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Heterodox economics :Economics and plurality Concepts and methodology in Green Economics: a pluralist Heterodox concept for economics: Inherent conflicts and dilemmas within the new discipline of Green Economics Miriam Kennet June 2007

This paper aims to introduce the Green Economics as a new heterodox, pluralist and progressive economics discipline. It uses multidisciplinary methodology to link poverty and species extinction. The paper first introduces the problems and describes why they are important, and then assesses the characteristics of mainstream economics and some of its foundational ideas and aims. Green Economics is then discussed and its inherently pluralist and heterodox approach is described as well as its two constituent parts- a) green or environmental, being simultaneously concerned with natural sciences, and b) the economics part which is predicated on social theory- and social justice, with an approach to economics which selects from various schools and which is mainly multidisciplinary, borrowing heavily from philosophy and anthropology. Its perspective on social justice and therefore its approach to the central importance of poverty alleviation, is also explored. Due to its ambitious scope and the fact that its aims of meshing simultaneously environmental and social justice, are often regarded as contradictory, the dilemmas inherent within a green social analysis and practice are raised.

Heinemann, (2007) strongly believes that this is a progressive approach, which the literature defines as one which builds on older learning and re-invents ways of understanding and explaining findings from older schools. Economics generally is different in this respect from other sciences in that it does not totally disregard previous learning from its own discipline in the longer term. This aspect is possibly an outcome of the influence of the German historical school and also possibly from the evolutionism of Darwin and Spencer, and Veblen who regarded as the current outcome of an age-long accumulation of human experience. (Negishi : 1989 :18)

A pluralist approach to economics, such as Green Economics, is justified in the paper as being particularly fitting as a tool to solve such pressing current global issues as global climate instability. This is based particularly on its twin aspects, both of ecological and economic, and additionally its attitude to the pivotal problem of poverty. It uses new assessments of reality, taking the perspective of the kinds of receipt of, and recipients of processes and acts of justice (Dobson 2000) rather than the measurement of the actions and actors from a corporation which aim to choose to provide or distribute justice, distribute economic resources or responsibility as provided for in such mainstream economics and business literature examples as stakeholder theory Freeman (1984).

Keywords

Pluralism ,progressive economics, green economics, heterodox economics
Environmental and social justice, poverty, bio -diversity

Biographical Notes:

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Article

Is Green Economics inherently a pluralistic discipline as it provides environmental and social justice equally and simultaneously as a means and as an end.

1. The pressing problems of today: the situation to which mainstream economics has inadvertently contributed.

The Millenium Ecosystem Assessment Synthesis Report (2001) states that, *Any progress achieved in addressing the goals of poverty and hunger eradication, improved health and environmental protection is unlikely to be sustained if most of the eco-system services on which humanity relies continue to be degraded*, quoted in Spicer, (2006 :154). Thus it is clear that an approach dealing with solely one aspect of social or environmental justice is actually doomed to failure and only a pluralist and composite approach is now believed to be likely to work.

Green Economics is such an attempt to provide an economic framework for environmental and social justice to be received by all its stakeholders, including all people everywhere, the biosphere and the planet.

In so doing it acknowledges that the economy as currently constructed, does not even conceptualise these stakeholders .but factors them out together

with reality from its scope using *ceteris paribus* in its quest for promoting and creating economic growth..

This paper discusses the problems of today, associated with lack of reality and pluralism in economics analysis, and how the Green Economics discipline is attempting to reorientate economics into a pluralist, heterodox multidisciplinary project, and in particular the paper focuses on beginning to discuss the issue of whether plurality and multidisciplinary and provided by Green Economics will help to re-orientate economics as advocated by Lawson (2007) and Davis (2003) in order to start to provide a methodology for solving some of these problems.

However on the ground, the reality of what the economics system has currently constructed looks rather different from economic development and prosperity.

Today's pressing problems are highlighted in some of the recent environmental and poverty statistics.

Giradet (2007) advises that Britain had its wettest winter in 270 years of record keeping, in 2001, northern China suffered from blizzards in which many of 100,000 herders starved, 40 people died in Pakistan in a heat wave and 92 hurricane events were recorded. In 2003, 1400 people died from heat in India and Pakistan, and 35,000 people in Europe died from the heat as well as the catastrophe in New Orleans which hit the poorest sections of the population. One quarter of species are predicted to not survive the century (Stern) and IPCC () and in a report in New Scientist (New Scientist 2007) one quarter of UK species are heading north due to being unable to cope with the new climatic conditions. (Berry). Claussen (2003) reveals that « the interaction between components of the climate system is non – linear, Claussen(2003 : 430) with multiple equilibria involved. These issues are caused by velocity potential patterns, atmospheric flow, and the Hadley Walker circulation shifts to the west, and there is albedo induced aridification, and changes in surface conditions directly influence vertical motion, and flow in the tropics, but not in high latitudes., as well as influences proposed from atmosphere vegetation sea ice systems in high northern latitudes. (2003 :420) Claussen . Climate (1908) Hahn is considered as *a sum of meteorological phenomena which characterise the mean state of the atmosphere, at any point of the earth's surface,* but now it is in terms of state and ensemble statistics of the climate system (Peixoto and Oort 1992), and it consists of the abiotic world, or physical climate system and the living world called the biosphere,. The physical system is further subdivided into open systems namely the atmosphere, the hydrosphere and the cryosphere (ice) the pedosphere ; the soils, and the lithosphere- the earth's crust , and the mantle Claussen (2003 :432), the interaction of all of which affect the climate and influence the economic resources and potential. For example changes in land surface temperature give rise to an additional warming of some 4% at regions north of 60N in spring and 1 % in other seasons, Claussen(2003 :424). The additional warming is mainly caused by a reduction of snow and sea –ice volume by nearly 40% which in turn reduced the surface albedo in the Arctic region by nearly 40% (1996 tempo. There is also the taiga tundra feedback for example which is a problem of vegetation snow and albedo which enhances summer warming on average over northern hemisphere continents by 1.7 degrees C in summer, in the past and now 2.2 degrees C., but is increased by 2.5 % by

synergism of tundra feedback and arctic sea ice albedo feedback. And it is this synergism which enhances winter warming –so here studying one mechanism in isolation failed to reveal the answer- only a composite plural question produced the predictions that made the model fit the evidence. Claussen (2003 : 426) .

Importantly for a green economics analysis including the biosphere and planetary systems in our economics calculations can begin to factor in resources available and also impacts at each level, which are now an integral part of economic responsibility and social and environmental justice.

Economics now needs to be far more mature and complex than current mainstream allows for. How can one unique equilibrium theory (Walras) these lead to abrupt transitions in vegetation structure and the system becomes less stable, eg as happened around 3500 years ago, and such changes are not gradual but in steps, and faster in some areas than in others and some quite abrupt as in the Eastern Sahara 5500 years ago according to marine cores drilled., and that such changes are amplified by biophysical feedbacks, and abrupt aridification occurs, and there was a very a fall in precipitation reflected in an abrupt shift in terrigenous material around 5000 BP from 40% to 60%. in 5500, to Atmospheric CO₂ 9000 years BP was approximately 20 ppmv lower than pre industrial value of 280. Therefore a complete simulation of Holocene climate changes requires inclusion of biochemical models. This is being done to include terrestrial and oceanic carbon cycles into a climate model. (New Scientist) *This requires information about oceanic biochemistry, and detailed paleobotanic reconstruction of holocene carbon pools as well as oceanic biochemistry*, Claussen (2003 : 434.) which are completely beyond the scope of main stream economics –but which are one of the few ways to predict the future of agricultural economic production both local regional and global.

