# Environmental governance and languages of valuation: two European case studies

PhD Thesis

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*often, by confronting difficulties and details you confront reality*
WERNER HERZOG

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# Abstract

The application of the homo economicus model of human action for analysing environmental policy has been consistently criticised for ignoring the multiplicity of environmental values and ethical bases that underlie human motivation, which may result in undesirable crowding out and voice silencing effects that generate ineffective and legitimacy-deficient environmental policies. This thesis considers policy implications of communicative rationality as an alternative model of human action capable to integrate multiple environmental languages of valuation in environmental governance. The thesis first examines conceptual and theoretical issues relating to the adoption of communicative rationality as an analytical model and then moves on to empirically explore implications of employing that model for analysing environmental governance by means of two case studies. The first employs Q methodology to analyse 'rurality' discourses underlying stakeholder perceptions regarding the role of a sustainability institution (social enterprise in rural Scotland), while the second analyses the politics of landscape value that underlie environmental conflict in a case of wind farm siting conflict in rural Catalonia.

Communicative rationality is found useful for analysing and indeed improving environmental governance, albeit with limitations. Normatively speaking, the concept allows connecting with the paradigm of deliberative democracy that offers an elaborated framework for understanding and assessing legitimacy aspects of environmental governance, particularly in terms of social and environmental justice. Positively speaking, communicative action allows conceptualising environmental conflicts as governance challenges and not merely as cases of government policy failure, which proves useful for analysing emerging policy arrangements promoting participatory decision-making in the network society. A main limitation is that by conceptualising stakeholder action embedded on communicative rationality research may develop a soft spot by ignoring the practical context of power that surrounds environmental governance. It is suggested that ecological economics adopts the creation of public spheres for deliberation of sustainability matters as a distinct policy objective and the study of the deliberative potential of actual participatory decision-making arrangements. This will help improve their capacity to effect change and test the danger of them becoming legitimising mechanisms for policies that promote existing resource inequities and power relations. Such a research outlook could also advance the relatively undeveloped study of power in ecological economics by furthering links with political ecology.

*Keywords*: communicative rationality, environmental governance, deliberative democracy, political ecology, power

# Resumen (Abstract in Spanish)

El análisis de políticas ambientales mediante el uso de *homo economicus* ha sido criticado por no tomar en cuenta la multiplicidad de valores ambientales y bases éticas en las cuales se basa la motivación humana. Esta limitación es importante, dado que puede resultar en excluir algunas preferencias ambientales y así generar políticas ambientales inefectivas y de poca legitimidad. Esta tesis considera las implicaciones de la racionalidad comunicativa para formar y analizar políticas ambientales, dado que esa pretende ser no solo un modelo alternativo a homo economicus sino también un modelo capaz de integrar múltiples lenguajes de valoración en la governanza ambiental. La tesis primero examina temas conceptuales y teóricos relacionados al uso de racionalidad comunicativa como modelo analítico y luego considera de forma empírica, implicaciones de usar este modelo para analizar la governanza ambiental por medio de dos estudios de caso. El primero, emplea la metodología Q para analizar discursos de 'ruralidad' que son la base de percepciones sobre el papel de empresas sociales operando en áreas rurales de Escocia. El segundo, analiza la formación política de disputas sobe el valor paisajístico que fomentan conflictos ambientales sobre parques eólicos en Cataluña rural.

La tesis concluye que la racionalidad comunicativa es un concepto útil para analizar y mejorar la governanza ambiental, aunque con sus limitaciones. En términos normativos, el concepto permite conectar con el paradigma de democracia deliberativa que ofrece un marco potente para entender y evaluar aspectos relacionados a la legitimidad de governanza ambiental, particularmente en términos de justicia social y ambiental. Analíticamente, la acción comunicativa permite conceptualizar conflictos ambientales como retos de governanza y no meramente como fallos de politica ambiental, lo cual ayuda entender políticas ambientales que promueven tomas de decisiones participativa en la emergente sociedad de redes. Una limitación básica es que conceptualizando las acciones de agentes como acciones basadas en la racionalidad comunicativa, la investigación científica puede acabar ignorando contextos de poder que rodean la governanza ambiental. La tesis sugiere que el campo de economía ecológica adopte como un principio normativo la creación de esferas públicas de deliberación sobre decisiones ambientales y que enfoque al estudio del potencial deliberativo de configuraciones actuales de toma de decisión participativa. Esto ayudaría mejorar su capacidad de efectuar cambio y comprobaría si dichos procesos se transformen en mecanismos de legitimación de políticas que promueven desigualdades en el uso y reparto de recursos ambientales y desigualdades de poder. Tal visión investigadora podría también

avanzar el estudio de poder que esta relativamente atrasado en economía ecológica, por medio de mejorar vínculos entre esta disciplina y la ecología política.

*Palabras clave*: racionalidad comunicativa, governanza ambiental, democracia deliberativa, ecología política, poder

# Preface

This thesis is submitted for a doctoral degree in the interdisciplinary field of environmental science, better known in the Anglo-Saxon literature as environmental studies. Three of this dissertation's chapters have either been published or accepted for publication, two in international journals and one as a book chapter.

Ever since my days as an undergraduate student in Business Administration back in Athens, I have felt uncomfortable with what I thought to be a simplistic representation of human behaviour propagated by economics via the model of homo economicus. Curiously, my doubts were to be bolstered in the most unlike of environments, in a London management consultancy where I worked as an assistant consultant after graduating. There I found out that it was more frequent for individuals and companies to co-operate in the quest of common benefits rather than compete in the quest of individual profit. Moving on to an MSc in Ecological Economics at the University of Edinburgh, I accidentally stumbled upon anthropology and the idea that environmental ethics can be premised on several worldviews, which have no reason to be less valid than 'developed' western views of nature. Indeed, my ethics class taught me that non-western ethical systems might at times result into practices that are not only more beneficial for the ecosystem than those premised on western ethics, but also bring about less unfair and oppressive relations among humans.

My readings during my work as a researcher and lecturer in environmental economics at the Scottish Agricultural College in Edinburgh, revealed to me that people's motivation to harm or protect their environment can be based not only on calculations

of personal costs and benefits but also on concerns about the welfare of others, concerns about keeping promises or following ethical principles which one may sometimes hold irrespective of the personal consequences of adopting such stances. I also realised that ecological economics was not only questioning the applicability of homo economicus for analysing environmental policy, but also accepted that environmental preferences are socially constructed through institutions and that it propagated the accommodation of plural values in environmental decision-making. In a sense, this meant that the question as to which model of human behaviour is more precisely describing how people act stopped being so important, and instead what became key were the policy implications of accepting broader than rational profit maximisation views of human action.

This quest became the starting point of my PhD. My encounter with critical theory and deliberative democracy taught me the policy importance of pursuing public spheres where environmental issues are debated in the absence of coercion and strategic pursue of individualistic benefits. This implied that the concept of communicative rationality advanced by more contemporary critical theory scholars not only described an alternative (to homo economicus) way that people come to form preferences (i.e. a model of human action in positive terms) but also – and similarly to the utilitarian rationality underlying homo economicus – a normative rule as to how public decisions should be taken. I then embarked to look, by means of a case study, how discourse analysis could help reveal the multiplicity of stakeholder environmental ethics in order to create public spheres and identify practical consequences for designing institutions for sustainable development. But after having done this, what I came across in the bibliography was a staunch critique of thinking

that this could be possible. This criticism made me think that, although not necessarily a bad idea, un-coerced public spheres were many times difficult to achieve as they ignored the existence of power that may end up not only determining what happens within them but even end up in them being appropriated by those in power in order to perpetuate inequality in the distribution of natural resources. This is when I found that political ecology offered a potent framework to analyse how such effects occur and so I embarked on a second case study to try and see how power influences decision-making processes regarding sustainability institutions (this time the formation of decisions concerning renewable energies).

This rather complex trajectory has implied that my doctoral research had to be multidisciplinary and that this dissertation rather demonstrates a line of research that I have followed on the course of trying to tackle my original question, instead of more conventional and well-established PhD formats that on the most try to 'answer' a research question. In a world of disciplinary rigidity, this may be seen at best confusing, at worst a shortcoming; however, I have come to believe that this multidisciplinarity has not only been necessary for me in order to investigate my topic, but also that it has somehow been unavoidable due to both my research interests and my professional and academic formation. Taking into consideration these premises that underlie my work, I leave the reader to judge its quality, hoping that at least (s)he will enjoy the reading.

# Chapter One: Introduction

"Picture a pasture open to all". With this quasi-bucolic image, Garrett Hardin starts

his description of how the *Tragedy of the Commons* unfolds in his well-known 1968

article in Science magazine. Addressing the Pacific Division of the American

Association for the Advancement of Science which he presided at the time (the article

is a reprint of his address), Hardin used the parable of 'the commons' to support his

argument on the policy need to effect a moral shift through regulation and education

in order to deal with the issue of overpopulation. Hardin argued that in a finite world,

one's decision to give birth implied reducing available resources for the rest, and

paralleled this decision to that of using resources in what he called 'a commons'.

Using the example of a commoner deciding whether to add one more animal to his[1]

herd, Hardin posed that:

> As a rational being, each herdsman seeks to maximize his gain. Explicitly or
>
> implicitly, more or less consciously, he asks, "What is the utility *to me* of adding one
>
> more animal to my herd?" (Hardin, 1968: 1244; emphasis in original)

He then went on to explain that this utility has a positive and a negative component,

the further consisting in the herdsman reaping benefits from selling additional animal

products and the latter mainly comprising the overgrazing created by the additional

animal. However, the adverse effects of overgrazing are *shared* by all commoners,

which results in our commoner's utility being negatively affected only by a fraction of

the whole negative impact making the decision to add one more animal in the herd as

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[1] The choice of the commoner's gender is Hardin's.

the only sensible course of action. With this logic, our herdsman carries on adding constantly more animals to his herd. What's more, what is reasonable to him seems reasonable to the rest of the commoners resulting in that each and every rational herdsman sharing a commons does the same, i.e. adds more animals to his herd. That leads Hardin to conclude that:

> Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit – in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all. (Hardin, 1968: 1244)

In the last forty years, numerous objections have been raised against Hardin's assumptions as well as the implications of his conclusions. First and foremost, it has been pointed out that his model does not describe a commons property regime but an open access situation where the use of natural resources is not regulated by any rules at all. Instead, supporters of this thesis argue, commons is a well-defined system of mutually beneficial and compelling regulations (Bromley, 1992). Others have taken issue with some of Hardin's suggestions that privatising commonly-held resources could be the best solution for protecting valuable resources as it gives a private incentive to conserve them for private benefit. Critics point out that commons have successfully supported populations living in marginal (in terms of fertility potential) areas (Monbiot, 1994) and that commons privatisation results in making a few already rich landowners even richer (Franke & Chasin, 1981) while transforming commoner populations to social and economic pariahs (Kirkby et al., 1995). Enclosure of the commons results in the private appropriation of what used to be a common benefit

(Thomas & Middleton, 1994). Moreover, Hardin's critics argue that practice shows it is actually private owners (enclosers) who not only benefit from but also contribute to the demise of the commons, as they move in to aggressively exploit resources to their full potential and then quickly sell them off in order to acquire more promising resources in other areas (Monbiot, 1994).

A central aspect of Hardin's article, which has also been duly criticised, refers to his treatment of human behaviour as depicted in his example of the 'rational' herdsman. Specifically, this being is meant to make decisions by carefully weighing utility gains and losses of alternative decisions. This is hardly an original view of human action as it is the one adopted by perhaps the most influential branch of economics: neo-classical economics. Standard neo-classical economics textbook definitions of human behaviour have it that rationality entails making decisions after careful weightings of costs and benefits of alternative options, always opting for that alternative that offers the higher utility gains to oneself. Philosophically based upon utilitarianism, this narrow definition of rational human behaviour has dominated mainstream economic models during the 20$^{th}$ century. Eventually, economists studying environmental issues also found it useful to adopt it for their analysis. According to this *homo economicus* model, rational human action as regards how to use environmental resources is individualistic, utilitarian and seeks to maximise one's own-benefit: individuals look at costs and benefits of alternative actions towards the environment in order to decide which one is best to follow.

Since the mid-80s, Hardin's insights have provided a rational argument for multi-lateral international institutions and western governments to pursue widespread

privatisations of natural resources and massive transfers of communal lands to the state or individuals in developing countries (Monbiot, 1994). Institutions such as the World Bank still put forward the logic in order to defend such natural resource management strategies as regards a new category of commons: the 'environmental commons'. In a 2002 article with the telling title 'Global Priority', the then president of the World Bank James D. Wolfensohn explained to the readers of the United Nations Environment Programme (UNEP) official magazine that environmental services such as biodiversity constitute invaluable global commons that are not effectively protected by individual countries as these have "limited economic incentives for taking action on the global environment" (Wolfensohn, 2002: 4). But, Wolfensohn tells us, this is something to be expected as it is exactly in the nature of a global public good such as environmental services to attract decisions taken at the country level that do not adequately reflect their global impacts. Consider for example a developing country rich in biodiverse rainforests but drawn into poverty. Its government would be happy to deplete all resources available in these forests for the country's economic development, no matter if in the course of this use, several ecologically valuable species disappear. Here, Hardin's 'rational' herdsman all-powerfully emerges again, only that in this case the individual herdsman comes in the guise of an 'individual country'. The World Bank president further explains that this is what economists describe as a situation where "regional and global externalities are not internalised at the national level" (Wolfensohn, 2002: 5). The author then points out that one of the Bank's tasks is precisely to generate those – previously absent – markets in which global environmental goods and services and global non-market values can be traded. One such example is the Global Environment Facility (GEF) where those values are captured primarily through international resource transfers.

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Similarly, the rational profit maximiser model of homo economicus human action underlies the recently established European Union (EU) Emissions Trading Scheme (ETS) and its counterpart Clean Development Mechanism (CDM) that aim to partly tackle climate change. This pollution permits trading scheme is premised on the idea that industrial polluters will act as 'rational' profit maximisers so that when they cannot afford reducing their pollution they will opt for buying a permit from more eco-efficient polluters who have already managed to reduce their pollution. As a result, the scheme expects to motivate more eco-efficient producers to reduce pollution themselves in the expectation of gaining money from selling spare permits. Alternatively of course, the whole scheme allows 'rational' polluters to invest in CDM projects instead of either trying to reduce their pollution or buy permits. In that case, industrial polluters, again acting as 'rational' profit maximisers, will prefer investing in sustainable projects that 'cancel out' their pollution (e.g. planting a forest or construct a wind farm in a developing country) instead of directly reducing the pollution themselves, as long as the second option is more affordable to them. ETS and CDM are specific examples of institutions set in place to accommodate a profit-maximiser (homo economicus) rationality in order to achieve sustainability goals. Both institutions comprise economic and in particular market-based instruments that are used to achieve sustainable development (halt biodiversity loss and reduce unnecessary pollution). Both of these economic institutions for sustainable development result from policy initiatives of large and influential organisations such as the EU and the World Bank, hence their worldwide impact is considerable.

However, on the ground conflict hinders the success of GEF initiatives and these conflicts can reach extremities as in the case of the Komodo National Park Collaborative Management Initiative in Indonesia, where fatalities were produced (Griffiths, 2005). Research suggests that several GEF projects overlook critical land tenure and property rights issues and remove control over decision-making and access to areas traditionally used by local indigenous communities (e.g. as hunting sites) (Griffiths, 2005). These criticisms point out that GEF projects regularly treat local populations as beneficiaries rather than rights holders and that the whole initiative should adopt policies which secure local people's rights to lands and territories, as well as their free prior and informed consent. Likewise, property rights issues underlie the limitations of ETS. Tradable pollution permits schemes have been criticised for not modifying the existing situation of injustice as regards rights and access to carbon sinks and reservoirs (Agarwal & Narain, 1991). Critics suggest that climate change policies should instead be looking to create fair shares of environmental space in terms of emissions equity, so that poorer nations are allowed to emit more greenhouse gases to develop and provide their citizens with much needed quality of life (e.g. health care improvements). A similar criticism also applies for the CDM of the ETS scheme, as this transforms local assets into a mortgage for developed economies to continue growing and polluting, removing at the same time control over the use of these resources from the hands of poorer local populations (Pedace et al., 2005) through long-term resource leases and use constraints.

