In this issue of *The Commoner*, we bring together diverse contributions all highlighting what people and communities are up against in creating and sustaining modes of life despite capitalism, whether these modes of life are in the street of Miami, along the rivers of Colombia, emerging from the flows of migrants, or flourishing within the post-scarcity cyberspace. We bridge these with one paper by Ariel Salleh making the case for the need to bring the invisible work of reproduction, what she calls meta-industrial labour, at the center of a Synergistic politics. This labour is characterised by the direct mediation of human and natural cycles whereas productivist labour, is linear and pursues a single goal regardless of consequence. We see this in agribusiness, mining, manufacture, and science as usual, where human instrumental rationality leaves disorder in nature, and human poverty as collateral to it. Globally invisible, meta-industrial work instead maintains the necessary biological infrastructure for all systems of reproduction of livelihoods, but with capitalist expansion, this labour is carried out at growing material cost to the life conditions of meta-industrials themselves - mostly women.

Ariel Salleh*

**Sustainability and Meta-Industrial Labour: Building a Synergistic Politics**

The sustainability question is embedded in the political economy of neo-liberal modernisation; a relentless drive for economic growth, which rolls over the borders of once sovereign states. EU enlargement is a testament to it. And this transnational corporate push, helped along by so called advanced democracies in the North and their financial institutions - IMF, World Bank, and WTO, makes us all members - de facto - of a single global society. Our lives now, from Italian housewives to Chinese factory girls, from Aboriginal Australians to New York art dealers, are increasingly interdependent, and the circle of our citizen responsibility grows. So I’d like to begin by acknowledging the World Social Forums, originating in Porto Alegre, Brazil; travelling on to Mumbai, India; and soon to be held in Africa and the Middle East. Whatever shortcomings these mass gatherings have, they mark a qualitatively new political conjuncture. Globalisation itself, is not new, but the coming together of this socially diverse worldwide resistance to it is. And it calls for new ways of thinking about all our political questions. This is why I want to talk about a synergistic politics, because in order to link ecological, socialist, womanist, peasant and indigenous struggles, we will need to find a polyphonic voice.

The Chilean economist Manfred Max-Neef (1991) also talks about creating change through synergistic solutions. In transport planning for example, the bicycle is synergistic, whereas the car is not. This is because the bicycle
serves many human and environmental objectives simultaneously - getting from A to B, affordability, space saving, non-polluting, low infrastructure requirements, meeting human needs for exercise, sensory stimulation, sociability, and so on. The car on the other hand, may get from A to B, but fails on every other count. Now keeping this image of the bicycle in mind - Is it possible to develop a synergistic politics? For too long, left politics fractured among single issue movements - for ecology - or justice - or cultural autonomy. But their competition for public attention and for government funds allows liberal pluralist regimes to preserve the status quo by setting them against each other.

In the lead up to recent elections, the Premier of my own state, New South Wales, managed to silence both ethnic minorities and feminists with media play on the rape of young Australian girls by unemployed Lebanese migrant men. In the USA, I notice that the tension between ecologists and refugee activists, also lends itself to wedge politics. But the way to move out of a contradiction like this, is to broaden the frame of reference to a point which can embrace both sides with compassion. The current neo-liberal conjuncture offers many opportunities to practice this kind of inclusivity. It challenges single issue movements to make new connections and hopefully, to be more reflexive. In a synergistic politics, an adequate environmentalism will equally serve wage workers, women, peasants and indigenous peoples. Likewise, an adequate feminism will serve wage workers, peasants and indigenous peoples, as well as ecological concerns. An adequate socialism too, must recover its multi-dimensional reasoning.

In this paper, I want to address a global vision of sustainability by discussing these separate movements as responses to kinds of material debt. I will describe debts to Europe’s environment, to the Global South, to Accession States, and the debt to Women in general. I will contrast high tech modernity with the idea of meta-industrial labour as self sufficient provisioning - and end up with some proposals for developing a synergistic sustainability strategy. In the words of feminist Nancy Fraser (1998), this politics will mean more than a renewal of distributive justice, parcelling out a fair share of goods and services. It will call for the political recognition of sexed and cultural differences. And beyond this, it will be participatory in a deeper and a wider sense than we have known. It will be participatory on a global scale.