How can we rely solely on neo classical economics to economics provide the information we need ? In fact it appears that sub saharan africa's share of world exports has fallen from 1.0 to 0.3 percent between 1960 and 2002, 160, Wallis 2007) and the average Sunday lunch had travelled 20,000 miles. 161 (wallis 2007,) using up resources and actually contributing to these problems of global environmental and social justice, and so invisible have these problems been within economics that Oxfam itself used armbands for its make poverty history campaign that actually came from indentured labour as supply chains have been so hidden and so misunderstood the implications of today's economy for social and environmental justice and its mechanisms.

Kennet and Heinemann (2006).

The Royal Economics Society published an analysis of poverty and social and environmental justice in April 2007, Collier 2007). The figures show that main stream economics has not delivered on either the global elimination of poverty or on environmental justice. Kennet (2007) , Kennet and Heinemann (2006). Although globalisation is powering growth for the four billion, it is not working for the bottom billion, indeed the very success of the four billion has made it much harder for the bottom to get started. Collier (2007) suggests that a critical mass of educated people is needed, and also that war is more likely in those countries setting up a cycle of deprivation. He further suggests that easy money from valuable natural resources leads to the undermining of governance, and impoverishes the country which is a pattern he is finding

repeated often. He proposes peacekeeping , and security guarantees, trade policy, advocating neither protectionism, nor fair trade, but temporary start up protection from more advanced start ups and other direct competitors in European markets., international standards and codes of conducts and codes of governance.

Further the Stern report and the Millenium eco system report and IPCC (Kennet 2007) have all published worrying findings about species extinction – over a quarter of species under threat by the end of the century, climate instability and warming by up to 5 degrees centigrade, farming only possible in the polar regions, and numerous other economic disruptions
The climate is very unstable and our economy which depends on it- as well as our civilisation is currently threatened with conditions of species extinction and climate conditions never experienced in the 10,000 years since our civilisation began.

This leads to a conclusion that either we must urgently reform the economics system which was the justification of these developments or we must adapt our civilisation and our economy to these new conditions if that is possible and indeed we probably are going to have to do all of these things.

2. Main stream economics characteristics

However the main stream economy that has led us to this position is narrowly focused on profit maximising behaviour, “ *pleasure and pain are the ultimate objects of the calculus of economics.*” Jeevons (1871), and Wickstead (1910) who said *economics was the psychology of the choice between two alternatives, and is not constructed to be able to provide wide, complex, non mathematical inter and multidisciplinary decision making.* Mill saw it as *imaginery and not an exact science, and political economy is concerned with him who desires to possess wealth, and who is capable of judging of the comparative efficiency of that end.*” Mill in Udehn(2003: 144) .

3. The need for a pluralistic approach provided by Green Economics

Therefore I am arguing that a more pluralistic approach,(Davies 2006) And Soderbaum (2008 forthcoming) involving natural science data for its modelling and information combined with an analysis which includes information from other disciplines such as are being rapidly developed in a green economics are very urgently needed and the only way that economics can adapt to meet these changing requirements and to meet the needs of a much wider group of its own stakeholders- which green economics now defines as the planet, and its physical systems, the biosphere, and all people everywhere, not only rational economic man.

Green Economics has been constructed on environmental management from such writers are O’ Reardon and Redcliff on Sustainable Development and also green theory and literature, as well as biodiversity research Berry, (2008) but equally is predicated on simultaneously addressing poverty prevention, Barnett (2006,) arguing that having either social or environmental justice without the other, does not work. Traditional mainstream development theory also is based around Rostows (1990) evolving model of economies working through his five stages towards mass high consumption from indigenous economies and green economics does not regard a “man in a business suit” as the pinnacle of all the stages of economic growth. Quite the contrary – we now know that this over consumption is one of the main factors harming the

planet and using up resources and creating more poverty. (Kennet and Heinemann (2006).

The issue of green economics- an inherently pluralist discipline? How a heterodox pluralist approach enables green economics to meet the challenges and conflicts involved in trying to provide social and environmental justice.

The Green economics approach which aims to create a methodology for achieving social and environmental justice as equal ends and means. *“That state, organization, and place of economics are argued to be undergoing change as a result of contemporary historical forces. This implies that the meaning and character of pluralism in economics is also changing, and that the nature of pluralism in economics (and in heterodox economics) needs to be re-conceived accordingly.”* Davies, (2007) abstract accessed on web, May 2007, and we argue here that a pluralist approach today has no meaning unless it addresses the foundations of all economic transactions, the social and environmental context without which it would not exist at all and in which it is actually firmly embedded but which as been denied under ceteris paribus and the marginal revolution for two hundred years. The costs of climate instability alone, quite apart from other social and environmental dilemmas will start to overtake neo classical economic forecasts, for example 40% of species will be extinct by the end of the century and this will affect the global economy which depends on other species to a large extent not least to provide agriculture and food and also to provide a gas balance to maintain climatic conditions favourable to mainstream economic growth. This kind of aim and understanding requires consideration of economic assessments to be complex, specific in time and place, and can no longer be one dimensional and easy to represent on a graph or simple model. Profit maximization to meet short term economic goals are no longer enough if for example measured against sea level rise which may submerge the trading entity or its host or home town. However the economic assessment simply has to have a more complex set of considerations and data included in it, and these must include the resources from the natural world and the social conditions governing its inputs and acceptability of outcomes from a moral perspective. However all these issues are dependent on the power situation of the actors and so this must be factored back into economic discussions. A green economics assessment is therefore predicated on 4 very practical areas of influence in most decision making. This gives it its pluralist character.

The Green Economics approach also is inherently pluralist and heterodox as its two constituent parts-a green or environmental approach is largely one of natural sciences, and the economics part is predicated on social theory- and social justice with an approach to economics which selects from various schools and is mainly multidisciplinary, borrowing heavily from philosophy and anthropology and takes nothing from economic constructs as a « given ». Further such writers as Tony Lawson (Cambridge University) argues that *« For I am indeed convinced that a pluralistic orientation is desirable, not least because it seems essential both to human flourishing in general and to knowledge advance in particular.*

The discipline of Green Economics operates within a pluralist and non-orthodox framework. The Green Economics Institute specifically inhabits the space between academia, politics, business and campaigning, and within its academic orbit it builds on transdisciplinary ideas and holistic arguments. (Bloom). It links social sciences, using information from philosophy, history, archaeology, economics, psychology and from natural processes and biology found in natural science. Its practitioners, in general, are multidisciplinary at the highest level, with many reaching professor status in one field and realising that the answers to social and environmental equity and justice elude them when they reach the pinnacle of a single academic discipline and thus seek a pluralist approach through using green economics methodology which does not bound the learning, questioning or knowledge applied to specific economics dilemmas. It does not find its concepts of equilibrium. Walras and Marshall in Turner and Roth (2003) for economics aims on price, but rather on need and requirements and rights, benefits for all with strong foundation concepts of sharing out nature's bounties.