Property rights issues with land and natural resources are at the heart of conflicts and concerns with economic institutions for sustainable development (such as GEF, ETS and CDM). These mechanisms seem to limit local access to the 'global commons' and

reduce local control over decisions made concerning them. The removal of property rights over these resources contributes to a form of environmental injustice as these mechanisms re-distribute costs and benefits from using resources ('global commons') to the disadvantage of poorer local populations. Homo economicus is the discourse used to legitimise and justify such policy instruments that facilitate this resource take-over, which suggests a crucial link between environmental justice and the use of this model of human action for policy analysis. Indeed, homo economicus seems to play a key role in this process: it is the central theoretical concept as regards human behaviour towards natural resources, which supports arguments used to analyse and chart policy that results in value dispute, conflict and injustice. In this way, Hardin's model of human behaviour is used not only to conceptualise environmental problems but also to produce conflictive policy suggestions. The diagnosis that the existence of facilities to trade externalities would help rid of environmental problems is entrenched in this homo economicus reading of human action towards the environment, which holds that individualistic, yet 'rational' behaviour is responsible for generating environmental problems (e.g. biodiversity loss, excessive pollution). This implies that from an environmental justice perspective it would be desirable to seek an alternative model of human action that can be used in the analysis of sustainability policy.

Further criticism of homo economicus from within the field of economics has pointed out that the model's profit-maximising view of behaviour is unrealistic as it ignores that human action towards the environment may have broader ethical premises than utilitarianism and that motivation for environmental action is embedded in multiple and possibly incommensurable environmental values and not just monetary ones. Moreover, when such a limited view of human action is used as a platform for the

analysis of environmental issues it may end up generating counterproductive or even undemocratic policies, by crowding out environmental values necessary for sustainability or by altogether excluding them.

## Literature background, thesis aims and methodology

Based on the observation of incommensurable and lexicographic environmental preferences, some critics have made a strong case for human action towards the environment to be considered as ethical action (e.g. Spash & Hanley, 1995). This implies that environmental preferences correspond to ways that agents implicitly or explicitly decide answering the question 'what is good and just', which is the essential question in ethics. Importantly, this conceptualisation of human action towards the environment does not exclude utilitarianism (Paavola, 2001). Normative ethics, the branch of philosophy dedicated to the study of the question 'what is right and just', postulates three major perspectives when answering this fundamental ethical question (Edward-Jones et al., 2000): consequentialism, judging rightness of action according to its consequences; deontologicalism, judging rightness of action according to its keeping with pre-established duties and rules; and, a procedural perspective, judging rightness of action according to its keeping with legitimate procedures.

Scholars have at times proposed several models of human behaviour alternative to homo economicus. Most of them seem to fall within those categories of ethical action. For example, utilitarianism (either self or other-regarding) fits with a consequentialist mode of answering the ethical question (Paavola, 2001); hierarchies of decision-making (lexicographic preferences) (Spash, 1998), expressive rationality (Hargreaves-Heap et al., 1992), and incommensurability (Martínez-Alier et al., 1998) fit quite well

with the deontological perspective; and finally, rule-based behaviours such as satisfycing (Simon, 1957), behaviour under risk and uncertainty (van den Bergh et al., 2000), and habitual behaviour (van den Bergh et al., 2000), which are premised on bounded rationality (Simon, 1957) that acknowledges informational and social constrains on behaviour (Baker, 2004) fit quite well with the procedural outlook. In several occasions (e.g. van den Bergh et al., 2000) environmental and ecological economics scholars urge using these alternative models instead of the unrealistic, limited and limiting homo economicus to conceptualise human behaviour and conduct sustainability policy analysis. Moreover, the previously-mentioned environmental justice perspective also requires such a shift. Yet, the same literature also affirms that "the implications of a broader and more sophisticated view of human behaviour remain to be explored, as do the full policy implications of such view" (Bromley & Paavola, 2002:13).

The aim of this PhD project is to examine the policy implications of a broader view of human action, and in particular, its implications for the design of economic institutions for sustainable development. To achieve this, the project tries to reach the following objectives:

– Establish a broader view of human action

– Identify an alternative type of policy analysis embedded in the broader view of human action

– Consider the policy implications of both, i.e. a broader view of human action and type of policy analysis supported by it

The methodology followed to reach thesis objectives involves:

- A critical inquiry into the literature in order to establish a broader view of human action and an alternative model of policy analysis supported by it

- An empirical investigation of the policy implications of broader views of human action and relevant types of policy analysis, by means of two case studies that examine issues pertinent to the design of economic institutions for sustainable development

The thesis structure reflects this methodology: this thesis is built upon three publications and a further chapter that synthesises and discusses the results of these publications. The first publication, a theoretical/ conceptual paper, critically analyses the main characteristics and limitations of homo economicus as these are laid out in the relevant environmental and ecological economics literature. It then considers the relevance of critical theory perspectives for identifying a broader view of human action. The objective of this publication is to establish this broader view and point to a corresponding type of policy analysis.

Both empirical studies that follow, examine situations in Europe where homo economicus is limited for understanding human action. The second publication explores the relevance of exploring multiple rationalities for generating policies that could sustain sustainability institutions such as the rural social enterprise. Here, initial inquiry pointed out that motivations to support and get involved in social enterprises have broader ethical bases than mere self-interested utilitarianism, which suggested the need to consider broader (than homo economicus) views of human action in the analysis.

The third paper explores some limitations of this type of analysis in the context of examining environmental conflict, specifically conflict over wind energy, another type of economic institution for sustainable development. Again, in this case study preliminary inquiry into the relevant literature pointed out the limited analytical capacity of homo economicus for explaining attitudes towards the environment (landscape) which made it necessary to consider broader, institutional factors influencing behaviour. A 'Results' section follows these three publications. In this section, the results from both the conceptual (Publication 1) and the empirical (Publication 2 and Publication 3) inquiries are put together and discussed with the view to clarify the sustainability policy implications of a broader view of human action. Finally, a 'Conclusions' chapter closes the thesis by bringing together final remarks regarding the whole PhD project.

# Chapter Two: Critical perspectives on human action and deliberative ecological economics[2]

The use of the homo economicus model of human behaviour by economists when conducting policy analysis of environmental and sustainability issues has been frequently criticised both from inside and outside economics and from several theoretical and ethical standpoints. Alternative behavioural models have also been suggested, again both from within economics and from other social sciences. These proposals often consider that human behaviour is embedded in a broader social context. The proposals also often have it that individualistic calculation of costs and benefits is too narrow a view of motivations for human behaviour, and that in reality there are other motivations as well.

Ecological economics has drawn attention to the importance of considering the policy implications of broader and more sophisticated views of human behaviour (e.g. Paavola & Bromley, 2002). It has also generated interesting insights regarding particular limitations of the homo economicus model for understanding environmental behaviour (Spash, 2000; Spash & Hanley, 1995) and the relevance of other models for analysing such behaviours (Gowdy & Erickson, 2005; Vatn, 2005a; O'Neill & Spash, 2000; van den Bergh et al., 2000). Moreover, ecological economists have shed light on the policy implications of basing policy analysis on the homo economicus model (Gowdy & Erickson, 2005; Paavola & Adger, 2005; Vatn, 2005a; Vatn, 2005b;

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[2] This chapter has been published as: Zografos, C. and Paavola, J. (2008) 'Critical perspectives on human action and deliberative ecological economics' In: Zografos, C. and Howarth, R.B. (eds.) *Deliberative ecological economics*, Delhi: Oxford University Press

O'Neill & Spash, 2000). Finally, ecological economics has considered the implications of incommensurable environmental values and motivational pluralism for public policy (Paavola & Adger, 2005; Paavola & Bromley, 2002; van den Bergh et al., 2000) and policy analysis (Vatn, 2005a; O'Neill & Spash, 2000).

However, ecological economics literature has largely failed to take a critical view of its own treatment of human behaviour. Critical literature highlights the importance of social justice, domination and exclusion in social and economic analyses (Barry, 2007; Honneth, 2004; Dryzek, 2000). It reveals homo economicus as an institutionalised, dominant discourse over sustainability which excludes the use of other models of human behaviour as 'unreasonable' both for analysing how people act and for considering the range of sustainability goals and policies that could be supported by people who subscribe to alternative models of human behaviour. Addressing the marginalisation of alternative behavioural models is not only important from an equity perspective but also from the perspective of developing effective deliberative processes for decision making over sustainability. Addressing the exclusion of alternative sustainability visions is important from the viewpoint of policy implementation as well, as it could facilitate the generation of policies and goals which people identify with, consider legitimate and comply with voluntarily (Paavola & Adger, 2005; Vatn, 2005b).

The paper's key argument is that ecological economics should move from criticism of homo economicus to the development of alternatives, such as the model of communicative action (Habermas, 1984), for understanding and advancing the politics of sustainability. What is needed is an analytical focus on the potential of institutions,

institutional practices, decision-making processes, discourses and environmental values to obstruct or facilitate deliberation over sustainable development and the functioning of institutions that seek to deliver it. Such a normative attention to communicative rationality is crucial for ecological economics to be able to embrace pluralism of interpretations and practices of sustainability as a way out of "ideological and epistemological straightjackets that deter more cohesive and politically effective interpretations of sustainable development" (Sneddon et al., 2006) and to open up public spaces for debating and enacting a politics of sustainability.

In what follows, the paper first reviews ecological economics literature on human behaviour and discusses its limitations. The paper then examines the key aspects of critical theory and political ecology that could help address the limitations in the treatment of human behaviour in ecological economics. The paper concludes by considering the relevance of the above insights for ecological economics research on deliberation.

## Ecological economics and homo economicus

As a reductionist model of human behaviour, homo economicus has it that agents choose how to behave after calculating the costs and benefits of alternative courses of action, always opting for the alternative that promises the highest net benefit to themselves. The philosophical roots of this model are in utilitarianism. Its first proponent, English jurist Jeremy Bentham (1748-1832), considered that nature had put man under the governance of two sovereign masters: pleasure and pain (Gandjour & Lauterbach, 2003). Bentham considered that 'a hedonic calculus' of pains and pleasures would assist in judging the value of any action. He also proposed the utility

rule "which approves or disapproves of every action whatsoever according to the tendency which it appears to have to augment or diminish the happiness of the party whose interest is in question" (Bentham, 2005 [1789]).

Neo-classical economics promotes the use of the utility rule for judging the desirability of alternative actions from the social point of view. Economists implement the utility rule by calculating the pecuniary costs and benefits of alternative policies and recommending as the socially most desirable option the one that promises the highest net benefits. This is in line with Bentham's utility rule which treated as 'good' whatever brings the "greatest happiness" to society. It is also compatible with other neoclassical social choice rules such as the Pareto improvement rule (Pareto, 1972 [1906]) and the Kaldor-Hicks criterion (Hicks, 1939).

Objections to the utility rule have been raised both from within and outside economics. The assumption underlying the utility rule that a surplus of benefits over the costs of an action constitutes a net gain to the society has been particularly contested because it masks the question who obtains the benefits. Net gains may be associated with the redistribution of benefits from the less advantaged to the more advantaged in society. Similarly, the utility rule says little about who carries the costs of attaining net social gains. Net gains can be achieved in a way which allocates the costs to those who do not gain or to already disadvantaged groups. Utilitarianism may thus result in injustice in the light of Rawls' (1971) idea of justice as fairness. For him, inequality is only justified if it benefits those who are the least well-off.

There is also a broader moral problem with the utility rule. Kantian conceptualisation of moral action and the dignity of moral agents suggest that treating others as mere 'means' is morally unacceptable (Edwards-Jones et al., 2000). Net benefits can be obtained in a way which overrides important moral principles, such as the right to a decent life or a right to life in general. For example, slavery undoubtedly generated considerable benefits to some, while denying the right of others to a decent life and thus failing to treat them as 'ends' instead of 'means'. This adds weight to the questions about the ability of the utility rule to bring about social 'goodness' (Gandjour & Lauterbach, 2003).

### *Utilitarianism as a model of human behaviour*

Utilitarianism also underlies the homo economicus model of human behaviour which has it that agents are calculating the costs and benefits of alternative courses of action and make their choices on the basis of this cost-benefit assessment. Contemporary utilitarians follow preference utilitarianism. It only accepts well-informed and rational preferences and considers that utility is not a matter of simple welfare calculus but a determination of the expected utility of alternative courses of action in terms of the relative level of preference satisfaction they can yield (Gandjour & Lauterbach, 2003). In short, this model attributes an *expected* utility rule to the choosing agents: the agents choose so as to maximise the utility that they are able to predict. This model of human behaviour has been criticised for several reasons. For example, the cognitive capacity of humans to conduct sophisticated cost-benefit calculations has been questioned. Relatedly, the individuality of benefit-cost assessments has been denied and such assessments have been argued to be of social nature. We will discuss both of these criticisms below in some detail.

A central feature of homo economicus is that his/her choices reduce to utility maximisation. For this to be possible, the agent has to have perfect knowledge about the alternatives. But it may be impossible to obtain perfect knowledge because information about the alternatives is controlled, constrained and dispersed (Boland, 1979; Paavola and Adger, 2005). Secondly, even if full information were available, the agents may be unable to process it to support utility maximisation (Baker, 2004). It has also been argued that limited cognitive capacity creates uncertainty which accounts for the emergence of institutions such as contracts: they provide safeguards such as trust against uncertainty (Bromley, 1992; Heiner, 1983).

One way to respond to the inability to obtain and to process perfect information is to "satisfy" rather than to maximise. Agents satisfy when they seek acceptable (instead of maximal) levels of welfare or other goal attainment. 'Bounded' rationality is another term used of rationality constrained by cognitive limitations (Simon, 1957). Some scholars have argued that bounded rationality simply acknowledges that information gathering and transactions are costly to undertake and thus subject to optimisation (van den Bergh et al., 2000). However, Simon's view of bounded rationality does shift the focus of analysis from decision outcomes to decision-making processes. This has led him to suggest that rationality is procedural rather than substantive (Simon, 1964; Simon, 1972).

Homo economicus model also ignores the social context within which choices are made. For example, Baker (2004) argues that "'web' of shared rules within which individuals operate, and through which they communicate, are fundamental to rational

choice". 'Webs of shared rules' are embedded in social institutions and they both *enable* and *enact* choice (Vatn, 2005a). Hargreaves-Heap et al. (1992) have proposed a synthesis model which includes both bounded rationality and satisficing aspects of Herbert Simon's theory and which can handle both cognitive and social constraints of choice behaviour. In the light of this model, agents employ 'rules of thumb' either to avoid looking for more information (and its opportunity and transaction costs) or to conform with social rules (and to avoid social sanctions).


### *Ethical concerns and human behaviour*

The second criticism of utilitarianism focuses on the moral concerns it attributes to and denies from individuals. It starts from a proposition that utilitarianism is only one of the many theories available for agents to rationalise their actions. More specifically, Bentham's utility rule is what ethicists call a *foundation of moral action*, and just one among the several possible foundations that are available. Substantive ethics suggests that there are three main strategies for answering the fundamental ethical question (Edwards-Jones et al., 2000):

- A consequentialist or teleological strategy which answers the ethical question by looking at the outcomes. The strategy can acknowledge either single or multiple outcomes and it can be either self- or other-regarding (Paavola, 2001);

- A rights-based or deontological strategy which focuses on the importance of duties and responsibilities for human behaviour;

- A procedural strategy, which focuses on conformance with right or acceptable procedures

The neo-classical view that human behaviour can be understood solely as utility maximisation grounds human behaviour on a utilitarian ethical foundation. At the same time, it has it that all non-utilitarian foundations of action are irrelevant or invalid motivations for behaviour. But closer examination of, for example, protest bids to willingness-to-pay questions in environmental valuation studies suggests that environmental preferences may express rights-based concerns such as concerns for the right to life of other species[3] (Spash & Hanley, 1995). This kind of evidence questions the capacity of the homo economicus model to explain all preferences and it suggests that people sometimes follow rules rather than maximise utility when making environmental decisions (Spash, 2000). The evidence also opens the door for considering a wide range of moral criteria as the potential bases of environmental preferences.

The evidence is also compatible with arguments that environmental values are incommensurable and that plural, ethical motivations can underlie environmental preferences (Paavola & Adger, 2005). In ecological economics, the concept of incommensurability means that although environmental values can be compared and ranked, they cannot be meaningfully measured and compared on a single scale, for example by assigning monetary value on them (Martínez-Alier et al., 1999). Pluralism entails that there can be a number of consequentialist, deontological and procedural rationalities which should be considered alongside utilitarian models when examining human behaviour towards the environment. Pluralism also leads to ask which of the many values are and indeed should be deemed relevant in specific institutional

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[3] Or human rights, the rights of indigenous peoples, etc. where trade-offs with monetary compensation are not accepted by those expressing zero bids.

settings (Vatn, 2005a). Both issues are important when considering the policy implications of alternative views of human behaviour.

