netherlands, as well as updated versions for the US.[4]

These indexes are explicitly not measures of production. They start with the personal consumption component of GNP on the (admittedly contentious) assumption that welfare is about consumption. This aggregate consumption figure is then adjusted for other factors relating to economic welfare, resulting in an alternative economic index and a summary figure analogous, but in opposition to, GDP.

The basic structure of all these indexes is similar. The GDP Consumption Figure is adjusted for the distributional in/equality of this aggregate personal consumption, giving a "Weighted Personal Consumption" figure. This is to overcome a fundamental problem of GDP as a welfare measure, that is, that GDP, and even GDP per capita may hide gross inequality and widespread poverty. Most indexes multiply their initial personal consumption figure by an index based on changes in the share of income of the poorest fifth of households, although the Austrian ISEW uses a different methodology and adjusts the whole ISEW for distributional inequality.[5]

To this Weighted Personal Consumption figure are added values for the consumption of services not included in GDP private consumption, most notably the value of unpaid household labour, the 'services' provided by consumer durables (household capital), and some public welfare enhancing services.[6] The bulk of government services are generally not included because they represent defensive expenditures, although the particular services included varies considerably between indexes. From this expanded value for consumption, deductions are then made for defensive expenditures which were included in GDP consumption; for environmental damage, depletion of natural capital, and in some indexes, for other social costs. Finally adjustments are made to measure the financial sustainability of consumption. Table 7.1 illustrates this structure.

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4 See Friends of the Earth website, http://www.foe.co.uk/progress/international.html

5 Engelbert Stockhammer, Harald Hochreiter, Bernhard Obermayr, and Klaus Steiner (1997) "The Index of Sustainable Economic Welfare as an Alternative to GDP in Measuring Economic Welfare: The Results of the Austrian (revised) ISEW calculation 1955 - 1992" *Ecological Economics*, Vol 21, pp 19 - 34.

6 The estimates of non-market production discussed in chapter 2 here are important. Cobb and Daly use Eisner's estimates based on the wages of domestic workers, while Hamilton uses Ironmonger's figures (somewhat revised) for his Australian estimates. Cobb and Daly, *op.cit.*; Clive Hamilton (1997) *The Genuine Progress Indicator: A New Index of Well-being in Australia*, Australia Institute. Discussion Paper 14. p 19.

Table 7.1: Structure of the Index of Sustainable Economic Welfare, 1990
(Adapted from Cobb and Daly's original table)

CONSUMPTION		ADDITIONAL CONSUMPTION OF SERVICES not included in [B]		SUBTRACTIONS for Non-welfare Enhancing Consumption		FINANCIAL SUSTAINABILITY	
Item	**Value**	**Item**	**Value**	**Item**	**Value**	**Item**	**Value**
[B] Personal Consumption	1265.6	[E] Household Labour	519.8	[I] Expenditure on Consumer Durables*	234.6	[V] Net Capital Growth	29.4
[C] Distributional Inequality	108.7	[F] Consumer Durables	224.9	[J] Defensive Private Health & Education Expenditure	63.2	[W] Change in Net International Position	-34.0
		[G] Streets and Highways	18.0	[K] Cost of Commuting	34.6		
		[H] Health and Education Public Expenditures	45.1	[L] Cost of Personal Pollution Control	5.0		
				[M] Cost of Auto Accidents	31.9		
				[N] Water Pollution Cost	15.3		
				[O] Cost of Air Pollution	18.9		
				[P] Noise Pollution Cost	4.8		
				[Q] Loss of Wetlands	21.3		
				[R] Loss of Farmlands	36.5		
				[S] Depletion of Non-renewable Resources	312.6		
				[T] Long-term Environmental Damage	285.3		
				[U] Cost of Ozone Damage	85.3		
[D]Weighted Pers. Cons.	**1164.4**	**+ Total**	**807.8**	**- Total**	**1149.3**	**+ Total**	**-4.6**
						ISEW Total	**818.2**
						ISEW per capita	**3253.1**
						GNP	***1950.8***
						GNP per capita	***7755.9***

* This expenditure is deducted so as not to double count the welfare gained from these consumer durables, once as personal consumption [Column B] and again as an imputed flow of services [Column F]
(The letters in square brackets represent the columns set out in the original table. All figures are in billions of 1972 US dollars, except column A (year), column C (an index number with a base: 1951 = 100), and the per capita totals which are in dollars, not billions of dollars.

While Table 7.1 shows the structure and gives a listing of these deductions in Cobb and Daly's ISEW, it should again be noted that the actual categories of deductions vary among the later indicators. For instance, the US GPI - a direct successor to Cobb and Daly's index - also incorporates deductions for loss of old growth forest, costs of crime, family breakdown, loss of leisure time, and underemployment, but it leaves out Cobb and Daly's accounting for expenditure on health and education.[7] The Austrian and German ISEWs make further deductions for costs of advertising - half of which is seen as a defensive expenditure against increased market competition.[8]

Despite its name, the Australian GPI (produced by Clive Hamilton at the Australia Institute) is as close to Cobb and Daly's original ISEW as it is to the US GPI. Gone is the US GPI's idiosyncratic deduction for the social cost of family breakdown,[9] and Hamilton has reinstated the ISEW's imputations for post-secondary education and public health spending. The bulk of the other categories of the ISEW/GPI adjustments are followed in the Australian estimate, although Hamilton's estimates of resource depletion are more conservatively priced than the US estimates.[10]

The other major difference in the Australian estimate is the accounting for time. Some early estimates of economic welfare included imputations for leisure time (as a utility produced by/consumed in the economy). However, the sheer size of the estimates often overwhelmed the accounts.[11] Cobb and Daly made no imputations for leisure, while the US GPI records only the change in leisure time relative to a base year. This makes the figure less overwhelming (and a negative), but still adjusts for an important shortcoming in traditional national accounts, where production figures can go up with no indication of whether this is due to increased productivity or just people working longer hours.

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7 Clifford Cobb, Ted Halstead, and Jonathon Rowe (1995) *The Genuine Progress Indicator: Summary of Data and Methodology*, Redefining Progress. Note: Cobb and Daly included one-half of the expenditure on post-secondary education and one-half of public spending on health as welfare enhancing - the rest was viewed as defensive expenditure against greater job competition and the impact of urban and industrial living. Cobb and Daly, *op.cit.*

8 Stockhammer et al, *op.cit.*; Hans Diefenbacher (1994) "The Index of Sustainable Economic Welfare: A Case Study of the Federal Republic of Germany" in Clifford Cobb and John Cobb (ed), *The Green National Product: A Proposed Index of Sustainable Welfare*, New York: University Press of America.

9 The deduction is "idiosyncratic" not so much because it is situated in a conservative discourse about the goodness and naturalness of the biological family (an approach which is of course highly problematic), but because one of the proxies for measuring family breakdown is time spent watching TV! Cobb, Halstead and Rowe, *op.cit.*, p 19.

10 Hamilton, *op.cit.*

11 See figures in the "Environmental Interlude" here from Shaikh and Tonak, *op.cit.*, p 14.

The Australian GPI takes a different approach again, by accounting not for leisure or its loss, but instead including an estimate of the cost of overwork. This is based on average wages for all hours worked by full-time workers beyond 39.9 hours per week (as this is the lowest average hours of full-time work per week in the period - in 1982). This cost is added to the costs of underemployment and unemployment in what Hamilton claims is "a more systematic approach to time use than [in] previous GPIs".[12]

The variations in all the indexes represent refinements of methodology as well as differences in data availability, but they also reflect differences in political assumptions. All the authors and institutions producing these indexes obviously have a commitment to some form of sustainable development, but the economic/theoretical assumptions are by no means homogeneous. The US ISEW is the result of the collaboration between a theologian (Cobb) and a neoclassically trained economist (Daly). Redefining Progress - the organisation which produced the US GPI - sees itself as part of a new anti-market/anti-materialist politics encompassing ecologists, social conservatives and Christians.[13] By contrast the Austrian and Australian indexes reflect much more secular, social democratic values.

These differences have clear impacts on the indexes. For instance, the US GPI's deduction for the cost of family breakdown (and the discussion of this adjustment) clearly indicates their conservative Christian understanding of the (nuclear) family as a natural and fundamental part of society.[14] Even more indicative of the different political assumptions is the treatment of government expenditure. Most of the economic welfare measures add only specific items of public spending which increase welfare, but as Hamilton notes,

> The decision to assume that public services are 'guilty until proven innocent' seems to reflect a peculiarly American suspicion of government. The Australian GPI breaks with tradition by assuming that each component of public spending adds to welfare unless we argue otherwise and deduct it.[15]

The Australian GPI then includes 25% of government spending on defence, public order and safety, 50% of spending on general government services (including tax collection and policy advice), and all government expenditure on recreation and culture. Philosophically this approach sits much more comfortably with a social democratic approach to

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12 Hamilton, *op.cit.*, p 10.

13 Clifford Cobb, Ted Halstead, and Jonathon Rowe (1995) "If the GDP is Up, Why is America Down?" *The Atlantic Monthly*, October, p 72.

14 Cobb, Halstead & Rowe, *The GPI, op.cit.*, pp 19 - 21.

15 Hamilton, *op.cit.*

government than do the socially conservative and liberal approaches of the US figures. As I will argue later, not only are these political assumptions reflected in the categories of the ISEW/GPI adjustments, they are also reflected in the method of calculating the adjustments. The methodology here is complex and varies considerably within and between the indexes, but there are also questions as to whether the various values included in the measures adequately or accurately represent the costs they purport to measure.[16] The authors of the measures all recognise the often 'heroic' assumptions they make, as well as a number of other problems with their various accounts. For instance, apart from the problems of non-beneficial consumption (eg. smoking), Cobb and Daly also recognise that their figures do not take account of hidden and illegal economic activity, or of changes in the conditions of work and/or the productivity of labour over time.[17] And again, the figures on the value of the depletion of natural resources are so controversial that Cobb and Daly give final ISEW figures both with and without these deductions, as does Hamilton for income distribution in Australia. However, such assumptions and data arguments are part of the terrain where market values are applied to non-market phenomenon. To some extent, they must simply be accepted as inevitable, but not fatal.

More of an issue is the criticism that welfare can not be measured in a single indicator or at a national level. Thomas Power argues that differing price structures and social and environmental conditions within countries means that the relationship between income/consumption and welfare is not comparable across different regions.[18] Similarly Nelson notes that using even a refined single measure as a yardstick for economic welfare "smacks of methodological reductionism"[19] - a criticism echoed in conservative responses.[20] The economic aggregations in the ISEW/GPI therefore hide as much as they reveal about the economic welfare of any given community.

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16 See for example, the critiques by Gavin Cameron (1998) "ISEW - an Economist's View," *Friends of the Earth Electronic Discussion list on ISEW/GPI*, Archived at http://www.foe.co.uk/progress/mailarchive/0007.html Message dated September 29; Eric Neumayer (1998) "More detail on the ISEW", *FOE Discussion list, ibid.*, Message dated 21 October.

17 Cobb and Daly, *op.cit.*, pp 447, 458 - 460.

18 Contribution in Clifford Cobb and John B Cobb (1994) *The Green National Product: A Proposed Index of Sustainable Economic Welfare*, Maryland: University Press of America. pp 147-168.

19 Julie A Nelson (1997) "Feminism, Ecology, and the Philosophy of Economics" *Ecological Economics*, Vol 20, No. 2, p 160.

20 See for example, Dennis Trewin (1998) "A Framework for the Presentation of Indicators of National Progress" in Richard Ekersley (ed), *Measuring Progress: Is Life Getting Better?*, Melbourne: CSIRO. p 111. Trewin was writing as the Deputy Australian Statistician, although from this source (as opposed to Nelson) I find the criticism somewhat bizarre when he (and presumably the ABS) defend GDP as a measure of progress or well-being. p 110.

These are serious problems which are recognised by the authors, but the evaluation here depends on one's standpoint. Compared to an embedded, locally based political economy/ecology, the ISEW/GPIs are clearly problematic. But compared to the official GDP measures which already define the terrain of measurement as a 'national economy', then the economic measures are not as problematic. Which is to say that the justification of the measures (and I argue below, their political project) is a pragmatic one. As Cobb and Daly put it, despite the problems and holes identified by their critics, their ISEW is preferable because it gets closer to 'the true health of the economy' than do traditional measures.[21] Similarly, the authors of the US GPI recognise that the nature of human well-being is too varied and subtle to be captured in any single measure, but claim that,

> the breakdown of families and communities, the depletion of natural resources and the like have significant economic consequences; to assign a reasonable figure to these is more accurate than asserting, as the GDP implicitly does, that their economic consequence is zero.[22]

Thus the same problem which creates the need for the alternative measures also justifies the new statistics, even with their inaccuracies and arbitrary assumptions. Unlike the official measures, the alternative indexes do provide *some* measure of factors vital to economic welfare. And, as I will argue below, in measuring such factors and producing an admittedly simplistic summary figure, these alternative economic indicators open up all sorts of possibilities for environmental (and other progressive) politics.

Results and Implications

Cobb and Daly found that per capita ISEW was only 16.5% higher in 1990 than in 1951. By contrast, GNP more than doubled in that period. More importantly, the ISEW fell through the 1980s by an average of 0.43% per year (while GNP continued to rise).[23] That is to say, in contrast to the story told by the official statistics of continued post-war economic growth, with each generation apparently so much better off than the previous one, the ISEW shows that on average people at the beginning of the 1990s were not that much better off than they were 40 years ago. Moreover, people were worse off than they had been at the beginning of the 1980s.

This result is replicated in most of the ISEW/GPIs. With more social costs included, the US GPI indicates that Americans are now actually worse off than in the 1950s: per capita GPI was 28% lower in 1994 than in 1950. (Aggregate GPI did in fact rise over the period

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21 Cobb and Daly, *op.cit.*, p 505.

22 Cobb, Halstead & Rowe, *The GPI, op.cit.*, p 45.

23 Cobb and Daly, *op.cit.*, p 505.

from $862billion to $1.06trillion, but this did not keep up with population growth).[24] However, for both the US ISEW and GPI the secular decline dates from the 1970s. Similarly the ISEW for the UK peaked in the mid 1970s, but by 1990 had slid almost back to its 1950s level.[25] The ISEW/GPIs of all other countries except Chile 'outperformed' the US and British measures, with most (including the Australian GPI) approximately doubling from 1950 to 1996.[26] The Dutch index tripled and the German index quadrupled over similar periods. However, these quantitative comparisons are problematic due to different data and methodologies. More important are the changes over time within each country. Again almost all the indexes show growth in the 1950s and 1960s turning around in the late 1970s and early 1980s. In contrast to GDP growth in these countries, measured economic welfare in the 1980s and 1990s is, at best, flat.[27]

These results have important political implications because, as Cobb and Daly note,

> The purpose of an index that strives to measure economic well-being is not simply to show us how we are presently faring or are likely to fare. It should also reveal the kinds of policies that would enable a nation to improve its welfare.[28]

Cobb and Daly have argued that the general trend in economic welfare suggests that the whole direction of development and faith in economic growth is misplaced - hence the need for a 'steady-state' economy. Thus they argue for a mixture of Pigovian taxes to correct market failures and a state imposed cap on the size of the economy (and international trade). These specific conclusions are not necessarily endorsed by all the authors of the other indexes, but all would agree that the first step is to make visible the particular things which contribute most to the gains and losses in economic welfare. Such visibility is not likely to flow from GDP measures. For instance, Hamilton argues that economic welfare in Australia has suffered due to foreign debt, the growing costs of unemployment and overwork, environmental problems, costs of energy resource depletion, greenhouse gas emissions, and capital disinvestment.[29] Arguably only the first of these has made an impact on the economic policy agenda in Australia.

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24 Cobb, Halstead & Rowe, *The GPI, op.cit.*, p 42.

25 Cited in Michael Jacobs (1996) *The Politics of the Real World*, London: Earthscan. p 82.

26 The Chilean per capita ISEW was also marginally lower in 1995 than in 1950, but its trajectory was more eratic. The ISEW/GPI graphs can be compared at the Friends of the Earth Website, *op.cit.*

27 FOE, *ibid.*

28 Cobb and Daly, *op.cit.*, p 507.

29 Hamilton, *op.cit.*, p 47.

With new concerns fitted into the dominant economic models (ie. quantifiable dollar values), public policy might then address those specific components to promote the positives or to minimise the costs. For instance, the US ISEW makes clear, and relevant to economic analysis, that efforts to control air pollution have improved economic welfare, as have efforts to reduce car accidents which have decreased the costs of commuting.[30] By contrast, both the US ISEW and the US GPI show that the biggest factors contributing to the decline in economic welfare through the 1970s and 1980s were increased inequality and the unsustainable use of natural resources. In contradiction to the dominant neo-liberal economic policies of today which insist on the economic benefits of smaller government, Cobb and Daly argue that the social policies of the 1960s demonstrably improved economic welfare by reducing income inequality - an observation which the Australian figures would support.[31]

This is not to say that public policy can simply be read-off from such accounts. Trewin suggests that such composite indicators are "good at grabbing headlines" but difficult to interpret accurately,[32] while El Serafy argues that the policy implications of such indicators have rarely been fully worked out or used to revise policy.[33] Yet this criticism seems to reflect a technocratic yearning for an (environmental) accounting which would lend itself to econometric modelling and give reliable 'scientific' data upon which to base precise policy descriptions. El Serafy even argues that greening the national accounts need not "involve any value judgement as to the desirability or otherwise of preserving the environment".[34] Suffice to say that such technocratic modelling is neither the purpose nor the politics of the economic welfare measures discussed here.

However, there is another reason why economic policy might not simply be read-off from the ISEW/GPI results. Michael Jacobs has argued that an ecologically sustainable society may require new investments in public transport, education, energy efficient technologies, etc. - ie. new (public) consumption which would lead to economic growth, even if *private* consumption does not rise.[35] If Jacobs is correct, the concern about economic growth *per se* is misplaced. The real question is not growth, but the type and impact of growth. Being based on personal consumption, the ISEW/GPIs are not well structured to reflect

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30 Cobb and Daly, *op.cit.*, p 508.

31 Hamilton, *op.cit.*

32 Trewin, *op.cit.*, p 120.

33 Salah El Serafy (1997) "Green Accounting and Economic Policy" *Ecological Economics*, Vol 21, p 218.

34 *ibid.*

35 Jacobs, *op.cit.*, p 33.

such different growth paths, and, as I will argue later in relation to exchange expenditure, they do not pay enough attention to the content of consumption expenditure.

While this is a powerful argument, I suspect that until the creed of 'economic growth as ideal' (in both senses of 'ideal') is made problematic, the question of the types of changes Jacobs envisages will not arise, and it is here that the ISEW/GPIs are important. Their results clearly confront the dominant assumption of public policy that growth *per se* is good and the proper goal of public policy. The disjuncture between GDP growth and the economic welfare figures clearly shows that economic growth is not *necessarily* a common good, and it gives some quantitative indication of just how far apart those goals (economic growth and welfare) have become.

