FEMINIST UNDERSTANDINGS OF PRODUCTIVITY

by Patricia E. (Ellie) Perkins
Associate Professor
Faculty of Environmental Studies
York University
North York, Ontario M3J 1P3
CANADA

Telephone: (416) 736-2000 ext. 22632
Fax: (416) 736-5679
E-mail: esperk@yorku.ca

Paper presented at the conference
"Feminist Utopias: Redefining Our Projects"
November 9-11, 2000,University of Toronto, Toronto, Canada
and revised for inclusion in Feminist Utopias: Re-Visioning Our Futures,
edited by M. Eichler, J. Larkin and S. Newsmith (Toronto: Inanna Publications, 2002).

ABSTRACT: The concept of productivity, meaning output per unit of input, is at once general and specific. Economists have used productivity as a very specific measure, denominated in dollars, which shows the output of a produced or consumed good per unit of labour or capital used in the production process. However, productivity can also be understood more broadly as a fundamental human value which denotes optimal use of the natural environment for individual, social and cultural benefit. This involves questioning, testing and replacing many of the static assumptions of the neoclassical economics paradigm: What are the significant inputs and outputs? Can their cost or value be measured in dollars? What additional, related outputs and inputs are silent, "external", or ignored in the production and consumption process? How do improvements in productivity take place, and how can they be measured and fostered? Feminist economists critique the exclusion of many important aspects of production and reproduction from most economic equations; the discussion on alternative ways of valuing inputs and inclusionary approaches to the question of productivity is well advanced in feminist debates. Building on recent research in ecological economics, feminist economics, community economic development, political ecology, and social/cultural studies, this paper explores and articulates several alternative conceptualizations of productivity. The paper's intent is to re-examine the capitalist concept of "productivity" which Maria Mies calls "the most formidable hurdle in our struggle to come to an understanding of women's labour" (Mies, Patriarchy and Accumulation on a World Scale, p. 48).

FEMINIST UNDERSTANDINGS OF PRODUCTIVITY

I. Introduction

The concept of "productivity" encapsulates a number of feminist concerns about economic analysis. In measuring "productivity", which is the output of something per unit input of something else, an analyst zeroes in on what's "important" for the economy by choosing which output and which input are in focus. Labour productivity, for example, means how many widgets a worker can produce per hour or per day. Capital productivity is a measure of how many widgets can be made per dollar invested in the widget plant. For feminist economists who are familiar with the invisible and unpaid inputs which undergird all kinds of production processes, the shortcoming of most types of productivity analysis is that these fundamental inputs are usually left out. Also omitted by definition, in traditional productivity measures, are the unplanned, unexpected and/or pernicious outputs which accompany production processes and which undermine their overall benefits for society. Usually-omitted inputs include the reproduction, socialization, feeding and care of workers and their unpaid support networks; the construction and maintenance of social processes which cushion the market such as home health care and elder care, community organizing and information-sharing, and social risk-reduction networks; and unpaid economic activities such as food production and processing, house and garden work, repair and maintenance of clothing and equipment, and expenditure-reducing thrift. Outputs which usually avoid capture include worker stress and work-related health problems; family violence; "fugitive emissions" of pollutants; distortion of urban form, transportation systems, and neighbourhoods; and market inefficiencies resulting from collusion, business lobbying, uncompetitive pricing, and political influence.

The concept of productivity tends to obscure trade-offs among different inputs. When labour productivity increases, for example, this usually involves increased use of land or raw materials, both because "haste makes waste" and because workers pushed to be more productive find ways to claim the productivity of natural processes as their own. Higher labour productivity, in this case, comes at the expense of reduced land/raw materials productivity. Economists attempt to resolve these "trade-off" issues through the concept of "total factor productivity", or output per unit input, but the units in which inputs are measured become problematic. If dollars are used as the common denominator, this introduces many distortions for unpriced or non-marketed inputs, inputs whose prices are not competitively derived, or inputs where there is no agreement on the proper price to use.