Vatn (2005b) relates ethical foundations of preferences to the choice of social institutions and public policy. He suggests that rationality is ethical instead of calculative, social instead of individual, and plural instead of solely utilitarian. Individuals have the capacity to adjust their behaviour to a variety of rationalities and the institutional setting mobilizes certain sets of values and actions. That is, for him institutions define which values will be emphasised as motivations for human behaviour in particular contexts. However, this does not preclude acting on rationalities that are not promoted by pertinent institutions. Examples include consumer boycotts seeking to protect labour or environmental rights in the market sphere, and corruption in the public sphere (Paavola & Adger, 2005). To conclude, environmental behaviour depends on the values that society decides to protect and mobilise through the establishment of particular institutions and, vice versa, institutional and policy choices reveal which values and interests the society wants to foster (Pitelis, 1993; Schmid, 1987).

### *Policy implications*

Acknowledgement of a broader view of human behaviour can help to address shortcomings in public policies based on the homo economicus model. The latter model omits moral foundations of human behaviour other than utilitarianism, a shortcoming which can compromise the effectiveness and legitimacy of sustainability policies (see Adger et al., 2003). For example, policies that rely on market incentives and motivate or "crowd in" individualistic behaviour may simultaneously "crowd out"

other-regarding utilitarian behaviour that could be more beneficial for delivering policy goals. This is the key argument of Berglund & Matti (2006), who argue that the crowding-out theory highlights the implications of using the 'wrong' incentives. They argue that some ways to promote environmental behaviour can be ineffective or counter-productive (Berglund, 2003) and that the origin of crowding out can be policy instruments that are incompatible with the agents' value systems (Berglund & Matti, 2006).

There are many non-environmental examples of crowding in and out. The classic study of blood supply by Titmuss (1970) demonstrated that paying for blood donations reduced supply and degraded its quality in comparison to unpaid blood donation. Frey (1999) shows how the introduction of economic incentives for residents of elders' houses resulted in people not being prepared to do anything if they were not paid for. Gneezy & Rustichini (2000) demonstrate how fees for late-coming parents in day-care centres in Israel resulted in more parents being late, as they considered it acceptable to be late as long as they paid.

Ecological economics literature has recognised some of the dangers of policy instruments that do not correspond with the agents' value systems (Vatn, 2005b). For example, policies that ignore plural motivations may be perceived illegitimate or unfair and hence not voluntarily complied with (O'Neill & Spash, 2000; Paavola & Adger, 2005)[4]. Misinterpreting behaviour in terms of the homo economicus model, for example by ignoring other ethical premises than the utilitarian ones, also excludes

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[4] Another example of counterproductive monetary incentives set up to induce environmentally-friendly behaviour can be found in Payments for Environmental Services (Kosoy et al., 2007).

these other voices and preferences and results in an unfair representation of affected parties (Paavola & Adger, 2005). This not only undermines the legitimacy of environmental policies but can also aggravate environmental conflicts (Martínez-Alier, 2002; Paavola, 2004)

Alternative policy and governance goals are also examined in ecological economics. Van den Bergh et al. (2000) argue that cost-effectiveness may be more descriptive of behaviour and prescriptive of public policy than utility maximisation. They also suggest that behaviour revealing lexicographic preferences is compatible with the argument that economic growth does not generate more social welfare: it may reveal a lexicographic preference for strong sustainability over economic growth. In this light, public policies that facilitate trade-offs between economic and environmental goods on the basis of individual preferences may be misguided: individuals may be unwilling to make such trade-offs.

Several ecological economists also highlight that consumers get satisfaction not only from goods themselves but also from the social context of their consumption. McDaniel & Gowdy (1998) exemplify how an increase in the price of blue-fin tuna has increased and not decreased its consumption in Japan, because its high status is only augmented by increase of price. Thus democratic processes may be a better instrument for changing preferences to foster sustainable consumption than price signals created by environmental policies. Van den Bergh, et al. (2000) argue that this normative perspective has already been adopted in the 'sustainable consumption' literature (see Lintott, 1998; Røpke, 1999; Paavola, 2001). Paavola and Adger (2005)

similarly argue that non-welfarist motivations justify acting collectively for important environmental goals even if doing so would reduce social welfare.

Relatedly, Vatn (2005b) suggests that the function of policy instruments is to invoke (crowd in) particular rationalities. The institutional setting influences preferences in a choice situation by activating  particular motivations and rationalities. For example, income transfer programmes shape preferences (Romer, 1996) and different constitutional arrangements affect the predisposition to evade taxes (Frey, 1997). Policy instruments can thus transform other-regarding motivations to individualistic ones, for example. Empirical evidence suggests this kind of transitions can be difficult to reverse. Think of reinstatement of trust after institutions fostering individualistic motivations have been established. Some behaviours such as cooperative consensus building and collective decision-making may also be difficult in a decision framework where only individual preferences count (Gowdy & Erickson, 2005).

In sum, accepting incommensurability and plural environmental motivations calls for abandoning homo economicus as the exclusive model of human behaviour. It also suggests that we should reject policy analysis strategies based on the model of homo economicus because they are likely to lead to ineffective and illegitimate policy solutions.

### *Limitations of ecological economics literature*

The main insights of the ecological economics literature on human behaviour can be summed as the (1) 'broadness' of human behaviour and (2) its policy implications. Although these insights are useful for understanding the limitations of the homo

economicus model, there is a somewhat surprising lack of their practical applications in policy-relevant research. What is missing is studies which take plural ethical motivations as a starting point and seek to suggest how institutions could be designed to crowd-in environmental values. This kind of research would consider multiple environmental values in the design of sustainable economic activities. There is also a dearth of empirical studies on the generation of legitimate goals for sustainable development. If people have plural environmental values, stakeholders participating in particular institutional settings are likely to hold different visions about the goals of these institutions. These visions are embedded not only in plural environmental values but in different rationalities. Mapping these visions and linking them to their value bases and rationalities is important for determining sustainability goals that are legitimate and supported by stakeholders.

Ecological economics literature also largely overlooks that the instrumental rationality grounded on the homo economicus model is the dominant discourse on what human behaviour *is* and how it *should be* (see Samuels, 1992; see also McCarthy & Prudham, 2004; Cramer, 2002; Tsakalotos, 2005). Therefore, it omits that the dominance of homo economicus as a construct of human behaviour excludes the consideration of other models both in empirical explanations and policy prescriptions. Ecological economics literature has touched upon this issue in arguments that crowding out of environmental values can generate illegitimate and unsuccessful environmental policies. However, it has mainly done so from an 'effectiveness' point of view and has not really analysed the issues critically from a social justice perspective. Yet, a social justice perspective would link ecological economics to critical social science

approaches which study social reality in order to develop theory that facilitates social change (Rush, 2004).

## Critical perspectives

The source of most critical analyses in social sciences is critical theory which considers that the central normative goal of society should consist in making self-actualisation mutually possible (Honneth, 2004). Doing so presupposes a normative ideal of society that is incompatible with the individualistic premises of the liberal tradition. This goal is perhaps best expressed in Habermas' (1984) normative principle of communicative rationality which has it that reasoning is formed within intersubjective communication instead of "within individuals". According to Healey (1993: 239) "such reasoning is required where 'living together but differently' in shared space and time drives us to search for ways of finding agreement on how to address our collective concerns". Analysis underpinned by the normative goal of communicative rationality advocates models of intervention that realise 'ideal speech situations' (Parsons, 1995) and facilitate expression and negotiation of multiple rationalities and values unobstructed by power relations.

Critical approaches have their roots in the work of the so-called Frankfurt School that emerged in the 1920s in the Institute of Social Research at the University of Frankfurt, and that culminated in 'critical theory'. Today critical research encompasses more than just critical theory, including all social science research which takes a critical stance towards the social reality and which seeks to provide a foundation for justification and criticism of institutions, practices and mentalities that make up the social reality. Critical approaches seek remedies against social injustice by employing

criticism rather than supposedly value free analysis to identify and change unjust ideologies, practices and institutions. Critical approaches integrate into social analysis the perspectives of domination and exclusion while advancing emancipation as a normative goal. Social injustice is studied by exploring how the predominance of certain ideologies and the systematic marginalisation of others facilitates the domination of certain groups and the thriving of others. From its inception, critical theory has examined the project of Enlightenment and the practices that it has bequeathed to modern society, and has used social theory for a criticism of modernity of both liberal-capitalist West and authoritarian-communist East (Barry, 2007).

Over time, critical theory has changed its scope of research and the issues of interest to it have changed as well (see Bronner & Kellner, 1989). We will focus below on those aspects of the critical theory that have been advanced by one of its most prominent contemporary representatives, Jürgen Habermas. His work has been used in public policy studies to emphasise the importance of deliberative democratic decision-making and his ideas have also been noted in ecological economics (O'Neill, 1993; O'Neill & Spash, 2000; Vatn, 2005b). Habermas is credited as the main instigator of the "deliberative turn" in democratic theory (see Dryzek, 2000) which has also made its way to ecological economics through the consideration of its implications for environmental decision-making, for example (Sagoff, 1998; Sneddon et al., 2006; Spash & Vatn, 2006; Wilson & Howarth, 2002).

In contrast to the early Frankfurt School scholars, Habermas supports Enlightenment values and is committed to the project of modernity due to the emancipatory power that he ascribes to them. He considers the Enlightenment as a transformative project,

the real aim of which is to achieve more just and egalitarian society. His belief that democratic life emerges in situations where institutions enable citizens to rationally debate matters of public importance is central to his theory and he advocates discourse as a means to realise the human potential for reason (Dryzek, 2000). The deliberation of matters of public importance is advanced as the most legitimate and useful guide to public decision-making. Deliberation takes place within a particular discourse ethics which requires the absence of power, rational argumentation and critical discussion to foster reflection and to enable the change of preferences (Dryzek, 2000). These cornerstones of discourse ethics underpin deliberation and serve to formulate communicative rationalities that can then legitimately guide public decision-making.

Habermas laments the take-over of the project of modernity by forces of economic and administrative rationalisation that submit areas of public life under the logic of efficiency and control. He considers that this can reduce human relations or what he calls communicative concerns to instrumental norms (Barry, 2007). Habermas believes that in the modern society the human competence to communicate and argue upon rational premises is often suppressed and weakened. This can happen when the explanation for the existence and operation of major domains of social life such as the state and social organisations are taken over by models of strategic or instrumental rationality (Habermas, 1984).

Habermas believes that communicative rationality advances the democratic development of society. His view of rationality as something generated in inter-subjective communication highlights that that this communication may be distorted by institutionalised forces or extra-institutional agents. Furthermore, it suggests that the

essence of rational action is not always instrumental but that it can also be to reach understanding between oneself and other actors, society in general or even other species (Dryzek, 2000). Action embedded in communicative rationality may thus reflect logics that go beyond instrumental seeking of pre-defined ends. The adoption of communicative rationality by democratic theory has strengthened the arguments that a deliberative form of decision-making – which facilitates reflective consideration of preferences in the absence of coercion – is the most legitimate form of democracy. The notion of deliberative democracy has it that individuals can be transformed in deliberative processes underpinned by communicative rationality (Dryzek, 2000).

Habermas agrees with earlier critical theorists such as Max Horkheimer and Theodor W. Adorno that modernity dangerously attributes instrumental values to the environment. For him, the instrumentality of our relation to nature is problematic because of its potential to be transferred to social and personal relations among humans through particular institutions and practices, and ways of thinking and acting. He does not regard instrumentality towards nature necessarily bad in itself. Habermas believes that trying to establish communicative rationality with nature can be dangerous. The difficulty to engage in democratic and discursive modes of communication with nature may give rise to non-rational argumentation and anti-democratic forms of authority (Barry, 2007).

Habermas' approach has been criticised by scholars who, although following the critical theory's project of advancing emancipation and criticising dominating structures, suggest that communicative rationality should be extended also to the non-human world (Dryzek, 2000). They argue that nature does 'speak to us' for example

through reactions to humanly-induced change and that we need to enhance our capacity of listening to nature by improving and institutionalising feedback signals and by criticizing institutions that subordinate nature and block human-nature communication. Building on an understanding that to advocate democracy means to advocate democratic procedures they suggest that *ecological democracy* requires moving beyond the adoption of green values to the establishment of green political structures which will secure more egalitarian interchange between humans and nature and constitute communicative action with the non-human world (Dryzek, 2000).

### *Communicative rationality, ecological economics and political ecology*

It is doubtful whether we have capacity to engage in communication with the non-human world, and there are some who deny the possibility of individual transformation in deliberative processes (Baber & Bartlett, 2005). However, the value of the idea of communicative rationality for the analysis of preference formation cannot be denied. It is particularly valuable to ecological economics which seeks to embrace multiple values in the definition and delivery of sustainable development. What becomes essential as an object of study is the capacity of different institutional arrangements, decision-making processes, discourses and environmental values to facilitate communicative action, or their capacity for accommodating communicative rationality instead of excluding views for example by legitimising only instrumental rationality concerns.

It is useful to consider here the approach of some critical theorists who follow Habermas. They suggest that the most productive way to link his theory with ecological concerns "lies in the area of democratic will-formation and democratic

decision-making in relation to the non-human world and different human valuations of nature" (Barry, 2007). As Brulle (2002: 17) points out, Habermas converges with green political theory on "democratic conversation about our fate and the fate of nature", i.e. on deliberative democracy and decision-making over environmental issues. Attempts to bring together critical theory and ecological concerns already exist (Barry, 1999; Dryzek, 1990; Smith, 2003). They have emerged as reactions to the mainstream economic practice of valuing environmental goods in monetary terms to integrate ecological concerns in environmental decision-making. This has been seen as a non-democratic practice as it 'crowds out' non-economic ecological values (Barry, 2007).

With a few exceptions, ecological economists have paid little attention to *why* the crowding-out of environmental values occurs. In his study of environmental conflicts, Martínez-Alier (2002) observes that some environmental values are regularly excluded from decision-making. He argues that the conflicts over the languages of environmental valuation are in the end conflicts over the distribution of costs and benefits of using ecological resources (see also Paavola, 2007). Martínez-Alier identifies a number of conflicts where local communities use the language of non-monetary (e.g. sacred) environmental value to defend the control of resources crucial for their livelihoods. For example, the U'Wa in Colombia appealed to the sacredness of surface land and subsoil to oppose the attempts of Occidental Petroleum to take over their land for oil exploitation (Martínez-Alier, 2002).

Martínez-Alier also examines how the U.S. environmental justice movement uses the language of 'rights' to defend making a living in the conditions of decent

environmental quality. He reminds us how some scholars have interpreted this vocabulary of protest as a denial of nature as capital (O'Connor, 1993). Martínez-Alier suggests the key questions are "who has the power to impose the particular language of actuarial calculation and money valuation?" (Martínez-Alier 2002: 271) and "who has the power to simplify complexity, ruling some languages of valuation out of order?" (Martínez-Alier, 2002: 271). For him this is an issue of power, an ability to impose particular valuation languages that determine the bottom line of ecological distribution conflicts. For him, this as an important research area in the interstices of ecological economics and political ecology (Martínez-Alier, 2002).

Political ecology studies how the outcomes of struggles are influenced by differential access to natural resources (Martínez-Alier, 2002). It draws attention to both discursive and material conditions that engender inequitable distributions of costs and benefits of natural resource use. It examines access to resources by different groups as well as institutions and environmental conditions through which access is gained and conditioned (Batterbury & Bebbington, 1999). Political ecology encourages a critical understanding of institutions that mediate interactions between the society and natural environment, trying to explain the emergence of particular environments or landscapes as a result of the constrains and opportunities that different institutions and the politics surrounding them impose for the realisation of sustainable and equitable development (Batterbury & Bebbington, 1999).

Political ecology is adept in exploring the significance of power in constituting differentiated social relations to nature and in answering questions such as: who gets what? Robbins (2004) draws links between political ecology and Foucault's ideas

about power. He focuses on Foucault's efforts to deconstruct dominant accounts of 'truth' as conditional to power relations. Robbins highlights how discourses and practices constitute what is accepted as 'truth', possible or inevitable and what has been used to justify repressive institutions such as the asylum to maintain power of particular individuals or groups. Similarly, political ecologists have questioned the use of pesticide in the American farms. Rather than accept pesticides as an 'acceptable risk' or as the 'price to progress' as advocated by the American Chemical Society, political ecologists have examined how such stories began to proliferate, and to whose benefit, examining the political effects of the concepts that have supported such narratives (Robbins, 2004). Robbins also identifies works in political ecology that have expanded the notion of hegemony suggested by Antonio Gramsci to characterise the limits of coercive control and the importance of challenges to power through everyday resistance in the context of natural resource use (see Kull, 2002; Scott, 1985). Recent work in political ecology explores complementarities of Foucault's and Gramsci's approaches and in particular acts of everyday exercise of power and resistance in the use of environmental resources (Ekers & Loftus, 2008).