The EU and Its Material Debt To The Environment
It is a truism that the capitalist division between mental and manual labour alienates individuals and damages social relations. In addition, critical thinkers like Alfred Sohn-Rethel (1978) teach us how modern production processes lead to highly abstract professional knowledges, thin on content and fat with positivist, mathematised formulae. The UN System of National Accounts is a classic case. And as UK sociologist Peter Dickens (1995) comments, such expertise, dislocated from its material ground in social and ecological relations, gets traded as a commodity. It is often inappropriate, even inaccurate. What I know of the emerging EU Sustainability Strategy suggests its origins in this limited social context. It reflects a hard and fast
division between mental and manual labour, as well as between economic production and social reproduction. This structural dissociation points to a self contradictory program. On the one hand, it embraces ambitious geopolitical enlargement by means of an aggressive neo-liberal model of economic growth; on the other hand, it aspires to enhanced social cohesion.

But what does the record say about neo-liberal efforts to manage environments sustainably? Ecological modernists like Arthur Mol (2000) propose that the way out of the current ecological crisis is to go further along the high tech route, but this entrepreneurial thesis does not appear to hold up. In making this assertion, I rely on recent work by American colleagues, Richard York and Eugene Rosa (2003). Having undertaken a comprehensive review of studies on the relation between high industrial growth and environmental sustainability, they find no empirical evidence for optimism. Neither business initiatives nor state driven environmental management of industry significantly alleviate the impacts of growth oriented production. Institutional solutions for ecosystem protection cannot be relied on.

From a deconstructive reading of ecological modernists, my sense is that they inhabit a quasi-fantasy world where economic progress is reified and treated as somehow natural and inevitable. It’s not surprising then, that sociologist Allan Schnaiberg (2002) discovers proponents of eco-management basing their optimistic environmental conclusions on selectively sampled research findings, and much of this, methodologically flawed. Enthusiastic industrialisers tend to overlook equilibrium effects as one economic sector surges ahead with eco-efficiency devices and another declines. They make misleading single variable assessments of progress as one polluter like coal is replaced by another like nuclear power with multiple attendant risks. The preferred organisational focus of ecological modernists often misses subtleties at the micro or behavioural level. For example, bald energy figures based on a category like household consumption, can mean many different things.

Applying the ecological footprint measure of consumption devised by Mathis Wackernagel and William Rees (1996), it is technologically developed nations that show the highest environmental toll. Far from the expected trickle down effect from educated affluence to green awareness, wealthy states are consistently the worst polluters. Finally, the popular dematerialisation argument put up by natural capital theorists Paul Hawken, Amory and Hunter Lovins (1999), is also unsubstantiated. Small capitalised improvements in eco-efficiency may actually lead to more production, and thus more energy use, as Schnaiberg’s classic treadmill of production analysis illustrates.

Other illusions of dematerialisation result when resources drawn from overseas are not factored in. And transport associated with global trade may give rise to more externalised ecological costs, through ocean oil spillages; trans-continental movement of disease organisms; and greenhouse gas induced climate disturbances. By the holistic reckoning logic of Barry Commoner’s (1971) thesis - no such thing as a free lunch, or Ivan Illich’s technological threshold (1977), dematerialisation is in reality a super-
materialisation. It simply involves a material displacement and is, therefore, an ecological debt. What I find disappointing is the fact that key global environmental NGO participants at the World Social Forum, have not assimilated the scholarly expose of ecological modernisation. A similar observation has been made by Saral Sarkar (1999) in relation to some Green party policy. In terms of a coherent sustainability strategy, the message is simple: an inverse relation exists between growth economics and sustainability.

The EU and Its Material Debt To The Global South

Well now, the humanist might concede, even if highly industrialised production systems can’t fully protect our ecosystems, surely capitalist growth provides a standard of living which meets the EU objective of stronger social cohesion? But the key question in this rapidly globalising world is - Benefits for Who? Cohesion for Who?

