Session - Globalisation and the Upward Long Wave.

The session would consist of two sessions, one from Keith Hassell on Long Wave theory, and the second from Bill Jefferies considering globalisation in the light of that theory.

This paper will consider the present phase of globalised capitalism in the light of economic long wave theory, as represented by the classical Marxist tradition including Trotsky and Mandel.

The collapse of the ex-centrally planned economies (ex-CPEs) and the restoration of capitalism between 1989-95 had a profound impact on capitalist economic development and opened up a new phase of the world economy commonly known as "globalisation".

This phase is characterised by;

The removal of all barriers on the export of capital – tariffs, trade agreements etc. and a tremendous increase in Foreign Direct Investment (FDI)

The creation of entirely new manufacturing networks of horizontally and vertically integrated production without reference to national barriers and a huge increase in trade as a proportion of GDP

A new technological paradigm – the ICT revolution

A very significant restoration in rates of profit worldwide

A continued neo-liberal attack on workers terms and conditions and the nationalised state sector

This paper will consider how these characteristics were decisively shaped by the destruction of the ex-CPEs and will explain why, with the integration of these states into the world market a new "upward long wave" as described by Mandel developed.

In particular it will critically assess the various objections to the idea of the upward long wave, as exemplified by Robert Brenner and Chris Harman amongst others;

That growth rates appeared to slow across the world economy through the 1990s

That levels of investment and "capital accumulation" appear to slow through the 1990s

That wage and salary levels continue to decline as a proportion of national income in many advanced and emerging capitalist countries

That the indebtedness of the working class has exponentially increased through the 1990s until present

It will conclude by attempting to periodise the current phase of globalisation and through applying long wave theory and consider various alternatives for its future development.

Long cycles, long waves and expansionary phases. By Keith Hassell

During the 1920s the Communist international debated whether long cycles of capitalist development lasting about 50 years could be discerned from at least the early 19th century, consisting of downward and upwards phases approximately equal in length, and if so what were the causes of such long cycles.

The leading proponent of the theory was the Russian Kondratiev who said such cycles were governed by rhythmic cycles whose duration were determined by the effect of major capital investments in large scale infrastructures and their wearing out. Leon Trotsky rejected the idea of long “cycles” with its implication that they had a regular periodicity related to internal mechanisms of capitalist accumulation, similar to the short-term business cycle.

On the other hand, Trotsky accepted there were long phases of capitalist development which were marked by general tendencies to expansion, stagnation or decline, of uncertain duration, in which broad socio-economic events were responsible for inducing the shift from one phase to another.

In the 1960s Ernest Mandel rejected the idea of long “cycles” for the same reason as Trotsky but said “long waves” existed the downward phases of which were largely determined by endogenous factors (i.e. those internal to the process of capitalist accumulation) while the upturns were determined by exogenous factors (e.g. effects of wars, revolutions, massive expansion of the market).

He argued that long waves were essentially characterised by major shifts in the average rate of profit and subsequently of accumulation. He posited some preconditions for a possible new wave of expansion beginning in the 1990s.

The paper assesses the key elements of the long phase of expansion in 1890s-1913, details the contribution to the theory of long waves by Trotsky and Mandel and explores Mandel’s discussion on preconditions for an expansionary phase against subsequent social-economic developments.

Session - New Theory of the Firm

Marshall's Theory Should be Discarded. By Steve Keen

Abstract: Though it is no longer an active area of research by economists, the Marshallian theory of the firm is still central to introductory pedagogy in economics. It has withstood numerous criticisms over the years---of its internal consistency, it empirical relevance, its uni-dimensional description of the motives of firms, its "black box" treatment of the firm, and so on. In this article I put one further critique: it is, quite simply, mathematically false. When the errors in the theory are corrected, nothing of substance remains: Equating marginal revenue & marginal cost does not maximize profits, competition does not lead to price equaling marginal cost, and the welfare loss previously attributed to monopoly is due instead to profit maximizing behavior, independent of the number of firms in an industry.

Prices and Price Strategies. By James Case

Abstract: There is a world of difference between a (static) price, like $4 apiece or $3.99 a minute, and a (dynamic) price strategy such as “we will not be undersold,” or “our prices are competitive.” Yet orthodox price theory all but ignores the distinction. The nature and (far-reaching) consequences of that distinction will be explored in unusual detail. In certain simple cases, Differential Game Theory can furnish an effective (though laborious) method of constructing viable price strategies.

Mexican Multinational Firm Expansion (An heterodox microeconomic analysis). By Dr Gustavo Vargas

One characteristic of international capitalism called globalization is the appearance and expansion of enterprises from developing countries, e.g. México, Brazil, Argentina, in Latin-America, etc. We propose that the Heterodox Microeconomics, in particular the Post-Keynesian theory can explain this expansion.

Multinational firm power, which is expressed in the production and financial globalization, is result of structural microeconomics characteristics of the capitalist enterprises, although they are coming from developing countries. That is true from the heterodox framework, but not for the main stream.