In sum, political ecology offers useful insights to ecological economics about power in human-environment relations, an area currently largely omitted by ecological economists. Political ecology offers analytical and conceptual tools for exploring procedural sources of power and the determination of 'bottom-lines' in ecological distribution conflicts. The bottom-lines of sustainability policies are legitimised by particular conceptions of rational action. The distinction between instrumental and communicative rationalities as *rationales* of sustainability sheds some light on

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ecological distribution conflicts related to procedural power and exclusion of particular environmental values from decision-making.

The relevance of these insights for ecological economics is that they provide a justification for employing particular methods of inquiry when examining the policy implications of rational action. They explain why critical analysis is needed of the emergence of popular discourses on particular sustainability issues and their comparison with official discourses over the same issues, as well as why exploring institutional arrangements and practices that promote human behaviour based on individualistic rationalities and instrumental values, are useful for explaining ecological conflicts. They also call for research that links broader conceptions of rationality to deliberative decision-making over sustainability.

## Conclusions

This paper has critically reviewed the ecological economics literature on homo economicus and other models of human behaviour. The paper has highlighted two key issues. First, although ecological economics has presented sophisticated conceptual critiques of the homo economicus model of human behaviour, there is a dearth of empirical studies that apply and test alternative theoretical insights. Second, the literature overlooks the social justice implications of the dominance of the problematic homo economicus model both at the normative and analytical levels. In the light of the model, both individual and collective action is legitimate only if it conforms with the instrumental rationality of homo economicus. This view excludes non-instrumental rationalities from policy debates, which is undesirable both from a policy effectiveness *and* from a social justice perspective. The paper explores critical

theory and in particular the work of Jürgen Habermas on communicative rationality to highlight new directions for ecological economics that further the research agenda on both the models of human behaviour and deliberative processes of decision making over sustainability. The paper argues that this new agenda could improve links between ecological economics and political ecology, which is particularly promising for the study of environmental values in environmental conflicts.

Ecological economics literature has been aware of crowding out of other environmental values in settings governed by instrumental rationality. Habermas points out in his analysis of the dangers of modernity that particular models of rational action can also be crowded out. Models of rational human behaviour do not only explain how people behave, they also comprise the premises upon which institutional action is deemed legitimate. This has been recognised in the ecological economics literature. When some models of rational action are screened out as potential institutional logics, this excludes some arguments about the rationale of social institutions. In other words, these institutions come to be seen only through the lense of instrumental rationality and to exist only to provide 'services' or functions. This constrains the potential for deliberation, as the playing-ground for communication and debate over the future of institutions is limited to concerns justifiable by instrumental rationality arguments.

Research at the intersection of ecological economics and political ecology can capture exclusion effects and their political implications but it has overlooked the incidence of these effects. Ecological economics research on the models of rational action should strive to reveal the exclusion effect, to explain how it occurs and to identify its

political implications for environmental values that are considered legitimate and included into discussions over sustainability. Furthermore, ecological economics research should aspire to make concrete suggestions as to how broader models of rational action can inform institutional logics and facilitate "democratic conversation about our fate and the fate of nature" (Brulle, 2002), which should be the ultimate goal of deliberative processes in decision-making over sustainability.

# Chapter Three: Rurality discourses and the role of the social enterprise in regenerating rural Scotland[5]

## Abstract

Social enterprises are businesses with primarily social objectives that reinvest their surplus in the community rather than seeking to maximise profit for shareholders. However, there is a debate regarding the drivers and the role of the social enterprise, the outcome of which is expected to have serious implications for the future of the institution (Brady, 2003). A 'reformist' view supports the position that social enterprises are simple extensions of existing economic systems, whereas a 'radical' stance sees them as the embodiment of an alternative vision of running local economies. Development Trusts (DTs) are social enterprises that focus on community regeneration. Our research explored DT stakeholder views regarding the role of DTs in regenerating rural Scotland. Using Q methodology (Barry and Proops, 1999), we drew on 'rurality' discourses (Frouws, 1998) expressed by DT stakeholders in order to investigate how these discourses informed their views. Radical positions were mostly associated with a hedonist rurality discourse and were split into three sub-discourses, whereas reformist positions mostly reflected a utilitarian rurality discourse. There was consensus between discourses in rejecting a primary DT contribution to rural regeneration by substituting state and local authority functions in rural Scotland. Results suggest that stakeholders prefer that DTs develop their own agendas and

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activity rather than try to substitute unsuccessful state or local authority provision of rural services. Social enterprise strategies and support policies promoting a service-providing role for DTs in rural Scotland should consider this issue if they are to avoid stakeholder objection and contribute to the success of DTs in becoming active vehicles of rural regeneration.

*Keywords*: social enterprise, rural Scotland, rurality discourses, Q methodology

## Introduction

Ageing populations, low numbers of new business start-ups, low incomes and vulnerable natural environments are some of the challenges faced by communities in rural Scotland (Edwards, 2005). Unsurprisingly then, the enhancement of "rural life, rural communities and the rural economy" has been a major objective of the first devolved executive power in Scotland (Partnership for Scotland, 1999). At the same time social enterprises figure particularly high on the UK political agenda, as a means to modernise public services and provide jobs in disadvantaged communities (Brady, 2003). Social enterprises are businesses with primarily social objectives – wider than employment provision and contribution to public revenue through tax – that reinvest the surplus of their operations in the business or in the community rather than seeking to maximise profit for shareholders and owners.

The particular type of social enterprise assigned with the specific task of delivering community regeneration in Scotland is the Development Trust (DT). DTs in rural Scotland pursue community regeneration mainly through the delivery of projects that improve local environmental and living conditions. Their activities include the management of vital community-owned environmental or built assets, purchase, restoration and management of derelict land (e.g. defunct military bases), installation and operation of renewable energy generation projects, establishment of community woodlands, cleaning up of essential communal natural assets (such as common green spaces), etc.

Although the focus on delivery of community benefits is an undisputed element of the social enterprise, there is a debate over the drivers and effectively the role of the social enterprise in the social economy (Brady, 2003). In particular, there is a 'reformist' view, which sees the institution as a simple extension of existing systems, engaging in activities that the state has withdrawn from and that private initiative has no profit motivation to get engaged with. Conversely, a 'radical' view of the social enterprise sees the institution as the embodiment of an alternative vision of running the economy and local affairs. In the latter view, the promotion by the social enterprise of principles and practices such as co-operative economic relations, inclusive governance of local institutions, and sustainability aims, realise this alternative vision.

There are indications that this debate is also of relevance to Scottish DTs. In its first annual report, the Development Trust Association Scotland (DTAS), observes that the primary focus of DTs should be achieving "long term sustainable community regeneration a bigger theme than the improvement of public services" that seems to be the drive of current policy interest (DTAS, 2003). Brady (2003) suggests that the outcome of the debate on the role of the social enterprise will have huge implications for the future of the institution. Certainly the perception of those involved in running, supporting and promoting social enterprises as to the role of the institution can significantly influence uptake or willingness to uptake certain support policies. Understanding the source of disagreement as well as highlighting issues of potential agreement among stakeholders can help to achieve more effective policy design. Furthermore, a better understanding of stakeholder views in the debate concerning the role of DTs can enable the design of more inclusive policies of social enterprise

support, i.e. ones that consider stakeholder views concerning what DTs should be all about.

The aim of this project has been to explore and understand the different viewpoints among DT stakeholders concerning the role of DTs in regenerating rural Scotland. This was pursued by exploring the discourses explain discourses taking place among stakeholders and by identifying areas of major agreement and disagreement among them. In order to deliver these objectives we employed Q methodology. Q is a methodology employed for the scientific study of subjectivity, i.e. for the study and understanding of the subjective viewpoints held by people on a particular issue (Brown, 1996). It combines the depth of qualitative research with the rigour of statistical analysis and is used to uncover underlying perspectives in debates over conflictive issues by analysing discourses.

In the process of investigating stakeholder views regarding the role of DTs we realised that their stances revealed not only a concern with social enterprise but also a concern over the qualities and the future of rural areas. In particular, they seem to express diverse claims and conceptions regarding the countryside, or else a series of 'rurality' discourses (Frouws, 1998). Perhaps this should come as no surprise given that the role of DTs is exactly to influence the direction in which 'the rural' should be moving. The way in which these 'rurality' discourses emerged during the implementation of our project is explained in the methodological section of this paper, but the discourses themselves are presented in the immediately following section as they provide a context for understanding stakeholder views in the social enterprise debate. The paper then moves on to present the process by which Q was employed in

the research project and the results it produced, to finally conclude with some thoughts regarding how the four discourses identified in this study relate to 'rurality' discourses and briefly presents some policy implications concerning DTs.

## Theoretical context: rurality discourses

The term 'rurality' refers to ideas held regarding what it means to be 'rural', impressions as to what the term 'rural' means, which in the long run inform views as to what a rural landscape does or should encompass. Rurality is not a self-evident concept as there is more than one 'rurals', i.e. there is a plurality of conceptions or else multiple versions of rurality which in turn create a significant variability in rurality discourses (Pratt, 1996). Such variability suggests that the concept of rurality is a contested one, which implies a contest over the features and the future of the countryside and it has been suggested that studying how people *feel* rural can uncover social divisions and power struggles in the rural landscape (Richardson, 2000). Moreover, the study of the variability of rurality discourses and effectively the study of contests over the future of the countryside can be used as a focus in order to reveal tensions regarding the rationality and contradiction of policy-making (Blunden and Curry, 1988) and political activity in rural contexts.

In that sense, the analysis of discourses over rurality is important on two levels: first, in obtaining more adequate explanations of social change (Pratt, 1996) by observing changes in attitudes and values regarding 'the rural' and second on a policy level. As Sibley (1994) explains particular legislation or policies may implicate legitimacy of a particular 'rural', in so doing they are likely to undermine or exclude others and thus create tension and conflict. Discourse analysis allows the unfolding and understanding

of challenges to 'predominant' or policy-making visions of 'the rural' and reveals points of possible tension of future policies with an impact on the rural landscape. It also allows consideration of whether policy visions of the future of 'the rural' are in tune with stakeholder visions on the ground, and also reveals points of consensus between stakeholder views in a way that allows for planning of more inclusive policies.

But what sorts of 'rurality' discourses, i.e. diverse claims and conceptions related to countryside are there? In an effort to "impose some order on the diversity of claims and conceptions related to the countryside" Frouws (1998: 55) identifies three major strands of discourses: agri-ruralism, utilitarianism and hedonism. He argues that variations of these discourses inform scenarios of rural development, are manifested in policy documents, research projects and publications, and generally appear in different arenas of public debate concerning the countryside. Although his main focus is on the Netherlands, he maintains a conviction that these discourses surpass "the idiosyncrasies of the Dutch debate on the countryside" (Frouws, 1998: 56) and that they "clearly and frequently relate to European perspectives on rural development" (Frouws, 1998: 56). These reasons have prompted us to employ his rurality discourse 'models' in a Scottish context.

What follows is an overview of the key points of Frouws's (1998) classification of 'rurality' discourses, which focuses only on elements of each discourse that have been of interest to this study, and in particular those elements that have been key in structuring the study's Q set (see below). For more detailed explanations on the discourses readers should consult the original article.

*Agri-ruralism*

The agri-ruralist discourse puts emphasis on the social dimension of 'the rural'. Farming is seen as that human activity that provides an interface between society and the environment. There is a call for rural 'renewal', which is seen as an endogenous process that should be pursued with the involvement of local people who are seen the backbone of this process. In this discourse, the role of the state is to provide financial and institutional support to those who actively help renew that countryside be them individuals or organisations (e.g. DTs).

*Utilitarianism*

Utilitarianism puts trust in the self-determining capacity of the entrepreneurial man. The emphasis of the discourse is on the economic dimension of 'the rural': 'developing' the countryside comes down to generating employment and income. There is a focus on commodifying rural areas and in particular rural 'amenities' that are on high demand (e.g. clean air). The role of the state in supporting rural organisations should be to assist generation of less subsidised and more market-created income. The approach favours rural institutions (e.g. DTs) that take maximum advantage of their economic potential to become integrated in the dynamics of modern markets.

*Hedonism*

The discourse emphasises a cultural dimension by prioritising the aesthetics of 'the rural'. Rural qualities are deteriorating and this reduces our quality-of-life, given that being in contact with the countryside improves our experience of life. However, self-fulfilment, enjoyment and payback from contact with the countryside can motivate enhancement of its quality. New forms of governance through self-organising networks and top-down organisation are crucial in pursuing this. Rural organisations (e.g. DTs) should promote negotiation, consultation and mutual agreement of rural priorities and action. Pubic policy in support of 'the rural' should provide stimulative and financial support to accomplish countryside restructuring but without infringing on the operational independence of rural organisations.

Our study set out to investigate the relevance of these 'archetypal' 'rurality' discourses for understanding conflicting views regarding the role of the social enterprise in rural Scotland. This approach was informed by the position that an analysis of rurality discourses can reveal the different constructions of 'the rural' that are selectively drawn upon and articulated for particular causes (Pratt, 1996) such as in the debate regarding the role of the rural social enterprise (rural DT) in Scotland. To analyse rurality discourses we employed Q methodology, a method specially developed in order to perform discourse analysis.

## Method

For over 60 years Q methodology has been a well-established research methodology (particularly in psychology) which seems to be now gaining more support in social

science research (Barry and Proops, 1999). Q is used to study subjectivity in a structured way, by combining the strengths of a rigorous statistical analysis (factor analysis) with the benefits of in-depth qualitative research methods (for more on Q see Addams and Proops, 2000; Barry and Proops, 1999; McKeown and Thomas, 1988; Brown, 1980; Stephenson, 1953). In practice, what Q does is to analyse people's responses to a series of statements in a way that groups them in teams of underlying common patterns of response. These groups of response patterns are then taken to comprise several discourses, i.e. ways of "seeing and talking about something" (Barry and Proops, 1999: 338) which are seen to underlie responses.

To achieve this, Q is implemented in five main stages:

- First, a pool of statements concerning the issue under investigation is generated (the 'concourse')

- Second, a formal procedure is used to reduce those statements to a smaller set to which participants will be asked to respond ('structuring' of the Q set)

- Third, participants are asked to sort the statements to a scale of 'Mostly Agree' to 'Mostly Disagree' on a template (the 'grid') designed to force responses to the form of a quasi-normal distribution in order to facilitate comparison between individual Q sorts (Figure 1)

- Fourth, statistical analysis (based on Principal Components Analysis) of results from several statement sortings is performed in order to discern discourses among respondents

- Finally, results are verbally interpreted, to outline discourse characteristics by specifying issues that each discourse mostly supports and rejects, as well as by

highlighting issues that differentiate each discourse from the rest and issues of consensus among discourses

**Figure 1:** The Grid

| Most like my view | | | | Neutral | | | | Most unlike my view |
|---|---|---|---|---|---|---|---|---|
| -4 | -3 | -2 | -1 | 0 | 1 | 2 | 3 | 4 |
| | | | | | | | | |
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| | | | | | | | | |

To generate our concourse, we decided to consult a number of organisations relevant to DT activity in rural Scotland, such as DTs themselves, DT 'support' organisations (e.g. DTAS, the Scottish Social Enterprise Coalition (SSEC), etc.), policy-makers (e.g. the Scottish Executive) and professionals with activity relating to DTs or social enterprises (i.e. consultants and academics). Over 40 individuals were contacted by an e-mail that briefly explained the project and its objectives and asked for their opinions on the role of DTs, their contribution to rural regeneration, obstacles to DT success and factors likely to influence the sustainability of DTs, in four open-ended questions. Analysis of the responses provided 120 statements regarding the role and the

sustainability of DTs. It was at this stage that we realised that stakeholder response regarding the role of DTs indicated a concern with the future and the qualities of the countryside by expressing views belonging to different 'rurality' discourses.

After an initial piloting of alternative Q sets, a size of 36 statements was found to be the most manageable one; this size also conformed to the requirement that there should be approximately three times as many statements in the concourse as in the Q set (Addams and Proops, 2000). To reduce statements we applied a factorial design of 4x3, 12-cell 'concourse matrix' in order to sample available statements (Figure 2). In choosing this sampling instrument, our interest has been to secure that each of the three 'rurality' discourses was equally represented in four areas of research interest, namely the sustainability of DTs, types of statutory support for DTs, the role of DTs and stances regarding the countryside. All statements included in the different cells came from stakeholders' responses to our e-mail, except from those belonging to the last category ('the countryside') that were taken directly from the literature on 'rurality' discourses. The final Q set of statements appears in Table 1.