When policy experts in the North look at the Global South, they often fail to distinguish between the desires of a Southern minority middle class urban elite, groomed to a consumer lifestyle by their colonisers, and perspectives of the rural dwelling Southern majority. Europeans understand their cloned Southern elites, so tend to essentialise their views in debates about what kind of development Third World peoples want. This same short sighted reasoning judges small farmers in the Global South as backward. Yet Vandana Shiva (1989), nuclear physicist turned ecofeminist, demonstrates that prior to modernisation pressures, peasant and foraging communities have been running self reliant economies, which protect their environment at the same time. Peasant women have expertise in managing local water catchments, and are adept in breeding crops and medicinal plants, saving and sharing seed stocks: the precautionary principle is second nature here. But subsistence farmers are pushed off their lands by agribusiness ventures serving Northern consumer tastes and Southern elite pockets - oil wells, beef cattle ranches, coffee plantations and now GM cotton.

Under the mystique of catching up with the North, Third World communities are urged to take WB loans to set up cash cropping and other export led development projects. So, a once self sufficient Argentina, now relies on imported food - thanks to the IMF. Capital works brokered as aid by Export Credit Agencies leave thousands of Cambodian rice farmers homeless. Indigenes in West Papua and small holders in Nigeria are coerced from their land by transnational mining firms, backed up by military violence. Filipino NGO leader Walden Bello (2002) describes how the neo-liberal development process destroys subsistence economies, and results in ethnic strife, farmer bankruptcy, landless refugee populations, sex tourism and mail order brides. The neo-liberal push to open every aspect of daily life to competition, sees IMF imposed structural adjustment measures applied to hospitals, welfare, and education. While disengaged wage workers fall into unemployment, government moneys saved in this way, service overseas debt or armaments purchases from the G8. Water supplies, social services, even jails, are floated on the international market as profit making concerns.

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Curiously named free trade treaties, en-force global deregulation of environment, industry and health standards everywhere. While in the Global South, the material bodies of small farmers fall ill from purchased pesticides and indigenes in mining areas fall ill from toxic streams. At the turn of the millennium, people of the isolated Pacific island of Tonga, find themselves struggling to hold on to their own blood tissue, as their government reviews an Australian pharmaceutical deal to patent this so called natural resource in exchange for a hospital. How would a fine EU clause like ‘protecting bodily integrity’ apply in circumstances such as these?

Self-styled advanced nations benefit from the unspoiled eco-metabolism and rich biodiversity of the Global South - the rainforest carbon sink is one example. Biodiversity is another, for the non-elected WTO with its Trade Related Intellectual Property Rights mechanism, facilitates corporate biopiracy of indigenously developed foods and medicines. Economic historian Joan Martinez Alier (2002) and Equador Accion Ecologia campaigners describe all this as an ecological debt owed by peoples of the North to peoples of the South. In fact, citizens of the North owe two kinds of material debt to the South: one based on benefits extracted from their habitat; another based on benefits extracted from their bodies. Yet the consumerist North, roughly 20% of the global population whose footprint stamps out 80% of global resources, hypocritically blames population numbers in the South for the global environmental crisis. The sophisticated meta-industrial resourcing techniques used by these land based communities are invisible to the eurocentric eyes that frame WB programs, or even the typical sustainability strategy.

**The EU and Its Material Debt To Accession States**

To digress for a moment: Australia is a small nation of 20 million people on a land mass the size of greater Europe. We are not exactly Global South, nor an accession state - at least not of the EU, and we want to keep it that way. But many of us are fighting right now to hold our sovereignty against a bilateral A-US Free Trade Agreement to be put in place later this year. Under the economic noose of this agreement, it will be very difficult for future Australian Governments to pursue an independent foreign policy. The AUSFTA proposal threatens our Government’s ability to regulate education and welfare services, quarantine inspection and food labelling, foreign ownership of our airline Qantas, our telecommunications body Telstra, and what we see on our TV. Australian film makers and writers will not have the same copyright status as US artists. Australian sugar and banana exports will be sacrificed, and wheat, barley, and rice farmers bankrupted. - The suicide rate of our young men in farming communities is already one of the highest in the world. My home is in the driest continent on earth - what a disaster if water management falls into the hands of fly by night contractors.