The heterodox microecomics of the firm (as developed by Sraffa, Andrews, Robinson, Eichner, Lee, M. Lavoie, Arestis, etc.) lets us explain the growth of the firm and even how they turn into transnational enterprises. Meanwhile the mainstream theory of the firm is embedded to explain their idealistic equilibrium, and does not explain anything about the firm’s real performance.

The heterodox microeconomic theory of the firm FHM, first of all explains why the inversion has being done, and then, explains the relevant enterprise characteristics: technology, costs, and pricing, secondly using the complex relation Firm-Competition explains its changes expressed in innovations, and expansion. In sum the microeconomic processes of the firm goes to accumulation and concentration processes. By this time, the firm power is clearly expressed in production and financial terms. This has been the path followed by the Mexican firms.

Using data from such Mexican corporations as: Cemex, Bimbo, Grupo Modelo, ICA and others we seek to identify patterns from the transnationalization of the Mexican firms. Our hypothesis are: a) the local market and its expansion is bigger than the firm’s production. And without institutional limitations, the firm(s) grows until it (they) dominate the local market, b) But, if the firm grows even faster than the expansion of local market, then the firm invests in the foreign market, turning itself into an International firm or multinational corporation.

As this is research in processes, we can conclude that the heterodox framework is sufficiently powerful to explain Mexican firm performance not only in the local market, but in the foreign market as well.

The history, the stakes and potential future directions of Ecological Economics: the case for and paths to a socio-economy of sustainable development

Workshop organized by *A. Douai* and *A. Mearman*

The establishment of the International Society for Ecological Economics (ISEE) in 1989 signified the recognition of fundamental failures within mainstream economics and discontent amongst a spectrum of academics concerned about environmental problems. Ecological Economics (EE) can be seen as opening-up a wide theoretical and political space in which the idea of the economy's embeddedness in society and Nature, systems thinking, ethics, interdisciplinary work with natural sciences and others would be favoured. Success as a new scientific field is evident with regard to the production of new knowledge and insights on a variety of topics, e.g. post normal science, footprint analysis, plural value articulation. EE now constitutes a collective questioning of economic orthodoxy and serious body of work for anyone working to address environmental problems and sustainability.

The development of specific research programs in the field has in fact involved a structural tension in particular vis-à-vis Environmental and Resource Economics (ERE). A large part of the EE movement – mainly the natural science and energy school factions in North America – has adopted a 'conservative' approach which employs neoclassical economic models and monetary valuation of the environment. This can be contrasted with a more radical heterodox approach, notable in the European Society. Here successfully dealing with environmental issues is seen as requiring a "break from the mainstream epistemology" (Özkaynak et al., 2004) and a distinct contribution is to be realised "by combining and integrating the insights of several disciplines within a coherent framework and transforming the nature of the problem considered" (Özkaynak et al., 2002). Social concern and political economy have been to the fore of this approach that has been called "socio-ecological economics" (Spash, 1999).

The issue of the identity of EE remains crucial for the overall intellectual landscape on sustainable development. RØpke (2005) qualifies EE as a "vulnerable success". The vulnerability concerns: 1) the lack of "some common ground" because identity is blurred by "the acceptance of anything as being justified because of transdisciplinarity"; 2) the inadequate definition of independence making EE susceptible to becoming "a sub-field" of ERE "modelling links between ecosystems and the economy."

The socio-economic perspective within EE has successfully dealt with important structural weakness of ERE – i.e. with regard to conception of value in environmental decision-making, institutions – in a scattered way. A further step would be the emergence of common ontological and methodological standpoints that would reinforce its identity and form a workable theoretical and methodological alternative to ERE. At present EE remains an "epistemological no man's land" (Faber, 2008), so that "[a]lthough the approach has elaborated suggestions regarding environmental issues, it has not yet fully considered the operation of the socio-economic system *as a whole*" (Adaman and Özkaynak, 2002).

The central thesis underpinning this workshop is that depth needs to be added to two broad areas of research.

1) *The economy-environment relationship in a socio-historical perspective*;
2) *The crossroad between environmental and social sustainability*. The aim of this meeting is to explore these paths through a productive dialogue between socio-ecological economics and recent heterodox approaches – Classical Marxism, historical and sociological institutionalism, environmental post-Keynesian economics (see Mearman, 2006, Berr, 2006), Green economics (see Kennet and Heinemann, 2006) and Social economics – to environment and sustainable development. The expected outcome is the design of a research agenda to establish a *socio- economy of sustainable development* that would constitute an integrative theoretical and political alternative to mainstream approach.