This quantification is particularly important because it speaks in the language of the hegemonic economic theory and political debates (ie. economic costs, dollar values). This not only provides an entry point into those debates, but may also be particularly important in terms of challenging and/or convincing those whose thoughts are bounded by the hegemonic market economic discourse. As Barry notes, borrowing from market economics can entail an "immanent critique" of orthodox economics:

> Showing how economic growth as a social ideal is flawed *by its own criteria and standards* is a stronger approach to take [than simply dismissing economic theory].[36]

The ISEW/GPI figures clearly raise questions as to both the goal and the content of economic growth, and it is this challenge to growth-centred political economy which their authors see as the major contribution of these measures. But in terms of this thesis, the green indexes have an additional function - that of providing a standpoint on the economy which includes non-market activity and opens a vision of economic difference.

The questioning of the content and effect of economic activity begins to challenge the assumed positiveness of production/economic growth (ie. production=welfare). But the ISEW/GPIs break the neoclassical nexus in other ways as well. They break the production = market nexus by the inclusion of household labour and capital services, and the production = economy = welfare nexus both by measuring consumption not production, and most obviously by deducting for 'production' (ie. economic activity) which is neutral or counter to welfare. Put another way, the ISEW/GPIs recognise different types of labour and economic activity - some beneficial (ie. welfare enhancing), some defensive (ie. beneficial in the sense of repairing damage done by other activity, but

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36 My emphasis. John Barry (1994) "The Limits of the Shallow and the Deep: Green Politics, Philosophy and Praxis" *Environmental Politics*, Vol 3, No. 3, p 373.

not adding to welfare beyond that) and some activity which is not beneficial at all (the social costs). Such activities are the destructive consumption of capital (natural or human produced). Again this recognition of different types of labour and economic activity potentially opens the space to rethink "the economy" in a way which better reflects the feminist concerns discussed in the earlier parts of this thesis - although, as I will argue later, the ISEW has little gender analysis.

The extent to which the ISEW/GPIs really break the neoclassical nexus should also not be exaggerated. While Cobb and Daly present an alternative to the neoclassical/Keynesian measures, they have themselves been criticised for the adoption of a political framework which remains tied to a (revised) neoclassical understanding of how markets work. Such theories and measures, Tracey Mott argues, fail to appreciate key economic processes elucidated by other economic theories, in particular the processes of capital accumulation and the extent of social control over capital necessary to limit its unsustainable growth.[37] By contrast, Stockhammer *et al.* claim that beyond a general and explicit faith in the market, Cobb and Daly are "rather ambiguous" about their underlying theoretical assumptions. More importantly though, the authors of the Austrian ISEW go on to claim that

> the ISEW is not bound to a special economic paradigm: It can be founded in neoclassical economics as well as in Marxian or Neoricardian economics.[38]

However, such a claim must be suspect given the historical and epistemological arguments made in Chapter 1 here. As with all accounting systems, the authors' (neoclassical) assumptions are embodied in their accounting. There is the obvious point that these measures are based on market measures and therefore bring all values into a market/dollar framework - thus reinforcing the idea that the economy is about the market, and that the market is the source of value. The specifics of the neoclassical economic assumptions are also evident. The calculations of imputed returns on consumer durables (household capital) and the discounting for depletion of natural resources and long term environment damage are both based on neoclassical notions of opportunity cost and the rational decisions of economic man. More generally, like neoclassical theory, the starting point (and the standpoint) is the individual. These indexes begin with personal consumption and end with economic welfare per capita, and there is little analysis or recognition of social structures and processes like gender or (antagonistic) classes.

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37 T Mott (1991) "Review of Cobb and Daly" *Journal of Economic Literature*, Vol 29, June, pp 593 - 595.

38 Stockhammer et al, *op.cit.*, p 25.

Critiques

Given the discussion in this thesis and its conclusion as to the necessity of decentring the market and breaking with neoclassical paradigms, such accounting must then be suspect, despite the political and epistemological possibilities noted above. Indeed from the perspective of a feminist informed economics, there are a range of problems with these alternative economic indexes, not the least of which is the absence of any consideration of gender in the measures.

The inclusion of an imputation for the value for household labour does address the most basic feminist critique of the official definition and measure, but with it comes the range of problems identified in Chapter 3. Specifically, an imputation based on the average wage of domestic workers enshrines the market's undervaluation of women's work, while this and the imputed returns for services provided by consumer durables gives the (misleading) impression that this unpaid production is *like* market production, and again, driven by the calculations of Rational Economic Man. The issues and compromises here have already been discussed. But even if we accept that such compromises are necessary and/or inevitable in any accounting, there are a number of problems which *can* be dealt with within the framework of alternative indexes of economic welfare. Addressing these problems would not only improve the indexes themselves, but, I argue, would also provide some basis of common analysis between feminist, green (and ultimately, socialist) politics.

Gendered Inequality

The problems begin in the first figures of the alternative indexes. The starting point of the accounts is personal consumption, but these figures, and the adjustments for distributional inequality in most of the indexes are based on inequality between households. As discussed in Chapter 3, this ignores inequality within households and assumes an altruism or commonality of household interest which has been much criticised by feminists. There are exceptions here however. Largely for reasons of data availability, the German ISEW uses the wages share of GDP and the Australian GPI uses individual taxable income figures to determine distributional inequality. Yet both these measures are problematic in that, by excluding non-income earners and some welfare recipients, they tend to reinforce the notion that the only 'real' income is that which is earned in paid work.

Moreover, Hamilton's discussion of the "apparent" (ie. not real) poverty of the household "second income earners" clearly assumes a shared household budget and misses the point

of the feminist deconstruction of the household unit.[39] Indeed, all these approaches ignore the fact that the lowest income earners in society are disproportionately women, and also disproportionately 'coloured'. Like the other GPI/ISEWs which measure inequality as between household units, they do not name the gender (and race) structures of poverty. The indexes present income quintiles as a one-dimensional stratification, when it is clear that women and non-whites are over-represented among the poor.

Perhaps the real exception is the Austrian ISEW. In the absence of national data on personal income distribution it focuses on three areas of structural inequality: the income inequality between workers and employees, between women and men, and between the employed and the unemployed. Subindexes for each of these lines of inequality are weighted by population share and combined to give a measure of changes in the distributional of welfare relative to the initial year.[40] The gendered inequality adjustment here is particularly important because it can be seen as a step away from the individualist, neoclassical assumptions which see inequality as between individuals [or unitary households]. It introduces the notion of *structural* inequality to the measures, although the Austrian authors are equivocal about this. At one level they explicitly reject "methodological individualism" regarding welfare as a social phenomenon (hence the concern with distribution), but they also argue that the actual gender (and class) basis of their inequality adjustment results from a lack of data on personal consumption. They regard the more usual mono-dimensional Gini coefficients as being "a more elegant approach".[41]

What I want to suggest here is that even if those household income figures were available, as they are for other countries, the structural focus of the Austrian figures provides a better foundation than do the gender-blind, mono-dimensional inequality adjustments of the other ISEW/GPIs. Mostly I argue this on the basis of my preceding argument about the need to break with the neoclassical paradigms. But there is also the obvious point that, even if there were no gender and race dimensions to such personal or household consumption (ie. even if the poorest quintile were as likely to be white and male as black and female), a feminist economics might still be interested in inequality between the sexes across all quintiles, not just the poverty of the poorest quintile. Indeed, given that the finding of the UNDP in its 1995 Human Development Report was that "no society treats its women as well as its men",[42] then some adjustment for gender inequality would appear

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39 Hamilton, *op.cit.*, p 15.

40 Stockhammer et al, *op.cit.*

41 *ibid.*, p 30, 22.

42 UNDP (1995) *Human Development Report*, United Nations Development Program. p 75.

to be necessary for any measure of economic welfare.

For the Australian GPI, Hamilton specifically rejects an adjustment for gender inequality, arguing that it "loads up the ISEW with more welfare significance that it can possibly bear" and takes the measure "way outside the terrain of consumption that the ISEW occupies".[43] Yet if we take a standpoint which sees gender as a primary category of economic analysis,[44] then a measure of gendered *income* inequality is clearly within the parameters of the ISEW/GPIs. Indeed, it seems unclear to me why a structural income inequality measure (like that contained in the Austrian ISEW) would overload the ISEW/GPI any more than the original distribution adjustments.

Beyond the ISEW/GPIs, there is also strong precedent to adjust welfare measures for gender inequality, most notably in the United Nations Development Program's 'Human Development Index' (HDI). Since 1995 the HDI has been supplemented with a Gender-related Development Index (GDI) which measures the same things (life expectancy, education and income) but adjusts for inequality between women and men. The greater the gender inequality the lower the country's GDI - ie. the HDI is adjusted downwards.[45] This index still does not reflect the distribution of income or consumption within the family, and it may underestimate gender disparity in market income because it deals only with income from labour (ie. discrepancies in wage rates) and not with income from land or capital - property which is mostly owned by men.[46] Nevertheless, even with these caveats, the GDI does represent some accounting for gendered inequality.

At a minimum then, a feminist informed economics might wish to adjust the Weighted Consumption figures so that the ISEW/GPIs reflect the gender inequality in the monetary earnings which support that consumption. However, the issue is wider than that.

Wider Issues

While all the economic welfare measures discussed above adjust for the inequality of money income distribution, they do not adjust for the inequality of the household services which they add into their index. The indexes are then gender-blind both in the overt sense of not accounting for gender differences in income, but also in the sense that the

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43 Clive Hamilton (1999) "Measuring Well-being: Responses to Some Criticisms of the Index of Sustainable Economic Welfare." Seminar to the Deaprtment of Geography and Environment, London School of Economics and Political Science, (Unpublished), p 13.

44 Again, see Nilüfer Çagatay, Diane Elson, and Caren Grown (1995) "Introduction" *World Development*, Vol 23, No. 11, pp 1827 - 1836.

45 UNDP, *op.cit.*, p 73.

46 *ibid.*, p 73, 130.

inequality adjustments apply only to GDP consumption (the traditional public domain) and not to non-market (private) production/consumption.[47] Given that, as noted in Chapter 2, women not only earn less money than men, women also spend more time than men on household production, inequality of household production is obviously of importance to a feminist economics.

In terms of the ISEW/GPI, this may take us from the consumption focus to a notion of production, but as Delphy and Leonard point out, people consume more than just quantities of abstract primary materials, they also consume the time that goes into the preparation and transformation of those materials into the final product:

> Family members at home consume all the housework done by the 'mistress of the house'. ... This includes some highly personalized services, for example, knowing the exact hour to serve meals, or how hot and how sweet particular people like to have their cup of tea, or which clean shirt they are likely to want to wear for a meeting on Monday. Wives do such things for other people. They almost never have them done for them by others.[48]

This "personalised service" again raises the issue of the particular (and embodied) nature of women's household labour, but the more immediate point here is that, despite their individual starting point, the measures of economic welfare ignore differences/inequalities in consumption between members of the family. In this sense they continue the problem which Delphy and Leonard identify as seeing the household as "'a unit of consumption' rather than as one distribution point among others for individual consumption".[49] Delphy and Leonard contend that the "domestic mode of production" is *also* a regime of consumption where women forego consumption and men consume more than their share. Similarly Chris Kynaston, drawing on later dual systems theorists, points to a number of other empirical studies of women's and men's unequal access to food, money and leisure within the home.[50]

If one of the concerns of the measures of economic welfare is to overcome the shortcomings of GDP in ignoring the unequal distribution of income, and if we take

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47 An exception here (arguably) is the Austrian ISEW which accounts for gender inequalities in work effort as well as income. However, this distributional inequality indicates the distribution of work time between paid and unpaid work, rather than focussing on gendered inequality in unpaid work. Moreover, the Austrian authors note that the adjustment "hardly influences the ISEW" as the index only measures *changes* in distribution. In the Austrian case the distribution of paid and unpaid labour has remained fairly stable over the period of the ISEW, 1955 to 1992. Stockhammer et al, *op.cit.*, p 31.

48 Christine Delphy and Diana Leonard (1992) *Familiar Exploitation: A New Analysis of Marriage in Contemporary Societies*, Cambridge: Polity Press. p 148.

49 *ibid.*, p 146.

50 Chris Kynaston (1996) "The Everyday Exploitation of Women: Housework and the Patriarchal Mode of Production" *Women's Studies International Forum*, Vol 19, No. 3, pp 239 - 41.

seriously the view that household production adds to welfare, then surely the ISEW/GPIs should adjust for inequality in this sphere as they do for inequality in paid income. Indeed, a case could also be made for adjusting other categories of the ISEW/GPI for gender inequality. Categories like costs of underemployment and loss of leisure/cost of overwork may well have particularly gendered patterns.

But the analysis might also go deeper than this. If we take non-market production seriously, why should the "cost of commuting" in the ISEW/GPIs refer only to travel to and from paid work, not the cost of urban congestion associated with shopping or getting kids to school?[51] Similarly, if we measure the cost of industrial accidents, why not also the cost of accidents in household production? Added to this is a suspicion that some ISEW/GPIs (eg. Sweden, Australia and the UK) undervalue household production by excluding a proportion of time spent on garden and household maintenance, and on shopping and childcare, where the authors believe these activities do not necessarily contribute to economic welfare, or are not the equivalent of the market produced welfare.[52]

Clearly a thorough-going gender analysis would result in a significant overhaul of the ISEW/GPIs, but it would also be a major statistical undertaking - even if the relevant statistics were available. However, the most obvious revision, the adjustment of the inequality index to incorporate gender wage differences, is achievable without a major overhaul of the indexes. There is also a strong political argument for making adjustments for gender pay differentials. If we are going to make economic measures (with all the reservations and compromises that entails) then it is not hard to imagine that the public policy benefits of these indicators noted earlier could also be beneficial from a feminist activist perspective.

There are clearly benefits in any measure which includes non-market production, but a measure which also adjusts for gender inequality would have even greater potential. Policies which reduced gender inequality would show up as increases in economic welfare. Conversely, perpetuating gender inequality would register as being detrimental to the general economic welfare. For instance, given that in most industrialised countries the gender wage gap has decreased over the last thirty years (most significantly in the 1970s),

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51 The discussion of costs of commuting is specifically about paid work (See for instance, Cobb, Halstead & Rowe, *The GPI, op.cit.*, p 24; and Hamilton (1997), *op.cit.*, p 24), although in a sense the Australian GPI does adjust for costs of other commuting because Hamilton includes as welfare enhancing only 50% of time spent on household travel. *op.cit.*, p 20. This again shows the necessary distinction between production and welfare: as argued in the previous chapters, travel for shopping is clearly production, but more travelling time does not necessarily increase welfare.

52 Hamilton, *ibid.*, pp 19 - 20.

then the incorporation of gender in the income inequality measurement would improve the overall 'performance' of the ISEW/GPIs. This revision to the GPI thus emphasises the need to decrease the gender wage gap *as a project benefiting the community* - a political framing of particular importance in an era of anti-feminist backlash.

The intersection of these green welfare accounts with a feminist economics thus holds out the possibility both of improving the economic welfare measures, and of providing a tool for a more unified green/feminist critique of dominant economic policies and directions. The gender blindness of the *existing* measures of economic welfare is not then a terminal flaw in this approach to economic measurement.

Of course gender is not the only structural line of inequality. The authors of the UNDP note in relation to their GDI that alongside gender,

> A case could be made along other dividing lines - involving say, class, community, or location. ... The focus on gender inequality is only a beginning in this respect, but it is an important starting point, since widespread gender bias severely affects the social, economic and political situation of many countries.[53]

Similarly the Austrian ISEW adjusts for class differentials - between employers and employees and between the employed and unemployed. While I agree that adjustments to the inequality index for any or all of these structural inequalities might validly be argued, and that such adjustments might also be important for moving the ISEW/GPIs to a more structural analysis, the particular arguments and adjustments for inequalities of class, race, location, etc are beyond the scope of the present critique. However, even having opted, like the UNDP, to focus on gender as one (important) line of structural inequality, and recognising that other structural inequalities should in principle also be recognised in the ISEW/GPIs, there remain other problems with those indexes from the (feminist) perspectives discussed in this thesis.

Recognising Different Labour - Exchange Labour

Again, I have argued in this thesis that what is ultimately necessary for a feminist informed definition and measure of the economy is to break the neoclassical nexus and to recognise different types of labour. I have also noted above that these measures of economic welfare do begin to recognise different types of labour and economic activity. However they do not go far enough in this direction.

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53 UNDP, *op.cit.*, p 72.

In Chapter 6, I noted Shaikh and Tonak's Marxist categorisation of different types of labour as productive, exchange and social maintenance.[54] I argued the need to add emotional labour to their taxonomy and questioned the labour theory of value which underlies their accounting system, but their categorisation does at least go some way to recognising different types of labour and economic activity. This is particularly relevant for the measures of economic welfare considered here, because, perhaps surprisingly there is a degree of common ground between these green-inspired accounts and Marxian national accounts.

Much of what green economics considers as defensive expenditures - defence, police, social work/counselling, health - are similar to Shaikh and Tonak's "social maintenance" (and to some of what Wallis and North's argue are the transaction costs which provide the framework for transformative activities to take place). This is not surprising given that the definition of a defensive expenditure as that which maintains the status quo (rather than increases welfare) is similar to Shaikh and Tonak's notion of social maintenance as labour necessary to reproduce the political economic system.

However, while there is common ground on this issue, there is no notion in the green economic welfare measures of a different "exchange" labour. That is to say, included within the calculation of Weighted Consumption in all of the indexes of economic welfare is a value for goods and services which are about the exchange of ownership of existing goods and services. This is particularly important both because this absence of a distinction between production and exchange tends to limit the notion of different types of labour. But more than that, I also want to argue that exchange labours/activities *do not* increase welfare and *should not* be included as a positive contribution to consumption/ welfare in the indexes.

To use Shaikh and Tonak's example of warehousing: it is not necessarily the case that the final customers are any better off for having what becomes their final goods warehoused for twelve months, as opposed to going straight from the point of origin to point of sale. There may be arguments here about warehousing increasing availability of products (and therefore utility), or alternatively in the case of perishable fruit and vegetables, perhaps warehousing makes goods available out of season and thereby enhances consumer welfare as the perishables would not otherwise be available. Of course such preservation might be argued to be part of the production process and not simply warehousing, but in any case the argument does not apply to the warehousing of non-perishables.

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54 I have substituted the term "exchange" for Shaikh and Tonak's term "distribution" so as to avoid confusion with the issue of income *distribution* in the ISEW/GPIs.

Examples of financing make the point more forcefully. Shaikh and Tonak argue that, even in owner-operated enterprises, the labour of producing the particular goods and services is conceptually different to the labour of ringing up the purchase and taking the money. Clearly the customer in this case is made better off by consuming the goods and services, not by paying for them or by the banking of the money just paid. These latter functions may be a pre-requisite for the consumption, but I would again argue (as për Shaikh and Tonak) that this of itself does not make the two activities the same. Indeed, in the context of green accounting, a system of law and order is a pre-requisite for (market) consumption, but the measures of economic welfare do not include these public order expenditures as positive contributions to welfare. By the green accounts' own definitions, simply being a pre-requisite of consumption is not enough to justify calling such activities "welfare enhancing".