4. A Green Economics multidisciplinary approach to social and environmental justice

It is therefore useful to investigate how the term green economics might be applied and how it might help, as well as exploring the inherent difficulties with the concepts of social and environmental justice and the need to have them work together in spite of the contradictions of less poverty leading to more consumerism and more poverty leading to more environmental degradation. (Singh 2007), (Potter 2004). I argue for the establishment of a whole new discipline (Anderson 2006) Reardon (2007) to cope with the demands needed for economic to be re-orientated as requested by Lawson (2007) and Davies (2007) into which we recommend as a Green Economics in the sense of economics with the aims of simultaneous social and environmental justice which could provide a future for our economy for the next 10,000 years (Kennet 2007).

It is therefore important as a further research agenda to establish what social justice entails, (Sen), (Rawls) (Sayer 2006) and to establish its meaning within the context of economics and within green economics in particular. It is important to establish and understand its complexities in the real world and in implementation as an end and also as a means, and also what environmental justice comprises. For example learned discussions about poverty often do not include the issue that more people in poverty are women or that in the UK only 3 economics professors are women. If economics as a discipline has an aim of increasing social justice or solving poverty issues, as the Cambridge Journal of Economics claimed in December 2005, then it is not surprising that by excluding half the population in practice from top economic decision and theory making, the practice that exists continues to exclude them in practice and green economics solution would perhaps be to ensure balance at this level. (Jacobs Royal economics society journal newsletter (2006)). This is also a good example of the fact that there is no evidence that women are not as good economists as men, but rather the power deconstruction (Foucault) in the way described by Foucault that institutions even ones promoting justice reflect and promote the values and power systems found in

the society to which they belong. As with all things pluralism and its counterpart diversity leads to a different result. Economics, mainstream or heterodox cannot advocate pluralism unless it is willing to accept such different outcomes wherever they may lead.

Instead if we examine economics as currently constructed we find an orthodox rigidity predicated on mathematical models employing positivist data on rational choice assumptions on the part of those engaged in what has been termed a commodified world focused on an international market place which tends to exclude all other aspects of society and non commodified economy and of reality, empiricism or facts. Rational choice theory, game theory etc are all aspects of understanding purchasing decision making on the part of rational economic men, in a perfect market when they have power and assets to make unfettered choices in the absence of limiting institutional or regulatory presence. It does not address the access to this universal market for other players who lack the ability or resources to enter it and most importantly it does not address the non commodified market activity which Williams claims is very large and important and it does not address any of the effects or impacts of such transactions on the global stakeholders, other people, the biosphere or the planet. He cites this as including, subsistence work (Mies) self provisioning, seof servicing, housework, domestic work, and also where goods and services are exchanged but no money changes hands such as unpaid community work or voluntary work or community self help where the profit motive is absent. He states that some writers are agreeing that every human transaction is being transformed into transient market exchange with the near complete penetration of the market into our lives. but Williams argues that there is no evidence for this at all, although it is a widely accepted thesis. Williams, (2005 : 14). Sayer (1997) is interesting on this point and argues that a *commodity can be valued for its intrinsic use value but to the seller it is unequivocally a means to an end, to the achievement of the external goal of making a profit and if it is unlikely to make a profit it will not be offered for sale.* In Williams (2005 : 16). So here lies the interest of green economics, How do we return to an economics which includes in its scope the consideration provisioning and producing goods and services which people need, rather than those which can be bought and sold ?

Sayer (2006 :150) further argues that a what he calls a *moral economy isa a way of thinking about economic matter for the point of view of social justice and well-being.*

Note that up to now this has not necessarily included environmental justice but Sayer is working within Green Economics in order to add this dimension to his work, and we can add his conceptualisation to ours. *He draws attention to the fact that economic relations between people have ethical implications because they affect their well being.* He argues that moral economy and green economics should *be compatible and that current forms of economic relation alienate us from both nature and society.* He suggests that economic inequalities are largely undeserved, cause suffering and weaken social cohesion and frustrate the achievement of the green economy, and he advocates a steeply progressive income tax justifiable on both social and environmental grounds. He proposes that the *point of economic action is to enable us to live well and to do sustainably,* Sayer, (2007 :150). He suggests

that unalienated economic practices should be governed by reason, justifications, and deliberative democracy on all three grounds of which capitalism he claims fails. He suggests that capitalism if modified could provide these, if adequately regulated, as an advanced economy requires that we are dependent on others and through the market mechanism whilst acknowledging our dependence on nature and a deep social division of labour.

He suggests that high income lifestyles are contrary to a green lifestyle in general and since they are largely undeserved, there is no moral reason why a steeper tax system could not remove the inequalities which he claims are largely generated by pure luck and a game won by the smart, and that people earn what they are worth. None of these he says actually can be justified and therefore our basic assumptions about economic rights in the market may be overturned in the search for environmental and social justice and more progressive taxes introduced.

Further the science of transaction cost analysis solely addresses the costs to the rational choice maker involved in a often a spontaneous decision made solely for himself and his own benefit. Further it completely ignores the power structures and access to democratic decision making which limit other players access to the market or which limit the player from making a free choice. If we now broaden out the nature of the description of economic activity to include

Power and hegemonic, legislative and institutional limitations, and those of assets and knowledge with which to have access to participate in the decision making the science of economics looks very different. But if we consider each transaction not a means for profit making on the part of the seller, but as a means for provisioning for our needs, and also investigate the impacts and effects of the activity then a completely different set of criteria need to be employed in consideration of a so called rational choice. If an economic activity is considered as an act of provisioning for our needs, for the needs of all people everywhere and the planet and the biosphere then for example paying for further study about the melting of the greenland icecaps which are at the waters edge, and its flows and contribution to climate instability and sealevel warming and rises starts to look as rational a choice as a decision to fly half way round the world to go to a football match. It would have more benefit for more people and species than increasing greenhouse production for one entity to have made a rational self seeking profit maximising transaction by selling the football ticket and one person to buy it and gain « happiness » by attending.

If we live now in a world which is more populated than the earths resources can provide for then we need to consider that if we use up more than we need, then others will have less. If we use up more than we need today it is likely that we will have less than we need tomorrow ourselves, further the cost of our football journey transaction, could be an increase in climate instability and a rise in sea level or disease which could affect us in the future.

Therefore if we consider what economics is today, and what we need it to become, a method of provisioning for our needs, then we need to adjust what we mean by economics, and we need to change the means and in particular the scope of economics. To do this I will argue it is entirely logical that we can

no longer confine ourselves to narrow definitions of what economics is, and confine it to activities of commodified market place transactions, and that these are solely there to make a profit, In the fight for survival in the 21st century profit is probably the last thing we need to be worrying about. We need to consider survival of the greatest number and social and environmental justice as the means and the end, so that we maintain a world in which we want to be living, and the scarce resources question – which samuelson said made the prices go up and creating value- therefore needs to be engineered is a thing of the past, The very items which were regarded as free goods in the past, clean air water, decent climate and resources, are now the scarce resources and need to be valued and cared for, and increased in abundance wherever and however possible. However- this has to be done within the context of environmental and social justice and sharing. There needs to be an overt value of non commodified activity and provisioning reasserted into economics as many human activities are in fact done not for profit and increasingly this part of life is being encroached up and this must now end and this part of life increasingly valued and understood and brought into the scope of economics.

All the above involves a complete rewriting or reorientation of economics and a reclaiming it from neo classical economics and current mainstream economics and really we dont have a huge amount of time as the effects of global warming so far achieved in the name of the market will be with us for about 150 years already.