The controversy within EE on the nature of the value of ecological resources is viewed as a point of entry for such a research program. Socio-economic EE research has produced several ethical and political insights into achieving autonomous space for environmental goods and environmental human values vis-à-vis monetary reductionism and the commodificative institutional perspective praised by ERE (Vatn, 2005). The ontological and methodological standpoints of the 'alternative' approach may be reinforced by a more explicit socio-historical perspective on the substantive content of the concepts of 'commodity', 'economic value' and 'money'. A core idea is that the intellectual and analytical foundations of EE have *a priori* eliminated its background Classical Marxism and post-Keynesianism, and that has somewhat undermined the growing rejection of market essentialism. The pre-conditions for a refreshed and productive dialogue on these issues now seem in place (Burkett, 2006).

The subsequent framing either joins or supports an emergent institutional approach at two levels: 1) The impact of power structures and power relations (at local/national/international levels) on environmental issues and regimes (see Söderbaum, 2000; Vatn, 2006); 2) An holistic methodology to take full account of the complexity and multidimensionality of social and economic systems and their dynamic interactions with environment. At these two levels, the potential analytical force of a coherent and inclusive institutionalist approach – mainly around the 'conventions of environment' (Vivien and Boisvert, 2005, Cazals, 2007) and the 'variety of capitalisms' (Zuindeau, 2007) could be important. On the whole, these paths support a socio-economic approach to the environment.

A final step is based on the stance that the above socio-economic program on environment – around value, ethics and institutions – would produce conceptual and methodological tools which are, either in themselves or by additional insights, at the crossroad of environmental and social equity concerns, the latter being underdeveloped in EE. This crossroad could be oriented, as a first step, towards two paths. First, consumption and conceptualizations of consumer behaviour as they relate to high-consumption but also to environmental values (Reish and RØpke, 2004; Starr, 2007). Second, the macro-socioeconomic adjustments or transformations needed to meet objective environmental constraints where there is a coming together of responsibility (inter-generational) and solidarity (intra-generational): Are social inequalities linked to environmental quality? If so, which paths to and which corresponding theoretical foundations for their effective reductions? : Work-time reduction, extension of the non-market sphere in the North? Are achievements of social objectives in the South necessarily linked to environmental degradation? How to sustain the "environmentalism of the poor" (Martinez-Alier, 2003) and at the same time successfully fight poverty?

Six sessions are proposed to deal with these issues. The first introduces the

actual intellectual landscape on sustainable development and makes the case for a productive dialogue. The second is devoted to the recent emergence of classical heterodoxies' interest to environment and sustainable development. The two next ones are designed to discuss the paths to a coherent institutionalist approach of the human-nature relationship. The two last ones aim at coping with the environmental-social interface at the crossroad of responsibility (intergenerational equity) and solidarity (intragenerational equity). A final round-table is proposed to take stock of insights and potentialities the previous sessions would have raised and to discuss next steps in terms of researches and events.

Session 1. Introduction – The case for a productive dialogue

[1]

John Ruskin's thought on development and environment

[2]

Ecological Economics twenty years on

Joan Martinez-Alier
President of the International Society for Ecological Economics, University of Barcelona

[3]

The state of the art in Green Economics

Miriam Kennet
Director of the Green Economics Institute, UK

In a world of rapidly changing climate, sea level rise, and where one third of all species are Critically Endangered according to the latest IUCN Red List Report (2007), and inequality of wealth distribution within and between countries and also poverty is increasing every day, it is difficult to argue that neo classical economics methodologies have been successful. It is even harder to conclude that the Brundtland definition of Sustainable Development has been fulfilled or that future generations will inherit a bundle of economic resources even as plentiful of those the current generation inherited which will be able to protect their social well being.

There is a renewed sense of urgency for finding tools, and methodological frameworks with which to meet these challenges. The umbrella of Heterodoxy provides an important space for economists to reflect on the best way to correct the shortcomings of mainstream economics or even which schools of economic thought can replace it and is helping to create a new pluralism.

The Green Economics School aims to factor in the missing data from poverty, climate change and earth sciences at its core, and so is evolving to provide a philosophical and practical methodology to address these needs as part of the Heterodox family of economics positions. There are increasingly obvious links and interdependencies between social and environmental problems and their solutions.

In particular there is interest in social solutions and new ways of meeting social requirements within the economy, with new emphasis developing throughout Europe on such schemes as the Basic Income or in decoupling work and employment from benefits and pensions, and pensions from a person's position in a family and towards the economic rights and responsibilities of the individual in society. This

is also related to the role of people as consumers of natural resources, in the current economy. The current socio- economic system requires and delivers over-consumption and wasteful consumption in order to keep it fuelled and strong enough to provide enough jobs to maintain it.

There are also discussions about the meaning of work and its boundaries, both informal and informal as a description for overall activities and contributions to society. This fits with feminist discourses and other questioning of how we account for such activity and the role of GNP and GDP and therefore the need for a "growth economy" as a central driver. This provides a framework for questioning the issue of China's phenomenal economic growth and whether this fits with goals of "sustainable development" or " sustainable growth" concepts, when pollution is reaching unacceptable levels and inequality is increasing to levels which threaten stability overall. The concepts of environmental economics, ecological economics and green economics and their relationships to each other and to mainstream economics are discussed, as well as examining the role of the term sustainable development in practical usage in relation to socio – economic issues.