With these arguments about 'necessity'/necessary labour put aside, I argue that the activity of exchange clearly does not enhance the welfare of the consumer. Indeed, in a trivial literal sense, consumers are made worse off by buying rather than otherwise (legally) appropriating the goods or services - perhaps as a gift. Similarly, outside of a system of finance which forms the prerequisite for such production and consumption, it is unclear how the consumption of banking services after the sale of the item enhances the economic welfare of consumers. Yet the cost of that activity is incorporated in the price of the good or service, and is therefore included as part of (welfare enhancing) consumption.

The same applies to many business services. In their classic polemical essay on American capitalism, Baran and Sweezy go further, saying that far from enhancing welfare, the enormous sums spent on advertising are detrimental to consumers. Corporate advertising, they argue, is not about informing potential customers of the availability of necessary goods and services, but rather it is about the creation of (unnecessary) wants, the fostering of brand loyalty (thus decreasing the elasticity of demand), and supporting (inefficient/undemocratic) non-price competition. Like finance, insurance and real estate activities, advertising and the sales effort are an outcome and a cost of a system of monopoly capital, not a contribution to collective economic welfare.[55]

These specific concerns about advertising are echoed in the discussions of the ISEW/GPI and in deductions in some of the indexes,[56] but I want to suggest more broadly that exchange activities generally should not be included as part of welfare enhancing

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55 Paul Baran and Paul Sweezy (1967) *Monopoly Capital: As Essay on the American Economic and Social Order*, New York: Monthly Review Press. ch 5.

56 Cobb and Cobb, *op.cit.* p 187, 223; Stockhammer et al, *op.cit.*, p 28.

consumption and as positive contributions in the green economic indexes. Given that these sorts of activities are currently included in the ISEW/GPI as a positive part of consumption, some deduction would then need to be made for the costs of finance, insurance, real estate, advertising, legal services and the like.

These Marxian-inspired adjustments would not only enhance the ISEW/GPI as a measure of economic welfare, but as with the feminist critique, they are important at a theoretical level as well. Just as the feminist concern to adjust for gendered inequality undermined the notion of the (liberal) individual as the point of analysis, so too an inclusion of exchange costs begins to move the alternative indexes away from their individualist notion of economic welfare (private consumption) to a more collective and structural analysis of how the system constructs and constrains economic welfare. When we begin to see industries like finance, insurance, real estate and advertising - that is, products of a particular capitalist market system - as costs rather than as something which enhances welfare, we can better question the amount of resources that go into maintaining such a system. Or, put another way, we see the waste of resources which happens *because* we live in this particular capitalist market system - an analysis which coincides with (some) green critiques of the unsustainability of the economy and gives some common ground for a more unified red/green analysis.

Potential for Revised Measures

Yet despite this common ground and the potential import of the feminist and socialist inspired revisions of the ISEW/GPIs which I have suggested in this chapter, these suggestions and the revised economic welfare measures remain an exercise in market accounting. They are not an organic synthesis of socialist, feminist and green traditions of the types envisaged by ecofeminists such as Salleh.[57] In significant ways the revised measures retain the flawed logic of the market as source and measure of value. Thus, for those whose political commitment is for a non-market political economy, even the revised ISEW/GPIs still operate on the terrain of the enemy. Nonetheless, precisely because they argue on that terrain, but also because the suggested revisions argue in a way which opens the possibility of a structural/systemic analysis, revised ISEW/GPI measures may both highlight the *need* to move to a different political economy and form a bridge between hegemonic market economics and a more transformative political economy.

It is at this level - as a transformative critique of economic growth - which I think the revised measures of economic welfare are most useful, but this is not to say that they have

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57 Ariel Salleh (1997) *Ecofeminism as Politics: Nature, Marx and the Postmodern*, London: Zed Books.

no policy application within the current system. I noted that the measures highlighted particular policy problems and successes, but by definition all such policy is a result of grounded political processes and must be fought for politically. The adjustments I have suggested should not limit the ISEW/GPI's usefulness for public policy analysis and campaigning. It would still be possible, for instance, to use the revised index movements to raise issues about inequality and welfare policies, or about the impact of pollution or resource depletion.

In this context, the crucial thing about the adjusted indexes is that they not only open the space to question particular economic and policy outcomes, but *at the same time* they also begin to question the very nature of the political economic system itself. For those wishing to advance a radical/systemic analyses in political economic debates over particular policies, the revised indexes may then provide a less compromised tool than the original versions, and certainly a much better option than arguing on the terrain of mainstream economic statistics which reflect completely foreign assumptions and methodologies. The revised indexes could then provide not just a bridge between red and green, and feminist and green political concerns, they may also provide some common ground between those seeking to make changes within the system and those who see the system itself as the problem.

Of course, an economic welfare measure is a tool not a panacea, but the political potentials opened up by the revised ISEW/GPIs are important. However, given the argument of the rest of this thesis, they need to be used cautiously. The arbitrariness of the figures and the compromises of market measurement needs to be kept in mind. But more than that, the perspective and context must also be remembered. Because they include a range of factors traditionally regarded as non-economic, the economic welfare measures present something which looks like an all inclusive measure of everything, rather than simply one view of the economy. Unfortunately, like the "theory of everything" of Chapter 5, the problem is that these measures of economic welfare do not (and can not) include everything. Consider again (as usual) the issue of emotional labour.

The indexes contain little or no accounting for, or mention of, emotional labour. While the production measures discussed in the previous chapters did not deal with emotional labour, I argued that their approach left open the space and vision of such economic difference because they explicitly measured only alienable goods and services. They did not pretend to deal with emotional labour or measure "the economy". But the ISEW/GPIs tend to foreclose on the space of the "other" because they are multi-dimensional rather than tightly focused. Since the measure of economic welfare is obtained by bringing the factors which GDP ignores or mistreats into the new index, then surely the labour and

services which go into making people happy, secure or simply "feeling themselves" should be included.

Indeed, the US GPI implicitly suggests this in its recognition of the cost of family breakdown, although the sort of emotional labour which makes families function is rendered invisible by the authors' notion of the goodness and naturalness of families.[58] Nonetheless, if one was in the business of proxy measurements, it might be possible to measure emotional labour's contribution to economic welfare, in the household at least, by flipping the GPI's measure of the cost of family breakdown on its head. The US GPI measures the economic welfare *lost* in family breakdown, but if the break-up of X number of families had a (proxy) cost of $Y to economic welfare, then the value of family maintenance is on average $Y/X per family. The aggregate contribution of this emotional labour then is $Y/X multiplied by the number of family units.

Clearly we are in bizarre territory here and I have already argued *against* attempting to measure emotional labour, precisely because it is unmeasurable. But the point is that unmeasurability alone can not be a reason for excluding emotional labour from the ISEW/GPIs because those indexes already include estimates of other 'unmeasurable' quality of life factors, like the psychological cost of crime, and environmental damage and loss of habitat in old growth forests. Moreover, as some of the ISEW/GPI deductions for social costs are not deductions for particular activities, but rather for overall losses of welfare related to the general economy, there is already a recognition of costs embedded in other activities. In this context, emotional labour is just another activity embedded/embodied in other activities.

Given this, neither the inalienability or unmeasurability of emotional labour is sufficient reason for its exclusion from these measures of economic welfare. Yet (fortunately), the ISEW/GPIs do not include a measure of the services provided by emotional labour - and nor can they. I have consistently argued that any market based measure must, by definition, ignore the particularity and inalienability of emotional labour. But the real issue here is more than simply leaving emotional labour out of the measure, it is that these alternative indexes tend to limit the possibility of *seeing* such different types of labour by presenting, not a hologram, but a unitary model of a quantified thing - the economy. Thus, while I stand by the arguments I have made here and elsewhere[59] about the political

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58 Cobb, Halstead & Rowe, *The GPI, op.cit.*, p 19.

59 I have put the political arguments made here and in the Environmental Interlude more strongly in Greg Ogle (2000) "Accounting for Economic Welfare: Politics, Problems and Potentials" *Environmental Politics*, (Forthcoming).

importance of the ISEW/GPIs, and the potential of the revised indexes for feminist, green and socialist political economy, the indexes need always to be kept in the framework of the economy as hologram.

While the ISEW/GPI indexes reveal much about the environmental impact of economic activity and the (un)sustainability of current economic systems, they remain just one approach to defining and measuring the economy and must be seen alongside other measures - as well as alongside non-quantitative approaches. Without the logic of the hologram, the ISEW/GPIs become a(nother) flawed attempt at a comprehensive definition and measure which repeats rather than critiques the failings of GDP and neoclassical accounting.

Chapter 7a: Revising the Estimates of Economic Welfare

Just as Chapter 6a was designed to extend the conceptual discussion of Chapter 6, so too this "chapterette" is intended to extend the discussion of the previous chapter by putting some quantities to the revisions suggested there. As with the estimates in Chapter 6a, the aim is not to produce robust, final figures, but rather to consider the magnitude of the suggested changes and their impact on the ISEW/GPIs.

I argued in the previous chapter that, despite the inclusion of non-market goods and services in the indexes, the ISEW/GPIs were largely gender blind. I suggested that, at a minimum, the inequality indexes within the GPIs needed to be revised to include gender inequality alongside the mono-dimensional income stratification figures. However, I also argued that the recognition of different welfare outcomes of economic activities evident in the green notion of defensive expenditures did not go far enough. The analysis needed to be extended by incorporating into the accounting the notion of exchange expenditures. In this chapter then, I want to make both those revisions to the Australian GPI.

Gendered Inequality Adjustments

The first adjustment which I have suggested to the existing ISEW/GPI is to factor in an accounting for gender inequality. I noted in Chapter 7 that, with a few exceptions, the existing economic welfare measures were based on private household consumption and that inequality was measured as inequality between households. The Australian estimate was an exception being based on individual rather than household income, but Hamilton's discussion of the data still carried the problematic assumption of altruistic sharing households. I also argued that, of all the measures, the Austrian ISEW was not just the only one to specifically include a consideration of gender, but that its methodology based on measuring lines of structural inequality (between employers and employees, women and men, and the employed and unemployed) provided a better foundation than the more mono-dimensional liberal notions of the other ISEW/GPIs.

However, replicating the three sub-indexes of the Austrian ISEW is a more statistically complicated exercise than I wish to attempt here. Moreover, the accounting for inequality between employed and unemployed workers may double up on the accounting for the costs of unemployment already in Hamilton's Australian GPI. Thus, rather than replicating the Austrian inequality index, I wish simply to supplement Hamilton's existing inequality measure with a measure of gender inequality.

As Hamilton's inequality index is about market income, the starting point I am suggesting for adjusting for gender inequality is the gender wage gap - the difference between the average wages or earnings of men and women. Sylvia Walby has argued that this earnings differential is a manifestation of patriarchal relations in paid work - relations which are one of six "structures of patriarchy". [1] But even without such a structured formulation it is clear that the gender wage gap is an important aspect of gender inequality and has ramifications for women's standard of living, life choices, power and status in society. Clearly too, as Jennings argues,[2] money matters and so the gender wage gap has a direct connection to equality of distribution of consumption and economic welfare in society.

Equally clearly however, the gender wage gap is not a complete index of gender inequality or even of gendered *economic* inequality. It measures differences in payment for work, not the different/sexualised production relations which Adkins and Beasley note govern women's work.[3] Nor does it measure gendered differences in job security where women have traditionally been clustered in casualised and marginalised work areas. And nor does it measure women's greater vulnerability to exploitation through unpaid overtime or 'flexible' hours which can accompany weak labour market positions. Similarly, as a proxy for consumption inequality, it does not account for where and on whom that money is spent, and the freedom or otherwise a woman in a (patriarchal) family has to spend it on herself.

Thus the gender wage gap is a very limited measure of gendered economic inequality, but it is nonetheless *an* indication and one which is quantifiable for accounting purposes. As with many of the components of the economic welfare measures where the accounting may be incomplete and/or involve heroic assumptions, the justification of the measure lies in the pragmatic argument that it is better than simply ignoring the issue. Incorporating an adjustment for the gender wage gap in revising the Australian GPI may be far from a complete strategy for dealing with gender issues, but it does provide some accounting for gender inequality.

There are two basic methods which have been used in various indexes to account for the gender wage gap and for gendered economic inequality. The simplest is that adopted by

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1 Sylvia Walby (1989) "Theorising Patriarchy" *Sociology*, Vol 23, No. 2, pp 213 - 234.

2 A L Jennings (1994) "Toward a Feminist Expansion of Macroeconomics: Money Matters" *Journal of Economic Issues*, Vol 28, No. 2, pp 555 - 565.

3 Chris Beasley (1994) *Sexual Economyths: Conceiving a Feminist Economics*, Sydney: Allen & Unwin; Lisa Adkins (1995) *Gendered Work: Sexuality, Family and the Labour Market*, Buckingham: Open University Press.

the United Nations Development Program in adjusting its Human Development Index (HDI). Recall that the HDI consists of three components (life expectancy, education and income). To produce their Gender-related Development Index, (GDI) the UNDP adjusted each of these components by multiplying the HDI by the simple average of women's share of those components. Ignoring the life expectancy and education components for the purposes of illustration here: if women earned on average 75% as much as men in a particular country, then the HDI would be multiplied by 0.75. The UNDP later modified this method to account for overall achievement as well as inequality.[4] However, either of these methods for adjusting for gender inequality would be problematic in the ISEW/GPIs because the sheer magnitude of the adjustment (historically up to almost 40% reduction in weighted consumption) would overwhelm the indexes. (See Appendix 2).

A better method is that utilised in the Austrian ISEW. Following the GDI, women's wages were compared to average earnings (rather than male earnings) and then weighted by population share. This figure was compared to a base year - the initial year of the survey (1955). Thus the gender wage gap was in 1955 was given an index of 1 and only *changes* in the gap were accounted for. Thus a 3% increase in women's earnings relative to the average would result in a multiplication of the ISEW by 1.03 (subject to variation by the other parts of their inequality index and a stable population share).

There may be a reservation here that simply measuring changes does not set the political goal at gender equality (only improvement), and that if there was no change the revised ISEW/GPI would effectively not register what may be a huge gender earnings gap. These are valid concerns, but given the absence of a practical alternative, and given the fact that the structure of the index sets the right direction (ie. increased equality leads to an increase in measured economic welfare), there remains some political incentive for progressive change. The problem here is then outweighed by the advantages of incorporating the gender wage gap into the index.

Of greater concern is the fact that these gender earning gap figures refer only to market income. As I argued in Chapter 7 proper, if we take seriously the view that household production adds to welfare, then the ISEW/GPIs should adjust for inequality in this sphere as they do for inequality in paid income. Furthermore, I suggested that issues of gender inequality might also apply to other categories in the GPI like the cost of overwork

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4 UNDP (1995) *Human Development Report*, United Nations Development Program. The UNDP found its original method was problematic because perfect gender equality in literacy, achieved at an overall literacy level of say 30%, was compared favourably to a situation where the literacy rates were 90% for men and 80% for women. In the 1995 GDI a more sophisticated formulation was used which assigned a weighting between inequality and overall achievement which expressed "a moderate aversion to inequality". p 73.

or unemployment. The Austrian ISEW goes some way toward this by accounting for gender difference in work effort (as between paid and unpaid work), and by applying the inequality adjustment to the whole ISEW (not just the GDP personal consumption base). However, as noted in the previous chapter, the first adjustment made little difference in practice, and Cobb and Cobb have criticised the application of the inequality adjustment to the whole index arguing that,

> There is no reason to believe that the effects of income distribution have any bearing on the distribution of the effects of pollution, accidents, resource depletion, or most of the columns of the ISEW.[5]

I am not entirely convinced by this argument. Those with money can often buy their way out of dealing with, say, environmental problems. The impact of those problems *is* unequal. However, it seems to me that this inequality is not always or best seen as gendered. For instance, it seems to me to be pointless to argue over the unequal distribution (gendered or otherwise) of the loss of old growth forests. Thus, in principle, I agree with Clive Hamilton that if we are to consider the inequality of impact of all the components of the ISEW/GPI, then the particular inequality of each component should be measured separately rather than applying the inequality index to the whole GPI.[6] However this creates enormous statistical problems. Even considering the conceptually easier example of household work/consumption, the figures are hard to find - impossible if the goal is to cover the whole period of the ISEW/GPIs. Thus while it would be desirable in fully revising the GPI to adjust for inequality within the household and in other categories, in the adjustments to the Australian GPI here I will simply follow Hamilton's practice of applying the distributional adjustment only to the GDP consumption base.

Given all of the above, what I am suggesting is that the existing distributional inequality adjustments in the Australian GPI should be revised for gendered economic inequality by adding a calculation of the gender wage gap. Comparability with the existing inequality index suggests following the Austrian example and indexing the gender wage gap to a base year. However I will ignore the Austrian weighting of the various components of the inequality index for relative population share. This weighting is of little relevance given the approximately equal numbers of men and women in the population. Certainly women form a much lower percentage of the workforce than men, but we should not weight the inequality index on that basis because such a weighting would mean that one aspect of

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5 Clifford Cobb and John B Cobb (1994) *The Green National Product: A Proposed Index of Sustainable Economic Welfare*, Maryland: University Press of America. p 255.

6 Clive Hamilton (1999) "Measuring Well-being: Responses to Some Criticisms of the Index of Sustainable Economic Welfare." Seminar to the Deaprtment of Geography and Environment, London School of Economics and Political Science, (Unpublished), p 14.

gender inequality (workforce participation) would hide, or at least minimise, the recording of another aspect of inequality - the gender wage gap.

In revising Hamilton's GPI, I also differ from the Austrian ISEW in not measuring the inequality relative to an average earning figure, ie. women's earnings as a percent of average weekly earnings. The "average weekly earnings" here again suggests some ungendered individual (average). This clearly runs contrary to the analysis of the gendered embodiment of labour in Chapter 4. Work and consumption are indeed (inherently) gendered, and if the inequality is between men and women, so it is the gap between men's and women's earnings which should be measured - not a gap between women and an average.

The figures used for the gender wage gap are those for Average Total Earnings of Full-Time Workers. These figures give a better reflection of gender pay inequality than figures for award rates which do not capture gendered differences in access to paid overtime and other over-award payments.[7] In principle I would argue for using the figures for average weekly earnings of *all* (paid) workers, not the more usual *full-time employees'* earnings figures. The former give some reflection of women's more marginal position in the labour force - their predominance in part-time and casual work. Unfortunately the unavailability of reliable statistics for total earnings for all employees before 1981 makes the use of these statistics a less practical option than the use of figures for full-time employees. (See Appendix 2)

Estimates and Results

The data source for measuring the gender wage gap, and further detail on the derivation gender inequality index, are outlined more fully in Appendix 2. Table 7a.1 below gives the basic figures which make up the Gender Inequality Index, showing movements in the gender wage gap for full-time workers indexed to the base year 1962 (the first year for which the gender wage statistics are available).