It is plain that neo-liberalism with its twin objectives of economic expansion and social cohesion is an incoherent philosophy. So as the EU expands in a horizontal direction, through economic trade across the globe and by geopolitical enlargement, can it hold together in the vertical dimension? In other
words, can local economies remain intact? Can cultural diversity be honoured? How will the voices of peasants, wage workers, and women be heard in the new union?

If the environmental critique of ecological modernisation is correct, there’s little reason to believe that the ecosystems of accession states will automatically improve with the adoption of new manufacturing technologies or bureaucratic controls. Besides, the WTO now mandates deregulation of environmental standards, as barriers to free trade. Many environments in accession states are already damaged from the excesses of communist productivism. But it would be especially sad if Europe’s new leaders fell in with the triage logic of former World Bank deputy chair, now Harvard president Larry Summers, who once remarked that an already spoiled Third World is the perfect dump site for industrially developed regions of the North. Anamaria Slabe (2003), from the Institute for Sustainable Development in Slovenia, fears increased dumping of unpopular GM seed stocks, as agroindustry gears up in the accession states for a new wave of export led development.

Social justice activists contend that growth oriented consolidation will place new EU nations under structural adjustment conditionalities parallel to those experienced by developing regions of the Global South. In other words, a Europe-wide neo-liberal economy may lean disproportionately and undemocratically on the energies and skills of people in accession states. With privatisation of these once communist economies, agricultural and factory workers already face flexibilisation, intensified competition for jobs, and collapse of the social security net. Political scientist Charlotte Bretherton (2002) describes a backlash on women in Poland now forced back into the home, into prostitution, or emigration to established EU states as cleaners, nannies, or invisible labour in laundries and restaurants. Some impoverished migrant women may become baby farmers for privileged middle class European couples. Already many capitalist success stories are coming from the deregulated post-communist region, where labour costs are so readily negotiable. But the material fallout from every global shift in free enterprise is unemployment, alchoholism and stress related illness, ethnic tensions, and sexual abuse of women. In fact, women’s bodies will be the shock absorbers in the race for empire.

The EU and Its Material Debt To Women
When planners play with social indicators, they often forget the synergistic political fact that women constitute around 50% of each rural community, 50% of each ethnic minority, 50% of wage labour, etc. So I agree with feminist energy campaigner Ulricke Roehr (2001), that EU social statistics must be disaggregated by gender, without delay. The EU is committed to advancing women and women’s perspectives in every field. Yet as policy analysts Genevieve Painter and Karin Ulmer (2002) point out, progress on mainstreaming has been painfully slow, not at the grassroots, but in the administrative centres. Again, Sabine Hofmeister and Ines Weller (2004) observe that while there is a will to include gender in sustainability dialogues,
this usually envisages women as objects of policy innovation, numbers of women accessing services or recycling etc.

Of course, this makes perfect sense, in a modernising neo-liberal society whose thrust is towards competition and homogeneity - deeply patriarchal preoccupations. Just as in Third World development, so in the EU, gender emancipation is a matter of socially cloning everyone to fit the global norm of the urban, white, middle class, man of a certain age. Thus mainstreaming tends to be reduced to equality indices, an abstract distributive notion, an assumption that a woman can and should be allowed to do everything that this average man can do. The actual wording of the EU policy goes deeper, but what counts, is how the policy gets to be interpreted and implemented.

A related aspect of the mainstreaming approach is its formulation in terms of gender as distinct from sex. Gender is a very sanitised indicator of the respective positions, roles, and opportunities of men and women within social structures. The sociological concept of gender neutralises or disguises the biological materiality of women’s sexed difference, in favour of men as the norm. For some of us, women free to design our own lives, this may not be a problem. But the life chances of most women globally speaking, are shaped and constrained by their embodied sexuality. Even in Germany, I have heard it said that to be poor in this country today, is to have children. This means that there is a profound material debt owing to mothers who labour to bear and raise those children - the next generation of productive workers. Perhaps the deletion of sex as an analytic category has had something to do with this?