This paper will explore these issues and provide links to the roots of these dilemmas and the role of international production in the development of these core changes to social and environmental issues.

Session 2. Heterodoxies and sustainable development

[4]

Thermodynamics in Classical Marxism:Achilles Heel or Basis for a Marxist Ecological Economics?

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Following the work of Joan Martinez-Alier, it has become a commonplace to exclude Marxism from the history of ecological economics on the grounds that Marx and Engels had an inadequate grasp of the importance of thermodynamics for human production. This paper argues that the exact opposite is the case: that classical Marxism contains a rich treatment of thermodynamic questions, both methodologically and in terms of substantive economic issues
– one that qualifies Marx and Engels as pioneers of ecological economics. It is shown that their metabolic-energetic analysis of socio-economic relations yields important lessons for contemporary ecological economists with regards to: (1) the dangers of energy-reductionism, and how to give energy questions their proper due without reducing economic analysis to "counting calories"; (2) the need to recognize the historical, social-relational specificity of production systems in order to explain energy-related crises and other systemic ecological- economic malfunctions; (3) the revolutionary (material and social) preconditions for an ecologically sustainable system of human production. These lessons are developed though brief reviews of Engels's dialectics of nature (including his discussions of the entropy law and the heat death theory of the universe), Marx's analyses of labor power and capitalist accumulation (exploitation and human-ecological crises), Engels's comments on the ecological energetics of Sergei Podolinsky, and Marx and Engels' projections of communism. It is thereby shown that the exclusion of Marxism from ecological economics represents an unjustified and exceedingly costly (in terms of lost analytical power) violation of the purported aspirations of this discipline for

interdisciplinarity, methodological pluralism, and historical openness in institutional and policy visions.

[5]

Whither sustainable development? A Post-Keynesian perspective

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Since the beginning of the 1970s, the questions related to ecology come in the forefront and progressively led to the adoption of the concept of sustainable development, which now appears to be a new world-wide objective. But, usually, sustainable development only focuses on environmental problems. Our aim is to show that sustainable development implies both ecological and social sustainability. Thus, dealing with poverty, inequalities or well-being, for instance, is central. In this way, we argue that numerous writings of Keynes contain the premises of such a sustainable development. Indeed, Keynes' positions on uncertainty, money, the place of economics, arts, financing, philosophy, etc. are consistent with a strong sustainability. But we think that post Keynesians, classical political economics or more recently ecological economics for instance, can enrich the concept of sustainable development by dealing simultaneously with its social and ecological aspects. We thus try to give some insights for an indispensable 21st century heterodox sustainable development program.

[6]

***Régulation* theory and environment: theoretical elements and application**

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For several years, amongst the heterodox responses to theoretical questions about the environment and sustainable development, *Régulation* theory has given rise to an increasing number of contributions (Gibbs, 1996, 2006; Becker, Raza, 2000; Gendron, 2001; Rousseau,
2002; Rousseau, Zuindeau, 2007; Zuindeau, 2001, 2007). They are thereby responding to an important shortcoming in this theory that Alain Lipietz emphasised and tried to explain in the middle of the 1990s (Lipietz, 1995). This new abundance and the relevance of the contributions does not prevent a dual deficiency.
On the one hand, the studies are relatively separate from each other (Zuindeau, 2007). At the very least, they do not constitute *one* regulationist theory of the environment that would be consistent, would largely cover the area concerned, and could already claim to be stable. On the other hand, the empirical applications of the proposed theoretical constructions are extremely reduced. With the exception of Corinne Gendron's thesis (2001), on companies' positioning on the environment, one can say that the work on empirical validation still fully remains to be done. The environmental wing of the regulationist corpus thus comes up against a constraint that is sometimes expressed against this same theory in its entirety: how to empirically justify what, failing that, remains of the state of hypotheses relating to the characteristics and development of accumulation regimes and modes of regulation? This communication seeks to provide a response both to the need for theoretical consistency and empirical deficiency.

At the theoretical level (1st part of the communication), by basing ourselves on the article by Zuindeau (2007), we will put forward the theory according to which there is an economic relation to the environment, which varies depending on the general socioeconomic context. More precisely, this relation to the environment is assumed to articulate three forms: one form called « transhistorical », one general capitalist form and a specific capitalist form, which varies depending on the modes of *régulation* and the accumulation regimes. We will look in particular at the characteristics of the general capitalist form and the characteristics of the specific capitalist form. In this regard, we will try to see how the specific relation varies, depending on the Fordist mode of development and the post-Fordist forms of growth.