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7 That these payments are important is clear in the figures cited by Mumford, where even when female award rates were over 90% of male awards during the 1980s, average earnings for full-time female employees were only just over 80% that of full-time male employees, and around 66% of all men's total earnings. Karen Mumford (1989) *Working Women: Economics and Reality*, Sydney: Allen & Unwin. p 33.

Table 7a.1 The Gender Inequality Index

Year	ABS Av. MALE F/T Total Weekly Earnings $	ABS Av. FEMALE F/T Total Weekly Earnings $	Female percent of Male F/T Earnings	**F/T Workers Gender Inequality Index**
1962	49.44	30.00	60.7%	**100.0**
1963	51.23	30.54	59.6%	**99.0**
1964	55.18	32.55	59.0%	**98.4**
1965	57.90		*58.4%*	***97.8***
1966	61.20	35.40	57.8%	**97.3**
1967	64.60	37.60	58.2%	**97.6**
1968	69.00	39.30	57.0%	**96.4**
1969	74.00	43.20	58.4%	**97.8**
1970	80.00	47.30	59.1%	**98.5**
1971	89.60	54.40	60.7%	**100.1**
1972	96.20	61.90	64.3%	**103.8**
1973	113.10	74.50	65.9%	**105.3**
1974	145.50	103.20	70.9%	**110.3**
1975	161.60	122.50	*74.0%*	***113.5***
1976	183.30	141.40	77.1%	**116.6**
1977	202.50	155.10	76.6%	**116.0**
1978	218.30	165.00	75.6%	**115.0**
1979	241.10	178.70	74.1%	**113.5**
1980	270.60	203.40	75.2%	**114.6**
1981	307.30	231.40	75.3%	**114.7**
1981	306.80	236.70	77.2%	**114.7**
1982	347.00	263.50	75.9%	**113.5**
1983	375.00	288.20	76.9%	**114.4**
1984	415.70	324.20	78.0%	**115.6**
1985	435.50	343.10	78.8%	**116.4**
1986	465.90	356.40	76.5%	**114.1**
1987	497.40	393.10	79.0%	**116.6**
1988	532.40	419.50	78.8%	**116.4**
1989	576.60	453.80	78.7%	**116.3**
1990	613.30	483.00	78.8%	**116.3**
1991	632.70	512.40	81.0%	**118.6**
1992	665.50	531.20	79.8%	**117.4**
1993	679.60	545.60	80.3%	**117.9**
1994	705.90	566.70	80.3%	**117.9**
1995	743.00	589.80	79.4%	**117.0**
1996	774.20	607.90	78.5%	**116.1**

Source: ABS - Various publications: see Appendix 2
Note: The double line and two values for the year 1981 represents the change in data set. See Appendix 2 for elaboration.

The following table and chart show what happens to the Australian GPI when the Gender Inequality Index is incorporated into the Distributional Inequality adjustment in Hamilton's index. So as not to distort the index by multiplying twice for inequality - once for inequality of income and once for gendered inequality - the revised Weighted

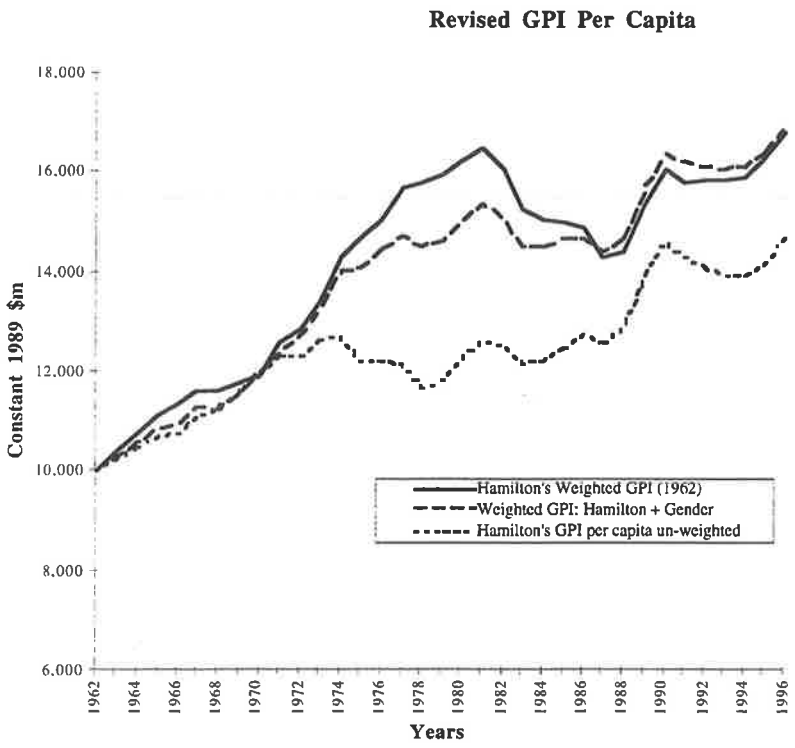
Consumption figures are the result of using a simple average of the two inequality indexes (again, explained more fully in the Appendix 2).

Table 7a.2 GPI Revised for Gender Inequality (1989 Dollars)

Year	Personal Consump-tion $b	Weighted Consump-tion: Hamilton (1962)* $b	Gender Revised Weighted Consump-tion $b	Rest of GPI Adjust-ments: Columns D-Y: $b	Weighted GPI - Hamilton (1962)* $b	Gender Revised Weighted GPI $b	**Weighted GPI per capita - Hamilton (1962)* $**	**Gender Revised Weighted GPI per capita $**	GPI per capita un-weighted $
1962	72.91	72.91	72.91	34.44	107.35	107.35	**10,031**	**10,031**	10,032
1963	77.38	78.91	77.77	34.31	113.22	112.08	**10,380**	**10,276**	10,242
1964	82.33	85.67	83.35	34.33	120.00	117.68	**10,790**	**10,580**	10,489
1965	86.15	91.19	87.74	35.56	126.75	123.30	**11,177**	**10,872**	10,732
1966	88.77	95.69	91.02	36.01	131.70	127.03	**11,355**	**10,951**	10,759
1967	93.13	98.90	94.91	38.52	137.42	133.43	**11,647**	**11,309**	11,157
1968	98.26	102.55	98.63	36.87	139.42	135.50	**11,609**	**11,282**	11,251
1969	103.41	105.61	103.37	38.89	144.50	142.26	**11,784**	**11,601**	11,604
1970	109.55	109.32	108.64	40.44	149.76	149.08	**11,974**	**11,920**	11,992
1971	114.12	117.92	116.10	46.69	164.61	162.79	**12,597**	**12,457**	12,308
1972	118.79	125.86	124.56	45.01	170.87	169.57	**12,843**	**12,746**	12,313
1973	125.42	135.74	133.90	45.24	180.98	179.14	**13,402**	**13,265**	12,637
1974	132.25	154.12	150.03	42.43	196.55	192.46	**14,323**	**14,024**	12,729
1975	136.92	171.15	163.25	32.54	203.69	195.79	**14,661**	**14,092**	12,198
1976	141.45	181.40	173.14	29.91	211.31	203.05	**15,058**	**14,469**	12,211
1977	144.98	194.80	181.50	27.83	222.63	209.33	**15,687**	**14,750**	12,176
1978	147.55	206.88	188.28	20.30	227.18	208.58	**15,821**	**14,526**	11,690
1979	152.76	212.96	193.20	19.10	232.06	212.30	**15,986**	**14,625**	11,840
1980	156.87	216.14	197.94	22.89	239.03	220.83	**16,266**	**15,028**	12,232
1981	163.28	221.55	204.44	25.25	246.80	229.69	**16,538**	**15,391**	12,633
1982	170.00	223.74	208.35	20.50	244.24	228.85	**16,085**	**15,072**	12,546
1983	172.12	220.06	208.50	15.44	235.50	223.94	**15,298**	**14,548**	12,184
1984	176.50	219.88	211.92	14.44	234.32	226.36	**15,041**	**14,530**	12,256
1985	182.75	222.53	217.58	14.07	236.60	231.65	**14,986**	**14,673**	12,466
1986	189.59	224.15	220.21	14.93	239.08	235.14	**14,926**	**14,680**	12,769
1987	191.19	219.51	221.22	13.26	232.77	234.48	**14,311**	**14,417**	12,570
1988	199.02	224.53	228.06	14.36	238.89	242.42	**14,451**	**14,664**	12,908
1989	207.90	232.76	237.25	25.43	258.19	262.68	**15,356**	**15,622**	13,878
1990	216.80	242.25	247.22	32.43	274.68	279.65	**16,096**	**16,387**	14,604
1991	218.74	245.19	252.26	28.18	273.37	280.44	**15,816**	**16,226**	14,286
1992	224.98	255.98	260.04	21.65	277.63	281.69	**15,874**	**16,106**	14,101
1993	231.87	265.35	269.31	14.42	279.77	283.73	**15,845**	**16,069**	13,950
1994	238.90	273.85	277.70	10.09	283.94	287.79	**15,918**	**16,133**	13,958
1995	250.19	288.94	290.77	5.77	294.71	296.54	**16,324**	**16,425**	14,177
1996	260.90	299.77	301.33	8.36	308.13	309.69	**16,848**	**16,933**	14,723

* The Weighted Consumption and GPI figures here are not the same as in Hamilton's original GPI because I have re-indexed his Distributional Inequality Index to a 1962 base year.

Figure 7a.1 Gender Revised GPI per capita



As is evident from the above table and graph, GPI growth in the first years of the revised GPI is little altered by the gender inequality index. However the story changes from the 1970s. Hamilton has argued that economic welfare would have stagnated through the 1970s had it not been for the socio-economic policies which improved equality (as evident in the Unweighted GPI [dotted line in Figure 7a.1]).[8] But the inclusion of the gender wage gap in the inequality index slows the rate of growth of the weighted GPI through the 1970s. While the gender wage gap closed considerably during this period, the increasing gender equality here did not match the rate of growth of the income share of the bottom 20% of income earners (Hamilton's distribution index). Thus the overall rate of increase in distributional equality is reduced compared to Hamilton's index. Conversely, when the bottom 20% of income earners begin to lose their share of national income (which began in 1978), the incorporation of gender considerations in the index slows the rate of decline of the GPI. (See tables in Appendix 2 for the figures) Indeed, while Hamilton's GPI declined from 1981 to 1988, the gender revised GPI basically held steady after an initial decline. This reflects the fact that although the closing of the gender wage gap slowed and basically stopped in the 1980s with the female share of male full-time earnings hovering around 80%, this gender inequality was at least not going

8 See also Hamilton, *op.cit.*, p 44.

backwards in the way that the bottom 20% of income earners were relative to other income earners. The rapid decline in the share of national income of the bottom income earners in the 1980s stabilised during the 1990s, but around 25 percentage points lower than in the 1980s, whereas the gender wage gap in the 1990s basically remained around its peak level in the GPI.

The result of these movements in measured inequality is that the gender wage gap revised GPI is higher in the 1990s than in the 1970s, while Hamilton's GPI is generally lower than its peak in the early 1980s (only surpassing the 1981 peak in 1996). Put somewhat more generally (admittedly too generally/simplistically), without considering gender, Australian society is better off now than in the late 1980s, but not very much better than we were in the late 1970s. By contrast, the inclusion of gender in the analysis suggests that in terms of measurable economic welfare we are clearly better off now than in the 1970s and 1980s. Or put another way: *the inclusion of gender in the analysis changes the perception of economic welfare since the 1970s and suggests that decreases in the gender wage gap mean that society as a whole is better off than it would otherwise have been.*

As noted in Chapter 7, this clearly has important political implications as it emphasises the need to decrease the gender wage gap as a project benefiting the whole community. Of course the 'community' who would be better off here is clearly a social construction - a discursive trick if you like as the 'community' is clearly divided by class, race, gender, etc, and with no necessary common interest or status - economic or otherwise. Any such category or grouping, in this case a national 'community' - has to be built politically - theoretically and practically. Yet I have argued that this is exactly what orthodox national accounts (among other things) do by constructing a "national economy" with a singular aggregate measure. This is part of the nature of the exercise of national accounting, an example of theory in part creating the objects of its own investigation. We are unavoidably on the same terrain here with the revised GPI, but the "national economic welfare" here explicitly includes women, or at least a measure of gender difference as a constituent part of the constructed unity.

Importantly though, the implications of the inclusion of the gender wage gap are wider than a (liberal) justice perspective of "adding women into" the definition and measure, or even the political imperative which follows from the figures highlighting of the benefits of greater gender wage equality. Just as the original GPI's incorporation of inequality and sustainability changes the way we see/record development and economic history over the last thirty years - decline or stagnation rather than the triumphal march of GDP progress - so too a gender analysis changes the way we look at that economic history and development. It hasn't all been stagnation and increasing social and environment

problems since 1970. If we incorporate gender in our purview, then 'we' might in fact be better off than we were thirty years ago - despite the problems identified by the GPI. More than simply adding women into the analysis, this inclusion changes - as it should - our view of malestream economic categories like growth, progress, welfare, and inequality.

Other Structural Adjustments

While these results give rise to significant reinterpretations of the trend of economic welfare, the revisions and figures above are by no means final or complete. I noted in the last chapter that while gender is a particular and important line of structural inequality, it is not the only structural inequality. Equally valid arguments could also be made to adjust the inequality index for other structural inequalities, most notably for class and race inequality. To some extent Hamilton's figures based on income tax differentials might reflect class differences, but this is a one-dimensional stratification model of class, not a more Marxian inspired notion of structurally antagonistic classes.

The point here is not to do the figures to incorporate measures of other structural inequality, but rather to point out that any such further consideration of structural inequality is not simply an addition to the suggested gender adjustments. For instance, a consideration of the wages share of GDP as a proxy for Marxian class inequality (as per the Austrian ISEW) would actually change the outcomes discussed above. The lesser magnitude of the changes in wages share of GDP relative to the other inequality indexes would flatten the overall inequality index,[9] and it is unclear how race or other structural inequalities might be incorporated. With more elements incorporated it would also be necessary to weight each element of the index by each particular group's population share - again, as per the GDI and the Austrian ISEW.[10] This clearly complicates the calculation of the inequality index, and again is beyond the scope of this thesis. The more immediate point is that the inclusion of other structural inequality into the GPI would also affect the gendered adjustment of Hamilton's inequality index and the GPI.

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9 Since 1962 (ie. the period covered by the gender revised Australian GPI) the gender index ranged over 25 percentage points while a similar index constructed from the wages share of GDP only moves 9.44 percentage points. Thus for instance, even where, the wages share of GDP was at its highest point (1975), the simple average of it plus the gender inequality index would be much less that the gender inequality figure by itself. Australian Bureau of Statistics *Australian National Accounts: National Income, Expenditure and Production*, Cat No. 5206.0. Canberra: ABS.

10 The population share weighting is necessary to avoid an (arguably) distorting picture of inequality where a simple averaging of the indexes would suggest that a movement of 1 percentage point in the wages share of GDP is of equivalent importance to a closing of the gender wage gap by 1 percentage point (or a 1 percent point change in the share of national income of the bottom 20% of income earners).

Clearly then the gender revised figures above are neither complete nor final. They are incomplete in that they do not account for other structures of inequality, or for gendered inequality in other spheres - notably in non-market production/consumption. And they are not final, in that the figures themselves would be changed by a more thorough analysis of other structural inequalities. And finally, the figures are neither complete nor final because there has been no attempt to adjust or reconfigure other categories to reflect a thorough-going gender analysis. Most notably I let stand Hamilton's devaluation of household labour, even though I suspect a case could made that activities which Hamilton excluded (like garden and home maintenance) do add to welfare. A further case might also be made that, if we are talking about welfare not prices of production, then all household labour should be revalued at average wages, or even the average male wage rather than the already devalued household replacement cost method - but again, for the sake of convenience I have simply followed Hamilton here.

Nonetheless, the gender adjustments made to Hamilton's GPI are sufficient to present some consideration of the potential impact of gender issues on the GPI and to draw some tentative political conclusions from the data, as I have done above. The calculation of a more inclusive and better weighted indexes must wait for another day.

Exchange Costs Adjustments

However, the inequality adjustments are not the only revisions to the existing ISEW/GPIs suggested in Chapter 7. I argued that the existing ISEW/GPI measures are flawed both in terms of recognising different types of labour and as indexes of measurable economic welfare, because they do not take account of exchange as a conceptually separate and different economic activity. Because exchange activity is about the ownership and transfer of ownership of existing goods and services, it can not add to the total economic welfare of society (as opposed to that of particular individuals). Therefore it should not be included as a positive contribution to consumption in the economic welfare measures.

To revise the existing ISEW/GPIs for exchange is at one level conceptually simple, although in practice it is a complicated statistical enterprise needing a major research project in its own right. As noted in Chapter 6, at the conceptual level what is required is to identify the industries and occupations which represent "exchange activities" and deduct the value of the output of those activities - in this case from the consumption base of the GPI. This is similar to the calculations used in accounting for some of the restricted definitions of production, but it also mirrors the accounting used for defensive expenditures in the economic welfare measures.

In Chapter 6a I have already produced estimates of production based on a restricted definition of production. These could be seen to imply an estimate of exchange activity in Australia. However, the methodology applied in measuring production is inappropriate for a measure of exchange costs in an economic welfare framework. The production figures represent the value-added (or product), not the total output, of particular industries. Thus, in the value-added framework, the national accounts' production figures for "exchange industries" do not account for the output of the production sectors which is used in producing the final product of exchange industries. Alternatively, when GDP production is measured by final expenditure, the production figures do not account for the output of exchange industries which go as intermediate inputs into production industries.[11]

The issue here parallels the different approaches taken by the Marxian and transaction cost estimates discussed in Chapter 6. In Shaikh and Tonak's Marxian measures, the output of the production sectors which finds its way into exchange activities is counted as part of the final product of the production industries (and the economy), because what is being measured is the production of goods and services in the economy. Similarly, the output of exchange industries absorbed by production sectors (and indeed the unproductive labour in the production sectors) in the Marxian analysis is seen as part of production (albeit as a claim on surplus). However, this means that the Marxian final product contains much production which does not add to welfare - because the purpose of that production is ultimately exchange (ie. not welfare enhancing production/consumption).

By contrast, the transaction cost measures (and, as noted in Chapter 1, the Smithian and Soviet measures to some extent) measure the whole cost of the exchange activity - both production used in exchange activities and exchange activities in production sectors - as a transaction cost. Thus for instance, the value of the pens, paper, computers, and the like consumed by the finance sector would appear in the Marxian accounts as part of total production (the product of the manufacturing sectors), while the labour in the finance sector would not add to production. However, in the transaction cost approach the whole output of the finance sector (including the value of the pens, paper, computers used for "finance") would be deducted in an estimate of national production (ie. transformation services).

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11 The national accounts use three ways of measuring GDP: by summing the value added at each stage (in each industry) in production; by summing the incomes received by producers; and by summing final expenditures on goods and services. In theory all should give and equivalent measure of GDP, although in practice there is a large statistical discrepancy. The value added approach is usually applied to industry measurements. Australian Bureau of Statistics (1990) *Australian National Accounts: Concepts, Sources and Methods*, Cat No. 5216.0. Canberra: ABS.