One reason for the European preference for talking about gender rather than sex differences, may be that sex as a biological referent is seen as demeaning. But if this is the case, it implies a major collective rejection of women. Besides, men also have bodies - and men’s bodies too, carry a share of the toxic load generated by industrial growth economies. So mainstreaming is discussed as closing a social gap. It conveys a sense that women are incomplete subjects needing the special protections of an enlightened policy framework. Yet in truth, the functioning of modern societies is fully dependent on the autonomous subjectivity of women. And an inclusive society will deal with women’s reproductive contribution by giving it the full status of labour.

Reproductive labour involves the maintenance of complex relationships across five dimensions - ecological, biological, economic, social, and cultural. Addressing the economic aspect first - socialists have long recognised the material debt owed by capitalists to wage workers, whose embodied labour adds value to the saleable product. And in parallel with this, a literature exists on how women’s unpaid domestic services are systematically absorbed and then erased in the capitalist economic equation. Australian Bureau of Statistics figures put this unspoken surplus value at around 60% of GDP. The phenomenon of women’s labour exploitation has been examined by innumerable scholars in Europe and elsewhere - among them Finnish UN activist Hilkka Pietila (1984), former New Zealand Parliamentarian, Marilyn
Waring (1988) and New York academic Silvia Federici (1999). An EU which rules all forms of labour discrimination unconstitutional, must pay a wage for reproductive labour.

But this quantitative response meets only the distributive aspect of the sexed-gender debt. A post-patriarchal society will also give recognition to qualitative inputs from women - like, how politics can be re-oriented to life affirming rather than competitive and militarist values. An idea like security, for example, is a heavily sexed-gender construct. Many women’s embodied biologically based experiences and their socially constructed care giving labours teach them relationally based reasoning and skills. Societies tacitly rely on these synergistic capacities for social cohesion. Socialist feminists like Heidi Hartmann (1981) have analysed this as social reproduction; Right wing American philosophers like Robert Putnam (2002) try to harness it as social capital; ecofeminists such as myself (Salleh, 1997), explore its ecological relevance. Either way, in a time when the EU is planning strategies for geopolitical enlargement, in conjunction with justice and sustainability, women’s integrative thinking and relational insights will be of immeasurable political value.

The EU and Its Meta-Industrial Alternatives
The issue of how to address sex and gender differences has been debated by feminists for decades now. But globalisation and the coming together of ecology, socialist, womanist, and postcolonial struggles, re-frames that argument in a new conjuncture of historical forces. And in this synergistic politics, the notion of reproductive labour is an integrative node point. It defies given sociological constructs of gender, class, and race, since all of us will undertake some kind of reproductive labour - economic, cultural, biological, ecological - at some stage of our lives. However, because this kind of work mostly takes place at the unmechanised margins of neo-liberal growth economies, in households, in rural areas where small farmers still operate, and in indigenous hunter gathering communities, I prefer to replace the term reproductive labour (which it certainly is) with the broader expression - meta-industrial labour.

Meta-industrial labour is characterised by the direct mediation of human and natural cycles. Conversely, productivist labour as we know it, is linear and pursues a single goal regardless of consequence. We see this in agribusiness, mining, manufacture, and science as usual, where human instrumental rationality collides with complex patterns of material exchange leaving disorder in nature, and human poverty as collateral to it. Globally invisible, meta-industrial work maintains the necessary biological infrastructure for all economic systems, but with capitalist expansion, this labour is carried out at growing material cost to the life conditions of meta-industrials themselves - mostly women. This is not the place to go into a close phenomenological analysis of meta-industrial practices - domestic or indigenous. But examination of the common epistemological features of such work, reveals why it is an ecologically sound form of human provisioning.
British social theorist Barbara Adam (1998) sees this engagement with nature in terms of interlocking cycles of human and ecological time. But in the industrialised North, people’s sensitivity to nature’s implicate timings has been colonized by the clock of capitalist production and its administering state. When the material substrate of life is processed by manufacture and put up for a price, the socially contrived focus on things as such, misses the myriad of reverberations that hold matter together. Ecologically modern citizens are turned into mere consumers, disempowered by their one dimensional economic landscape. Meta-industrial labours enhance metabolic flows between humans and nature, and flows within ecosystems. Such labours manage risk by observation, timing, and attunement. This hands-on reproductive interaction with habitat creates lay expertise, which is both economic and scientific. - Can EU policies for sustainability be informed by this kind of knowledge?