The theoretical study will be expanded by an application of an empirical nature (2nd section). More precisely, there will be an analysis and an attempt to categorise environmental profiles and the countries of the OECD in terms of environmental policies. The study will be regulationist-inspired insofar as it intends to rely on several references to this theory that relate to the varied forms of capitalism (Boyer, 2002; Amable, 2003). In these contributions, several families of capitalism have been identified on the basis of characteristics that make sense of the regulationist viewpoint, notably in that they describe the "institutional forms" that the authors of this School resort to: wage-labour nexus, forms of competition, nature of the state…
In our case, it is the national forms of the "relation to the environment", mentioned above that will be described and that will help in developing a typology. To do this we will use factorial analysis and cluster analysis. The data used are those provided by the OECD as part of the environmental compendia (in particular, in our application, the 2004 compendium which was published in 2006). The categories of countries obtained through cluster analyses will then be compared with those that the regulationist authors, in particular Bruno Amable in his book, *The Diversity of Modern Capitalism (2003)*, propose on the basis of their own empirical work.
The challenge inherent in our application is to see if the national positioning in terms of environmental impact and environmental policies is or is not close to the grouping applied to broader socioeconomic categorisations. In other words, and interrogatively, does the manner in which economies are structured and how they organise their regulation affect their way of understanding their environment and managing their environmental policies? Assuming that the practice of categorisation that is applied contributes towards confirming a positive response to this question, this means that the economic relation to the environment would demonstrate a form of dependency on the factors that more generally structure the regime of accumulation and the mode of *regulation*.

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Session 3. Values, Institutions and Environment I

[7]

An inquiry on power and ecological economics

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To the extent that ecological sustainability is defined with reference to (re)embedding the economy (back) into society and nature (along the Polanyian line), one has to recognize the utmost necessity of democratising the use of natural resources. Participatory mechanisms over the management of natural resources that have been implemented in many parts of the world—at local as well as regional levels—are, in principle, the right step towards democratising the use of natural resources. However, the outcomes of such mechanisms often fall short of expectations. On paper these programs seem fully democratic, yet their operationalization remains problematic due to a varying degree of lack of consideration of prevailing power structures. The power relations among local/regional actors and/or the general power structure (the aspect of gender being an example) are likely to lead to the marginalization of interests of some and, thus, challenge an effective participation of all stakeholders, whichmay bring about unintended, unanticipated and undemocratic consequences that, more often than not, further the interests of those who were already powerful. More particularly, the fact that the less powerful group is not excluded from discussions—however an important step in itself—may not render the process democratic for two reasons: first, the feasible set of policies may be formulated and set out by those that are in favour of the powerful group, and second, there is always the possibility that the powerful group may impose a strict dominance over the less powerful group. Departing from this observation, it will be argued that the issue of power must be positioned at the centre of any analysis on the use of natural resources, both at theoretical and policy levels. This necessitates incorporating the issue of power into the economics discipline in general and the ecological economics in particular. While power is considered to some extent both in economics and ecological economics, existing theories, by and large, fall short of providing a structural and dynamic analysis at the social level. At this background, the paper will first critically review existing theories of power in economics and ecological economics. Then, it will argue that power should be understood as a process, as an aspect of the dynamic social structure. Therefore, even though power may be

observable at the empirical level, it is irreducible to it, and power can be understood through the analysis of the ways in which it is institutionalised in the economic, social and political aspects of societies rather than as a characteristic of

different atomistically-defined, isolated individuals. Such a framework is important especially for ecological economics where it is by no means possible to ignore the social context.

[8]

Are we ready to understand individuals and organizations as political actors?

Peter Söderbaum
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Some of us heterodox economists are active in the field of ecological economics focusing on the importance of natural resources and ecosystem services. Problems are then often connected with unsustainable trends related to the environment. In attempts to understand environmental and natural resource degradation, problems may, however, be sought in many directions. Exclusive reliance on positivism as a theory of science or on neoclassical economics as a paradigm is among the potential areas for identification of problems. The mainstream ideology in a society, for instance Neo-liberalism focusing on economic growth and with a special idea of efficiency is similarly another possible part of the problems faced. A total complex of problems may also include the objectives and preferences of actors, such as firms and consumers, as well as observed production and consumption patterns.

As part of this broader view, our models of individuals and organizations as actors in society appear to be essential. While not excluding other possibilities, I will discuss the pros and cons of a model of the individual as Political Economic Person and of the organization as Political Economic Organization. Scholars educated in the positivistic tradition will only reluctantly recognize the political aspect of our behaviour and the behaviour of our fellow human beings. Still I believe it to be a necessary first step. Economics whether mainstream or heterodox is – and has always been – political economics.