As part of the work of constructing a feminist vision and understanding of economies, economics and economic change, I believe it is important to grapple with the concept of productivity, for several reasons. First, "productivity" is a key economic indicator, a shorthand measure which is widely used in policy processes and in business decisions. A feminist

productivity measure which captures the long-term social and ecological value of economic activity (instead of the costs of its immediate inputs compared to the market price of its outputs) would be a powerful tool for economic planners and political decision-makers. Such an indicator would allow governments, firms and community organizations to compare projects according to their long-term benefits and overall costs, for women and men and for society as a whole, making possible an expanded and comprehensive picture of economic activity.

Second, exploring the concept of "productivity" provides a convenient entrée into many issues of concern for feminist economists, such as unpaid work, "caring" labour, community solidarity, ecological impacts of production, valuation, and measurement questions. For popular education and demystification purposes, a critical study of productivity with all its implications gives an interesting and somewhat manageable slant on a wide range of feminist and economic issues.

Third, "productivity" implies and depends upon value-judgements about the overall economy and its change, so it is a political concept as well as an economic one, and it links material and social factors with cultural determinants and understandings of value, or what is important in society. Both for purposes of theoretical discussion and for intervention and activism, these interrelationships are crucial.

Thermodynamic analysis makes it clear that getting more and more output from the same amount of physical input is an impossibility, which appears to call into question the feasibility of limitless economic growth (Jackson, 1996:168); feminist economists similarly speak of the "global crisis in social reproduction" and the need for "recognizing and respecting limits" to bring about "subsistence-oriented women's liberation" (Folbre, 1994:254; Bennholdt-Thomsen and Mies, 1999:203). However, it is difficult to sell "limits" and "subsistence" in a democratic, market-based society; moreover, economic growth seems to be required to make possible redistribution and the rectification of long-standing economic injustices, both locally and globally. Can a feminist productivity analysis help to handle these contradictions?

Just as ecological economists are redefining economic concepts to conform with ecological realities, and thus changing the ethical foundations of economics itself (Henderson, 1988), feminist redefinitions of economic terms have the potential to fundamentally reshape both economics and economies (Nelson, 1993:24). This is a long-term project, fuelled by the internal crises of the dominant neoclassical paradigm and fraught with tensions between immediate and far-reaching goals. "Productivity" is the sort of jargon-word which may be on its way out; in a truly feminist, ecological, sustainable steady-state economy it would be unnecessary to measure or attempt to improve productivity because it would be so well understood that improvements in one sort of productivity imply declines in another. No Pareto improvements would be possible in such an economy! But as a means of getting from here to there, as noted above, grappling with the concept of productivity is a reasonable transitional strategy.

The recent ecological economics and political ecology literature is filled with views on

productivity and how to reframe it. Some ecological economists are calling for a re-substitution of labour for capital in production processes, as a way of staving off unemployment-related social disintegration (Jackson, 1996:165-170). Others point out that "sustainable productivity" means an integration of social production with global ecological processes, an inherently cultural dynamic which requires integration with local conditions, values and knowledge (Leff, 1995:91-97). Thermodynamic theory offers the insight that it is order in material things (which is created using energy and information) which generates use-value for humans; Elmar Altvater redefines use-value to mean "lower entropy with higher order" and notes that "economic and social systems call for fundamental reorganization when production geared to exchange-value is only capable of creating use-values with a limited capacity to satisfy needs." (Altvater,1993:228, 230).

Building on but in contrast to such ungendered approaches to productivity, this paper outlines some starting-points for a specifically feminist standpoint on "productivity". The following section discusses four principles for measuring and defining productivity through feminist eyes. Implications of this sort of approach for envisioning a feminist and sustainable economy are discussed in the next section. The conclusion to the paper offers some ideas about where this line of analysis leads in terms of research, policy, empirical work, and activism.

II. Feminist Perspectives on Productivity

What kind of productivity is of interest? This is a crucial initial question, and one which demands both gender analysis and the full participation of all members of society to determine. Total factor productivity, or the output of all goods derived from all inputs in the economy, is one place to start. But the limitations of the market, and of existing systems for pricing and counting, hamper the measurement of true total factor productivity – in fact, at first glance it seems almost impossible.

For any productivity measure to be a true reflection of output per unit input, the value of the output in question must be balanced against the costs of the inputs required to produce it; *all* the inputs should be included and counted. In addition, the value of any negative outputs which accompany the "good" which is in focus should also be subtracted, since without the production process these "bads" would not have been produced.