From the World Social Forum to the internet, we see how campesinos, indigenous peoples, and housewives, increasingly reject the individualistic consumerism imposed on them by a capitalist patriarchal North. From Ireland to Australia, people are setting up frugal bioregional economies, communal farms, permaculture, LETS schemes, eco-villages and local organic markets. Landless people’s movements in Latin America and France, are reclaiming what we once shared as Commons. People want autonomy, security, clean food, clean water, and shelter. The ecofeminist analysis of Maria Mies and Veronika Bennholdt-Thomsen (1999) develops a rationale for this subsistence alternative. And it is based on the meta-industrial practice of reciprocity in diversity. Corporate science, incompetent high technologies, and clumsy state bureaucracies are ineffectual. They operate in false idealisations, and they cost the earth. By contrast, self-managed land based economies generate empirically tested understandings that are not only environmentally benign, but creatively social. As well as meeting material needs, their synergistic logic fosters learning, participation, innovation, ritual, identity and belonging.

Towards a Synergistic Sustainability Strategy
Mega-economies and supranational states like the EU, must externalise social and ecological costs to remain viable. Their sovereignty is therefore hollow and trumped up, since they exist in a condition of material debt - owed to nature and to the bodies of others. Not surprisingly, the traditional disciplines of the North - from religion to economics - are culturally hierarchical and devalue meta-industrial work. This is clearly one of the reasons why the varieties of material debt have remained invisible for so long. It may also explain the European preference for the sex neutral term gender in the discourse on mainstreaming. However, without inputs from people with practical knowledge of how human bodies mesh with biological and ecological cycles, we end up with reified and inaccurate policy. - Now while dialogue between business and trade unions has become routine in the modern democracy, it remains narrowly focused on the distribution of goods. In order to extend the conversation to relational questions like sustainability and social cohesion, meta-industrial labour needs to be present. But this kind
of enlargement - vertical as distinct from horizontal - implies the political recognition of sexed and cultural differences. And it implies a far more comprehensive notion of citizen participation than we have known to date - a global one.

What would the agenda of this post-normal political meeting look like? Here's a thought experiment -

1. Can we place EU sustainability strategy in a synergistic political frame - one that integrates ecological security with global justice, gender reflexivity, and cultural diversity?

2. Can we identify and name meta-industrial i.e. materially reproductive labour wherever it occurs in EU policy?

3. Can we track and path analyse the economic and ecological contributions of meta-industrial labour?

4. Can we clarify the global structure of material debt by comparing the average ecological footprint of the EU citizen with one from the Global South?

5. Can we clarify the social structure of material debt in the EU by disaggregating the ecological footprint by class, ethnicity, gender, and age?

6. Can we foster capacity building by rotating opportunities for meta-industrial work in the EU and into the Global South?

7. Can we enhance global citizenship by asking meta-industrial workers for advice on which manufactured products are absolutely necessary?

8. Can we calculate in Euro value, the resource debt in terms of goods imported to the EU from the Global South?

9. Can we calculate in Euro value, the resource debt in terms of goods bio-pirated to the EU from the Global South?

10. Can we calculate in Euro value, the ecological repair costs of industrial pollution exported by the EU to the Global South?

11. Can we calculate in Euro value, health repair costs to the bodies of EU wage workers, farmers, and mothers, tied into de-regulated industrial regimes?

12. Can we make comparable measures for the Global South?

13. Can we calculate the EU's material debt to women as an average hourly reproductive labour wage - under the heads - biological
reproduction, child socialisation, sexual servicing, elder care, household maintenance, subsistence cultivation.

14. Can we make comparable measures for the Global South?

15. Can we recover sovereignty of the Commons - land, water, and biodiversity in the EU - by helping local meta-industrials take over the commons for subsistence living?

16. Can we find a way to dual power EU institutions, when these are not responsive to our globally democratic sustainability strategies?

As the World Social Forum shows, meta-industrials North and South have a common stake in challenging self contradictory neo-liberal notions of high tech development. But more than this, their understanding of reproductive relations can ground a generous synergistic politics, addressing class, race, gender, species and habitat, simultaneously. This is an intellectual gift to people like ourselves who put life before empire.

References


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