The Green economics approach aims to create a methodology for achieving social and environmental justice as equal ends and means. Such a Green Economics solution is proposed as simply an economics which in all its conceptualisation includes social and environmental justice as an ends and a means but which also inherently therefore includes part social theory from « economics » and part natural science from « green » and environmental learning. If these two factors are borne together in all conceptualisation and reasoning then there is some hope of turning economics round to become a discipline which can help establish what we ought to do in a normative way, and to explore effects and implications of our activities and to help us to provision for and taking into account of everyone and everything on the planet.

However, in order to do this, it has to be accepted that economics as a narrow and focused discipline has had its day, and rose at a given time in response to the success of the physical sciences and was an attempt to move away from its earlier more pluralist beginnings as an art of provisioning, with a strong moral and transformative character under Adam Smith and Mill to becoming a « toy for boys in sandpits (McCloskey) enabling modeling, mathematics and physics envy to be conducted well away from reality. Considering that today most justifications for environmental degradation are given as economic, and most justifications for enduring poverty are so as not to inconvenience or limit the market from allowing others to become wealthy so that they may provision for the poor, then we must revisit that whole hypothesis and accept that if we use letto Gilies theories about the actual impact of the firm, then we need to factor reality straight back in to economics and we will get a completely different result.

Therefore, the economics discipline needs to engage fully with other aspects of economics activity and to work in a multidisciplinary and pluralist and non orthodox way. I contend that Green Economics cannot exist without a pluralist and multidisciplinary approach because of the foundations of Green Economics as a concept and this may account for some of its early success. It does uniquely have the facility to engage in this way and to provide the much needed pluralist and multidisciplinary approach to its analysis and practice, and to encompass historical progressive learning and geographical and temporal specificity in its activity.

Social and environmental justice is often split so the cause of one is advanced in preference to the other, in the belief that they contradict and cannot occur together. This is a view advanced in mainstream economics, that advances in economic benefit contradict the need for social justice. (Guardian 26th May 2007) The example most recently was the need to expand Stanstead Airport at the expense of the Hatfield Forest and to the discomfort of local residents, as the economy is claimed would benefit by 16 billion if airports were expanded in the UK. Stewart (2006 :193) suggests *that « the argument is that the expansion of aviation is generally an effective way to boost the performance of a mature economy, and in general it actually caters for the leisure market, and as such there is emerging evidence that it actually takes out more money than it puts back in, investment in other industries not subsidized the way aviation is could bring more benefit to the economy. And again artificially cheap aviation is a major component of the globalised economy transporting people and goods across the globe. As such it hinders the development of economic localisation underpinned by equity ».* (2007 :194). He concludes *that the evidence suggests that not only is cheap subsidized air travel causing real problems for today's economy, but it is a positive hindrance to the development of a greener more equitable and more localised economy.* This is partly due to the fact that in the UK only 11% of people who fly come from social classes D and E and the poorest 10 % hardly ever fly making a mockery of rational choice theory, as constraints of power and access to assets are in fact the biggest determinants of the fundamentals of economic decision making.

A heterodox pluralist approach enables green economics to meet the challenges and conflicts involved in trying to provide social and environmental justice. It therefore includes unlimited learning from other disciplines and from life and from reality outside academia. In fact The Green Economics Institute, is predicated on four pillars for the scope of its activity, business, academia eco-nomy/ cology, campaigning, and policy, with a moral/social framework over all. Its early work on procurement activity investigates the effects of such activity on stakeholders and examines real situations in an attempt to factor back reality into economics and to remind economists of the effects of their actions on people, the planet and the biosphere.

The paper discusses the nature of certain attempts at pluralism, and its meaning and arguments currently put for the necessity of pluralism as an approach.

Pluralism however has a chequered history, and is a term which needs to be used with extreme caution, it has in the past been used to justify parallel existences as in cultural pluralism and to justify activities of extreme racism as in separate development. In fact Green Economics requires a stance of inclusiveness and of diversity as two of its most important drivers- which is completely at odds with this particular use of the word pluralist.

A pluralist approach in economics can mean a number of things however and 4 of these are presented in Williams as being

In general in Green Economics we refer to an inter trans or multidisciplinary approach which inherent within the core of Green Economics legitimises our use of data and progressive learning from economic analyses of past and other schools put together in a new way, through the lens of the search for environmental and social justice but also much more the search from other disciplines and « the lifeworld » in order to assess economic imperatives and to make judgements about likely overall impacts. In this respect the discipline is part of the pluralist school of economists although in general we use the inter trans and multi disciplinary descriptions.

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There is the question of whether Green Econmics can spread its multi disciplinary or pluralist analysis to even influence the mainstream economics

accounts to become pluralist and there is already some evidence that this may be happening(Lawson)

As its arguments are compelling when we consider that 1/5th of human kind is still in life threatening poverty, that Britain although 5th in the league of successful economies has the most unhappy children and young people, which highlights the fundamental flaws in mainstream economics focus and analysis. One quarter of species are predicted to be extinct by the end of this century and resources are predicted to be running out) new scientist may 2007) . The poverty- which affects one fifth of humanity. The Independent predicts (7th april 2007) that the poor will be the worst affected by climate change and so we need to address environmental and social justice as two parts of the same problem as illustrated for the case of South Africa by Barnett (2006) and so we need to mitigate and prevent climate change in order to prevent more poverty.

All this for the goal of mainstream and neo classical economic theory and justification which does not begin to meet needs and has led to emphasis on business such as arms, even within academia in the UK most women are earning 40% less than equivalent male counterparts according to a new survey() . if global climate instability does get a hold farming will be a thing of the past except at the poles and at moment even bees required for agricultural pollination are disappearing at an alarming rate.

There is currently a need for a completely new formula to solve these questions and it needs to come in economics and to influence economics practice and decision making as soon as possible.

A pluralist multidisciplinary approach is the only way it can work – how can we sort out the problem of the bees without reference to biology- and it turns out this is caused by mobile phone radiation, which also needs to be understood as does the role of the bee in pollination and then finally its overall contribution to provisioning of our food and crops and the economy probably as the least important. However the need for mobile phones is an economic assessment too, do we really need to use them and do corporations really need to sell them ? and if so do we need to allow the corporations to sell them more than we need the bees to continue to pollinate crops. We need to therefore work to understand the theory of the firm and why it needs to sell phones, and also institutional decisions which allow for transmitters to be placed on schools for income, even though the health implications of this economic transaction contravene the precautionary principle, and also very importantly the supply chain of the mobile phone which allows for mining of coltan in the Congo and allows for wars and killing and child mining in order to obtain this precious component for 85% of mobile phones globally and a thorough examination of the inherent social and environmental justice within that supply chain and its effects on local people, local biosphere and the planets physical systems. This I would argue is the economic question to answer, not whether or not John or Jim want to decide to buy a phone or not and at what market price or monetary value. There is so much more to economic decision making and impacts than rational economic men « John or Jims » decision to buy at a particular price from a particular supplier. This new scope, is the realm of Green Economics and it is without a doubt a pluralist agenda.

Goldsmith describes the current state of world food and climate and this shows how we need to tackle this in a non traditional economic way and need to include ideas of equity, justice and science of climate change as well as non economics based agriculture as the purpose can no longer be to make money for the grower but to feed people and to help people to feed themselves locally. (Goldsmith 2007).