**Figure 2:** The Councourse Matrix

| *Theme/ Discourse* | Agri-ruralism | Utilitarianism | Hedonism |
|---|---|---|---|
| DT sustainability | 3 | 3 | 3 |
| Statutory support | 2 | 2 | 2 |
| The countryside | 1 | 1 | 1 |
| The role of DT | 6 | 6 | 6 |

**Table 1:** The 36 statements

1. DTs will become sustainable if they engage with their community and provide some worthwhile local service or trade

2. For DTs to become sustainable they need to engage in environmentally-friendly activities and provide quality products demanded by consumers

3. The sustainability of DTs depends on the extent to which their priorities concur with the wishes of the community

4. An income stream away from the begging bowl has to be secured to enable DTs to gain independence from public bodies

5. The sustainability of DTs is linked to the commercial aspects of the trust

6. DTs will become sustainable in the long term by learning to be social entrepreneurs

7. Apart from securing their own funding, land and resources, DTs must work together with the democratically elected Community Councils in order to be sustainable

8. DTs should develop good working relationships with the public sector in order to become sustainable

9. DTs will be sustainable if they provide a participative democratic forum for local people to collaboratively tackle the issues that matter most to them

10. DTs need to be recognised by agencies at a local and national level as an important part of the community landscape and this might necessitate formal agreements and core funding

11. Tailored statutory support policies are necessary to fill the gap in the kind of investment available to DTs: currently nothing exists between grant support and straightforward commercial finance

12. Public bodies should encourage DTs to get into service provision

13. The state should assist DTs to become independent of grants

14. DTs should be provided with easily accessible funds to pay for core staff

15. DTs should be provided with direct growth funding to allow progression towards income generation

16. Rural regeneration should be pursued by involving local people in the development of countryside resources

17. Rural amenities (e.g. clean air) are in high demand and cashing in on this is the best way of using rural resources

18. The countryside is significant primarily because it contributes to quality-of-life, so we should be trying to enhance its beauty and quality

19. The role of the DT should be to ensure that necessary services remain in place to allow communities to grow and develop

20. DTs should play a part in building social capital, generating wealth for community benefit and establishing the means to maintain the momentum of regeneration beyond the initial funding phase

21. The key role of a DT is to help the community take the leading role in addressing the economic, social and environmental issues affecting it

22. DTs should be stewards of local environmental resources and guarantors of their use in local development

23. DT should provide a vehicle for local communities to achieve outputs that they themselves have identified as necessary for the future sustainability of a locality

24. DTs should promote economic development and address social and environmental issues in order to make rural areas more attractive and viable places to live

25. The role of DTs should be to support active individuals and smaller community groups who are pursuing a more restricted purpose

26. DTs should be means of unlocking an entrepreneurial spirit in the locality

27. DT activity should primarily focus on the (re) development, maintenance and management of a community's capital assets

28. DTs should primarily contribute to rural regeneration by plugging service gaps left by 'cash-strapped' local authorities, and by providing employment

29. DT activity should mainly try to make most commercial use of 'green' rural assets such as renewable energy forms – wind, tide and hydrogen cell technology

30. DTs should act more as social enterprises by working closely with both the public and the private sector to service their needs and receive payment in exchange

31. DTs should be led by close communication with the community they are involved with and should strive to form associations with others by way of partnerships

32. DTs can act as anchor organisations in communities around which a wide range of positive regeneration and self help activity can take place

33. DTs should be revolutionary and push the boundaries of what a community wishes to do for itself, and

has the capacity to do

34. With their focus on locking wealth into the local community and building and retaining capacity within communities, DTs provide a genuinely community-based alternative to top-down models of regeneration

35. DTs should give local communities real power to shape the environment that they live in

36. DTs should offer an arena for local people to participate in local development and therefore attract the "doing" community rather than the "talking" community

The next stage of the study involved the administration of the Q sort, i.e. work on the field. 20 interviews were conducted at respondents' offices, each of them lasting between 1 to 3 hours. An initial short semi-structured interview was followed by the Q 'exercise', where interviewees were first presented with the grid and the 36 statements. Then they were explained how those statements had been obtained and they were asked to place each statement on the grid in a way that represented their views. Respondents were suggested to first sort statements into three broad groups of 'like their view', 'unlike their view' and those to which they felt neutral. After they had finished 'sorting' the Q set, they were asked to take a very last look to make sure that the sorting represented their views.

### *The P set*

We interviewed representatives of three main stakeholder groups: DTs, DT support organisations and other people with an interest and activity relating to DTs (Figure 3). Nearly half of our sample consisted of DTs. Four of the DTs interviewed are based in the Highlands & Islands, reflecting the situation on the ground in rural Scotland, i.e. that a big proportion of social enterprises operate in this area of the country (just over 50% of DTAS members come from that area). Support organisations included a

network of social entrepreneurs in Scotland (Senscot) and the Highlands & Islands

Enterprise (Strengthening Communities Group) in Inverness, a public sector

organisation that supports the development of the Highlands & the Islands area; this

particular group endorses activities that support rural communities in the area.

Another interview involved an officer from one of the two National Park Authorities

based in central Scotland (Loch Lomond) with significant contribution in setting up

DTs within Park limits. The Association of Scottish Community Councils (ASCC)

was also interviewed; this organisation supports the operation of community councils,

which are non-statutory bodies set up to ascertain, co-ordinate and express to Local

and Public Authorities the views of their communities. Finally, the parliamentarian

interviewed is a Member of the Scottish Parliament (MSP) and the consultant an

expert with more than 20 years of experience in setting social enterprises in rural

Scotland.

**Figure 3:** The P set

| Group: | Development Trusts | Support Organisations | Other stakeholders |
|---|---|---|---|
| **No. of interviews & Organisation** | • 8 DTAS members<br><br>• 1 non-DTAS member | • 2 DTAS officers<br>• 1 SSEC officer<br>• 1 Senscot officer<br>• 1 officer ASCC<br>• 1 Highlands & Islands Enterprise officer<br>• 1 National Park officer | • 1 parliamentarian<br>• 1 expert consultant<br>• 1 academic<br>• 1 city council officer |
| **Geographical location** | • 4 Highlands & Islands<br>• 2 Central Scotland<br>• 1 Borders<br>• 1 East Scotland<br>• 1 Central Belt | • 5 Central Belt (Edinburgh)<br>• 1 Highlands & Islands (Inverness)<br>• 1 Central Scotland | • 2 Central Belt (Edinburgh)<br>• 1 Highlands & Islands (Inverness)<br>• 1 Central Scotland (Stirling) |

## Results: the 4 factors

The PQ Method software was used in order to analyse Q sorts. A Principle

Components Analysis (PCA) was initially performed, followed by both a varimax and

judgmental, manual rotations with the use of the PQROT software. Results of both

types of analyses were compared in order to choose which one could provide a more

meaningful explanation of our data. To this end, consideration was given to factor

loadings, factor arrays, distinguishing and consensus statements, as well as to

qualitative data from interview transcripts.

As a result, four factors were kept for rotation, a solution that accounted for 62% of

the variance. Following an iterative judgmental process several manual rotations were

performed with the use of PQROT and their results were compared with results from

the varimax rotation. Following standard processes in Q, factor arrays as well as

distinguishing and consensus statements produced by each type of rotation were

considered vis-à-vis qualitative data from interview transcripts in order to decide

which rotation provided results that would be most amenable to interpretation.

Varimax rotation results were selected to use in the analysis as they provided a fairly

acceptable distribution of explained variance between the four factors, allowed to

meaningfully relate particular sorts among them in specific factors (discourses), and

produced factor arrays and distinguishing statements that provided a meaningful

differentiation between the factors and related well with qualitative data from

interviews.

**Table 2:** Factor Loadings

| QSORT | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| 1 | 0.1167 | -0.0517 | 0.1082 | 0.3749 |
| 2 | 0.1969 | 0.0485 | **0.6678X** | 0.2391 |
| 3 | -0.0278 | **0.7488X** | 0.2670 | 0.1083 |
| 4 | 0.1615 | 0.1382 | **0.7929X** | 0.1302 |
| 5 | 0.2219 | 0.1608 | **0.7883X** | 0.2254 |
| 6 | **0.8300X** | -0.0809 | 0.1048 | 0.0374 |
| 7 | **0.5344** | 0.0061 | 0.2639 | **0.5450** |
| 8 | -0.0093 | **-0.6874X** | 0.3761 | 0.1175 |
| 9 | -0.1610 | **0.6338X** | 0.4134 | -0.1426 |
| 10 | **0.4258** | -0.3261 | 0.4070 | -0.3620 |
| 11 | **0.4614** | **0.5842X** | 0.4011 | 0.0459 |
| 12 | **0.5676X** | 0.1825 | 0.1519 | 0.3184 |
| 13 | 0.0417 | 0.1008 | **0.8726X** | 0.1664 |
| 14 | **0.4433** | 0.0261 | **0.5830X** | -0.2191 |
| 15 | 0.1054 | 0.3363 | 0.0693 | **0.7119X** |
| 16 | **0.7721X** | -0.0239 | 0.1534 | 0.3513 |
| 17 | **0.6962X** | 0.0684 | 0.1555 | 0.2008 |
| 18 | 0.3304 | -0.1873 | 0.1793 | **0.7663X** |
| 19 | **0.4343** | -0.0743 | **0.4247** | 0.2371 |
| 20 | **0.5431** | **0.5652** | 0.0547 | 0.3118 |

**X** indicates a defining sort; significantly loading cases are in bold

Factor loadings of the varimax rotation of the four-factor solution of the study's 20

sorts are shown in Table 2. Following standard procedures, the level of statistical

significance was determined at 2.5 * Standard Error (SE), with SE = $1/\sqrt{N}$ (where N:

number of statements, i.e. N=36), hence at 0.42. This gives one 'null' case (i.e. a Q

sort that does not significantly load in any of the factors) which is respondent number 1. This could be due to the fact that two persons were involved in producing this sort, hence it did not manage to reflect an individual view and instead was a mixture of several discourses. In order to construct the factor array in Q methodology, not all statistically significant cases are used, and defining sorts were identified by using the automatic flagging facility in PQROT and by performing some manual flagging, specifically by removing the flag from the null case and from three 'mixed' cases, namely 10, 19 and 20. This produced the factor arrays displayed in Table 3.

**Table 3:** Factor Arrays

| No. | Statement | Factor | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| 1. | DTs will become sustainable if they engage with their community and provide some worthwhile local service or trade | 0 | 2 | -1 | 2 |
| 2. | For DTs to become sustainable they need to engage in environmentally-friendly activities and provide quality products demanded by consumers | -1 | 1 | -2 | 0 |
| 3. | The sustainability of DTs depends on the extent to which their priorities concur with the wishes of the community | 1 | 0 | -3 | 3 |
| 4. | An income stream away from the begging bowl has to be secured to enable DTs to gain independence from public bodies | 0 | 3 | 2 | -1 |
| 5. | The sustainability of DTs is linked to the commercial aspects of the trust | -3 | 1 | 2 | 0 |
| 6. | DTs will become sustainable in the long term by learning to be social entrepreneurs | -2 | 3 | 1 | -2 |
| 7. | Apart from securing their own funding, land and resources, DTs must work together with the democratically elected Community Councils in order to be sustainable | 0 | -4 | -1 | 0 |
| 8. | DTs should develop good working relationships with the public sector in order to | -1 | -1 | 0 | 1 |

| | | | | |
|---|---|---|---|---|
| become sustainable | | | | |
| 9. DTs will be sustainable if they provide a participative democratic forum for local people to collaboratively tackle the issues that matter most to them | 4 | 1 | -4 | 0 |
| 10. DTs need to be recognised by agencies at a local and national level as an important part of the community landscape and this might necessitate formal agreements and core funding | 0 | -1 | 1 | -1 |
| 11. Tailored statutory support policies are necessary to fill the gap in the kind of investment available to DTs: currently nothing exists between grant support and straightforward commercial finance | 0 | 0 | 0 | -3 |
| 12. Public bodies should encourage DTs to get into service provision | -4 | 0 | 0 | -4 |
| 13. The state should assist DTs to become independent of grants | -1 | -3 | 1 | -1 |
| 14. DTs should be provided with easily accessible funds to pay for core staff | 2 | -4 | -3 | -4 |
| 15. DTs should be provided with direct growth funding to allow progression towards income generation | -1 | 0 | 2 | -1 |
| 16. Rural regeneration should be pursued by involving local people in the development of countryside resources | 1 | -3 | -1 | 0 |
| 17. Rural amenities (e.g. clean air) are in high demand and cashing in on this is the best way of using rural resources | 2 | -2 | -4 | -2 |
| 18. The countryside is significant primarily because it contributes to quality-of-life, so we should be trying to enhance its beauty and quality | -1 | -2 | -2 | -1 |
| 19. The role of the DT should be to ensure that necessary services remain in place to allow communities to grow and develop | 1 | 0 | 0 | -2 |
| 20. DTs should play a part in building social capital, generating wealth for community benefit and establishing the means to maintain the momentum of regeneration beyond the initial funding phase | 2 | 0 | 2 | 2 |
| 21. The key role of a DT is to help the community take the leading role in addressing the economic, social and environmental issues affecting it | 2 | 3 | 3 | 2 |
| 22. DTs should be stewards of local environmental resources and guarantors of their use in local development | 0 | -2 | -1 | 1 |

| | | | | |
|---|---|---|---|---|
| 23. DT should provide a vehicle for local communities to achieve outputs that they themselves have identified as necessary for the future sustainability of a locality | 4 | -1 | 3 | 2 |
| 24. DTs should promote economic development and address social and environmental issues in order to make rural areas more attractive and viable places to live | 0 | 1 | 0 | 1 |
| 25. The role of DTs should be to support active individuals and smaller community groups who are pursuing a more restricted purpose | -2 | -2 | -2 | 1 |
| 26. DTs should be means of unlocking an entrepreneurial spirit in the locality | 0 | 4 | 0 | -3 |
| 27. DT activity should primarily focus on the (re) development, maintenance and management of a community's capital assets | -2 | 0 | -1 | 0 |
| 28. DTs should primarily contribute to rural regeneration by plugging service gaps left by 'cash-strapped' local authorities, and by providing employment | -4 | -3 | -3 | -4 |
| 29. DT activity should mainly try to make most commercial use of 'green' rural assets such as renewable energy forms – wind, tide and hydrogen cell technology | -3 | 1 | -2 | 0 |
| 30. DTs should act more as social enterprises by working closely with both the public and the private sector to service their needs and receive payment in exchange | -3 | 2 | 0 | 0 |
| 31. DTs should be led by close communication with the community they are involved with and should strive to form associations with others by way of partnerships | 1 | -1 | 3 | 1 |
| 32. DTs can act as anchor organisations in communities around which a wide range of positive regeneration and self help activity can take place | 2 | 2 | 4 | 3 |
| 33. DTs should be revolutionary and push the boundaries of what a community wishes to do for itself, and has the capacity to do | 3 | 4 | 1 | -2 |
| 34. With their focus on locking wealth into the local community and building and retaining capacity within communities, DTs provide a genuinely community-based alternative to top-down models of regeneration | 3 | 0 | 4 | 3 |
| 35. DTs should give local communities real power to shape the environment that they live in | 3 | 2 | 1 | 4 |
| 36. DTs should offer an arena for local people to participate in local development and therefore attract the "doing" community rather than the "talking" community | 1 | -1 | 0 | 4 |

Next we describe the four factors by discussing salient statements for each factor. These are statements assigned as 'most like my view' (given a +4 or +3 score) and 'most unlike my view' (given a -4 or -3 score) in the typical Q sort of each factor. A second category of salient statements involves statements that distinguish each factor from the others (distinguishing statements at $p<0.01$). Where necessary this evidence is complemented with qualitative evidence from the interviews performed prior to the Q exercise.

**Factor 1** (F1): *anti-commercial radicalism*

The main thrust of this discourse is radical, as it sees the social enterprise as a vehicle for participatory, bottom-up rural regeneration, while downplaying the importance of the commercial and service delivery aspect of the organisation. There are 10 sorts that significantly load on this factor, four of which are also defining sorts (Table 2).