Feminist analysis has much to say about such components and products of economic processes which are often termed "externalities"; in many cases they are omitted precisely because they relate to "women's work" (Ferber and Nelson, 1993). There is a long discussion among socialist feminists about the Marxist distinction between production and reproduction, and the impossibility of separating the two kinds of work, especially in subsistence economies (Mellor, 1997:171). Maria Mies states, "It is thus necessary, regarding the concept of the *productivity of labour*, to reject its narrow definition and to show that labour can only be productive in the sense of producing surplus value as long as it can tap, extract, exploit, and appropriate labour

which is spent in the *production of life*, or *subsistence production*, which is largely non-wage labour mainly done by women" (Mies, 1986:47). In this sense, "female productivity is the precondition of male productivity and of all further world-historic development" (Mies, 1986:58).

Because of problems with market valuation processes, deriving a "total factor productivity" measure means that feminist productivity analysis must employ or develop ways of valuing goods and services which allow comparisons across material units without the violence inherent in market-based processes. Even the prices for goods and services which are marketed show gender (and other) inequities related to power dynamics in patriarchal society; this is why nurses, daycare workers and secretaries must fight lengthy battles for pay equity commensurate with their level of responsibility, and why neoconservative governments offload "caring services" formerly provided by funded institutions to churches, volunteer organizations, and households. Much more violent and distorting are the pricing techniques used for goods and services which have never been marketed at all: house price differentials in different neighbourhoods are used as a proxy for the value of clean air and other environmental amenities; the amount of money some people spend to visit national parks becomes an estimate of the value of conserving nature and biodiversity; questionnaires are used to probe public support for hypothetical environmental protection measures; estimates of the value of housework for national economies, even if calculated using only the minimum wage, are simply ignored because they dwarf economic activity in all other sectors (Pietila, 1997). "Discourse-based valuation", discussed below, is one promising and increasingly-used alternative method of arriving at relative and multi- factor valuation.

Some of the information needed to conduct feminist productivity calculations is difficult to obtain with current data-gathering structures and policies, so special attention must be paid to the data requirements of feminist productivity calculations and how to meet them.

The following sections discuss each of these points in more detail.

A. Incorporate all inputs to the production process.

Feminist economists critique the exclusion of many important aspects of production and reproduction from most economic equations; the discussion on alternative ways of valuing inputs and inclusionary approaches to the question of productivity is relatively well advanced in feminist debates (Waring, 1989; Folbre, 1994; Nelson, 1996; Mellor, 1997). There is thus a wealth of literature on the ways in which women's contributions to economic processes have been ignored, undervalued, unpaid, discounted and otherwise left out of economic analysis. Such contributions include the socialization of children and teaching of cooperation skills, health care for family members who are engaged in paid work outside the home, housework and household maintenance, cooking and food provision, community and social maintenance work, and many other jobs which can be understood in a thermodynamic sense as using energy to reverse entropy (Perkins,2000). Estimates of the value of environmental and ecological

inputs to production should also be included – for example, clean air and water, ozone-layer protection, soils – even if they are unvalued or undervalued in markets.

B. Incorporate all outputs of the production process.

Production of "goods" usually entails producing some "bads" as well – pollution, wastes and other by-products. Other negative externalities of production processes include worker stress, ill-health, social inequities, community breakdown and other social by-products (Schor, 199 5; Hayden, 1999) which it then often becomes "women's work" to address or mend (Perkins, 1996). Valuing and incorporating these negative outputs of production in productivity analysis – which will tend to reduce the net value of the overall output – is a crucial part of a feminist approach to productivity.