[9]

The ontology of environmental values: the contribution of historical institutionalism to (Socio-) Ecological Economics

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This paper proposes ontological and conceptual foundations to the recent institutionalist inclination of “socio-ecological economists” like A. Vatn and P. Söderbaum developed against monetary reductionism and the commodificative institutional perspective praised by ERE with regard to environmental values. The case for an historical institutionalist approach of human-nature relationship is argued with, to the fore, the idea that all human-nature relationships always refer, firstly and decisively, to relationships between humans themselves. A double anchoring in the Marxian and Commons’ thoughts, which is specific to an historical approach of institutions and particularly to the *Regulation theory*, is developed in

order to support the following principles:

- Cost-Benefit Analysis praised by ERE to integrate environmental human values within decision-making process is interpreted as the projection of a *specific instituted* relationship between humans themselves which starts with the establishment of *property rights* – which for historical institutionalism are political constructions – and finishes with the realisation of the economic value in the *money form* (an institutional form which has specific roles within capitalism).
  Mainstream approach of environmental values can be seen as the ideological superstructure that supports the growing commodification of Nature.
- Ecological resources which are not privatively appropriated and which stand outside the sphere of socialised work have no *intrinsic economic value*. The neoclassical quest for an "economic value" of Nature constitutes an analytical mistake that results from the a-historical and a-social attributes of its epistemology, reflecting a real
"commodity fetichism".
- As Vatn and Söderbaum have argued, *multiple modes of human valorisation of nature* exist which are irreducible to any monetary value. These modes can be integrated in the following frame: (1) the dualist model of the human actor praised by most ecological economists and by Söderbaum is rejected. A reappraisal of the notion of *interest* as a social construction is necessary in order to produce a coherent institutional view of human motives. (2) This view is necessary in order to emphasize the *social and political character of the human valuation* of things and conditions.
- The *conflict* is inherent to human-nature relationship. Any formal institutional form for decision-making would never overcome it as such. Beyond this normative quest, an institutionalist approach would first concentrate its effort to produce a denaturalised picture of the "game" – values, powers, etc. – so that the relevant actors that should be supported with regard to the desired outcome would be identified.

This work supports a research program dealing with the influence of modes of regulation and regimes of accumulation on sustainability (Zuindeau, 2007), therefore emphasising the need for a holistic and historic approach of the economy-environment relationship.

Session 4. Values, Institutions and Environment II

[10]

Debated universes and environmental conventions

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The purpose of this paper is to describe and define from a theoretical viewpoint the specific kind of conventionalist approach that we have adopted to account for biodiversity. [Boisvert, Vivien, 2005]. This approach rests on the notion of "debated universe" to characterize situations in which scientific controversies, radical uncertainty, irreversibility, conflicting interests and long-term stakes prevent the definition of optimal solutions.
We shall develop three main questions. As a first step, we will show the stand of this"debated universe" approach within the theory of conventions. Indeed, the environmental conventions do not appear either among the various types of conventions listed by Batifoulier *et al.* [1][2001:16] or in the collection of papers edited by Eymard-Duvernay [2006][1]. Furthermore, some of the distinctive features that these authors define as characteristics of a convention do not apply to our research

objects. As a second step, we will compare our approach which is inspired by historical institutionalism to the one followed by the regulation theory. We will report and comment the debate and argument between the theory of conventions and the theory of regulation [Favereau, 1995] and examine to what extent the theory of conventions can be considered as a "great leap backward", as Lipietz [1995] has styled it.
Finally, we will characterize the position of our approach within the present trends of ecological economics.

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[11]

Environmental conventions: the case of agriculture

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The Economics of conventions is a French theoretical movement. It is developed at boundaries of economics and sociology (Chavance, 2007), so it has contributed to a socio- economy approach by focusing on the different modes of coordination in the economy by stressing upon the rules.
Godard (1993) has introduced the concept of "environmental convention" to account for the different references that allow for a collective decision process in the context of "debated universe". The word "convention" is used in the sense given in French literature (Dupuy et al,. 1989; Orléan, 1994; Eymard-Duvernay et al., 2006). This term is specified by Salais
(1989) as "a system of reciprocal expectations on skills and behaviours, conceived as self

[1] Some chapters, for instance Jolivet [2006] and Baron and Isla [2006], incidentally refer to sustainable development, but they are in the parts of the book devoted to conventions of quality and developing economies. Moreover they are both using the rhetoric of justification developed by Boltanski and Thévenot, which is not our point of view.

evident and to go from oneself". An environmental convention focuses on the aspects of the issue that have to be considered as relevant and possible. This economic analysis is based on the acceptability criteria rather than on the optimization one.
This paper aims at presenting a conventionalist analysis of environmental issues especially in agriculture. What are the common references that characterize environmental conventions in this sector?
The communication will be divided in three sections. Firstly we will set out the analysis of rules according to a conventionalist approach and its relevance to study environmental issues. Secondly, we will use the concept of "worlds of production" as world of conventions which has been elaborated by Salais and Storper (1993). Then, we consider that each "environmental convention" organizes a *possible world of production protecting of the environment* where producers and consumers agree on the definition of the environmental quality of products (Cazals, 2006). What are the boundaries of each *possible world of production environmental protector?* This approach, which gives its entire place in the sense that actors give to their practices and the diversity of institutions they can mobilize, contributes to the development of a broader institutional economics of environmental issues (Ropke, 2005; Soderbaum, 2007). Thirdly we will briefly explain how it is possible to demarcate the *real world of production protecting of the environment* to which the producers belong.

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[12]

Defining environmental sustainability of a production process in agriculture: is the fund-flow model of Georgescu-Roegen relevant?