**Table 4:** Salient statements for Factor 1 (+4, +3, -3, -4; distinguishing statements with *; consensus statements are shaded)

| No. | Statement | Factor Score |
|---|---|---|
| 13 | The state should assist DTs to become independent of grants | +4 |
| 9 | DTs will be sustainable if they provide a participative democratic forum for local people to collaboratively tackle the issues that matter most to them | +4 |
| 35 | DTs should give local communities real power to shape the environment that they live in | +3 |
| 34 | With their focus on locking wealth into the local community and building and retaining capacity within communities, DTs provide a genuinely community-based alternative to top-down models of regeneration | +3 |
| 33 | DTs should be revolutionary and push the boundaries of what a community wishes to do for itself, and has the capacity to do | +3 |
| 5* | The sustainability of DTs is linked to the commercial aspects of the trust | -3 |
| 30 | DTs should act more as social *enterprises* by working closely with both the public and the private sector to service their needs and receive payment in exchange | -3 |
| 29 | DT activity should mainly try to make most commercial use of 'green' rural assets such as renewable energy forms – wind, tide and hydrogen cell technology | -3 |
| 28 | DTs should primarily contribute to rural regeneration by plugging service gaps left by 'cash-strapped' local authorities, and by providing employment | -4 |
| 12 | Public bodies should encourage DTs to get into service provision | -4 |

Denotes a distinguishing statement (at $p<0.01$); shaded statements are also consensus statements

There is a clear prioritisation of the community aspect of DTs and on their significance in pursuing a participative, bottom-up rural regeneration, by both increasing community capacity and involvement in tackling local issues. The

importance of the community aspect of the DT is such that the long-term sustainability of the organisation is seen to be dependent on the extent to which it provides the opportunity for communities to democratically debate and prioritise, as well as collaboratively tackle "the issues that matter most to them" (statement 9 at +4). Also, the views that DTs "should be revolutionary" and that they should give communities "real power to shape the environment that they live in" are dominant in this discourse. The centrality of the community in determining social enterprise priorities was also revealed during interviews:

"I cannot imagine DTs not developing out of a participation process, the first phase of which would have been the identification of local needs by the community itself" (Q Interview 7)

On the contrary, the commercial aspect of DTs is much less important in this discourse. Neither encouragement by state policies for DTs to get into service provision is favourably seen (statement 12 at –4) nor views that the future sustainability of DTs depends upon the "commercial aspects" of the enterprise (statement 5 at –3, also a distinguishing statement). Qualitative data suggest that rejection of the service role may also relate to a disagreement with what is seen by some as an attempt by the state to use social enterprise for its own ends, a move that could demote the potentially pivotal role envisaged by supporters of this discourse:

"There is a dilemma regarding DT activity, i.e. whether it comprises a delivery of government services 'on the cheap' or whether it is something more than that: I would personally not be interested in the former" (Q Interview 17)

"… so I am wondering: are DTs a cheap way out for public bodies to offer public services? Because if they want me to do the job, they'd better employ me and pay me my pension and all" (Q Interview 6)

Overall, this is a radical discourse that emphasises the centrality of the community in the workings of the DT and downplays the commercial aspects of the organisation.

**Factor 2** (F2): *the enterprise*

In sharp contrast to the previous factor this is an 'enterprise' discourse, i.e. one that stresses the importance of the commercial element in the role of social enterprise in rural Scotland. There are five significantly loading cases in this factor, four of which are also defining sorts (Table 2).

**Table 5:** Salient statements for Factor 2 (+4, +3, -3, -4; distinguishing statements with *; consensus statements are shaded)

| No. | Statement | Factor Score |
|---|---|---|
| 33 | DTs should be revolutionary and push the boundaries of what a community wishes to do for itself, and has the capacity to do | +4 |
| 26* | DTs should be means of unlocking an entrepreneurial spirit in the locality | +4 |
| 6* | DTs will become sustainable in the long term by learning to be social entrepreneurs | +3 |
| 4 | An income stream away from the begging bowl has to be secured to enable DTs to gain independence from public bodies | +3 |
| 21 | The key role of a DT is to help the community take the leading role in addressing the economic, social and environmental issues affecting it | +3 |
| 16 | Rural regeneration should be pursued by involving local people in the development of countryside resources | -3 |
| 28 | DTs should primarily contribute to rural regeneration by plugging service gaps left by 'cash-strapped' local authorities, and by providing employment | -3 |
| 13* | The state should assist DTs to become independent of grants | -3 |
| 7* | Apart from securing their own funding, land and resources, DTs must work together with the democratically elected Community Councils in order to be sustainable | -4 |
| 14 | DTs should be provided with easily accessible funds to pay for core staff | -4 |

* Denotes a distinguishing statement (at p<0.01); shaded statements are also consensus statements

This discourse seems to represent the 'reformist' extreme of the debate, that supports a more entrepreneurial, commercially dynamic and financially independent DT. This stance is revealed by the emphasis placed on a DT role that will unlock "entrepreneurial spirit in the locality" (statement 26 at +4, also distinguishing) and by

the expectation that DTs become sustainable if they learn "to be social entrepreneurs" (statement 6 at +3, also distinguishing) and gain independence from public bodies through securing their own income (statement 4 at +3).

> "Our job is to pursue 'change' through the development of local assets, assets in a broader sense like social, human, environmental, etc., not only financial, although the development of those is essential; promoting enterpreneurship is the main way of achieving this change" (Q Interview 3)

Another element of the entrepreneurial approach is its low levels of support for easily provided funds (statement 14 at –3). Moreover, there is clearly less emphasis on the importance of community involvement, evident in the low level of support for processes that involve local people "in the development of countryside resources" (statement 16 at –3). This is also revealed by the fact that DTs are seen less as a vehicle for "local communities to achieve outputs that they themselves identify as necessary" than in the other discourses (statement 23 distinguishing and "not like my view" for F2, whereas +4 for F1, +3 for F3 and +2 for F4). However, this is not to say that communities are ignored by this discourse, but that perhaps the level of their involvement is seen as less essential for the mission of the social enterprise:

> "Community involvement is important, and establishing credibility with local communities is essential, … this is why accountability and transparency are key criteria for DT success. But you cannot avoid the fact that in every community there are people who want to do things and others who do not, or who do not see it as their role to get involved". (Q Interview 9)

Overall, this discourse represents a 'reformist' standpoint in the social enterprise debate, strongly supporting an entrepreneurial DT that contributes to the economic side of rural regeneration, being less interested in the importance of local community involvement in DTs.

**Factor 3** (F3): *radical pragmatism*

This discourse envisages a central role for the community in the workings of the rural social enterprise and regeneration, but additionally it reflects a concern with the limitations of community capacity and the pivotal role of the state in addressing this. There are six sorts significantly loading on this factor, five of which are also defining sorts (Table 2).

**Table 6:** Salient statements for Factor 3 (+4, +3, -3, -4; distinguishing statements with *; consensus statements are shaded)

| No. | Statement | Factor Score |
|---|---|---|
| 32 | DTs can act as anchor organisations in communities around which a wide range of positive regeneration and self help activity can take place | +4 |
| 34 | With their focus on locking wealth into the local community and building and retaining capacity within communities, DTs provide a genuinely community-based alternative to top-down models of regeneration | +4 |
| 23 | DT should provide a vehicle for local communities to achieve outputs that they themselves have identified as necessary for the future sustainability of a locality | +3 |
| 21 | The key role of a DT is to help the community take the leading role in addressing the economic, social and environmental issues affecting it | +3 |
| 31 | DTs should be led by close communication with the community they are involved with and should strive to form associations with others by way of partnerships | +3 |
| 3 | The sustainability of DTs depends on the extent to which their priorities concur with the wishes of the community | -3 |
| 28 | DTs should primarily contribute to rural regeneration by plugging service gaps left by 'cash-strapped' local authorities, and by providing employment | -3 |
| 14 | DTs should be provided with easily accessible funds to pay for core staff | -3 |
| 17 | Rural amenities (e.g. clean air) are in high demand and cashing in on this is the best way of using rural resources | -4 |
| 9* | DTs will be sustainable if they provide a participative democratic forum for local people to collaboratively tackle the issues that matter most to them | -4 |

* Denotes a distinguishing statement (at p<0.01); shaded statements are also consensus statements

This factor also reflects a radical stance, clearly prioritising the community

perspective and in particular the importance and potential of DTs to be focal points

that facilitate pursuit of locally identified objectives and community capacity building (statements 32 and 34 at +4; statements 21 and 23 at +3). Nevertheless the significance of pursuing bottom-up models of regeneration goes hand-in-hand with some sort of pragmatism as to the limitations of the 'community approach' and the importance of obtaining support by means of partnerships (statement 31 at +3) and state support for DTs to grow (statement 15 distinguishing). This element of pragmatism characterises this overall 'radical' discourse, and distinguishes it from the other two radical approaches emerging with F1 and F4. This is revealed by the reluctance of this discourse to consider DT sustainability conditional on the wishes of the community (statement 3 at –3); however, a look at the distinguishing statements (Table 7) for this factor provides a better insight into this trend of 'radical pragmatism'.

**Table 7:** Distinguishing Statements for Factor 3

| No | Statement | F1 | F2 | F3 | F4 |
|----|-----------|----|----|----|----|
| 15 | DTs should be provided with direct growth funding to generate income | -1 | 0 | 2* | -1 |
| 33 | DT role: revolutionary and push boundaries of what community wants | 3 | 4 | 1* | -2 |
| 6 | DTs will become sustainable by becoming social entrepreneurs | -2 | 3 | 1* | -2 |
| 9 | DTs will become sustainable if they provide a participative democratic forum for local people to collaboratively tackle issues | 4 | 1 | -4* | 0 |

Asterisk (*) Indicates Significance at P < .01

F3 expresses no support for the view that developing DTs as participatory democratic forums for communities to collaboratively pursue resolution of "issues that matter most to them" will secure DT sustainability (statement 9 at –4 and distinguishing), a view highly supported by the anti-commercial radical discourse (+4). This view seems

to be based not upon a lack of support for the significance of this function, but on scepticism as to the extent that such an outcome can guarantee long-term sustainability of the social enterprise.

> "The wishes of the community are very important but won't safeguard the sustainability of the sector, will they?" (Q Interview 14)

Similarly, the radical pragmatist discourse supports the idea that the sustainability of the DT is dependent on it becoming a social entrepreneur, a view not favoured by the anti-commercial radical discourse (statement 6 at –2 for F1 and at +1 for F3). Likewise, the radical pragmatist discourse differs from the other radical discourse (F4, see below) in its support for state growth funding and for the view that DT sustainability passes through the organisation's operation as a social entrepreneur (statements 6 and 15 'like my view' and distinguishing for F3, 'unlike my view' for F4).

Overall, although the main thrust of this discourse is radical, it is highly reflective of the limits of community involvement in DTs while it also underlines the importance of partnership formation and government support in order for DTs to fulfil their role.

**Factor 4** (F4): *small 'r' radicalism*

The main thrust of this factor is also 'radical' and hedonist, but there is more focus on a DT that avoids being dependent on the state; additionally, this expression of the 'radical' discourse seems to place more stress on grass roots elements of the

community concept. There are three significantly loading sorts on this factor, two of which are also defining sorts (Table 2).

**Table 8:** Salient statements for Factor 4 (+4, +3, -3, -4; distinguishing statements with *; consensus statements shaded)

| No. | Statement | Factor Score |
|---|---|---|
| 36* | DTs should offer an arena for local people to participate in local development and therefore attract the "doing" community rather than the "talking" community | +4 |
| 35 | DTs should give local communities real power to shape the environment that they live in | +4 |
| 3 | The sustainability of DTs depends on the extent to which their priorities concur with the wishes of the community | +3 |
| 34 | With their focus on locking wealth into the local community and building and retaining capacity within communities, DTs provide a genuinely community-based alternative to top-down models of regeneration | +3 |
| 32 | DTs can act as anchor organisations in communities around which a wide range of positive regeneration and self help activity can take place | +3 |
| 26 | DTs should be means of unlocking an entrepreneurial spirit in the locality | -3 |
| 11 | Tailored statutory support policies are necessary to fill the gap in the kind of investment available to DTs: currently nothing exists between grant support and straightforward commercial finance | -3 |
| 14 | DTs should be provided with easily accessible funds to pay for core staff | -3 |
| 12 | Public bodies should encourage DTs to get into service provision | -4 |
| 28 | DTs should primarily contribute to rural regeneration by plugging service gaps left by 'cash-strapped' local authorities, and by providing employment | -4 |

* Denotes a distinguishing statement (at p<0.01); shaded statements are also consensus statements

The emphasis on grass roots elements of the community concept in this discourse is expressed by the strong support for DTs to be vehicles that mobilise 'doing' communities and hand-down to them real power to shape rural environments (statements 36 and 35 at +4). Contrary to the pragmatist radical discourse, the sustainability of the social enterprise is seen to be dependent on its concurrence with community priorities (statement 3 at +3) and less emphasis is placed on anything that relates to making DTs dependent on state support. It is notable that four out of five 'least like my view' scored statements (statements 11, 12, 14, 28) are statements that in one way or another relate to either state support or state authorities. Reluctance towards state support was also expressed during the interviews:

"If we want to be successful we should keep clear of the 'dead hand' of the state" (Q Interview 16)

"Yes, we need to engage with Local Authorities, but we should be cautious as they are fickle" (Q Interview 16)

Qualitative data from interviews with respondents that prepared the defining sorts for this factor provided some insight to this reluctance:

"Communities in the area have a feeling of being left out of policy priorities, for example we were not part of any 'Initiative at the Edge' projects. Also, … due to ferry changes the place is no longer used as a pass" (Q Interview 19)

This discourse differs from the anti-commercial radical one in that it sees social enterprise radically but from what we may call a 'local', or even perhaps a 'small', more practical perspective and not from the perspective of a 'grand plan' that seems to inform the F1 discourse. Perhaps it is important to highlight that F4 is mainly a discourse structured by respondents working for small DTs that operate quite actively in small communities and that rely on the work of either active individuals or small groups. This perspective manifests itself in the less favourable take of this factor on the view that DTs should "be revolutionary and push boundaries of what community wishes to do" (statement 33 negative in F4 and at +3 in F1). Qualitative data also suggested that this did not reveal a reactionary attitude to the role of the social enterprise but an objection to the idea of communities being dictated to:

"Communities should be left alone to do what they decide it's necessary to do and not pushed to do things" (Q Interview 16)

Contrary to the anti-commercial radical discourse, this discourse considers that supporting active individuals and small community groups in pursuing more limited purposes should be a part of the DT role. The relevant statement (25) is placed on the 'like my view' side of the board for F4 and on the 'unlike my view' side by F1, revealing a more sympathetic take on the importance of individual input to local regeneration, an element relatively downplayed in the anti-commercial radical discourse. This was also highlighted by the interviews:

"DTs should operate for the benefit of the community but also for the benefit of individuals: in a way the second can bring the first" (Q Interview 16)

Overall, this is a radical discourse that differs from the previous two radical discourses by its firm objection to DTs being state dependent and by its emphasis on supporting small, localised, even individual initiatives as part of DT's mission.

Finally, one consensus statement emerged from this study. This was statement 28 stating that "DTs should primarily contribute to rural regeneration by plugging service gaps left by 'cash-strapped' local authorities, and by providing employment" a view to which all four discourses quite strongly did not identify with (scored either –4 or –3 in all factors). We interpret this as an indication that all discourses commonly reject a DT role that tries to substitute the state and in particular as a provider for services that the state is expected to provide to rural areas. It also seems to indicate that DTs should not try to target their activity in filling gaps left by local authorities, in the sense that they should try to develop their own agenda and priorities. On the whole, there seems to be an agreement that DTs are more than mere service providers although there is no agreement as to the exact DT objectives and way of reaching them.

## Discussion and conclusions

This study explored discourses that emerge in the debate concerning the role of the social enterprise by focusing on one such enterprise in rural Scotland, namely DTs. The study found that this debate is linked to concerns over the qualities and the future of rural areas, which were expressed by means of different claims and conceptions concerning the countryside, otherwise termed as 'rurality' discourses (Frouws, 1998). It then went on to examine the extent to which these discourses underlie the

perception of DT stakeholders regarding what the role of this type of social enterprise in rural Scotland should be. A close look at study results indicates that, to a degree, 'rurality' discourses are employed by some DT stakeholders to support different views regarding the role of DT in rural Scotland.

To this end, four main conclusions can be drawn from the results of the Q study. First, that the radical position concerning the role of DTs in rural Scotland mostly employs arguments of the hedonist 'rurality' discourse and is split into three sub-discourses, namely anti-commercial radicalism, radical pragmatism and small 'r' radicalism. Second, that the reformist position regarding DT role represented by the 'enterprise' discourse mostly employs elements of the utilitarian 'rurality' discourse. Third, that a clear agri-ruralist discourse is absent, although elements of this discourse can be found in some radical sub-discourses. Finally, that all discourses seem to agree to one thing, that is that they reject a primary DT focus that will seek to contribute to rural regeneration by substituting state functions (e.g. provide employment) and plug service gaps left by 'cash-strapped' local authorities.