The end result of these differences is that, despite the similarities in definitions of exchange activities between the Marxian and transaction cost analyses, the bottom line of their calculations is very different. Shaikh and Tonak's Gross Final Product is on average 15% lower than official GDP,[12] while Wallis and North estimated transaction costs in 1970 (the final year of their survey) as being over half of GDP.[13] Given the size of this difference in the bottom line, the choice of methodology is clearly important.

While in Chapter 6a I used the Marxian approach to measure the (market) value of *production*, in the context of a revision of the GPI then the logic of the transaction cost is clearly preferable. If the purpose is to measure production/consumption which contributes to welfare, and if by definition exchange activities do not contribute to economic welfare, then the total value of those activities should be deducted from the GPI. This deduction includes both the value of those commodities consumed in the process of producing those exchange activities, and the exchange activities contributing to production industries. This approach is consistent with the ISEW/GPI treatment of defensive expenditures (eg. deducting for advertising because a proportion of the final consumption was for defensive purposes). It recognises that, while the value of production might be $X, if half that production goes to activities which do not directly enhance welfare, then only one-half of that production actually increases economic welfare. Again, production and welfare are different and require different measures.

One practical result of this is that the national accounts production figures are not very useful. If we are using the methodology of the transaction cost approach to calculate the GPI deduction for exchange activities, then we are concerned not with the ABS defined *production* of exchange sectors, but with their *gross output* (ie. their production [value added] plus the intermediate consumption of goods and services used up by those exchange sectors).[14] Statistics for gross output of particular industries are contained in the Input-Output tables published by the ABS, although the historical coverage of these accounts is not as comprehensive as the production accounts. Experimental Input-Output accounts were produced for 1958/59, but there have only been 14 accounts over the 34 years of the Revised GPI.

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12 Anwar Shaikh and E. Ahmet Tonak (1994) *Measuring the Wealth of Nations: The Political Economy of National Accounts*, New York: Cambridge University Press. p 221.

13 John Joseph Wallis and Douglas C North (1986) "Measuring the Transaction Sector in the American Economy, 1870-1970" in Stanley L Engerman and Robert E Gallman (ed), *Long Term Factors in American Economic Growth*, Chicago: University of Chicago Press. p 120.

14 Definition from ABS, (1990) *op.cit.*, p 7.

Despite these historical gaps, the Input-Output accounts are particularly useful for our purposes because they give not only gross output figures, but also the amount of this output which is consumed as intermediate input into other industries. This allows for the avoidance of a considerable amount of double-counting where the output of a particular industry deemed to be an exchange activity is an input into another exchange industry, or an input into industries whose production/consumption has already been deducted from the GPI as defensive expenditure (eg. defence, education). Thus, for instance, if finance and real estate are exchange activities, then in counting the gross output of the finance industry we need to deduct the value of financial services consumed in real estate activity as the value of these particular finance activities would already be accounted for as part of the gross output of real estate. Similarly, because 75% of the value of expenditure on defence is deducted from Hamilton's GPI, then 75% of financial services used in the defence sector should also not be counted in the finance sector's gross output, less its value be deducted twice from the GPI.

Thus the figures used here to calculate the GPI deduction for exchange activities are the Input-Output tables totals for designated industries' Final Consumption Expenditure (Private and Government) plus Intermediate Usage (ie. values which enter Consumption Expenditure by being part of the value of the product of other industries), less the values for Intermediate Usage deducted elsewhere in the GPI (ie. in other exchange or defensive expenditure deductions). The classification of industries as "exchange" is the same here as that outlined in Chapter 6a, namely (FIRE [including Business Services], and 1/2 Wholesale and Retail). However in using Input-Output accounts rather than production accounts, there are extra problems in that there is no continuous time series calculated by the ABS, and any calculation straight from the I-O tables is complicated (again) by changes in the ABS system of industry classification. (See Appendix 2 on Classification Changes). The result is (again) that the estimates produced here are by no means final or complete.

The estimates are still less complete because, apart from the need in a more sophisticated accounting to go below the broad level of industry group aggregation used here, they deal only with the output of *industries* deemed to be exchange industries. They do not account for exchange activities by employees of firms whose primary activity is in a production industry. Again for instance, the value of wages of a salesperson employed by a metal manufacturer remain a part of the welfare enhancing consumption of the product of the metal manufacturing sector, whereas, if the same company outsourced its sales effort to a marketing firm, then the value of that sales function would be deducted.

In principle the value of the wages of exchange activity workers in production sectors should be added to the estimate of exchange activity. However, as noted in Chapter 6a, the ABS does not publish the statistics necessary for this. As with the earlier estimates of production (narrowly defined), I propose here to simply ignore the value of exchange labour within the production sectors. This is not ideal both in terms of the magnitude of the estimate of exchange activities or the measurement of changes over time. As in the above example of the sales of metal manufacturers, any growth in the proportion of exchange industries in the economy might represent, not a growth in sales activity, but simply a change in its location from (an invisible place) within the manufacturing sector to an industry accounted for as an exchange industry.

This is problematic, but not fatal to the current exercise. Partly the concern here is limited because, as I have noted repeatedly, my aim is to provide ball-park figures for the GPI revisions I suggest, not to provide final estimates. But the evidence from the United States also suggests that, despite the problem noted above, any exaggeration of the growth of exchange activities due to outsourcing of 'non-core' functions of production enterprises to exchange industries is dwarfed by the continued growth of those activities within the production sectors. Shaikh and Tonak calculate that these 'unproductive' workers constituted 17.7% of workers' wages in the production sectors in 1950. By 1989 they constituted 37.4%.[15] Similarly Wallis and North found that for the period up until 1970 the greatest growth in transaction service workers was within the production/transformation sectors.[16]

Thus I suggest that, if the trend in Australia is anywhere near the US experience, the estimates of exchange activities given in this thesis underestimate both the magnitude and the growth of exchange activities because they ignore exchange workers employed in production industries. If the figures were available to do this calculation then the revised GPI would not only be smaller, but there would be an even greater slowing of the rate of growth of GPI arising from the inclusion of exchange activity. However, as the appropriate figures are not available, and the calculation in any case is mind-bogglingly complex, we are left with a calculation of exchange activities which is necessarily conservative. Nonetheless, if my argument as to the need to incorporate an analysis of exchange activity in the GPI holds, then *some* accounting for such exchange activities is clearly warranted. The figures given below provide a relatively consistent, if not complete and final accounting for exchange activity in Australia.

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15 Shaikh and Tonak, *op.cit.* Figures adapted from Table F1, p 298.

16 Wallis and North, *op.cit.*, p 107.

Estimates and Results

The methodology outlined above to generate these exchange activity costings can be summarised as follows. The output of certain industry groups (Finance, Insurance, Real Estate and Business Services, and 1/2 of Wholesaling and Retailing) is designated as exchange expenditure. The value of their output is derived from the Input-Output tables by adding the figures for Intermediate Usage and Private and Government Final Consumption Expenditure for those industries, and then deducting the value of Intermediate Usage which is accounted for elsewhere in the GPI (either as exchange or GPI defensive expenditure). This gives a value for consumption expenditure on exchange industries in current dollars for each year of the I-O accounts (Column 2 of Table 7a.3). This is then translated into Constant 1989 dollars to fit Hamilton's GPI and the blank years are then filled in by a simple linear extrapolation, as per Table 7a.3 below. The raw I-O figures and further details of the calculation of actual expenditure are contained in Appendix 2.

Clearly from the right hand column of this table, exchange activities have become increasingly important in Australia. This is not surprising given the previous discussion of exchange expenditures in reference to the production estimates (Chapter 6a). As noted in that discussion, what this suggests on the ground is that, as the economy becomes more 'sophisticated', more and more resources and money go into organising the ownership and exchange of existing goods and services rather than into the production of commodities. In the logic of the GPI (paralleling the argument about defensive expenditures) the economy has to run faster to stand still: that is, more output is required to produce the same amount of welfare for consumers.

Not surprisingly then, as evident in Table 7a.4 below, the revised GPI deductions for exchange expenditures not only decrease the magnitude of the GPI, but also represent a slowing of GPI growth over the period. Hamilton's GPI per capita grew by 60.6% from 1962 to 1995, while the Final* Revised GPI grew by only 29.6% over the same period.[17] That is, the analysis that exchange activities are different from production activities and do not increase aggregate welfare, suggests that around half of the measured economic progress over the last thirty years has not in fact been of net benefit to the community.

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17 The asterix in Final* Revised GPI indicates that the figures are final in terms of this thesis, but as noted earlier, they are by no means final and complete estimates of exchange activities or of the revisions to the GPI.

Table 7a.3 Exchange Expenditures

Year	Exchange Expenditure (Actual $m)	GDP(E) Implicit Price Deflator	Exchange Expenditure at Constant Prices (1989$m)	Extrapolated Estimates of Exchange Expenditure (1989$m)	Exchange as % of GPI
1962				13,075.3	12.8%
1963	2,033.7	13.3	15,290.6	15,290.6	14.2%
1964				17,505.9	15.3%
1965				19,721.2	16.3%
1966				21,936.5	17.5%
1967				24,151.8	18.5%
1968				26,367.1	19.9%
1969	4,601.8	16.1	28,582.5	28,582.5	20.8%
1970				30,333.4	21.4%
1971				32,084.4	20.5%
1972				33,835.4	20.8%
1973				35,586.4	20.7%
1974				37,337.4	19.9%
1975	11,062.0	28.3	39,088.3	39,088.3	20.1%
1976				39,225.2	19.5%
1977				39,362.1	18.5%
1978	15,365.1	38.9	39,498.9	39,498.9	18.2%
1979				40,090.1	18.1%
1980	18,916.8	46.5	40,681.2	40,681.2	17.8%
1981	22,753.5	51.3	44,353.8	44,353.8	18.8%
1982	25,913.8	56.6	45,784.0	45,784.0	19.7%
1983	28,863.2	62.5	46,181.1	46,181.1	20.7%
1984	31,560.7	66.8	47,246.6	47,246.6	21.3%
1985				50,111.7	22.4%
1986				52,976.8	23.5%
1987	45,064.4	80.7	55,841.9	55,841.9	25.5%
1988				59,191.6	26.3%
1989				62,541.4	25.7%
1990	65,891.2	100	65,891.2	65,891.2	25.4%
1991				69,575.1	27.0%
1992				73,259.0	28.0%
1993	81,867.2	106.4	76,942.9	76,942.9	29.2%
1994	84,748.0	107.6	78,762.1	78,762.1	29.5%
1995	98,935.7	109.6	90,269.8	90,269.8	32.6%

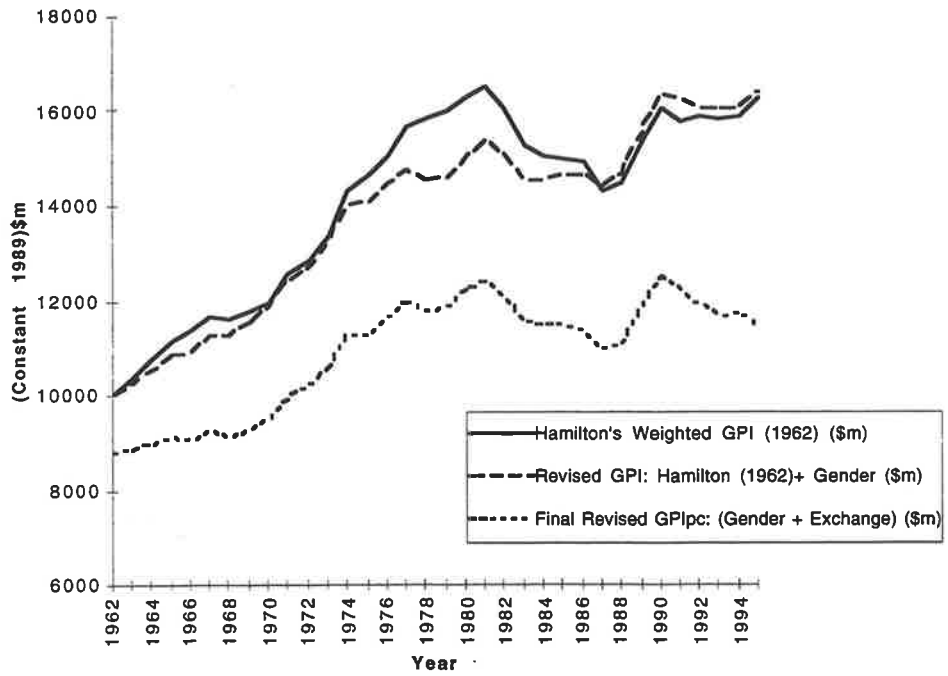
Table 7a.4 Exchange Expenditure and GPI

Year	Hamilton's Weighted GPI (1962) ($b)	Gender Revised GPI ($b)	Final Revised GPI: (Gender + Exchange) ($b)	Hamilton's Weighted GPI *per capita* (1962) ($)	Gender Revised GPI *per capita* ($)	Final* Revised GPI *per capita* ($)
1962	107.4	107.4	**94.3**	10,031	10,031	**8,810**
1963	113.2	112.1	**96.8**	10,380	10,276	**8,874**
1964	120.0	117.7	**100.2**	10,790	10,580	**9,006**
1965	126.8	123.3	**103.6**	11,177	10,872	**9,133**
1966	131.7	127.0	**105.1**	11,355	10,951	**9,060**
1967	137.4	133.4	**109.3**	11,647	11,309	**9,262**
1968	139.4	135.5	**109.1**	11,609	11,282	**9,087**
1969	144.5	142.3	**113.7**	11,784	11,601	**9,270**
1970	149.8	149.1	**118.7**	11,974	11,920	**9,494**
1971	164.6	162.8	**130.7**	12,597	12,457	**10,002**
1972	170.9	169.6	**135.7**	12,843	12,746	**10,202**
1973	181.0	179.1	**143.6**	13,402	13,265	**10,630**
1974	196.6	192.5	**155.1**	14,323	14,024	**11,304**
1975	203.7	195.8	**156.7**	14,661	14,092	**11,279**
1976	211.3	203.0	**163.8**	15,058	14,469	**11,674**
1977	222.6	209.3	**170.0**	15,687	14,750	**11,976**
1978	227.2	208.6	**169.1**	15,821	14,526	**11,775**
1979	232.1	212.3	**172.2**	15,986	14,625	**11,863**
1980	239.0	220.8	**180.2**	16,266	15,028	**12,259**
1981	246.8	229.7	**185.3**	16,538	15,391	**12,419**
1982	244.2	228.8	**183.1**	16,085	15,072	**12,056**
1983	235.5	223.9	**177.8**	15,298	14,548	**11,548**
1984	234.3	226.4	**179.1**	15,041	14,530	**11,497**
1985	236.6	231.7	**181.5**	14,986	14,673	**11,499**
1986	239.1	235.1	**182.2**	14,926	14,680	**11,372**
1987	232.8	234.5	**178.6**	14,312	14,417	**10,983**
1988	238.9	242.4	**183.2**	14,451	14,664	**11,083**
1989	258.2	262.7	**200.1**	15,356	15,622	**11,903**
1990	274.7	279.7	**213.8**	16,096	16,387	**12,526**
1991	273.4	280.4	**210.9**	15,816	16,226	**12,200**
1992	277.6	281.7	**208.4**	15,874	16,106	**11,918**
1993	279.8	283.7	**206.8**	15,845	16,069	**11,712**
1994	283.9	287.8	**209.0**	15,918	16,133	**11,718**
1995	294.7	296.5	**206.3**	16,324	16,425	**11,425**
1996	308.1	309.7		16,848	16,933	

However, as Figure 7a.2 below highlights, the impact of the exchange expenditure deductions is not simply a slowing of GPI growth. Just as the Gender Revised GPI per capita changes the perception of economic welfare and development, so too the inclusion of exchange expenditures now questions the growth in economic welfare evident in the Gender Revised GPI. Recall that the gender revisions presented a much more optimistic picture of economic progress than did Hamilton's original GPI. The gender revised

measure was much higher in the 1990s than in all earlier periods. Because of the growth of exchange activities, the Final* Revised GPI follows a trend closer to Hamilton's original, although of course the result would be different again (with much lower economic welfare) if the gender revisions were not included in the exchange activity adjusted index.

Figure 7a.2 Exchange Expenditure and GPI per capita



The 1990s seem particularly significant to the different readings of economic welfare here. While all three per capita indexes peaked (again) in 1990, the subsequent decline in Hamilton's original and the Gender Revised GPI was minor. By the end of the period the GPI had recovered and was reaching new levels. By contrast, the growth of exchange activities meant that through the first half of the 1990s the Final* Revised GPI declined. There may be some suspicion of this result as the calculation of exchange expenditures does jump somewhat in the first set of figures under the new classification system (from 25.4% of GDP in 1989/90 to 29.2% in 1992/93). However, the figure continues to rise for 1994/95 under the same classification system, so even if the new system does exaggerate the jump a little, there is no doubting the trend.

The decline of the Final* Revised GPI through the 1990s has a major impact on the overall reading of the GPI. Like Hamilton's GPI (but unlike the Gender Revised GPI figures), the exchange adjusted GPI at the end of the period is again less than it was

during the 1970s. And unlike Hamilton's original figures, there seems little prospect of improvement in economic welfare as measured by the Final* Revised GPI. In turn this has important political implications. Just as the original GPI measures for Australia and elsewhere suggested fundamental problems in the direction of public policy and the economy, so the inclusion of exchange activities in the index adds to this critique. The finding that around one half of the growth in GPI did not actually add to net economic welfare further supports the critique of economic growth made in the GPI and (some) green literature. GDP growth has been even less beneficial than the GPI analysis suggested.

Again, the Final* Revised GPI forces political economy to ask not simply, "is it (the economy) growing?", but "what sort of growth is it?". Is it a growth which will make 'us' better off? As I have argued throughout this thesis, these are questions which can not be asked within neoclassical and Keynesian economics and accounting. Yet they are crucial. If, as the GPI suggests, the economy is going nowhere or in fact making us worse off, then this needs to be highlighted so it can be addressed at the political level, not hidden by the one-dimensional statistics of market growth.

Obviously such findings lend support to calls for policies which directly enhance elements of economic welfare (eg. fairer distribution of income, pollution control) and challenge the faith in the market based economic growth solutions which have dominated public policy over the last two decades. But again, the incorporation of exchange activity (and gender inequality) into the GPI does so in a more systemic way. The results suggest not simply that the market needs to be regulated and supplemented to stop the negative impacts of growth overwhelming the economy, but rather that the very nature of the organisation of much of society around private ownership and competitive exchange is *increasingly* hindering the advance of economic welfare. We are increasingly being held back, or indeed being made worse off, by the growth of capitalist market institutions in the economy.