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This paper deals with the environmental sustainability issue of the agricultural process by putting special emphasis on non commodity outputs (public good and waste) as joint products.
We propose a methodological approach based on an analysis of the agricultural production process from a physical viewpoint, which is related to the Georgescu-Roegen's analytical tool: the fund-flow model. Particularly, the second law of thermodynamics involves defining the condition of joint production in relation with the quality of all the output-flows (outflows) produced by the agricultural production process. In this context, the environmental sustainability of the production process depends upon the quality of all its flow components during a period of time. Environmental sustainability is thus measured through the qualitative change of the production process, *i.e.* through the waste production and lead to an efficiency approach of the process. Bringing together thermodynamics, the fund-flow approach and joint production of commodities and non-commodities in order to assess the environmental sustainability of agricultural processes is the corner stone of our work.

Session 5. From the environmental-social interface to social sustainability I

[13]

The social construction of normal standards in consumption

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The environmental impacts of consumption are often considered in relation to selected symbolic actions where consumers choose between more or less environmentally friendly options. However, a large part of the environmental impacts are related to consumption which is seldom considered from an environmental perspective, such as the general increase in standards and the changing consumption patterns related to changes in everyday life. Growing consumption codevelops with long-term changes of daily life and, gradually, new expectations emerge with regard to what is taken to be the normal standard that most people in society can expect to achieve.

One of the fastest growing fields of consumption is the use of information and communication technologies (ICT). New consumption patterns emerge and new standards are set with regard to both stationary and mobile equipment necessary for leading a "normal life". The intention with this paper is develop a theoretical framework for studying the social construction of new normal standards. The framework is intended to be applicable to the study of the present processes related to ICT in everyday life, and illustrations from this process will be included.

The framework is inspired by studies of historical changes of consumption patterns such as the emergence of the car society (Sachs) and the modern household coevolving with technologies applying the small electromotor (Cowan). The approach emphasizes the coevolution of production and consumption, and the interplay between the new technologies and the social, economic and cultural institutions into which they become embedded (Fine and Leopold, Princen et al., Norgaard, Schor, Harvey et al., Randles). The approach also draws on the increasing focus on practice in consumer studies, emphasizing that consumer goods are adjuncts to social practices – and that practices rather than goods make sense to consumers (Warde, Shove, Pantzar, Spargaaren). Not all these strands of socio-economic research are motivated by environmental concerns, but they can inform environmental studies.

Socio-economic and institutional perspectives are relatively strong in environmental studies when it comes to the management of natural resources, valuation, and to some extent, instruments (Vatn, Andersen and Sprenger), and these studies have resulted in more general

observations and conceptualizations. The case study in this paper is intended to contribute to the elaboration of such perspectives in relation to environmental consumption studies and to consider possibilities for generalizations regarding core institutions and settings that are decisive for the present construction of new consumption patterns. It is discussed whether and how such knowledge can be transformed into ideas for developing more sustainable consumption patterns, and what forms of institutional change would be needed to encourage degrowth in consumption rather than ever increasing standards.

[14]

Global warming and high consumption: Habits, needs and social values

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A critical part of stemming global warming is reducing carbon emissions associated with typical high-consumption lifestyles in advanced-industrial countries. While there is much debate about how best to achieve this, it is clear that curbing growth in consumption levels is important for stopping climate change. Understanding how this might be done is hindered by the traditional representation of the consumer, which prioritizes individual satisfactions from having things, while bracketing the social processes that shape perceptions of what constitutes a materially good life.
This paper examines questions of high consumption, habits, needs and social values, aiming to develop a conceptualization of consumption dynamics that takes into consideration the social nature of consumption. I first review the literature that 'socializes' views of consumption by incorporating issues of relative status (Veblen, Duesenberry, Frank) and/or the social constitution of needs (Veblen, Kyrk, Peixotto, Hoyt). I argue that, as much as these views capture elements of consumption dynamics that are missing from the standard representation of the consumer, they suffer from problems of essentializing properties of consumption that have only weak roots in fundamental characteristics of human psychology, and rather reflect socio-cultural mechanisms that have arisen in such societies to articulate aggregate demand and supply. The paper goes on to lay out an understanding of consumption wherein these social dimensions of consumption arise endogenously, with businesses' quests for moments of abnormal profits producing a constant updating of 'drives to buy' and regular percolations of new consumption norms through society. It is argued that the social and economic mechanisms that sustain this process are 'adaptive', in the sense that they facilitate some clear social goods: sustained growth of employment and widespread material security. However, as with any adaptation to a given ecological niche, there is no assurance against its eventual decline in adaptive value. The paper ends by discussing implications for strategies to shift consumption growth onto more sustainable trajectories.