Goldsmith states « *The climate change is by far and away the most daunting problem that mankind has ever encountered.* » (2007 : 59). The estimates he provides for temperature changes for this century are between 5.8 C and he shows that current problems of melting ice caps are all within the boundary of only 0.7 so that in terms of degrees of change, he argues we haven't even started to approach the catastrophic and runaway changes in store for us. He also reminds us that 30% of the world's agricultural land will disappear due to encroachment by sea water and a sea level rise of up to 88 metres and flooding. The salinity of the oceans would compromise the gulf stream, and northern areas such as the UK would be frozen and that even if we take steps to remove this it will take 150 years to work its way back, but the saddest part of all this is that over the last 4 years of drought in Africa 30-40 million people have faced starvation, and exports from America and Canada and Australia of food have reduced.

He argues that traditional and local agriculture is much more energy efficient and the only solution as proposed by Pretty (1999) and Alterii) Pretty and Ball show that to produce a ton of cereals or vegetables by means of modern agriculture requires 6-10 times more energy than it does by using non mechanised agricultural systems sustainable agricultural methods (61 ; Goldsmith) . He suggests that in economic terms governments and international agencies are keen to prevent traditional agriculture being practiced as this stops economic development, making it difficult to introduce new crops and large scale production for export. He says that small scale farmers are outstanding managers of their own resources land fertiliser and water but this prevents obstacles to economic development according to the World Bank.62. The new developments such as GM crops perhaps reached the limit of what people wanted from large scale business, as people began to understand the difference between crops and products solely for profit and those for use to meet needs of purchasers and consumers and for the first time these two ideas were seen to be clearly largely divergent. Similarly with global supply chains the unnecessary movement of goods round the planet is using up resources at an alarming rate and contributing to green house gas production just at a time we desperately need to reduce it.

The important concept here is that agriculture communities – ancient knowledge have all been compartmentalised and now need to be added back and the negative impacts have been largely driven by a neo – classical economic framework and this rationale has to be changed as fast as possible into something which reverses the catastrophic developments in other fields such as the science and impacts of climate change and economists have absolutely to factor this kind of impact in all their calculations, and this is the realm of an holistic and interdisciplinary change in main stream economics as well as the foundation of a new discipline with which to provide the tools.

The need for a pluralist approach has been raised by many

“That state, organization, and place of economics are argued to be undergoing change as a result of contemporary historical forces. This implies that the meaning and character of pluralism in economics is also changing, and that the nature of pluralism in economics (and in heterodox economics) needs to be re-conceived accordingly.” Davies, (2007) abstract accessed on web, May 2007. Davis (2003) argues for a) the need for developing an understanding of how regional economic integration can be compatible with concern for the environment in rapidly industrializing parts of the developing world. B) that this compatibility would be aided by reconceptualizing the collective decision-making process in regional economic communities in a manner that employs a plural subject concept of the decisionmaking agent. The plural subject concept—developed by philosophers but not yet

applied in economics to collective decision-making problems—provides a nonpreference-based approach to explaining joint action.

In this current paper I respond to this and I suggest that a Green Economics approach is one of the few which can respond to these kinds of imperatives. This is because a pluralist approach today has no meaning unless it addresses the foundations of all economic transactions, the social and environmental context without which it would not exist at all and in which it is actually firmly embedded but which has been denied under *ceteris paribus* and the marginal revolution for two hundred years. The costs of climate instability alone, quite apart from other social and environmental dilemmas will start to overtake neo classical economic forecasts, for example 40% of species will be extinct by the end of the century and this will affect the global economy which depends on other species to a large extent not least to provide agriculture and food and also to provide a gas balance to maintain climatic conditions favourable to mainstream economic growth. This kind of aim and understanding requires consideration of economic assessments to be complex, specific in time and place, and can no longer be one dimensional and easy to represent on a graph or simple model. Profit maximization to meet short term economic goals are no longer enough if for example measured against sea level rise which may submerge the trading entity or its host or home town. However the economic assessment simply has to have a more complex set of considerations and data included in it, and these must include the resources from the natural world and the social conditions governing its inputs and acceptability of outcomes from a moral perspective. However all these issues are dependent on the power situation of the actors and so this must be factored back into economic discussions. A green economics assessment is therefore predicated on 4 very practical areas of influence in most decision making. This gives it its pluralist character. There is the question of whether Green Economics can spread its multi disciplinary or pluralist analysis to even influence the mainstream economics accounts to become pluralist and there is already some evidence that this may be happening(Lawson)

As its arguments are compelling when we consider that 1/5th of human kind is still in life threatening poverty, that Britain although 5th in the league of successful economies has the most unhappy children and young people, which highlights the fundamental flaws in mainstream economics focus and

analysis. One quarter of species are predicted to be extinct by the end of this century and resources are predicted to be running out) new scientist may 2007) . The poverty- which affects one fifth of humanity. The Independent predicts (7th april 2007) that the poor will be the worst affected by climate change and so we need to adress environmental and social justice as two parts of the same problem as illustrated for the case of South Africa by Barnett (2006) and so we need to mitigate and prevent climate change in order to prevent more poverty.

All this for the goal of mainstream and neo classical economic theory and justification which does not begin to meet needs and has led to emphasis on business such as arms, even within academia in the Uk most women are earning 40% less than equivalent male counterparts according to a new survey() . if global climate instability does get a hold farming will be a thing of the past except at the poles and at moment even bees required for agricultural pollination are dissapearing at an alarming rate.

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Costs in a mobile phone transaction according to a Green Economics Analysis (Kennet (2007))		
Layers of effects of a transaction	Costs	Green Economics using a pluralist approach
Society, people, biosphere planet effects of transaction	External social and environmental justice effects and costs of transaction	-Costs to society of use of good. -Opportunity costs of local economy displaced by global production Hines -Costs to indigenous peoples in area of resources exploitation land used for exploitation of resources which could be used for food or water - power structures replaced in areas with focus on foreign market Foucault
Health effect of siting a repeater on a school to enable reception in use	External costs of use of product (Pigou)	Social and environmental costs of transaction
Health effects of transaction and use on actors	Longer term transaction costs	Cost to actors of use of good Increase in brain Tumours
Effects on biodiversity or disappearance of bees For pollination of other products-eg crop reduction which is food production (Goldsmith 2007)	Biosphere reduction costs	(New Scientist)
Effects on labour and social effects of corporate activity		(letto Gilies 2006)
Transaction takes place and immediate costs are paid	TRANSACTION COSTS (Coase)	Market coordinates buyer and seller and price
Transaction takes place between two actors	Rational choice theory	
Price is decided	Just price theory	
Supply chain for the good (Bridger) (Kennet 2006) (New)	Resources used for production of goods	Environmental and social Costs of supply chain
Production and health effects()		Social and environmental costs of production
Effects of work on people alienated by it	Mellor Mies Robertson	
Labour conditions in colonies	Mies, Shiva Klein	
Raw materials for the good (Coltan in the Congo) supply chain vulnerability (Fenwick 2006)	Market cost of raw material	Social and environmental cost of resources obtained from Congo

Green Economics is a discipline concerned with meeting needs

Needs is another important definition of Green Economics rather than providing for what some have termed greed- but also wealth, that is not necessarily the best aim for an economy, Alderson (2008 forthcoming).