The split of the hedonist rurality discourse supports the idea that social representations are inherently elusive and that they are able to sustain contradictory aspects as a result of which individuals tend to hold an amalgam of social representations (Halfacree, 1995). Our analysis tries to take forward an important point made in the literature, which is that there is a need to study the variability, contradiction and variety of representation and articulation of rural discourses and put more attention on the variability instead of the consistency of rurality discourses (Pratt, 1996).

The 'anti-commercial radical' discourse is clearly characterised by elements of the hedonist 'rurality' discourse, particularly reflected in its emphasis on negotiation and mutual agreement of local priorities as a way to make DTs sustainable. Support for self-organisation is another key element of the hedonist discourse which clearly appears in this discourse, evident in the fervent support for a DT role that allows communities to achieve outputs that they themselves have identified as necessary for the future sustainability of a locality. These liberal elements of the hedonist discourse regarding self-organisation naturally extend to (or perhaps even flow from) notions of bottom-up organisation and governance, and these are also evident in support for a DT role that provides a genuinely community-based alternative to top-down models of regeneration.

Several elements of the hedonist 'rurality' perspective are also revealed in the 'radical pragmatism' and 'small 'r' radicalism' discourses. 'Radical pragmatism' assigns importance to a DT role of an anchor organisation that allows for self-help activity to take place, thus reflecting a basic hedonist position that types of 'new governance' through self-organising networks is the way ahead for rural development. Similarly, the role of DTs in stirring up a 'doing' community is a strong element of the 'small 'r' radicalism' discourse, so reflecting a basic hedonist 'rurality' point, which is the emphasis on individual responsibility, moral commitment and participation as a central element of the 'new governance' self-organising networks approach (Frouws, 1998).

All three hedonist discourses seem to share a common perspective regarding the role of DTs. This perspective emphasises the importance of achieving community-based

bottom-up models of rural regeneration as an ultimate target for DTs, by means of retaining local capacity and wealth for community benefit. It also stresses the importance of DTs facilitating the handing down of *real* power to communities to shape their environment, and envisages them having an 'anchor' organisation role that will allow self-help activities to develop. Nevertheless, the hedonist discourse breaks down on three pieces when the issue of future sustainability of DTs is considered. One approach ('anti-commercial hedonism') is that DTs will persevere if they focus on being participative democratic forums for local people to collaboratively tackle the issues that matter most to them and not by focusing on any service delivery or commercial pursuits. However, another hedonist approach ('pragmatic hedonism') holds that the further (participatory democratic forums) cannot guarantee DT sustainability; instead, becoming social entrepreneurs together with state support – in the form of growth funding – and partnership with other players in the regeneration arena could better guarantee future sustainability. Yet, a third hedonist debate ('small 'r' radicalism') suggests that depending on the state is to be avoided which differs from all other discourses by its preference for a DT that supports active individuals and more restricted purposes in the community.

As far as the agri-ruralist discourse is concerned, our study has not identified one such clear and discrete discourse; nevertheless, fragments of agri-ruralist views have emerged in some radical discourses, as well as in the 'enterprise' discourse. A central element of the agri-ruralist discourse is its emphasis on the involvement of local people in the pursuit of 'rural renewal' and this comes out quite strongly in the support of the 'pragmatist radical' discourse for DTs that help communities take the leading role in addressing issues affecting them. The acknowledgement of the central

role of community in rural regeneration through DTs also comes out strongly in the 'small 'r' radical' discourse, by means of this discourse's embracing of the idea that community support is a prerequisite for sustainable DTs. In that sense the concern for making local people the 'backbone' of rural regeneration through DT activity is not entirely lost in debates over the role of DTs in rural Scotland. However, it is notable that other basic elements of the agri-ruralist discourse such as support for multi-functional rural operations and a stewardship role for DTs figure less in the debate.

Helping communities to take the leading role in addressing issues affecting them, together with pushing community boundaries as to what can be done, are two agri-ruralist stances that also figure in the 'enterprise' discourse. Nevertheless, this discourse has a strong flavour of a utilitarian position regarding 'rurality' and the importance of the economic dimension in rural regeneration. These are reflected in the strong support for a DT role that unravels an entrepreneurial spirit in rural areas, suggesting that more entrepreneurship is instrumental for successful rural regeneration, a main position of the utilitarian discourse that puts trust in the self-determining capacity of the entrepreneurial man (Frouws, 1998). Similarly, the 'enterprise' discourse sees the sustainability of DTs as depending on their ability to function as social entrepreneurs more than anything else (e.g. be supported by the community, facilitate participative rural regeneration, etc.), which again seems to reflect the strong utilitarian belief in the potential of entrepreneurship for rural regeneration. Finally, the 'enterprise' discourse puts emphasis on the importance that gaining independence from public bodies has for the future sustainability of DTs. This represents a basic utilitarian stance concerning policy-making for rural organisations, which holds that

the aim should be to try and make them as independent from the state and integrated into market mechanisms as possible.

This research suggests that policies promoting a service-providing role for DTs in rural Scotland should be carefully considered if they are not to face stakeholder objection. Coming from either a reformist or a radical stance, stakeholder reactions seem to demonstrate a conviction that DTs should rather develop their own agendas and activity in pursuit of rural regeneration than try to substitute unsuccessful local authorities or state agencies. Nevertheless, this does not indicate disapproval for policies that open the way for DTs to become the local providers of some services. Instead, a disapproval seems to exist in supporting policies that would end up with DTs being limited to only delivering services and losing sight of the possibility of pursuing a fresh approach to rural regeneration, through either economic (reformist view) or more hedonist-centred (radical view) perspectives.

# Chapter Four: The politics of landscape value: a case study of wind farm conflict from rural Catalonia[6]

## Abstract

Conflicts over the installation of wind farms constrain the potential to adopt an effective means for mitigating climate change. Although conventional wisdom attributes wind farm opposition to NIMBY attitudes, research shows that this explanation fails to incorporate the multiplicity of underlying motivations of opposition. Instead, distributional and institutional factors and procedural opportunities for public participation significantly influence support for wind farms. This paper considers the relevance of a political ecology explanation of wind farm conflicts by focusing on a case study in rural Catalonia, Spain. We argue that the conflict constitutes a recurrence of older and broader 'centre' – 'periphery' antagonisms and that two more explanatory elements are complementary to this political ecology explanation: the existence of alternative landscape valuations and the encouragement of instrumental rationality by the planning framework. We suggest that the absence of opportunities for meaningful deliberation in decision-making and the predominance of decisional bottom-lines curtail claims to fairer distribution of costs and benefits from locally-hosted energy developments, as well as alternative landscape value claims and that this fuels conflict.

*Keywords*: political ecology, communicative planning, wind farms, property rights, Spain

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On March 16, 2008, the inhabitants of the Catalan village of Horta de Sant Joan in the comarca[7] of Terra Alta, were invited to vote for or against the installation of a wind farm in their community. Almost 78% of the voters rejected the project. According to the highest-circulation Catalan daily newspaper La Vanguardia "what happened in Horta de Sant Joan, beyond the democratic right of citizens to express their opinion, is a matter of concern because it represents a new stage in the 'no' culture developing in matters of energy infrastructure. 'No' to new nuclear power stations, 'no' to thermal power stations, 'no' to power lines and, most recently, 'no' to wind power, despite its being one of the cleanest energies. This negative tendency adopted by Catalan society is very dangerous, for it blocks access to new energy sources. Catalonia does none the less need new energy sources to make up for its electricity deficits." (La Vanguardia, 2008)

Conventional wisdom indeed holds that opposition to wind farms is an expression of NIMBY (Not-In-My-Back-Yard) attitudes that reflect an individualistic, selfish stance towards socially beneficial developments such as renewable energy. Such local NIMBYism is an embarrassment for the environmental movement concerned about greenhouse gases and opposed to nuclear energy. Conflicts over wind energy also split environmentalists between renewable energy and conservation supporters thus confounding attempts to shape common views over the meaning of sustainable development. Furthermore, they regularly result in delaying or even abandoning the installation of facilities constraining the potential of economies to adapt to the challenges of climate change. From a policy perspective, understanding opposition to

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[7] Territorial-administrative division one level below the level of province and one level above the level of municipality; roughly equal to the British 'shire'.

wind farm siting is crucial as it can help resolve or avoid such localised conflicts in the future.

Although attesting to the significance of landscape values, relevant studies identify little evidence of NIMBY attitudes and instead underline the importance of both distributional property rights ('who owns the land, who owns the wind') and institutional structures of decision-making for explaining conflicts over wind farm siting. They further advocate the need to pursue collaborative and communicative planning practices for successful wind energy implementation. Yet, the planning literature indicates that such practices are limited in their potential to consider the practical context of socio-political power that surrounds planning, which points to the need for an explanatory framework that is also sensitive to these contexts. This paper puts forward one such framework (political ecology) and explores its explanatory value in the context of a case study of conflict over wind farms in a small rural area in southern Catalonia, Spain.

The paper first presents the literature on conflicts over the implementation of wind energy focusing on the interpretation of reasons behind conflict (NIMBY model) and considers the ensuing change of research focus towards procedural aspects of decision-making and the relevance of political ecology. We then move into the case study and develop a political ecology explanation of the conflict, complementing it with evidence from other relevant aspects identified through fieldwork, before closing with some concluding remarks.

## The explanation of conflict over wind energy: from NIMBY to communicative planning and beyond

Evidence of overall support for wind power as a 'clean' and renewable source of energy generation has been combined with manifestations of wind farm opposition on the basis of local landscape impacts to suggest that opposition reflects a NIMBY attitude. NIMBYism expresses a situation where one holds positive attitudes towards something (e.g. wind energy) until actually confronted with it, at which point the same individual opposes it for selfish reasons (e.g. adverse impact on aesthetic quality of individual's surrounding landscape) (O'Hare, 1977). However, research on individual attitudes identifies low numbers of persons looking at costs and benefits in terms of individual utility and instead shows high numbers of opponents putting more weight on public interest and the interests of others (Wolsink, 1994). Also, studies fail to find a relation between distance and opposition (Wolsink, 2000), a central element of the NIMBY construct. The literature on wind energy conflicts indicates that the construct not only inadequately explains opposition to wind energy projects (e.g. Wolsink, 2000) but also blurs our understanding of it (Kempton et al, 2005). Some scholars even argue that the classification of opposition to public projects as NIMBY serves as a means to disqualify and hence silence opponents (e.g. McAvoy, 1998) and that perhaps NIMBYism indicates a pattern of political activism, rather than one of public opinion (Michaud et al., 2008). Pendall (1999) explains that public protests are based on a multitude of underlying motivations instead of the calculative rationality of NIMBY and Devine-Wright (2005) agrees that NIMBY is not a useful concept for explaining reactions because it misrepresents underlying opposition motives and overall wind energy attitudes of opponents.

Instead, equity and fairness are regularly central concerns for local opposition to wind farms (Wolsink, 2007) and institutional factors (e.g. formal decision-making framework) have a greater impact on wind energy implementation than individual perceptions (Wolsink, 2000). Research also highlights the existence of dynamic change in attitudes towards wind farms during the decision-making process (Pasqualetti, 2001) and the influence of social networks and communication for shaping perceptions (Devine-Wright, 2003). Attempts to better explain opposition suggest that groups have no pre-fixed interests as NIMBY assumes and as the decision-making process is a crucial stage where stakeholder attitudes are formed, more attention needs to be paid to procedural opportunities for public participation (Healey, 1998): siting conflicts are not market imperfections or bureaucratic obstacles but the result of ineffective planning (Wolsink, 2000). Planning systems that reproduce top-down decision-making styles which tend to trigger opposition are highlighted as failing to take into account issues that are most important to those concerned with local impacts of wind energy (Wolsink, 2007). This line of research argues that the quest for consensus-laden solutions (Lambert and Elix, 2005), the advance of collaborative siting (Bell et al., 2005), the building up of institutional capital and the promotion of open planning practices (Wolsink, 2007; Wolsink, 2000) are crucial for improving wind energy implementation rates.

The emphasis on actor communication during the decision-making process as a crucial element of attitude formation towards wind farms reflects a more general shift in the field of policy analysis. This is a shift from using a constraining rational, utilitarian and individualist profit maximisation model of human action in order to explain environmental attitudes, towards a model of communicative rationality

(Habermas, 1984). Realised through inter-subjective communication, communicative action is oriented towards understanding between individuals instead of achieving pre-established ends as assumed by the instrumental rationality of the NIMBY model. The idea of using communicative rationality in policy contexts has given rise to a theory of communicative planning (e.g. Albrechts, 2003). Proponents argue that the democratisation of planning practice can be pursued by imbuing planning with communicative decision-making processes that have an increased potential to encompass multiple languages and values (e.g. Healey, 1997). Such processes are rooted upon the idea of deliberation in the quest of consensual planning solutions, which takes place through the transformation of preferences by means of reflection: actors listen to each other's arguments and reflect on their own preferences, which they transform in the quest for common solutions. For the process to be genuinely democratic, actors need engage in a communication that is "free from coercion, deception, self-deception, strategizing, and manipulation" (Dryzek, 2000: 21). The emphasis on deliberation as a benchmark of 'good' decision-making marks an attempt to entrench the legitimacy of public decisions in a model of democracy capable to both encompass multiple values and seek (consensus-based) solutions.

However, scholars seem to be sceptical as to the potential of communicative rationality alone to effect democratic and effective planning results. Communicative planning theory advocates have been reproached for their assumption that the workings of power could be temporarily suspended through communicative planning practice in order for new consensual planning discourses to emerge. Critics point out that this theory "pays insufficient attention to the practical context of power relations in which planning practice is situated" (McGuirk, 2001: 196) and that theories

"aiming at the democratisation of planning practice will need to depart from an orientation to consensus … and instead account for the irreducible nature of power and difference" (McGuirk, 2001: 195). Similarly, others have argued that "a deliberative and democratic praxis of sustainability may be effective only if and when underpinned by substantive changes to the exercise of power and leadership" (Stratford and Jaskolski, 2004: 311).

The wind energy literature abounds with suggestions to consider more participatory planning processes in order to avoid conflict (e.g. Bell et al., 2005; Lambert and Elix, 2005; Strachan and Lal, 2004; Khan, 2003). However, power issues also seem to be relevant here as one basic matter concerns who has access and ownership of land and wind property rights. As evidenced by the success of the Danish model, community ownership of wind farms that implies a financial stake and voice in planning, development and management of facilities reduces opposition (Toke, 2002). Interestingly, reduced opposition could be attributed less to monetary compensation and more to the fact that community property rights imply local control over the siting process, which entails ability to accommodate local concerns (Bell et al., 2005). Furthermore, "the visual evaluation of the impact of wind power on the values of the landscape is by far the most dominant factor in explaining why some are opposed to wind power implementation and why others support it" (Wolsink, 2007: 2696). Considering the importance of property rights and the conflictive nature of landscape change then seems crucial for understanding the conflict and this is the reason why in this study we adopt a political ecology conceptual framework which also takes into account power relations in the explanation of environmental conflict. Such an explanation of wind energy conflicts is missing from the literature, and this is

surprising given that political ecology focuses inter alia on the relevance of property rights in environmental conflicts and the occurrence of conflicts arising from landscape change (Robbins, 2004) arguably dramatic in the case of wind turbines.

Political ecology conceptualises environmental conflicts as ecological distribution conflicts, i.e. struggles for re-dressing emerging or existing power inequities and unequal distributions of costs and benefits resulting from landscape or ecological change (e.g. Martínez-Alier, 2002; Peet and Watts, 1996; Blaikie and Brookfield, 1987). Political ecologists hold that landscape change generates re-distributions of costs and benefits, which tend to be unequal; as a result, 'losers' from such redistributions tend to challenge them and reclaim different ones, which leads into conflict. Moreover, environmental conflicts over cost/ benefit redistributions from landscape change, tend to be part of larger gendered, classed, and raced struggles (Robbins, 2004), i.e. struggles over some kind of broader discrimination.

Political ecologists tend to study power in two main ways (Paulson et al., 2003). First, as "a social relation built on an asymmetrical distribution of resources and risks," (Hornborg, 2001: 1) they explore how power circulates among and between different social groups, resources, and spaces. This essentially neo-Marxist view looks at power as something that "presses on the subject from the outside, as what subordinates" (Butler, 1997: 2) and has proved very useful. An alternative way of looking at power is by examining the ways people, resources, and places are constituted. This follows Foucault's view that power is omnipresent and formative, that it becomes embodied in social practice and that in this twisted way it provides "the very condition of [a subject's] existence and the trajectory of its desire" (Butler, 1997: 2). It should be

noted here that this approach is not meant to celebrate power but to supply more nuanced means of identifying and studying it.