[15]

The environmental impacts of changing consumption patterns: evidence from Turkey

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Abstract
Despite hopes for the 'dematerialisation' of the economy in absolute terms, economic growth, with the present technologies in production, transportation and building construction and social 'lock-in' in consumption habits and urban settlement patterns, still lead to growth in material and energy flows (at least in developing countries, and in many western industrialised countries), and hence to increased environmental burden on the region's and/or world's ecosystem (EUROSTAT, 2002; Haberl *et al*., 2004). Turkey, as a country with a growing population and a growing economy, will also find it difficult to avoid moving towards the use of higher levels of direct material and energy inputs.

Based on a project conducted at the metropolitan city of Istanbul—a city of 12 million with different socio-economic profiles—the paper aims at understanding the extent of environmental pressures of household consumption. The environmental profile of the households (in terms of material and energy use) is calculated by using consumer expenditure surveys, information from the national accounting tables (with environmental accounts) and a quantitative survey administered to a total of 1200 households representative of the urban population of the city. Survey research is also used to understand the factors conditioning the consumption patterns of individuals (e.g. demographic and socio-economic factors, attitudes, values, environmental knowledge, institutional framework, city infrastructure and service availability).

It is hoped that the outcomes of the project will give us insight about what has to be done to promote more sustainable consumption patterns. Better solutions would surely require different types of regulatory forces at the local, national and international levels that privilege environmental sustainability as a policy outcome.

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Session 6. From the environmental-social interface to social sustainability II

[16]

Growth Dynamics, Social Inequalities and Environmental Quality: An Empirical Analysis applied to Developing and Transition Countries

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Since the beginning of the 1990s, the environmental consequences of wealth accumulation are the subject of a polemic around the concept of *Environmental Kuznets Curve* (EKC) favoured by mainstream approach. The EKC is a hypothesized negative relationship between various indicators of environmental degradation and income per capita. In the early stages of economic development pollution increases, but beyond some level of income, the trend reverses itself, so that at high-income levels, economic growth leads to environmental improvement. This implies an inverted U-shape relation between pollution and per capita income. Even if the EKC is essentially an empirical phenomenon, most of the econometrical literature remains weak. More particularly, these empirical studies suffer from serious potential omitted-variable bias. The objective of this article is to deal with the impact of social inequalities on pollution as a way to overcome this bias. We argue that income dispersion would have a larger effect on pollution than income level.

From a theoretical point of view, a decrease in inequality has an undetermined effect on environment. On the one hand, a more equitable income distribution increases the consumption of goods of poor people which enlarge society's environmental footprint. On the other hand, decreasing inequalities may ensure to the poorest a better representation (at the political level) of their interest to the respect of environment (Boyce, 2003; Martinez Alier, 2003). Moreover, it may guide their choice towards goods which are less harmful to environment.

On that base, we propose an econometrical analysis using panel data for 83 developing and transition countries during the period 1988-2003. We examine the effect of income inequalities on local pollutions (sulphur dioxide emissions and organic water pollution) by integrating the Gini index in the formulation of EKC. Two effects may be tested: (i) a direct effect of inequalities on pollution as proposed by Boyce (1994), Scruggs (1994) or Torras & Boyce (1998); (ii) an indirect effect by which the degree of inequality influences pollution by its action on political freedoms. The rationale for this second effect is that a high degree of inequality generates a concentration of powers within dominant groups and then reduces the importance attached to environmental preoccupations. In order to test this indirect effect, we proxy political situation by the *Freedom House* political rights index and we use instrumental variables techniques with panel data.

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[17]

Use value and trade value for a theory of social and ecological sustainability

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The access to the modernity era, the taking off of the industrial development twinned with the institution of capitalistic social relations and the attempt to domesticate nature lead the classical prevailing economic theory, and particularly the neo-classical one, to exclude at first from its research programme the natural elements supposed to be worthless and subsequently to deny human work as the foundation of the trade value of goods. This double exclusion happened to be an insuperable theoretical contradiction because the irruption of the issue of environmental and social sustainability of development brought out the need for a coherent theory of economic value and for an ethical questioning about what can be considered as valuable, but with a totally different meaning, because it cannot be simplified and united to the object of economic measure.

Faced with the inability to think out the nature value (combining the two meanings) and to think out the place of work in the foundation of economic value and in the life of each human being, we suggest new formulations of these questions.

Sustainable development – that is to say both social and ecological sustainability – implies to return to Marxist theory of value. But in the context of the commodification of all human activities, we propose to examine this theory with a new point of view.

Firstly, we try to show that non-saleable services have a non-saleable monetary value which is not extracted from the private sector and redirected to the public sector but produced by the latter. Work done in non-saleable services is not exchanged for capital, nor is it exchanged for levied income. Instead, it is exchanged for income that is produced following a collective decision on the anticipation of collective needs.

Secondly, the natural goods are a wealth but have not an economic value in itself if they are not produced. The difference between wealth and economic value is the foundation of a theory of strong sustainability, because the real value of nature is not economic but political and ethical.

Visiting again the theory of value, it is possible to found a new critical political economy compatible with the strategy of sustainability. The condition is to not reduce the use value to the trade value.