There are particular challenges and contradictions which occur when social and environmental justice are placed at the core, Dobson(). Having economics aims which explicitly define beneficiaries as all people everywhere, non human species, nature, the planet and the biosphere immediately comes into conflict with mainstream economics which takes a more anthropocentric view and a more first world view which Foucaultian (Foucault) discourse might argue presents a perspective of white male western educated middle class MBA graduates, rather than a discourse which might be concerned with the other voices of half the human population who are women or nature who have no legal standing of their own with which to express economics preferences or for whom utility is a mixed blessing. (Mies 2007).

Green economics is also influenced greatly by anthropology which has sought to explore other voices and looking at societies from the outside. Such an approach is influenced by such writers as **Mauss, () , Polyani, and and Sahlins in (2001)** all of whom sought to find other meanings in economics transactions and to inform themselves about previous economic systems and other societies.

“

5. Green Economics is a progressive approach : incrementally building on existing learning

However it is also argued by Heinemann, (2007) that it is a progressive approach, which the literature defines as one which builds on older learning and re-invents ways of understanding and explaining findings from older schools. It is different in this respect from other sciences in that it does not totally disregard previous learning from its own discipline in the longer term. This is an outcome of the influence of the german historical school... and also the evolutionism of Darwin and Spencer, and Vleben which regarded as the current outcome of an age-long accumulation of human experience. (Negushi : 18).

According to Bronfenbrenner in (1971) in (Negushi (1989 ;3) outmoded ideas are never definitively displaced in economics, and this makes economics a special case and incompatible with Kuhn's catastrophe theory, he supports his argument with an examination of just price theory and mercantilist notions. Outmodedness is only therefore defined in relation to other paradigms, making the study of economic history especially pertinent. This also makes economics unusual as a science as new discoveries such as the need to promote environmental and social justice could use tools in existence previously- but need to re- orientate the outcomes and the ends and means. This is in part what green economics attempts to do.

The importance of a Green Economics' account of economics and the influence of pluralism and a progressive economics perspective in economics, analyses the concepts put forward by Negishi (1989) in his history of economic thought and those of progression in economics, catastrophic

scientific revolutionary change of the type proposed by Kuhn, and Bronfenbrenner,(1971) who suggested that outmoded ideas are never definitely displaced in economics. "advances in economics tend to be major accretions without rejecting existing paradigm.Negishi, (1989:3). Negushi illustrates this with an examination of just price theory and of mercantilist notions. :Latakos suggests that the history of science is a history of competing research programmes. Such research programmes in economics could be considered to include Marxian and non Marxian economics, Mercantilism, Malthus, underconsumptionists, overproduction and deficiency of effective demand. Monetarism and quantity theory of money,. Neo – classical traditions such as neo –Walrasian, and the neo Austrians and Menger and Von Mises. The Ricardian research programme. Neo Ricardian, the German historical school and institutionalism its American equivalent. Veblen argued that economics should be an evolutionary science which examines the emergence and modification through time of economic institutions and can be divided into production or acquisition. He suggested that there exists a tension between engineers and businessmen, or the makers of money or the makers of goods. It evaluates relationships between humanity and nature in terms of respect (for human beings, for future generations, even for other species), not by the yardstick of control.

According to Lipietz(2000) the second difference is more profound. The green paradigm, while certainly politically **progressive, it is not "progressivist."** Its vision of history is not a tale of progress. In fact, it is far from a linear historical vision. If history did have an inner dynamic, it would, if anything, be governed by the second law of thermodynamics: a history of an inexorable rise of entropy, a history of decay. Only a reflexively critical human consciousness can slow or reverse this decline. Political ecology thus defines progress only as a tendency - defined in terms of certain ethical or aesthetic values (solidarity, independence, responsibility, democracy, harmony). There is no real guarantee that the world will actually move in this direction (as through the "socialization of the productive forces"). The historical and dialectical materialism of the greens is non-teleological, then, even rather pessimistic

6. Supply chain and Procurement : Their importance in Green Economics as an illustration of the drivers of mainstream economics and the reality of economic practices today.

An illustration of this is in the question of procurement which forms a large part of international and European trade. At present there is a move towards standardisation and large companies are keen to promote their brand of environmental and social justice using corporate social responsibility and higher environmental standards. One way of doing this is to partner up with other companies such as themselves whose products they know meet certain standards. However, the very act of doing this eliminates true competition and creates huge and insurmountable barriers for new and smaller and local suppliers especially when one of the criteria is for the partner firm to have a global reach. This alone ensures that diversity and local criteria, both essential elements in true environmental and social justice in a supply chain

are completely lost. So what we find in Green Economics, the fact that economics has divided itself off from other disciplines and other aspects of life and not taken a pluralist view- has enabled it to test outcomes on a model or a graph but not against true implementation in reality. It is this factor in particular which Green Economics offers, by factoring back reality, and specificity in time and place and above all outcome and attempting to assess the effects of the activities international firms as advocated by Letto Gillies (2006) on a theoretical level which is an important contribution to debate and to changes in practice. It is to some extent moving away from abstract schemes such as *Idealtypus* of Weber, and models such as Walras () back to examining specific examples from life.

The forgotten importance of the supply chain (New, Bridger, (2006) (2007) Kennet, (2006) Fenwick (2006) one of the most influential and practical areas of economics which heavily influence the social justice outcome is factored back into the equation, and the paper introduces new concepts and developments of air freighting food from countries with very high levels of starvation and lack of social justice and with a net outpouring of food for western country luxury trades. This recent development is involving the use of vast sums of capital which could be used to feed local people and to provide social justice and so the unravelling of the supply chains role in social and environmental justice especially its increasing use of cheap aviation is a feature of the paper, Bridger (2007).

It is important to investigate alternative ways of assessing reality- at the local and specific level, and also at the macro level, including philosophy and on quite a number investigating different aspects of economics and economic theory. For example the economics of abundance and scarcity (Kennet and Heinemann (2006) Hoershele (2007) and also economics umbrellas such as Heterodoxy and placing green economics within in a Post – Keynesian framework. Mearman (2007)

The roots of modern economics of the firm are also important in terms of their effects on social and environmental justice as well as by an examination of legacy of the East India Company, Robbins (2008 forthcoming) and current concerns in China covering Bhuddist teaching and Green Economics, Guenter Wagner (2007) and corporate social responsibility and Bhuddist teaching aspects of green issues in China Welford (2007) as well as from dissident perspectives to China's newly emerging oil companies. A Green Economics analysis includes such questions as the proper and important role of social justice in economics and how to implement it, and attain it both as an end and as a means, and exploring such evidence as migrant rights in Norway, Seeberg (2007), and stakeholder fisherman's rights in the North Sea. Griffin (2006, 2007). There is also a focus on environmental justice and issues in the former Eastern Block from Russia and Georgia, Koslov (2007).

It is also important to explore and benchmark the understanding that social and environmental aims have been treated as conflicting and a justification for providing one without the other. Corporate social responsibility, and stakeholder theory, Freeman (1984) Friedman and Miles (2005), involves mitigating the damage inflicted by corporate activity but the literature does not really explore the idea of doing no harm or the current state of ignoring social and environmental concerns where possibly in favour of economic considerations. Barthorpe (2006) or what more useful aims of economics ought to be if profit is no longer considered to be the main aim. Zlonai (2006). The new school of thought is concerned to find new and innovative ways of providing economic benefit- and defining what that might be, and to ensure that the new paradigm, school, methodology fits with reality, and also considers social and environmental justice in all that it does. Anderson (2006) Kennet (2007).