Of itself this is not a new revelation. It has been a mainstay of radical political economy from Marx's immiseration of the proletariat, Baran and Sweezy's growth of economic surplus, Bookchin's post-scarcity anarchism, to the more recent insights of ecofeminism and deep ecology.[18] But what the revised GPI analysis adds to this is some quantitative (gu)estimate of the extent of the problem. More importantly than simply the figures

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18 See for instance, Paul Baran and Paul Sweezy (1967) *Monopoly Capital: As Essay on the American Economic and Social Order*, New York: Monthly Review Press.; Murray Bookchin (1971) *Post-Scarcity Anarchism*, Berkeley: Ramparts Press.; Ariel Salleh (1997) *Ecofeminism as Politics: Nature, Marx and the Postmodern*, London: Zed Books.

though, is that the revised GPI makes the argument in the language and currency of market economics. While the market values employed might limit the GPI's radical potential, they enable the GPI to say that, when all the costs and benefits of the system are taken into account, then, judged on its own terms - dollar values in the market - the current system(s) are increasingly failing to deliver. And they are failing because of the nature of that/those system(s).

Again though, as argued in the main Chapter 7, these finding must be kept in the context of the economy as hologram: they are insights opened up by one particular view of "the economy". Nevertheless, the empirical data in this chapter does support the conceptual argument of the previous chapter. Despite the heavy qualifications necessitated by lack of data and the roughness of the orders of magnitude, there is clearly political importance and potential in revising green economic welfare measures to extend the recognition of different types of economic activities and to incorporate a more structural political economic analysis.

Section 4:
Conclusion and Foundations

Conclusion

The Australian economy grew by 4.2% last year.[1]

We have seen that this seemingly straightforward statement hides historically long and politically important debates about the definition and measurement of the economy. The definition of production which underlies this "economy" was established in national accounting at the turn of the twentieth century. That definition reflected the analysis and concerns of neoclassical economic theory. Some 50 years later Keynesian economics gave the national accounting aggregates a new importance in economic management. Indeed, I have argued that both neoclassical and Keynesian theories became reified in the official definitions and measures of the economy.

This reification of theory into "the economy" is politically important because it means that any political economic theory which does not share the neoclassical/Keynesian approach to managing the economy is forced to argue on foreign territory. This limits any alternative political economy. If radical economists use the official definitions and measures, they compromise their own theoretical and political concerns. Alternatively, if a radical political economy abandons the official definitions and measures to pursue its own theoretical/political agenda, it runs the risk of being marginalised from mainstream political economic debate. This is a central issue in the politics of national accounting. This thesis has principally been concerned to explore this political question, mainly in relation to feminist approaches to economics, but also by drawing parallels to and links with environmental and socialist political concerns.

For a feminist informed political economy, the most obvious limitation of the neoclassical/Keynesian definitions and measures is that they exclude (most) non-market production. They therefore ignore unpaid work, which is done predominantly by women, and which constitutes the majority of women's work. However, as I argued in Chapter 3, this problem can not be solved simply by extending the existing definitions and measures to non-market production. Such attempts to extend neoclassical accounting suffer from a form of market centrism and a subsequent gender blindness which creates a conflict between market economics and feminist concerns.

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1 Based on the GDP growth figures for the December quarter, 1999. Australian Bureau of Statistics *Australian National Accounts: National Income, Expenditure and Production*, Cat No. 5206.0. Canberra: ABS.

This is not to say that the original feminist critique of the exclusion of women's work was flawed. As I argued in Chapter 1, "the economy" is not something that exists 'out there', rather it is a construction of particular economic theories. If this is the case, then clearly from a feminist perspective the definition *should* include the work women do. Yet this creates something of an impasse. To include non-market production in the main definition and measure of the economy is to hide much of its difference from market work, but to focus on its difference is to render it again outside of the view of mainstream economics.

This is a particular version of the more general issue in the politics of national accounting. We saw similar tensions in socialist feminist and environmental debates over the definition and measurement of the economy, but the tensions were at their most acute when the issue of emotional labour was considered. The analysis of emotional labour showed that there was work which women (particularly) do, but which is excluded even in the attempts to extend existing definitions and measures to non-market production. The analysis of emotional labour also further challenged the whole exchange based paradigm by suggesting that labour is uniquely and inherently embodied. Any attempt to see labour as an alienable commodity therefore hides much of the nature, not just of emotional labour, but of labour in general.

Perhaps most importantly though, I argued that the idea of labour as an alienable commodity which can be bought, sold and measured, is a view of labour from the perspective of capital. Thus, a political economy which sought to reflect (gendered) labour, might then start from an analysis of the embodied experience of that labour, both in the market and in the household. Such an analysis would reject the idea of a separation of producer and product, and therefore challenge the whole project of measuring the economy. However, again, this refusal itself comes at a price: the marginalisation of alternative political economy, and an implicit suggestion that such an alternative analysis has nothing to say about markets, prices, wage levels and the quantum of mainstream economics.

Most importantly though, I have argued that this seeming political impasse is a product of neoclassical definitions. The neoclassical definitions create a nexus between work, production, economy, the market and welfare. In this neoclassical nexus all labour and production (because it is defined by the market) is exchangeable and measurable. That which is not quantifiable and not exchangeable is not 'economic'. This binary logic then values that which comes within the neoclassical definition and devalues the "other", be it emotional labour, labour's embodied experience of work, or the environment.

To avoid this constant impasse facing an alternative political economy, I have suggested that a new politics of national accounting is possible once we move beyond neoclassical definitions and measures. If the neoclassical nexus tied work, production, economy, market, and welfare together, then a first step is to break that nexus and recognise the differences between those concepts. Recognition of this difference makes it possible to consider each concept more on its own terms. Freed from the sameness imposed by neoclassical economics, I argued that space could then be opened up to see other economic differences, and perhaps to develop different measures which are less compromised than the official estimates.

This approach of separating out the terms of the neoclassical nexus fits well with the epistemology outlined in Chapter 1, which suggested that theories construct, in part, the objects they seek to explain. I have used the metaphor of a hologram to capture this notion that what we see as "the economy" is dependent on political standpoint, and on the theoretical assumptions and questions asked. The logic of the economy as a hologram is important because it allows us to focus on each of the terms of the neoclassical nexus separately and to see different things in the economy. But it also brings to the forefront the partialness and standpoint dependence of our view.

This in turn is important because it means that not all aspects of the economy need to be incorporated in an economic measure. Unlike the neoclassical definition where measurement matches definition (or, in the radical critique where measurement is abandoned because it does not fit the definition), the logic of the hologram suggests that where economic measurement is useful and appropriate, it can be done without rendering invisible that which can not or should not be measured.

This argument, which culminates in Chapter 5, is the main theoretical conclusion of the thesis. It is an application of an overdeterminist epistemology to the definition and measure of the economy, and an attempt to pull together a range of critiques from within feminist and green political economy. The argument I have made provides a new approach to a political impasse faced by any alternative political economy. While not resolving debates around 'revolutionary' versus reformist approaches, the hologramatic approach at least helps to find a way past the impasse around the conflicting problems of co-option and marginalisation.

By implication, such an argument also provides a critique of the neoclassical economics which created that impasse. However, given that there is already a well established critique of neoclassical and market economics, particularly within feminist and socialist political economy, the real issue is what is done with the critique. Ultimately, as well as a

critique of the existing state of things, a radical political economy requires concrete alternatives. This is particularly the case in a post-Cold War world where, for most people, capitalism and the market is not just the best system, it is the only conceivable system. The alternatives traditionally posited by the political left have been largely discredited by the failure of the social democratic (Fordist/Keynesian) welfare state models in the 1970s, and the final demise of "actually existing socialism" (such as it was) in the 1980s.[2]

This political economic change rendered much of the political left devoid of any real alternative political vision - let alone a vision which encompassed feminist and environmental concerns as anything other than add-ons.[3] In contrast with this void and despair from the left, globalisation and neoliberal policies were marketed and accepted (even by social democratic/labour parties) on the grounds that there was no alternative. Yet the social and ecological costs are obvious, and an alternative vision is needed.

At one end of political activism, the development of a socialist/feminist/green informed alternative could take the form of particular policy platforms. At another end, it might require the creating of utopian blueprints to re-excite the imagination about political alternatives. The approach followed in the second half of this thesis fits somewhere in between these two. While the first half of the thesis attempted to think about the underpinnings of current economic policy from the perspective of a transformative political economy, the second half begins to explore concrete ways of using the critique developed to show that there *are* other ways of doing and seeing things: that there are alternatives.

The epistemological approach suggested as the alternative to the neoclassical nexus is the starting point. However, while the metaphor of the hologram gives us a framework of inquiry, it does not tell us anything about the particular entry points and approaches which should be adopted. This is determined by the political standpoint - in this case, by the

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2 There was a voluminous academic debate in the 1980s on these themes, and the issues were reflected in the decline, fall (and restructuring) of communist and social democratic parties the world over. See for instance the collection of essays in R Miliband, J Saville, M Liebman, and L Panitch, ed (1986) *Socialist Register, 1985/6*, London: Merlin Press, 1986. In an Australian context, see Thomas Bramble (1996) "Globalisation, Unions and the Demise of the Labourist Project" *Journal of Australian Political Economy*, No 38, December, pp 31 - 63. There is in fact considerable overlap between these debates and those around globalisation referred to in the Introduction here.

3 I saw first hand these issues playing out in the dissolution of the Communist Party of Australia and the failure of the New Left Party in the 1980s. And in editing an issue of *Australian Options* on the "Future of the Left" in 1995, I was struck again (and unfortunately not for the first or the last time), by the absence of inspiration and new vision among much of the organised left, and by the unpreparedness to make feminist and environmental issues central to a class politics.

questions asked by drawing on and making links between feminist, green and socialist traditions. Given that neoclassical economics has historically been seen as being opposed to Marxian/socialist political economy,[4] and also that I have argued that feminist and green economics need to break the neoclassical nexus, the concepts tied up in that nexus seemed a logical place to start developing an alternative approach.

Overall, I have argued that, when taken out of the neoclassical equation and considered on their own terms, the separate definitions (and sometimes measures) of work, production and welfare tell us something specific and important about "the economy". When we do not require the category of work to mean production or be synonymous with the market, the economy, or with welfare, we open up a view not just of an economy outside of the market (which the measures discussed in Chapter 2 did), but also a view that work might be more than simply the production of goods and services (as in the analysis of emotional labour in Chapters 4 and 5). Far from being simply about goods and services, we saw that work is about social relations, and that analysing work on its own terms gives an insight into those social relations. This insight is, almost by definition, precluded in a neoclassical framework peopled by decontextualised, autonomous individuals.

Similarly, as I argued in Chapter 6, when we see that not all work is "production", and we do not require production to mean all economic activity, or assume that production necessarily adds to welfare, then a more consistent view of the relative quantum of market and non-market production is made possible. And as we saw, when production is measured by this restricted definition, proportionately less goods and services are produced in the market that outside it, and this proportion is less than is recorded in the neoclassical based accounts.

Finally, when we look at "the economy" without assuming that all work, production, or market activity adds to welfare, it is possible to see the very different views of economic growth and development opened up by the measures of economic welfare discussed in Chapter 7. And while these measures themselves needed some revision, the estimates made in Chapter 7a enriched the political insights of the original GPI.

Of course, the approaches considered here do not exhaust the question that greens, feminists or socialists have or might ask about "the economy". Nor do the approaches all break completely with market economics. Two of the three approaches I have considered

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4 See the history section of Chapter 1, although again, Resnick and Wolff see Marxian and neoclassical economics not as being opposed (as in antagonistic), but simply different within a pluralist environment. Stephen Resnick and Richard Wolff (1987) *Economics: Marxian Versus Neoclassical*, Baltimore: John Hopkins University Press.

still use market based, dollar value measurements, and as such, still retain some of the flaws of the mainstream measures identified in Chapter 3. For instance, the restricted production and economic welfare measures still incorporate the market's undervaluation of women's work and the neoclassical view of economic rationality. Similarly, in giving money values to things outside the money economy (household labour and the environment), the measures tend to hide the importance of money as a particular (and gendered) form of exchange (and power).

However, despite these limitations, the measurements of production and economic welfare that I have proposed remain important. As I argued particularly in Chapter 7, the use of market measures provides a bridge to mainstream economics and an ability to engage in political economic debate - to question the direction of economic policy and the sustainability of economic growth. In this sense, the problem is less being on the terrain of the enemy, than being trapped in that territory by neoclassical economic discourses. The estimates of production (narrowly defined) in Chapter 6a, and the revisions to the GPI suggested in Chapter 7a, provide a bridge not just *into* mainstream debate, but also a way *out* - a way to shift the debates from the terrain of individualist assumptions of market behaviours and imperatives to a more structural analysis of political economic power.

Taken together, the three approaches, focusing on emotional and embodied labour, production, and economic welfare, provide politically important understandings of the "economy". They suggest that a political economy informed by a mix of feminist, green and socialist political economy has something unique to offer by questioning, not just undesirable economic outcomes, but also the nature of the political economic system. And in the metaphor of the hologram, I have suggested how such diverse approaches might sit together, without creating a hierarchy of concerns, interests or oppressions.

Further research in these areas is necessary, as I suggested in Chapters 6a and 7a, to produce better statistics for the measures of production and welfare. But future research might also further develop the possibilities for public policy suggested by the analysis underlying the new figures. Research is also necessary to extend the scope of the analysis beyond my focus on national accounting and the definition of the economy: to consider other links between feminist, green and socialist political economies, and to better integrate the national accounting questions into these broader political perspectives.

Nonetheless, as I argued in Chapter 1, an interrogation of what we mean by "the economy" is an important step in the development of an alternative political economy. Equally important though, is a recognition of the differences between all the versions of

"the economy", precisely because the economy is more like a hologram than the 'solid object' created by national accounts.

Officially, the economy grew at 4.2% last year.

After 5 years of research I know something of what that means, but more importantly, I know that this 'fact' will not advance a political project of transformative change informed by feminist, green and socialist concerns.

"The economy" did lots of things last year.

Or more accurately:
a lot of things happened in the economy last year.

Appendix 1: Data for Restricted Product Estimates

The following table contains the ABS data used to calculate the restricted product measures used in Chapter 6a.

The Chain Volume Measures in these estimates are from the new Australian System of National Accounts. They replaced the Constant Price estimates in the old ANA, but serve the purpose here of providing an industry disaggregated time series of production.

Source: ABS Cat. No. 5204.0

Notes:
The category of "Ownership of Dwellings" is deducted from GDP to give Gross Market Product (GMP) - a term borrowed from Ironmonger - because in an extended accounting the imputed 'rent' on owner-occupied dwellings is part of non-market production.

The line item for Proportion of Taxes/Subsidies and Discrepancy is an adjustment to incorporate a proportion of the ABS estimates for these categories into the Restricted Product estimates. The proportion of these expenditures allocated to Restricted Production is the same as the proportion of GDP constituted by the restricted product estimate. This is clearly not as accurate as a separate accounting for taxes and subsidies in each (restricted) production industry, but it will suffice to give the orders of magnitude sought here.

Appendix 1

INDUSTRY PRODUCT: GROSS VALUE ADDED					
Chain Volume Measures(a)					
	Jun.1975	Jun.1976	Jun.1977	Jun.1978	Jun.1979
Wholesale trade	17135	16942	17656	17024	17449
Retail trade	16197	16245	16567	16545	17047
1/2 WRET	16666	16594	17112	16785	17248
Agriculture, forestry, fishing	10248	11095	11392	11019	13411
Mining	8739	8515	9067	9266	9467
Manufacturing	51321	50773	52028	51803	53935
Electricity, gas, water supply	6102	6327	6778	6867	7232
Construction	16973	18475	19366	18799	19338
Accommodation, cafes etc	7088	6897	7160	7357	7212
Transport and storage	12714	12647	13695	15425	15672
Communication services	3200	3017	3155	3351	3622
Cultural and rec. services	4674	4959	5055	5210	5414
Personal and other services	7293	7517	7346	7350	7517
V-Added in Production Sectors	145018	146816	152154	153232	160068
Gross V-added all industries	251476	256051	265350	268569	282059
Taxes less subsidies	22157	22069	23208	23157	23829
Statistical discrepancy	-2696	275	-280	-265	777
Proportion Tax/subs & dis#	11223	12812	13147	13061	13964
Restricted Product	**156241**	**159627**	**165301**	**166292**	**174032**
Gross Domestic Product	270576	278159	287943	291211	306536
Ownership of dwellings	21913	22868	24045	25406	26749
GMP	**248663**	**255291**	**263898**	**265805**	**279787**
Restricted Product as % of GDP	62.8%	62.5%	62.6%	62.6%	62.2%
GDP Growth p.a.		2.8%	3.5%	1.1%	5.3%
Restricted Product Growth p.a.		2.2%	3.6%	0.6%	4.7%
(a) At basic prices. Reference year for chain volume measures is 1997/98.					