C. Use discourse-based valuation.

The method used to compare quantities of different things – pollution, widgets, hours of work, stress, whatever the output or input of interest – affects the practicability and political acceptability of the analysis as well as its bottom line. With growing frequency, economic studies which leave out crucial variables, just because they are hard to quantify or attach dollar-values to, are being criticized at the political level because they don't address situations realistically or in a publicly-acceptable way. So new and more accurate methods of commensurating and comparing goods and services are needed. Environmental economists have grappled for decades with the question of how to value pollution and unwanted outputs; the shortcomings of valuation techniques such as "contingent valuation analysis" (using hypothetical studies or questionnaires) and "hedonic pricing" (using market-valued goods as proxies to attach dollar values to externalities) are well known (Field and Olewiler, 1994:130-174). Ecological economists have begun to propose using "discourse-based valuation", in a process which brings together all people or groups with an interest in the political decision for which a valuation of various goods and bads is sought; by discussing their various perspectives on the valuation issues, they arrive at a common understanding of the factors which can lead to political outcomes which are acceptable to all (O'Hara, 1996). Valuation thus becomes a step along the way towards political consensus.

A feminist approach to productivity requires that any necessary common-denominator valuation process go way beyond market valuation to encompass the needs and views of all. Discourse-based valuation is one promising way of incorporating valuation, as a way of arriving at commonalities, into political-economic decision processes and reducing markets' gender biases (Ferber and Nelson, 1993).

D. Gather the necessary data.

Feminist economists have often discovered that the empirical data needed to test or investigate their hypotheses are not available; government statistical agencies often have other

priorities (MacDonald, 1995). Part of the work of building an inclusive and green productivity measure is to start from scratch by collecting the types of data which are required to construct a realistic picture of productivity. Statistics Canada's inclusion of a household work survey in the 1996 census is an example of the kinds of data-collection initiatives which are needed. Other examples include emissions and waste generation by production facilities, worker and community health data, and information on the connections between child-rearing, community resilience, cooperation skills, and people's initiative, ability to work with others, and creativity.

III. Implications and Applications of Feminist Productivity Analysis

As noted above, in a truly feminist and ecological economy/society, the issue of productivity would not be of central importance. This is because there would be no politically-acceptable way to boost productivity of one kind at the expense of others, and because well-being would already be at high levels, with minimum ecological impact -- so few overall productivity gains would any longer be possible. The concept of productivity is more important in a transitional sense, as a bridge from production-focused economic growth (in a system which represses knowledge of, and downplays, the economy=s ecological, social and equity implications) to well-being-focused growth (in a system which cycles and recycles economic and social value in myriad diverse ways to and from flourishing ecosystems). The dynamism of such a sustainable and just economy would come not from the accelerating one-way throughput of materials through the economy, but instead from its vibrant diversity and from constant attempts to reframe value and redistribute power.

In embarking on the four-step process of trying to name all inputs and outputs of production processes, measure them and seek to understand their correlations with production, commensurate them by widening the circle of those consulted about economic value, and derive conclusions about the health of the production process itself, feminists can influence a wide range of political and economic situations and make the point repeatedly that economic and ecological injustices are unsustainable. Slowly but inexorably, this is part of a long-term transition to a better world.

And in the interim, work on feminist productivity measures can also help to advance feminist ecological policy goals in a number of ways. The measurement and acknowledgement of women's economic contributions is a crucial feminist issue. This goes far beyond "wages for housework", and requires deep understanding of the reasons why money values and standard estimation techniques are inadequate to measure activities which serve as the foundation of all economies, both in the North and the South. Demonstrating that fairer and more accurate techniques, such as discourse-based valuation, are workable and can meet feminist concerns regarding equity of all kinds, is an important empirical and theoretical endeavour. Finally, the practice of reworking/reframing old-style conceptual tools, such as productivity, so that they become useful for socio-economic transformation is a feminist strategy as well as an ecological one. Redefining productivity in our own terms is energizing, constructive, challenging, and healthy!

IV. Conclusion

For academics, the implications of feminist productivity analysis are both demanding and exciting. We need to continue to press for the types of data and information we need to develop these ideas further; we must also construct and test valuation techniques which allow generalities to be built from specificities without violence and with respect for the politics of diversity. Theoretical work in feminist ecological economics is advancing the agenda of naming and quantifying gender-based and ecological 'externalities' and previously-invisible inputs to economic processes, and this work is crucial.

The blinkers of traditional economic concepts and their unquestioned use in policy circles will not be removed without pressure from activists. Feminists, environmentalists, free-trade opponents and community development workers, among many others, can find much common cause in the work of insisting on the need for local political processes which give a voice to, name, and actualize diverse realities. Technological advances make possible the generation and exchange of information to facilitate this; communities and political groups need to insist that their interests be prioritized.