We will also aim to advance the practical development of green economics to include such factors and ideas as the moral economy, Sayer (2006) the economics of scarcity and abundance, Horschele (2007) and ecology, and to find new ways to eliminate poverty from the planet and to provide social justice for current generations, all people everywhere and future generations, in a world of diminishing resources Chong (2006), Alderson (2005), (2008 forthcoming), suitable for people as climate change and instability disrupt living patterns and food production and create people displacement and social and environmental hardship for people. A community of practice is being developed for people to work together going forward in order make effective change in campaigning, politics, business and academia, the four pillars of the Green Economics Institute with which we work to provide social and environmental justice in economics. (Kennet and Heinemann 2006).

7. Perspectives, discussion points and tensions within the emerging Green Economics School

There are contradictions of greens perspective on poverty, appalled by consumerism in the west, tend to glamourise the third world poor as close to anture in their low levels of consumption, Some third owrld activists such as Shiva also pander to these western views of third world poor, which becomes a site of green celebration. .. which is vulgar, as it ignores the fact that this poverty means children are illiterate, or studying in schools with no blackboard and no roof, They are malnourished and ill and have inadequate doctors and hospitals, Futher glamorisationv of poverty amounts to abandoning any galitarian perspective of reducing or removing poverty. Singh . (2007:169) In africa it is often misconstrued that green concerns are important to economically proivledged clases from teh developed world and from within africa and emphasis the need to conserve nature while ignoring the need to alleviate poverty of people Naicker 2008. Singh however questions if poverty in one part of the world essential for prosperity in another. Is the expansion of capiltiasm in the third world a historically progressive developent in so far as

this expansion is weakening the ecological limits to the continuous sustenance of capitalism. He proposes reduction of poverty in backward capitalist countries as it hastens the end of capitalism and speeds up the search for renewable energy and sustainability. Poverty may reduce consumption but poverty forces poor people to encroach on nature in order to secure food, survive and reproduce themselves. Sustainable development is that development that does not compromise the access of future generations to environmental resources. The dilemma Singh sets out (2007 :71) is that both the persistence of poverty and the reduction of poverty are environmentally damaging for different reasons, reduction of poverty raises consumption, persistence of poverty uses up environmental resources. One route could be to alleviate poverty by development in the third world or a massive transfer of aid. Or small scale production.

Many of the environmental discourses have adopted a position which puts nature and its intrinsic value first, before people such as deep ecologists and the eco centric view. (Sessions, Duvall, Naess) such as Earth First, (Wall). This is different from the human ecological perspective and other perspectives which argue that green economics is intended to provide social justice or care for the poorest. Others raise questions of fairness and moral questions of what is right and fair Sen in Wall (2007), Rawls (1971) and Nozick () Others take an eco efficiency perspective and argue for the use of the corporations (Welford, Elkington,) who they argue already rule the world anyway, (Korten) and that these corporations and their growth will solve poverty and environmental problems. This argument is extended to sustainable development, (Springett, (2006), Redclift (), Brundtland. (1990). Some would argue that the market will solve such issues as climate change as it will adapt to prevailing requirements and needs. (Blair, Sachs). The concepts of triple bottom line (Elkington) for business or environment social and economics as business aims has become important, as has stakeholder theory (Freeman (1984), Starik (1995) and corporate social responsibility (Carroll), (Hopkins) and environmental management (Welford,) (Bansal and Howard), (Gladwin and Kennelly).

Neo Malthusian arguments reveal that population and the limits to growth ideas calculate that current consumption will require between 3 and 6 planets in order to allow for full economic development for all nations on the level of the US current spending. In such a scenario nations such as China and India will not be able to continue on their current growth trajectory. Lord (2007) An overall reduction in uses and abuses of natural resources and consumption is proposed, Simon (2007). The need to reduce population is emphasised and also relative consumption. Competition for resources of the commons and the fact that people do not always share common resources is a dilemma and a challenge which the right suggests is more important than democratic resource cooperation which may take too long to achieve and therefore more coercive means may have their place, Hardin (1967), Lord (2007). Much of green thinking is predicated on community and choice and involvement and therefore such ideas would be impossible in many green regimes. Population issues are regarded as difficult and most importantly women have the right to choose what they do. The use of the one child policy and coercion or pressure such as the India policy of a transistor radio in India being offered to men who undergo a vasectomy is regarded as coercive and ungreen in most green

literatures. The education of women and ensuring they have equal rights and education is regarded as a solution more in keeping with participation and the rights of the individual.

Some Green writers also refer to localisation, Schumacher,(1973) ,Bridger (2006) as a solution to rampant globalisation but others seek a more just other globalisation, Potter (2004) *Globalisation is an ill defined concept which is used to describe hegemonic tendencies, as well as increase in size of global companies and the power structures they support.* The idea of protectionism is attractive especially for food supply but some greens believe that this is a right wing project which in the past has fostered nationalism and totalitarianism.

These conflicts are played out in the responses to climate change, those that wish to have everybody reducing their use of carbon voluntarily and greatly and in a participatory fashion reflecting the view of those who want communities to set the targets and for people to participate in what is best for everyone.

There are those that wish to allow people to off- set their carbon emissions using market trading and allowing large corporations to help them do that with company schemes. There are those that wish to allow individuals or companies or countries to trade carbon quotas- which would in a Foucaultian sense provide for the richest and most powerful carry on at the expense of others carbon allowance which they would buy up. The eco efficiency arguments follow that cars and other carbon usage items become more efficient in their carbon use and so we can carry on with business as usual as a technological fix will help protect us.

There are other dilemmas particularly around the idea of a more just globalisation and a an increase in localisation. Is it better to allow for more competition and openness in industry with bidding being available to all at every level and at every stage in a process of supplier selection or is cooperation important?

Green philosophies value diversity, however what happens when such diversity does not support womens rights, or advocates violence?

The role and importance of every individual is extremely important in green thinking, however, such thinking of the greatest happiness of the greatest number(Bentham) led to individual preferences being expressed in economics and in many cases in the west- this has led for example to a shopping culture and one where labels and brands carry huge importance. It has led to a brand becoming a short hand for quality, but allows the buyer to ignore or not question any inherent social injustice such as sweatshops as the brand becomes part of what is bought and this like the goods can be manufactured to appear as the buyer would like to imagine it, rather than the labour, or blood or sweat or injustice inherent within it. If it hurts others to consume and to express a buying preference, green economics questions its validity.

The role of industrialisation is examined in many green writings, Dobson, (1990) Dryzeck (1997) however- in many cases it is acknowledged that if the nature and injustices such industrialisation is something the west cannot cope with knowing about and it has therefore been the subject of environmental and social dumping in less developed countries. Some are arguing that if

industrialisation is necessary, then its consequences should be addressed at home and action taken to make it just.

Economically speaking the aim of current economics is an increase in GDP. The indication of a healthy economy is challenged in many green writings, (Anderson, 2006) Daly (1974) and such Green discourses suggest an opposing trend, towards a reduction in consumption, and in demand, in order to meet environmental targets, and so this inherent challenge in the kind of economics aims and objectives is one of the most vital, pressing and important dilemmas today. How can we morally prevent China and India industrialising and consuming as the west has been doing? If not how can we limit the ecological and social injustice which will arise if there is a finite limit to resources, and scarcity and pricing becomes less of an issue in economics and its emphasis shifts towards survivalism. (Dryzek 1997).