Appendix 1

INDUSTRY PRODUCT: GF					
Chain Volume Measures(a)					
	Jun.1980	Jun.1981	Jun.1982	Jun.1983	Jun.1984
Wholesale trade	18325	18432	19114	17342	18051
Retail trade	17465	18601	19321	19465	20192
1/2 WRET	17895	18517	19218	18404	19122
Agriculture, forestry, fishing	11762	10312	11998	9375	13434
Mining	9149	9238	8950	9378	10178
Manufacturing	56260	57413	58837	53997	54817
Electricity, gas, water supply	7736	8078	8508	8748	9114
Construction	19786	21230	22157	19640	19690
Accommodation, cafes etc	7306	7609	7922	7924	8054
Transport and storage	16139	17128	17388	16754	17599
Communication services	3893	4309	4651	4857	5146
Cultural and rec. services	5559	5736	6083	6137	6525
Personal and other services	7672	7905	8057	8200	8294
V-Added in Production Sectors	163157	167475	173769	163414	171973
Gross V-added all industries	289198	298963	310594	299927	314631
Taxes less subsidies	23906	24528	25607	23943	25488
Statistical discrepancy	1088	400	-394	3672	5750
Proportion Tax/subs & dis#	14101	13964	14106	15046	17074
Restricted Product	**177258**	**181439**	**187874**	**178459**	**189047**
Gross Domestic Product	314200	323949	335833	327778	346017
Ownership of dwellings	28164	29698	30932	31629	32290
GMP	**286036**	**294251**	**304901**	**296149**	**313727**
Restricted Product as % of GDP	62.0%	61.7%	61.6%	60.3%	60.3%
GDP Growth p.a.	2.5%	3.1%	3.7%	-2.4%	5.6%
Restricted Product Growth p.a.	1.9%	2.4%	3.5%	-5.0%	5.9%
(a) At basic prices					

Appendix 1

INDUSTRY PRODUCT: GF					
Chain Volume Measures(a)					
	Jun.1985	Jun.1986	Jun.1987	Jun.1988	Jun.1989
Wholesale trade	19045	18900	18852	20312	22487
Retail trade	21401	21763	21351	21889	22757
1/2 WRET	20223	20332	20102	21101	22622
Agriculture, forestry, fishing	13461	13098	13409	13289	13573
Mining	11597	12814	12102	14226	14938
Manufacturing	57617	57984	59570	63543	67203
Electricity, gas, water supply	9680	10051	10277	10804	11309
Construction	21388	22590	21914	23652	26062
Accommodation, cafes etc	8232	8592	8522	9103	9623
Transport and storage	19029	20196	20557	21497	22493
Communication services	5545	6017	6474	7043	7622
Cultural and rec. services	7086	7287	7332	7685	8090
Personal and other services	8351	8839	9139	9403	9879
V-Added in Production Sectors	182209	187800	189398	201346	213414
Gross V-added all industries	332860	346202	354604	377304	396752
Taxes less subsidies	27518	27746	27168	28537	30618
Statistical discrepancy	1453	2768	5505	2306	-2680
Proportion Tax/subs & dis#	15859	16553	17451	16459	15028
Restricted Product	**198068**	**204352**	**206848**	**217805**	**228442**
Gross Domestic Product	361840	376960	387354	408191	424832
Ownership of dwellings	33037	34294	35422	36516	37850
GMP	**328803**	**342666**	**351932**	**371675**	**386982**
Restricted Product as % of GDP'	60.2%	59.6%	58.8%	58.6%	59.0%
GDP Growth p.a.	4.6%	4.2%	2.8%	5.4%	4.1%
Restricted Product Growth p.a.	4.8%	3.2%	1.2%	5.3%	4.9%
(a) At basic prices					

Appendix 1

INDUSTRY PRODUCT: GF					
Chain Volume Measures(a)					
	Jun.1990	Jun.1991	Jun.1992	Jun.1993	Jun.1994
Wholesale trade	22949	20966	20687	20853	22463
Retail trade	23553	23048	23785	24136	24902
1/2 WRET	23251	22007	22236	22495	23683
Agriculture, forestry, fishing	14357	15054	14532	15775	16326
Mining	16548	17598	18459	18570	18898
Manufacturing	66412	64949	63022	64369	67240
Electricity, gas, water supply	11890	12138	12280	12506	12946
Construction	26660	24923	22597	23858	25858
Accommodation, cafes etc	10015	9840	9902	9799	10460
Transport and storage	22992	23165	23709	23855	25142
Communication services	8520	8989	9638	10764	11758
Cultural and rec. services	8279	8424	8647	8771	8966
Personal and other services	10555	10595	10479	10438	10418
V-Added in Production Sectors	219479	217682	215501	221200	231695
Gross V-added all industries	412257	413697	412137	427371	444733
Taxes less subsidies	31449	30630	30551	31603	33152
Statistical discrepancy	-3269	-4621	-1306	-1318	-1404
Proportion Tax/subs & dis#	15003	13686	15292	15675	16540
Restricted Product	**234482**	**231368**	**230793**	**236874**	**248234**
Gross Domestic Product	440584	439783	441458	457735	476556
Ownership of dwellings	39270	40482	41598	42913	44425
GMP	**401314**	**399301**	**399860**	**414822**	**432131**
Restricted Product as % of GDP'	58.4%	57.9%	57.7%	57.1%	57.4%
GDP Growth p.a.	3.7%	-0.2%	0.4%	3.7%	4.1%
Restricted Product Growth p.a.	2.6%	-1.3%	-0.2%	2.6%	4.8%
(a) At basic prices					

Appendix 1

INDUSTRY PRODUCT: GF					
Chain Volume Measures(a)					
	Jun.1995	Jun.1996	Jun.1997	Jun.1998	Jun.1999
Wholesale trade	25160	26611	27379	29034	31226
Retail trade	26098	27921	28855	30260	31140
1/2 WRET	25629	27266	28117	29647	31183
Agriculture, forestry, fishing	13049	16536	17804	17719	19044
Mining	20199	22678	23422	24651	23873
Manufacturing	68668	70099	71795	72068	73800
Electricity, gas, water supply	13300	12970	12930	13312	13496
Construction	27003	27707	29230	32741	34334
Accommodation, cafes etc	11327	11552	11930	12256	13314
Transport and storage	26679	28724	29666	30484	31372
Communication services	13149	14325	15966	17281	18945
Cultural and rec. services	9506	9534	9720	10147	10544
Personal and other services	11074	11650	11956	12505	12928
V-Added in Production Sectors	239583	253041	262536	272811	282833
Gross V-added all industries	462069	483839	503006	525523	546759
Taxes less subsidies	36135	37010	37664	40358	42680
Statistical discrepancy	0	0	0	0	2107
Proportion Tax/subs & dis#	18736	19356	19658	20951	23168
Restricted Product	**258319**	**272397**	**282194**	**293762**	**306001**
Gross Domestic Product	498113	520669	540379	565881	591546
Ownership of dwellings	46106	47740	49614	51233	52961
GMP	**452007**	**472929**	**490765**	**514648**	**538585**
Restricted Product as % of GDP'	57.1%	57.6%	57.5%	57.1%	56.8%
GDP Growth p.a.	4.5%	4.5%	3.8%	4.7%	4.5%
Restricted Product Growth p.a.	4.1%	5.4%	3.6%	4.1%	4.2%
(a) At basic prices					

Appendix 2: Further Data and Methodological Issues in the GPI Revisions

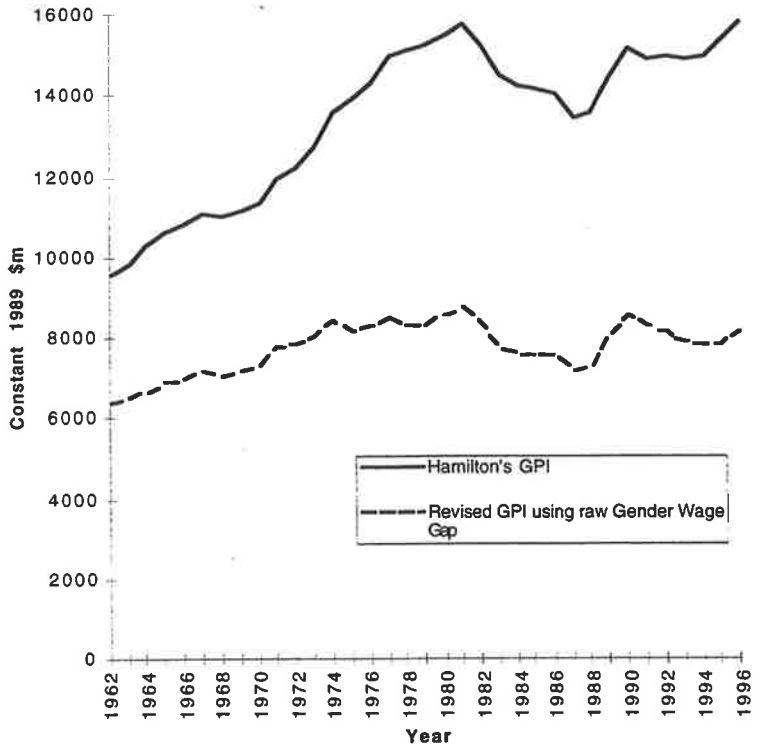
While Chapter 7 (proper) argued the reasons for adjusting the GPI and Chapter 7a extended this to make estimates of what such revisions might look like, this Appendix sets out in more detail how those adjustments were made and the data used.

Gender Wage Gap

Why an Index?

I have turned the gender wage gap figures into an inequality index measuring changes relative to a base year. This was necessary because simply multiplying the Consumption base figure by women's share of income would overwhelm the rest of the GPI. The simple multiplication of Private Consumption by women's percentage of male income would reduce the Weighted Consumption figure by up to 40% and have a major impact on the whole GPI. Figure A2.1 shows the impact on the GPI of revising the GPI for gender inequality without using an index.

Figure A2.1 Revised GPI p.c. Using Raw Gender Wage Gap Figures



Over the whole period Hamilton's GPI increased by 60.6%, but the (non-indexed) gender revised version increased by only 18%. Arguably this impact out of proportion to the importance of the issue of income inequality, particularly in relation to Hamilton's inequality adjustment (because gender inequality becomes much more important than the relative poverty of the bottom 20% of income earners). But more problematic is the fact that in the time covered by the GPI the gender wage gap has decreased markedly and its inclusion should have shown up as an increase in economic welfare. It does not do so here, although of course had the gender wage gap not decreased, the revised GPI would have been even worse. The raw adjustment for gender inequality thus both overwhelms the GPI and gives a somewhat counter-intuitive result - hence the use of an index which measures year by year changes in the gender wage gap relative to a base year.

The Data

Perhaps surprisingly, the data for this index proved problematic. Despite a reasonable sized literature on the gender wage gap, I could find no straight tabulation of the gender wage gap over time in any of the secondary literature. There were many articles based on gender wage gap statistics, but usually based over a more limited time frame - most often from 1981 when the current ABS time series began.[1] Alternatively, articles contained analyses of figures for one or two years with various econometric calculations to isolate the impact of particular factors on the gender wage gap.[2] However, while these articles often presented their formulae and calculations in detail, they did not present the raw data on women and men's earnings. Thus in order to develop the index of gender wage inequality I used the raw ABS data on men's and women's wages, but even this was problematic as there was no continuous data series for the entire period. Moreover, there is no relevant data published on earnings (as opposed to award rates) before 1962 - hence the start date and base year for my revisions to the GPI.

There were also other problems of data availability. As noted in Chapter 7a, my preference was to use figures for total earnings for all employees rather than only full-time employees. The current ABS series, *Average Weekly Earnings*, gives figures for average

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1 See for instance, Malcolm Langford (1995) "The Gender Wage Gap in the 1990s" *Australian Economic Papers*, Vol 34, No. 64, pp 62 - 85.

2 See for instance, William Even and David Macpherson (1993) "The Decline of Private Sector Unionism and the Gender Wage Gap" *Journal of Human Resources*, Vol 28, No. 2, pp 279 - 96. Sarah Rummery (1992) "The Contribution of Intermittent Labour Force Participation to the Gender Wage Differential" *Economic Record*, Vol 68, No. 203, pp 351 - 64. Stephanie Spilsbury and Michael Kidd (1997) "The Gender Wage Gap: What Has Happened Between 1973 and 1990 in Australia?" *Australian Economic Papers*, Vol 36, No. 69, pp 205 - 23. Martin Watts (1993) *The Relative Earnings of Female and Male Employees: Does Occupational Segregation Matter?*, Department of Economics, University of Newcastle. Occasional Paper 191.

earnings of both full-time and all employees.[3] The gender wage gap can then be calculated for both categories of workers, but these figures only date back to 1981. While the previous series for full-time workers extends back to 1962, comparable data for all employees was not really published. The ABS did publish data on "Average Weekly Earnings per Male Unit" prior to 1981, which involved calculating the average ratio of female to male earnings which was then published almost as a footnote.[4] However, these statistics were not collected in all states and were only published yearly back to 1973. A single estimate of women's earnings as equal to 52.5% of all male earnings was used for 6 years prior to that and no such statistics were published before 1966.

In any case the choice of statistics here makes little difference to the impact on the GPI's Weighted Consumption figure. Despite the gender wage gap for all employees' total earnings being about 13 percentage points larger than for full-time employees, the trend is very similar, with a substantial closing of the gap in the early to mid 1970s followed by a levelling out through the 1980s and 1990s. Any yearly variations between the two sets of figures were not significant or sustained enough to make a major difference to the gender inequality index. Given this, and the longer time period covered I preferred to use the figures for full-time employees (rather than for all employees).

However, even using the ABS figures for Full-Time Workers' Average Weekly Earnings, there is no continuous time series. The current ABS data series is based on a purpose designed survey of employers whereas data prior to 1981 was based on payroll tax data collected by the ABS. The pre-1981 figures I have used are those reported in the Reserve Bank's summary of ABS figures and cover only private sector, non-managerial earnings.[5] Figures including public sector employees are available from 1976, but because the gender wage gap was less in the public sector than in the private sector, inclusion of public sector employees in the late 1970s would exaggerate the growth of gender wage equality. For instance, in 1977 full-time adult women employees earned on average 76.6% of men's earning in the private sector by comparison with 81.0% of earnings when all full-time employees were considered.[6]

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3 Australian Bureau of Statistics *Average Weekly Earnings*, Canberra: ABS. Cat No. 6302.0.

4 The "male unit" here was defined as "total male employees plus a proportion of female employees, the proportion being derived from the estimated ratios of female to male earnings." Australian Bureau of Statistics (1973) *Official Year Book of Australia*, Canberra: ABS. p 255.

5 R.A. Foster and S.E Stewart (1991) *Australian Economic Statistics: 1949-50 to 1989-90*, Reserve Bank of Australia. Occasional Paper 8. pp 177 - 179.

6 See Mumford, who uses the same data. Karen Mumford (1989) *Working Women: Economics and Reality*, Sydney: Allen & Unwin. p 33.

While the figures covering all adult full-time employees might be more inclusive, they do distort the series and the gender inequality index as their inclusion from 1976 would exaggerate the extent of closure of the gap in the late 1970s. Thus the figures dealing only with private sector employees provide a more consistent coverage over a much longer period prior to 1981, when the data set changed. The post-1981 figures do include public sector employees, but in creating the gender inequality index for these years I have re-indexed the series thereby minimising the statistical impact of the different data set.

This re-indexing is evident in the figures for 1981 in Table 7a.1 There are two sets of figures for 1981: the first are the old data set figures for May, the second line is when the new data series begins in September. In order to construct an index across the whole time period for which gender statistics are available I have used the last figure in the old data series as the base for the new series and measured the annual changes from 1981-96 against the old series 1981 values. While this gives a smooth data series which reflects the increments each year, it does not solve all the problems of continuity between the two data sets. The content and methodology underlying the data sets remains different, although this is not fatal. What is important here is not the absolute figures - the dollar value of average weekly earnings - but the ratio of male to female earnings. As long as both male and female earnings are calculated from the same data sample each year, then the ratio of female to male earnings should be equivalent across the different methods of data collection. Given this I think the advantages of having a longer time series outweigh the potential distortions of using different data sets.

The Index

Having thus constructed a series of numbers which trace changes in the gender wage gap since 1962, there remains the issue of how to put them into an index analogous to the distributional inequality index in the GPI. There are two issues here: one is the choice of base year, the second is how the gender index is to be combined with other distributional inequality figures in a revised GPI.

The choice of base year is important in terms of the impact of the gender inequality index on the GPI. It makes no difference to the rate of change of the index or to the size of the adjustment to the Weighted Consumption figure in the GPI, but it does make a major difference to its direction. On the assumption that the broad direction of change over the GPI period has been toward greater gender equality, then positing 1962 as the base year would mean that all index figures would be above 100. The gender adjustment would then increase the GPI inequality index and increase Weighted Consumption. By contrast, if the final year was chosen as the base, then all index figures would be less than the original and the Weighted Consumption figure smaller than in Hamilton's estimate. As

noted above, a decrease in the magnitude of the core Weighted Consumption figure means that all other positive and negative adjustments become relatively more important. The extent of relative change here is nowhere near as large as in the earlier example of adjusting for the raw value of women's share of income, but it does again highlight that the ISEW/GPIs are about changes over time not about measuring a reified 'thing' with an absolute quantum.

Figure A2.2: The Inequality Indexes

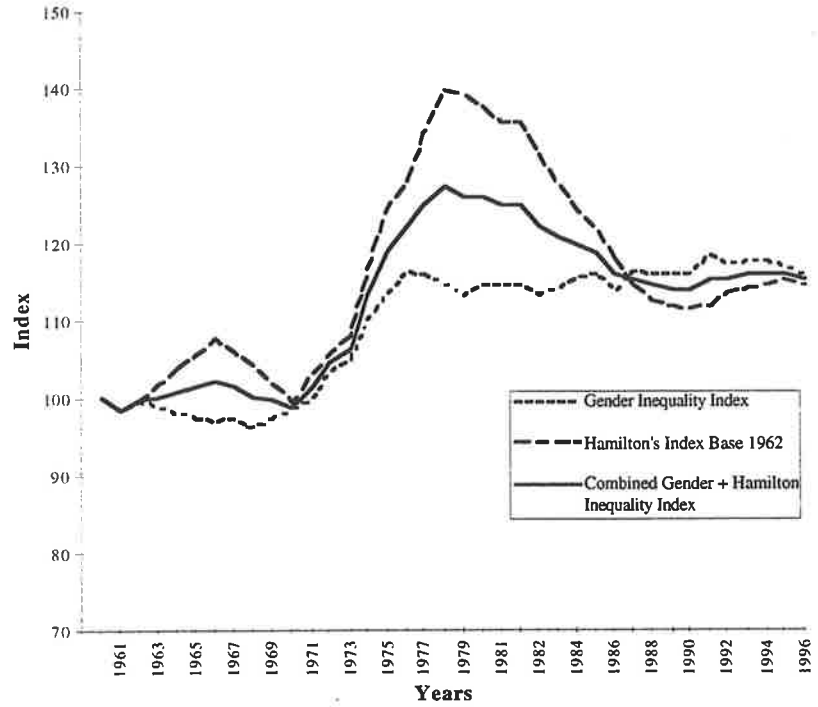


Figure A2.2 shows the trend of both Hamilton's inequality index and the gender inequality index, as well as the combination of the two. Ideally it would be desirable to follow the Austrian example of using the initial year of the ISEW survey as the base year, but since the gender wage gap figures only go back to 1962 I have used this as the base year and adjusted Hamilton's distributional inequality, weighted consumption and final GPI figures accordingly. A combined income inequality index is calculated by taking a simple average of Hamilton's (1962) Inequality Index and the Gender Inequality Index, as per Table A2.1 below. It is this index which weights the consumption figure in the revised GPI index in Table 7a.2.