These preliminary thoughts about a more holistic approach to "productivity" underscore the need for more holistic political processes as well. The unveiling of 'homo economicus' (Ferber and Nelson, 1993) and the deepening of 'productivity' are both parts of a much longer-term project: the construction of more equitable and less patriarchal societies.

My utopian vision is of a society where "productivity" is irrelevant because everyone is productive in his or her unique way; where human-scale institutions facilitate communication and interrelationships which allow people to work together to sustain themselves within their ecological context, expand their knowledge and enjoyment, meet challenges, and "develop" individually and collectively; and where blanket generalizations and reductionist statements are met with quizzical glances of incomprehension.

REFERENCES

Altvater, Elmar (1993). The Future of the Market. London/New York: Verso.

Bennholdt-Thomsen, Veronika, and Maria Mies (1999). The Subsistence Perspective. Lond/New York: Zed.

Field, Barry C. and Nancy D. Olewiler (1994). Environmental Economics: First Canadian Edition. Toronto: McGraw-Hill Ryerson.

Ferber, Marianne, and Julie Nelson (1993). Beond Economic Man: Feminist Theory and Economics. Chicago/London: University of Chicago Press.

Folbre, Nancy (1994). Who Pays for the Kids? Gender and the Structures of Constraint. London/New York: Routledge.

Hayden, Anders (1999). Sharing the Work, Sparing the Planet: Work Time, Consumption, and Ecology. Toronto: Between the Lines.

Henderson, Hazel (1988) The Politics of the Solar Age: Alternatives to Economics. Indianapolis, IN: Knowledge Systems, Inc.

Jackson, Tim (1996). Material Concerns: Pollution, Profit and Quality of Life. London/New York: Routledge.

Leff, Enrique (1995). Green Production: Toward an Environmental Rationality. New York/London: Guilford Press.

MacDonald, Martha (1995). "Feminist Economics: From Theory to Research." Canadian Journal of Economics, vol. 28 no. 1, February.

Mellor, Mary (1997). Feminism and Ecology. New York: New York University Press.

Mies, Maria (1998). Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour. London/New York: Zed Books.

Nelson, Julie (1993). "The Study of Choice or the Study of Provisioning? Gender and the Definition of Economics." In Julie A. Nelson and Marianne A. Ferber (eds.) Beyond Economic Man: Feminist Theory and Economics (Chicago and London: University of Chicago Press).

Nelson, Julie (1996). Feminism, Objectivity and Economics. London/New York: Routledge.

O'Hara, Sabine (1996). "Discursive Ethics in Ecosystems Valuation and Environmental Policy". Ecological Economics, Vol. 19, No.2, 95-107.

Perkins, Patricia E. (1996). "Building communities to limit trade: following the example of women's initiatives," Alternatives, Vol. 22, No. 1, January/February, pp. 10-15.

Perkins, Patricia E. (2000) "Equity, economic scale, and the role of exchange in a sustainable economy." In F. Gale (ed.), Nature, Production, Power: Approaches to Ecological Political Economy. New York: Edward Elgar.

Pietila, Hilkka (1997). "The Triangle of the Human Economy: Household, Cultivation, Industrial Production." Ecological Economics, vol. 20 no. 2, February.

Schor, Juliet (1995). "Can the North Stop Consumption Growth? Escaping the Cycle of Work and Spend." In V. Bhaskar and Andrew Glyn (eds.), The North, the South, and the Environment: Ecological Constraints and the Global Economy (London: Earthscan).

Waring, Marilyn (1988). If Women Counted. London/New York: Harper and Row.

Ellie Perkins teaches Environmental and Ecological Economics in the Faculty of Environmental Studies at York University and participates in local environmental work in the Riverdale area of Toronto. She formerly taught economics in Mozambique, and worked as a policy advisor for the Ontario Ministry of the Environment.

I would like to thank Diana Huet de Guerville, Harriet Friedmann, Martha McMahon, and another anonymous reviewer for their very helpful comments on an earlier version of this paper.