8. Some examples of Pluralist policy ideas (Williams 2006)

Neill (2006). This is for **4 examples of pluralist approaches**

a) Williams (2005) provides some examples of discourses on cultivating economic pluralism as opposed to the homogeneity of his commodification thesis. (2005:217). The pluralism discourses he describes include **The Third Way**, which differentiates the economic realm from that of the welfare realm. In this realm the civil society needs to be harnessed to provide welfare needs and to provide social cohesion. *Social order, democracy and social justice are needed in equal measure in order to sustain a pluralistic society.* Giddens (2000 : 218). This is therefore a mixed economy of welfare delivery which transcends the public versus private debate.

Tony Blair says (1984 ;14) it recognises the limits of government in the social sphere and enables governments to help families and communities to improve their performance.

b) The second example he provides is the non – **market social- democratic thought**. This involves the development of non commodified work as an alternative to the commodified realm. (Mayo 1996) Gorz (1999) Sachs (1984) and other non market social democrats, who find the profit motivates exchange stultifying and alienating. The workplace is regarded as places of social disintegration. This reduces self esteem, social respect, self identity, companionship. Beck (2000 : 58) says that *the idea that social identity and status depend only on a persons occupation and career must be taken apart and abandoned so that social esteem and security are really uncoupled from paid employment.* Capitalism makes the two synonymous according to Gorz (1999 : 72).

Further people are needing to work to provide corporate profit even though the goods produced are not economically indispensable and don't respond to the needs of the consumer, Friedman 1982 only 35% of the population is engaged in indispensable production. Employment should not be seen as an end in itself, but as a means to achieving a better quality of life. There has also been a devaluation of non commodified work or socially embedded economic activity and Polanyi argues for assigning non commodified work a crucial role in the future of work and welfare. They argue to reduce heteronomous work as those productive activities over which individuals have little or no control.

c) Radical ecology is another discourse, which seeks to recognise and foster pluralism in order to achieve sustainable development. (Dobson (1993), Ekins and Max Neef (1992) Goldsmith (1995) and Henderson (2007). They argue against the pursuit of greater materialism, and they seek to recapture the ends and aims of economic activity. The two aspects of this are the relationship between people and nature and the direction of society. They follow the ecocentric view of work, viewing nature as having biotic rights that require no justification in human terms (Naess 1986 and Devall and Sessions 1985). They argue that ecological sustainability can only occur if smaller scale decentralised ways of life are pursued based upon greater self reliance and the cultivation of non commodified work practices (Douthwaite, 1996, and Lipietz 1995). They advocate localisation Hines 2000, and their objective is to foster more inward looking approaches focused on meeting local basic needs through the pursuit of selfreliance, and more localised self reliant and sustainable economic development. These writers have exerted a big influence on the development of green economics in the UK, however green discourses in other countries have taken a view more in keeping with some of the other ideas mentioned above- in particular the idea of democracy and regulation, and maintaining corporations but greening them up and reintroducing democracy to institutional requirements. The eco efficiency route is considered more important in many « green » analysis. The Green Economics discipline is interested in each of these views and possibly would argue for a pluralism of discourse so that learnings and analysis from each of the above debates is included and forms an integral part, however- eco efficiency and economies of scale for certain commodities is in direct conflict with demands for localisation and so it seems that appropriate levels of work and production rather than always choosing the smallest and most local are going to have to be the way forward. For food production local production is clearly the most sensible whilst climatic conditions allow for it. However many countries can't sustain this and increasingly will run into climate and soil problems. So there needs to be local production favoured over global production and global GDP contribution but a global concept of welfare needs to be developed so that countries that need help can get it. For other commodities such as wind turbines it makes no sense to produce them locally.

Lipietz (2000) In this respect, Marx shares entirely the Biblico-Cartesian ideology of the conquest of nature, as would be taken to its extreme, first, by the "conquering bourgeois," and then by the sorcerer's apprentices of Stalinist Siberia and the Khazakstan steppes.

d) Post development discourse

Questioning the binary western idea of paid commodified work and to attach a value to non paid forms of work and to blur the boundaries.

a) revalue non commodified practice

b) to blur the boundaries

c) recognize interdependencies between the two and how they depend on each other Escobar (1995). His reading of identifying barriers to growth and prescribing development pathways has in effect violently subjected individuals and regions and entire countries to the powers and agencies of the development apparatus. The vision of the good society comes with commodification as the only story and the new idea is the unmaking of the third

world and to end economic impotence and subservience. Escobar 1995.
« With the western commodification both the referent and the context, the plural economies of other nations have been deemed to have a problem of backwardness that needs to be resolved and using commodification as a benchmark have been subjected to development and progress. The landscape of difference has not been valued., and power and conceptions of economy have been imposed, The plural activities are described by Beck 2000 as commodified employment works alongside parental work, work for oneself, voluntary work or political activity. 229. Williams. In the economic sphere commodified work retains its status as the only form of work, of any true worth. To rectify this we must revalue work in the other spheres where people are fully engaged in society, to meet their needs, Examples of how to do this are proposed in Williams social network capital, time capital human capital and economic capital and institutional barriers need to be overcome.

According to Lipietz (2000) the question is even more complicated when one recalls that the greater part of human work, carried out by women, is still situated within patriarchal relationships. These relations, which combine the bonds of love and oppression in a particularly perverse way, have been battered by the feminist advance. They still respond, however, even today, to our most fundamental needs. And these needs, even in a society completely free from patriarchy, will not have disappeared.

Ten years from now, there will be 150,000 hundred-year-olds in France. It is not their eighty-year-old daughters who will care for them - nor their sixty-year-old granddaughters, just taking up their well-deserved retirement after a lifetime of feminist struggle. Which "capacities" will one appeal to then? Neither celebrating "localized employment" ("les emplois de proximité") nor denigrating "casual jobs" ("les petits boulots") will move the discussion forward. Rather, we need to develop a "third sector of social and ecological utility," within the framework of the welfare-community (1a Communauté-Providence). The construction of an eco-feminist communism remains an unfinished task.

Conclusion: Green Economics : a new pluralist discipline

In conclusion, in order to realise the aspirations of heterodox and pluralist economics community, green economists, those who regard economics as comprising a discipline with aspects of moral and societal transformation and the alleviation of suffering and poverty, are proposing a truly radical and pluralistic school of economics, which is well on the way to establishing itself as a useful methodology and development in economics, Reardon (2007) and Lawson (2007). Its twin components of Green (meaning social and environmental justice meshed together simultaneously) and the economics in the sense of *oikia*, the household in all its meanings, and *oik-*ology nature and habitat and the biosphere, make this perhaps one of most relevant disciplines of the moment and one which naturally can take economics effortlessly into a more pluralistic mode of theory, operation and practice. It can only exist in a historical and geographically specific context, and comprises more than a little anthropology and psychology, and its physics

envy is not equilibrium theory models far removed from reality but the natural science of the world around us and the care of the resources it gives us. Such an economics is no longer measured by destruction of natural assets and through put of resource depletion but rather human and biosphere well being and the well being of the earth' s physical systems. Above all it promotes and creates alleviation of poverty, as means and ends and inequality reduction between and within societies rather than the profit maximizing choices of rational economic man.

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***Regional Economic Integration, the Environment
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