Table A2.1 Derivation of the Revised Distributional Inequality Index

Year	Hamilton's Distribution Index	Hamilton's Index Base 1962	F/T Workers Gender Index	Combined Gender + Income Inequality Index
1962	92.97	100.00	100.00	100.00
1963	94.95	101.98	99.03	100.51
1964	97.03	104.06	98.41	101.23
1965	98.82	105.85	97.84	101.84
1966	100.77	107.80	97.26	102.53
1967	99.17	106.20	97.62	101.91
1968	97.34	104.37	96.38	100.37
1969	95.10	102.13	97.80	99.96
1970	92.76	99.79	98.55	99.17
1971	96.30	103.33	100.13	101.73
1972	98.92	105.95	103.77	104.86
1973	101.20	108.23	105.29	106.76
1974	109.51	116.54	110.35	113.44
1975	117.97	125.00	113.45	119.23
1976	121.21	128.24	116.56	122.40
1977	127.33	134.36	116.01	125.19
1978	133.18	140.21	115.00	127.61
1979	132.38	139.41	113.54	126.47
1980	130.75	137.78	114.59	126.18
1981	128.66	135.69	114.72	125.21
1981	128.66	135.69	114.72	125.21
1982	124.58	131.61	113.51	122.56
1983	120.82	127.85	114.42	121.14
1984	117.55	124.58	115.56	120.07
1985	114.74	121.77	116.35	119.06
1986	111.20	118.23	114.07	116.15
1987	107.78	114.81	116.60	115.71
1988	105.79	112.82	116.36	114.59
1989	104.93	111.96	116.27	114.12
1990	104.71	111.74	116.32	114.03
1991	105.06	112.09	118.56	115.32
1992	106.75	113.78	117.39	115.58
1993	107.41	114.44	117.85	116.15
1994	107.60	114.63	117.85	116.24
1995	108.46	115.49	116.95	116.22
1996	107.87	114.90	116.09	115.49

Exchange Expenditures

Changes in ABS Industry Classifications

The current classification system which forms the basis of ABS production and Input-Output accounts is based on the Australian and New Zealand Standard of Industry Classification (ANZSIC). It is a relative recent taxonomy, being introduced in the 1990s

to replace the system relating to Australian Standard Industry Classification which had been in use since 1969 (although this was itself revised in 1978 and 1983).[7]

While the accounting for Wholesale and Retail activity is straightforward throughout, the accounting for the FIRE industries is much more complex. The 1962 Input-Output accounts published data on 30 industry groups disaggregated into 105 industry classifications. Industries listed in the 105 table as (I1) Finance and life insurance, (I2) Other insurance, (I3) Investment and Real Estate, (I4) Business services, combined to form industry group number 25, Finance, Insurance, Real Estate and Business Services. In subsequent accounts this industry group changed to "Finance, Property and Business Services" in a 28 industry group taxonomy comprising Banking 61.01, Non-bank finance 61.02, Investment and services to finance and investment 61.03, Insurance and services to insurance 61.04, and Business services not elsewhere included 61.05, in a 108 industry classification. In 1992/93 the industry group was split into two: Finance and Insurance (Group K) and Property and Services (Group L) in a 35 industry group classification creating further problems of continuity of data (discussed below).[8]

Nevertheless, despite the changes in the names and categorisations of the published data, the content of what is counted in the sectors which fit what I have called the FIRE component of exchange activities remains essentially the same. For instance, the I3.1 Real Estate Agents and the I3.3 Share and Stock Brokers of the 1962 classification are part of the 7702 Other Property Services category in 1992/93. Similarly the legal, accounting and auditing, advertising, architectural, engineering and surveying, and security services of the 1962 sub-group "Business Services" all form part of categories 7801, 7802, and 7803 of the current classification, "Property and Business Services" industry group.[9]

The later categorisations tend to be broader (eg. "Non-bank finance" replacing "Building Societies" and "technical services" replacing "engineering") in order to reflect a greater range of financial mechanisms and business services. However even where new forms of services or financial tools have grown, in general, they have not been shifted from other industry sectors in a way which would exaggerate the growth of exchange activities. Despite the changes in both categorisations and industrial landscape, the major FIRE activities have remained within or grown from the broad categories listed above. For this reason, in calculating the value of the FIRE activities to be deducted from the GPI I have

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7 Australian Bureau of Statistics (1993) *Australia and New Zealand Standard Industrial Classification*, Cat 1292.0. Canberra: ABS. p 1.

8 Australian Bureau of Statistics *Australian National Accounts: Input Output Accounts*, Canberra: ABS. Various years. See also ABS, ibid.

9 ibid.

used the broader industrial group figures, rather than the more disaggregated figures which, given the category changes, are unnecessarily complex for the order of magnitude figures being considered here.

Unfortunately, the situation is more complex when considering adjusting the WRET and FIRE GPI deductions for values already deducted from the GPI as part of designated defensive expenditure. It would be an enormous undertaking (if it is possible at all) to deduct from the exchange activity estimate a value for every exchange activity which went to a defensive end use. Using the 105/108/113 industry classifications in the Input-Output tables, it might be possible to identify the output of exchange industries which go into some of the major areas of Hamilton's defensive expenditure deductions like defence, health or education, but even with these accounts it is not possible to identify all such exchange inputs into identified defensive expenditures. For instance, the I-O accounts do not separate out tertiary from other education as do Hamilton's estimate. Nor do the I-O accounts separate public order and safety expenditure (eg. courts and police) from other government expenditure whereas Hamilton treats these expenditures differently (the former being 75% defensive, the rest being seen as welfare producing or up to half defensive).[10]

Given the data mismatch, and given that much of Hamilton's treatment involves quite arbitrary apportionings of expenditure as 25% or 50% welfare enhancing, there seems little to be gained by going below the broader level of industry group classification in the I-O tables. However, in recognition that government expenditure is a mixed bag of defensive and welfare producing expenditure, I propose simply to use 50% of the figure for FIRE and WRET activities which went into "Government Administration" (Public Administration and Defence in the earlier accounts) in order to adjust the exchange activity estimate. Similarly I propose to use 50% of the I-O figure for Health, Education and Welfare/Community Services. In incorporating the other welfare and community services included in this category (eg. child care, community care services) these categories clearly go beyond Hamilton's health and education defensive expenditure deductions, but they may also be similarly borderline cases where the 50% figure is not entirely unwarranted (again particularly in the context of the admittedly arbitrary nature of much of this accounting - and indeed all national accounting).

Unfortunately though the published data makes even this procedure difficult. The I-O categories changed in 1992/93 and the old "Community Services" went into a number of

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10 Clive Hamilton (1997) *The Genuine Progress Indicator: A New Index of Well-being in Australia*, Australia Institute. Discussion Paper 14. pp 17 - 18.

categories, including Education, and Health and Community Services. Using simply the Education, and Health and Community Services categories which most closely approximate Hamilton's defensive expenditure deductions means a discontinuity in the data as expenditures on museums, library services and religious organisations which were previously part of the accounting suddenly disappears. To correct for this I have supplemented the figures for exchange activities which go to Education and Health and Community Services (the 35 industry groups classifications) with the figures for "Libraries, museums and the arts" from the 113 industry accounts. It should be noted though that this is more a matter of statistical imperative than an analysis of the activities themselves. Hamilton clearly identifies such cultural and recreation services as welfare enhancing (ie. not defensive), and so they should not be incorporated into the earlier figures as defensive expenditures. However the published figures do not allow for their exclusion from the pre-1992 exchange activities category of "Community Services". For the sake of continuity I have included the value of exchange industry output which went to "Libraries, museums and the arts" in the later years alongside the adjustments for Education and Health and Community Services.

The published data does not allow a similar procedure for the output which went to religious organisations which, prior to 1992/93, formed part of the Community Services category, but were reallocated to Personal Services in the most recent accounts. Consequently I have simply let these values drop out of my accounting. Clearly this discontinuity in the data is not ideal, but the magnitude of these expenditures is relatively small and does not impact on the overall trends of the data.

Calculation & Raw Data

The methodology for calculating the deductions for exchange activity is outlined in Chapter 7a, but can be summarised as follows. The output of certain industry groups (Finance, Insurance, Real Estate and Business Services, and 1/2 of Wholesaling and Retailing) is designated as exchange expenditure. The value of the output of these industries is derived from the Input-Output tables by adding the figures for output going as Intermediate Usage to other industries, plus Private and Government Final Consumption Expenditure: Columns 2,3 and 4 of Table A2.2 below. Deductions are then made for the value of Intermediate Usage of exchange outputs which is deducted elsewhere or not included in the GPI - either as exchange expenditure (Columns 5 and 6 in the pre-1992/93 figures below, or columns 7 & 10 in the later figures) or as GPI defensive expenditure (Columns 7 & 8 in the pre-1992/93 figures or columns 11 & 12 in the later figures). This gives a value for Total Consumption expenditure of each exchange industry (Column 9 in the pre 1992/93, column 13 in the later figures). These are added

together to give a Total Exchange Expenditure in current dollars for each year of the I-O accounts which is then transferred to Column 2 of Table 7a.3.

As noted in the chapter, these current dollar value are then translated into Constant 1989 dollars (using the Implicit Price Deflator for GDP (Expenditure) as a whole (rather than the price deflator for each industry which would have unnecessarily complicated the calculation).The blank years are then filled in by a simple linear extrapolation, and deducted from Gender Revised GPI to form the Final* Gender Revised GPI.

Table A.2: I-O Accounts Exchange Expenditures

(Direct Allocation of Imports, Basic Values)

Column	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
YEAR	**1962/63**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	**WRET SECTOR**	**FIRE SECTOR**	**Public Admin & Defence**	**Health Education Welfare Services**	**TOTAL CONSUMPTION**				
WRET SECTOR	665.1	1,634.3	0.0	0.0	7.0	9.6	9.4	2,282.9				
FIRE SECTOR	447.7	237.4	208.8	0.1	0.0	3.1	0.1	892.2				
								TOTAL EXCHANGE EXPENDITURE				**2,033.7**
YEAR	**1968/69**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	**WRET SECTOR**	**FIRE SECTOR**	**Public Admin & Defence**	**Health Education Welfare Services**	**TOTAL CONSUMPTION**				
WRET SECTOR	1,461.2	3,118.1	0.0	0.0	40.2	17.3	44.0	4,508.5				
FIRE SECTOR	2,119.3	482.5	0.0	229.9	0.0	45.6	3.1	2,347.6				
								TOTAL EXCHANGE EXPENDITURE				**4,601.8**
YEAR	**1974/75**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	**WRET SECTOR**	**FIRE SECTOR**	**Public Admin & Defence**	**Health Education Welfare Services**	**TOTAL CONSUMPTION**				
WRET SECTOR	3,788.6	7,492.8	0.0	393.3	92.4	31.9	111.1	10,724.2				
FIRE SECTOR	5,612.5	1,334.1	21.9	673.2	497.2	182.3	14.1	5,699.9				
								TOTAL EXCHANGE EXPENDITURE				**11,062.0**

Calculation of Exchange Expenditures from ABS Raw Data

Table A.2: I-O Accounts Exchange Expenditures								(Direct Allocation of Imports, Basic Values)				
Column	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
YEAR	**1977/78**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	**WRET SECTOR**	**FIRE SECTOR**	**Public Admin & Defence**	**Health Education Welfare Services**	**TOTAL CONSUMPTION**				
WRET SECTOR	5,687.3	10,511.8	7.8	353.1	197.6	116.4	358.9	15,418.6				
FIRE SECTOR	9,403.4	2,057.7	58.5	1,870.8	1,299.0	513.4	874.6	7,655.8				
								TOTAL EXCHANGE EXPENDITURE				**15,365.1**
YEAR	**1979/80**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	**WRET SECTOR**	**FIRE SECTOR**	**Public Admin & Defence**	**Health Education Welfare Services**	**TOTAL CONSUMPTION**				
WRET SECTOR	6,237.9	12,101.0	7.4	304.1	222.7	111.6	427.3	17,550.1				
FIRE SECTOR	13,402.2	2,694.9	80.3	2,414.3	2,495.6	861.4	1,390.1	10,141.8				
								TOTAL EXCHANGE EXPENDITURE				**18,916.8**
YEAR	**1980/81**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	**WRET SECTOR**	**FIRE SECTOR**	**Public Admin & Defence**	**Health Education Welfare Services**	**TOTAL CONSUMPTION**				
WRET SECTOR	7,571.9	14,001.7	4.0	330.6	318.7	146.7	534.5	20,587.7				
FIRE SECTOR	17,013.0	3,085.3	98.4	3,034.8	3,507.9	787.6	1,601.1	12,459.7				
								TOTAL EXCHANGE EXPENDITURE				**22,753.5**

Table A.2: I-O Accounts Exchange Expenditures

(Direct Allocation of Imports, Basic Values)

Column	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
YEAR	**1981/82**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	**WRET SECTOR**	**FIRE SECTOR**	**Public Admin & Defence**	**Health Education Welfare Services**	**TOTAL CONSUMPTION**				
WRET SECTOR	8,132.8	15,522.2	6.5	372.0	340.2	143.8	555.2	22,599.8				
FIRE SECTOR	19,387.1	3,735.6	89.7	3,375.7	4,204.5	606.2	1,430.5	14,613.9				
								TOTAL EXCHANGE EXPENDITURE				**25,913.8**
YEAR	**1982/83**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	**WRET SECTOR**	**FIRE SECTOR**	**Public Admin & Defence**	**Health Education Welfare Services**	**TOTAL CONSUMPTION**				
WRET SECTOR	8,630.3	16,575.2	7.9	397.0	328.2	166.9	595.8	24,106.9				
FIRE SECTOR	21,914.1	4,211.8	125.0	3,766.0	4,356.9	819.5	1,817.0	16,809.8				
								TOTAL EXCHANGE EXPENDITURE				**28,863.2**
YEAR	**1983/84**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	**WRET SECTOR**	**FIRE SECTOR**	**Public Admin & Defence**	**Health Education Welfare Services**	**TOTAL CONSUMPTION**				
WRET SECTOR	9,640.7	17,576.6	6.8	498.3	361.9	250.8	729.7	25,873.7				
FIRE SECTOR	23,660.3	3,842.4	106.4	3,173.3	4,075.9	1,223.2	2,248.8	18,623.9				
								TOTAL EXCHANGE EXPENDITURE				**31,560.7**

Calculation of Exchange Expenditures from ABS Raw Data

Table A.2: I-O Accounts Exchange Expenditures								(Direct Allocation of Imports, Basic Values)				
Column	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
YEAR	**1986/87**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	**WRET SECTOR**	**FIRE SECTOR**	**Public Admin & Defence**	**Health Education Welfare Services**	**TOTAL CONSUMPTION**				
WRET SECTOR	17,042.3	26,904.2	14.8	1,193.6	814.1	553.2	1,307.5	41,023.3				
FIRE SECTOR	33,799.9	5,704.9	113.9	6,923.7	6,250.6	1,607.7	2,175.6	24,552.8				
								TOTAL EXCHANGE EXPENDITURE				**45,064.4**
YEAR	**1989/90**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	**WRET SECTOR**	**FIRE SECTOR**	**Public Admin & Defence**	**Health Education Welfare Services**	**TOTAL CONSUMPTION**				
WRET SECTOR	21,788.6	40,706.8	29.7	1,353.7	979.3	715.9	1,626.7	59,020.8				
FIRE SECTOR	54,031.5	9,765.1	546.7	12,925.1	11,773.4	3,224.3	3,303.8	36,380.8				
								TOTAL EXCHANGE EXPENDITURE				**65,891.2**

Table A.2: I-O Accounts Exchange Expenditures

(Direct Allocation of Imports, Basic Values)

Column	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
YEAR	**1992/93**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	Wholesale	Retail	**WRET SECTOR**	Finance etc	Property/Business Services etc	**FIRE SECTOR**	**Gov't Admin & Defence**	**Other Defensive Expend.**	**TOTAL CONSUMPTION**
Wholesale	17,094.6	6,879.1	30.5	426.4	250.0	676.4	258.6	592.8	851.4	660.5	831.9	
Retail	1,128.9	33,497.9	0.0	23.1	141.3	164.4	101.2	4.7	105.9	18.1	8.9	
WRET SECTOR	**18,223.5**	**40,377.0**	**30.5**	**449.5**	**391.3**	**840.8**	**359.8**	**597.5**	**957.3**	**678.6**	**840.8**	**56,073.2**
Finance &Insurance	30,288.1	9,159.4	185.0	1,045.9	1,185.6	2,231.5	6,887.3	2,260.5	9,147.8	2,139.6	1,466.3	
Property/Bus. Services etc	45,523.1	2,798.1	1,715.9	3,467.3	5,404.7	8,872.0	3,123.6	7,781.8	10,905.4	3,528.8	2,229.9	
FIRE SECTOR	**75,811.2**	**11,957.5**	**1,900.9**	**4,513.2**	**6,590.3**	**11,103.5**	**10,010.9**	**10,042.3**	20,053.2	**5,668.4**	**3,696.2**	**53,830.6**
										TOTAL EXCHANGE EXPENDITURE		**81,867.2**
YEAR	**1993/94**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	Wholesale	Retail	**WRET SECTOR**	Finance etc	Property/Business Services etc	**FIRE SECTOR**	**Gov't Admin & Defence**	**Other Defensive Expend.**	**TOTAL CONSUMPTION**
Wholesale	19,257.6	7,217.9	13.9	891.9	285.0	1,176.9	158.6	730.4	889.0	744.8	886.6	
Retail	1,369.1	36,385.3	0.0	50.7	309.8	360.5	37.1	33.7	70.8	36.0	14.9	
WRET SECTOR	**20,626.7**	**43,603.2**	13.9	**942.6**	**594.8**	**1,537.4**	**195.7**	**764.1**	**959.8**	**780.8**	**901.5**	**60,905.5**
Finance &Insurance	27,746.1	9,989.1	188.6	1,276.5	1,229.6	2,506.1	5,408.4	2,367.5	7,775.9	2,497.5	1,956.8	
Property/Bus. Services etc	50,289.7	2,935.8	1,613.8	5,918.7	6,670.9	12,589.6	1,727.6	8,527.6	10,255.2	3,680.4	2,547.3	
FIRE SECTOR	**78,035.8**	**12,924.9**	**1,802.4**	**7,195.2**	**7,900.5**	**15,095.7**	**7,136.0**	**10,895.1**	18,031.1	**6,177.9**	**4,504.1**	**54,295.3**
										TOTAL EXCHANGE EXPENDITURE		**84,748.0**

Calculation of Exchange Expenditures from ABS Raw Data

Table A.2: I-O Accounts Exchange Expenditures								(Direct Allocation of Imports, Basic Values)				
Column	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
YEAR	**1994/95**	**($m Current Prices)**										
INDUSTRY SECTOR	**INTER-MEDIATE USAGE**	**FINAL PRIVATE CONS EXPEND**	**FINAL GOV'T CONS EXPEND**	Wholesale	Retail	**WRET SECTOR**	Finance etc	Property/Business Services etc	**FIRE SECTOR**	**Gov't Admin & Defence**	**Other Defensive Expend.**	**TOTAL CONSUMPTION**
Wholesale	30,153.9	11,222.9	14.9	1,181.5	694.0	1,875.5	219.9	1,345.2	1,565.1	842.7	1,431.8	
Retail	920.2	38,157.5	0.0	438.2	76.3	514.5	14.0	10.1	24.1	10.7	10.9	
WRET SECTOR	**31,074.1**	**49,380.4**	**14.9**	**1,619.7**	**770.3**	**2,390.0**	**233.9**	**1,355.3**	**1,589.2**	**853.4**	**1,442.7**	**75,342.2**
Finance &Insurance	25,827.2	14,902.8	19.4	1,792.3	1,562.7	3,355.0	7,392.5	2,866.0	10,258.5	1,591.1	*936.4*	
Property/Bus. Services etc	85,093.3	2,836.3	1,794.7	13,227.7	7,538.9	20,766.6	2,018.0	28,713.3	30,731.3	3,246.1	2,421.7	
FIRE SECTOR	**110,920.5**	**17,739.1**	**1,814.1**	**15,020.0**	**9,101.6**	**24,121.6**	**9,410.5**	**31,579.3**	40,989.8	**4,837.2**	**3,358.1**	**61,264.7**
								TOTAL EXCHANGE EXPENDITURE				**98,935.7**

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