Politics are then found in the practices and mechanisms through which the power to decide over environmental issues is circulated: politics are a contested realm characterised by "practices and processes through which power, in its multiple forms, is wielded and negotiated" (Paulson et al., 2003: 209) on multiple scales and contexts. This understanding of politics goes beyond institutions of governance to "encompass struggles over human practice, meaning, and representation in relation to the environment" (Paulson et al., 2003: 213). These conceptualisations of power and politics are used to improve research on environmental change and conflict and to develop better ways of addressing practical problems of resource degradation and social marginalization.

The focus on power and landscape issues makes political ecology conceptually attractive as an explanatory framework to improve understanding of wind farm conflicts. Moreover, its empirical application can help determine its limits as well as ways to improve the framework.

## Study aims and methodology

The aim of this study is to offer an alternative (to NIMBY) explanation of wind farm conflicts based on political ecology. We do this by focusing on a case study of a relevant conflict in a small rural area, the comarca of Terra Alta in southern Catalonia.

The case study research methodology (Yin, 2003) is used, combining data from interviews, documentation and direct and participant observation. Fieldwork took place for approximately two months and the whole study was conducted in the course of sixteen months (May 2006 to September 2007). As regards documentation, provincial, regional (Catalan) and national (Spanish) media sources were researched for the period spanning back to 1999 which marks the beginning of wind farm-related issues in the area; moreover, locally available material (e.g. pamphlets, maps, etc.) was collected and studied. Fourteen in-depth interviews were conducted with local village mayors, members of opposition groups, farmers, wind farm supporters, landowners controversially affected by wind farms, businesses, legal experts and academics specialised in the area and its conflicts. Interviewees were selected to represent a broad spectrum of local interests, knowledge regarding wind energy implementation in the area and positions and roles taken both in the past (e.g. mayors who negotiated and signed agreements with energy companies) and presently (e.g. wind farm opposition leaders). Interviewees were first requested to provide an account of the implementation of wind energy according to their experience and then asked open-ended questions about issues such as pros and cons of wind farms and the implementation process, reasons why they considered the whole issue to be conflictive and their views over the value of the local landscape. Some interviews were conducted indoors (e.g. in offices or homes of the interviewees) while others were conducted outdoors with interviewees showing us and discussing the significance of landscape aspects that would be affected by wind farms. Observation involved inter alia participation in village council plenary sessions, meetings of local opposition groups and local social events.

The explanation building technique (Yin, 2003) was used to analyse both primary (interview and observation) and secondary (documentation) data, and in particular to consider how specific key events and elements of the siting process fit with a political ecology explanation of wind energy conflicts. Such explanation building is also shown in the sections that follow, which analyse three key aspects of the conflict in the terms drawn out by Yin (2003). In particular, the study first stipulates and examines the relevance of an initial political ecology statement about the conflict (that unequal economic and environmental cost-benefit distributions are at the heart of the conflict) and then juxtaposes this to evidence identified through fieldwork (i.e. the importance of local life project initiatives). It then uses this evidence to revise the initial statement and moves on repeating this process for two more key aspects of the conflict (i.e. the life projects themselves and procedural aspects of decision-making). This whole process allows considering the relevance and applicability for the case study of the initial political ecology explanatory statement and leads to a refinement of the statement itself, which permits to both better explain the case study and further advance the concept theoretically. It is important to note that the value of single case studies lies mainly in making analytical instead of statistical generalisations (Yin, 2003), i.e. in this case expand, generalise and refine political ecology theory, implying that the approach can help explain this but not necessarily all wind energy conflicts. Still, by doing so, this case study adds new perspectives that help obtain a more in-depth and global understanding of the phenomenon. We begin the analysis with a brief description of the case study area and a concise presentation of the course of the conflict.

## Terra Alta: land and wind farms

Terra Alta is a small comarca of 12 villages in the westernmost corner of the province of Tarragona at the south west of Catalonia (Map 1). Its size is roughly 740 km$^2$ (just above 2% of Catalan territory) and its population slightly over 12,700 people (approximately 0.4% of the population of Catalonia) with a markedly low population density (17.12 inhabitants per km$^2$ in comparison to the 218.73 inhabitants per km$^2$ average of Catalonia). Terra Alta is the second poorest comarca in Catalonia (Nel.lo, 2003) and was recently ranked among the three (out of a total of 41) less competitive Catalan comarcas (Deltell, 2007). Its low GDP per capita (15,600€)[8] and the fact that it is the comarca with the lowest enterprise concentration per 1000 inhabitants were among the reasons that recently prompted the Catalan government to include it in the four comarcas most needy of 'economic revitalisation' (Generalitat de Catalunya, 2008).

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[8] Low compared to the 19,300€ average for Catalonia (2006).

**Map 1:** Terra Alta in Catalonia



Source: Institut Cartográfic de Catalunya (reproduced with permission)

Anyone travelling for the first time in Terra Alta quickly notes that this is "an eminently agricultural territory dominated by the cultivation of vine" (Olivé and Alay, 1994: 273). In 1989, more than 60,000ha out of the approximately 70,000ha of cultivable land were assigned to agricultural uses (Arrufat i Viñoles et al., 1993) mainly cultivation of vine, olives, almonds and hazelnuts. Not surprisingly, Terra Alta has the highest proportion of population actively engaged in agriculture in Catalonia (Nel.lo, 2003): in 2001 over a quarter of the workforce was employed in agriculture (compared to 2.5% average for Catalonia). Although retaining a major role in local economic life, the potential of agriculture constantly declines. Official statistics

(IDESCAT, 2007) reveal that within a generation agriculture passed from generating 66% (1970) of employment in the comarca down to 26.5% (2001). Still, in 1996 (latest available data) agriculture accounted for nearly a quarter of the gross economic value generated in the comarca (average for Catalonia was a mere 2%) (IDESCAT, 2007); however, here also, one can observe a marked decline (figure was 30.3% in 1991) (IDESCAT, 2007).

But the Terra Alta landscape is not only marked by agricultural but also by population decline: data shows long and relatively stable reduction trends with scant signs of a possible recovery. Terra Alta reached a population peak in 1920, with 23,365 inhabitants (Arrufat i Viñoles et al., 1993) meaning that today's population has been reduced to nearly half that figure. In 2006, more than a quarter of the population was aged 65 or over and in 2001 there was clear evidence of negative population growth (-6.4, overall trend in Catalonia was positive) (IDESCAT, 2007). During the 50s, the industrial development of the metropolitan areas of Tarragona and Barcelona attracted the comarca's working population. From the 60s onwards, these areas offer more secure employment opportunities that people cannot find in their villages anymore (Arrufat i Viñoles et al., 1993). This slow but steady drainage of the youngest part of the population carries on until today intensifying the need to increase employment opportunities in order for younger generations not to leave villages. The recent influx of younger eastern European and Latin American immigrants has only slightly moderated negative trends.

## The conflict

Wind farms can offer such a promise. With sites where the speed of wind reaches 7-8 m/sec (and even 9-10 m/sec in some places) Terra Alta is one of the two comarcas in Catalonia that provide the best in-shore wind resources (Generalitat de Catalunya, 2002), although doubt is cast over the way wind availability is calculated by the Catalan Map of Wind Energy Resources[9] (Interview 12, local geographer). The first plan for a major project was announced in June 1999 by a German company intending to construct a wind farm of 80 turbines, "the biggest potential in the world" installed on a single farm (Nel.lo, 2003). The promoters publicised that this large investment would create 200 posts during construction period and 20 long-term ones for farm maintenance. Soon after, several representatives of local municipal authorities proclaimed the possible future installation of energy plants as "a way toward the development of the comarca, given the absence of any other industrial activity to revive the economy of this part of Catalonia" (Nel.lo, 2003).

Wind farm promoters quickly capitalised on this message and several projects took root in the comarca, resulting in the Government of Catalonia (GC)[10] authorising 11 wind farms by the end of 2005. These would involve 183 (there is currently just two) wind turbines, running on a discontinuous line of 40km across the comarca (Map 2), generating approximately 360MW (Aymí, 2006). Evacuating this energy requires the construction of two new lines of high tension electricity wires that would run for approximately 60km across the comarca. A 2006 study contracted by the local

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[9] The Map, for brevity.

[10] Generalitat de Catalunya (in Catalan).

association of wind energy promoters AERTA[11] concluded that if the comarca got

fully on the wind energy bandwagon it could receive up to €9,6 million annually for

25 years which would represent a considerable 7% increase of its GDP (Berbís, 2006).

However, in August 1999 the local opposing group Platform for Terra Alta (PTA)

was set up. Its supporters argue that if all planned wind farms get a go ahead, the

comarca will end up generating approximately 40% of total wind energy in Catalonia

while consuming roughly 3% of total energy in Catalonia (Interview 8, local

researcher). This point encapsulates the main local opposition argument that wind

energy is good but its generation should not be massively concentrated in the area.

Initially, PTA opposed the building of wind farms in two civil war battle sites

together with a controversial ENRON power station and the highly contentious

National Hydrological Plan that promoted diversion of river Ebro to use water for

regions in the south of Spain (Valencia and Murcia). In these struggles, PTA

successfully sided with other organisations and in March 2001, the Catalan Parliament

voted against both the National Hydrological Plan and the ENRON facility. By 2002,

the abovementioned historical sites were excluded as potential wind farm sites thus

signalling a victory for local opposition. The change of government after November

2003 that meant the end of 23 years of one party's dominance in Catalan politics

created expectations for more participatory forms of decision-making, but the new

government soon showed they had no different plans as regards the exploitation of the

area's wind potential. Since early 2005, PTA have resumed protest at times adopting

direct action (e.g. road blockings) and have pursued media visibility in the province

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[11] Initials for Exploitation of Renewable Energy Terra Alta (Aprofitament Energies Renovables Terra
Alta, in Catalan).

via interviews, press conferences and manifestos. However, more and more local mayors seem to support wind farm projects, which results in them being scrutinised by local opponents who ask for more transparency in decision-making. The final outcome of this conflict is yet unclear: at the time that the study was completed no wind farm had been built but many had their applications at an advanced stage. Yet, local reaction was also gathering pace with new opposing groups emerging and some municipalities taking up initiatives to conduct local referendums.

**Map 2**: Approximate locations of wind turbines (intercepted lines) in Terra Alta



Source: own elaboration (Map: Associació Cultural Zero Mig Partit-Per-Mig)

## Geography of an energy-generating landscape

Imbalances on the generation and consumption of locally-hosted energy production are at the heart of this conflict. Indeed, local opposition has repeatedly maintained their objection towards the *massive* installation of over 180 wind turbines that will result from the construction of all 11 wind farms authorised by GC and not towards

wind energy per se (Moreno, 2006). Locally, the term 'massification' is used to describe the phenomenon of both existing and planned concentration of energy facilities in and around the comarca, which turn the broader area into a power house for the Catalan 'centre' (e.g. Barcelona). Considering a 30km radius around the comarca one can draw a geography of energy-generating facilities that reveals how the area has consistently attracted facilities representative of their times: dams in the '50s and '60s, nuclear power stations in the '70s and '80s, combined cycle and renewable energy facilities during the '90s and the '00s.

Two out of seven nuclear power plants operating in Spain are located within a close distance from Terra Alta. In 1972 a 480MW nuclear power reactor was installed in the village of Vandellòs some 30km[12] from the administrative limits of Terra Alta; a second reactor of 1087MW installed capacity was built in 1987. In 1989 and after a fire threatened the facility a decision was taken to close down the older reactor. In 1982 a nuclear power plant was built in Ascó, less than 10km away from Terra Alta. Its reactor (approximately 1000MW of installed capacity) was later (1985) supplemented by a second one of more or less the same capacity. Nuclear power plants were locally opposed with massive mobilisations, evidence of which is still evident in graffiti in Terra Alta villages.

The advance of hydroelectric energy has also left its mark in the area. In the village of Flix, less than 20km off Terra Alta, a hydroelectric plant was built in 1950. The dam reservoir contains remains of DDT residues previously dumped in the river Ebro by a

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[12] Distances in this section are measured in straight line as this is relevant for understanding negative impacts of controversial developments (e.g. nuclear energy).

chemicals factory (Ercros, previously ERKIMIA) that still operates in the area. In 1969, another dam was constructed in Riba-Roja d'Ebre approximately 15km from Terra Alta. At the time, the nearby villages of Fayón and Mequinenza had to be inundated and new villages were built for their inhabitants. Nearly half Mequinenza's and over 2/3 of Fayón's population abandoned the area. More recently, the area has attracted not only eco-efficient wind farms but also energy efficient combined cycle power plants. There is currently one combined cycle power plant in the broader area (Vandellòs) built in 2007, but there are plans for at least two more (Fayón and Riba-roja d'Ebre). Finally, the comarca is a candidate for hosting the first ever nuclear waste cemetery to be built in Spain exactly due to its proximity to two out of seven nuclear power plants in the country (to minimise costs and risks of nuclear waste transport).

Still, while the urban region of Barcelona with a population of approximately 5 million people requires (at the present level of over 1KW power per person) electricity from roughly three nuclear power stations (3,000MW), two large dams (600MW), three combined cycle gas power stations (1,200MW) and also wind power, Terra Alta requires at most 13,000KW. However, the siting of electricity production (Map 3) shows that in comparison to the rest of Catalonia, the broader area concentrates a significant number of facilities set to become even higher with the planned installation of Terra Alta wind farms, which creates a large imbalance in terms of sharing environmental costs and economic benefits from locally-hosted energy generation.

**Map 3**: Electricity generation in Catalonia (2005)
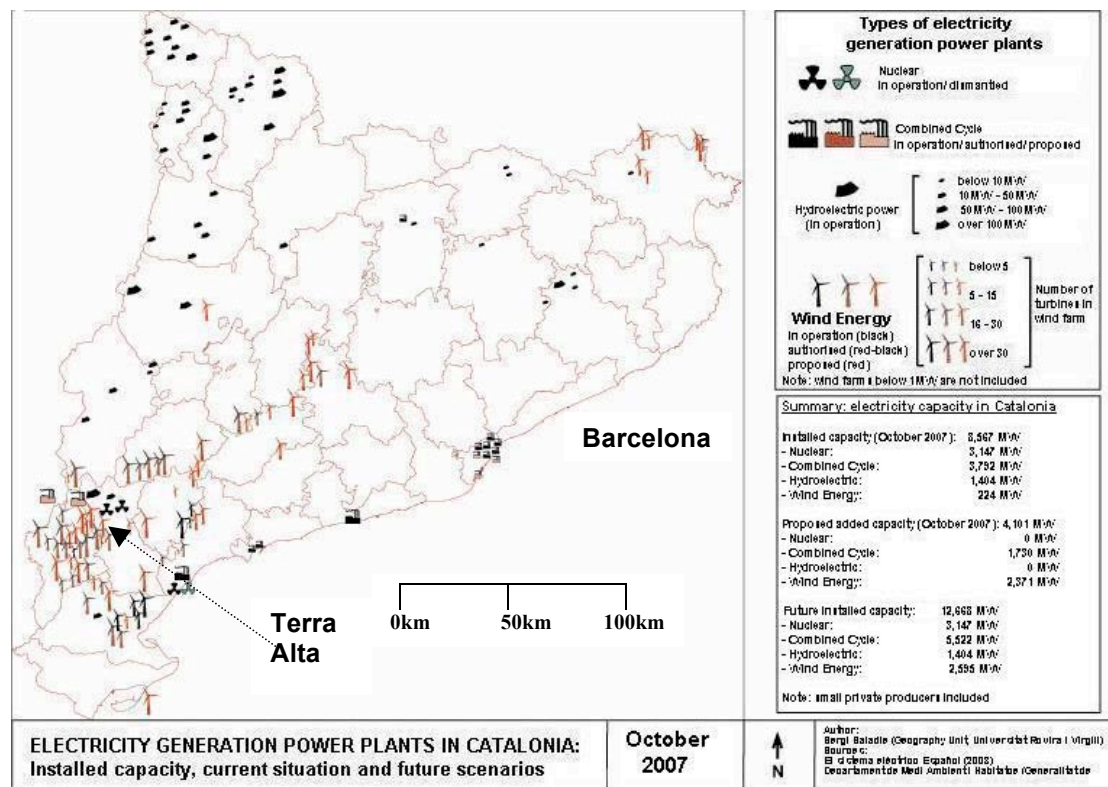


Source: Sergi Saladie (reproduced with author's permission)

Wind farm planning in Catalonia seems to reflect a historical pattern that tends to favour the installation of controversial facilities in southern Catalonia ('periphery'), where local opponents ask political authorities "why always here?" (Nel.lo, 2003). In Terra Alta both wind farm opponents and supporters agree that the reasons for this are structural, namely the reduced political power of the comarca and its poor economic profile that result in the comarca's political 'invisibility' within Catalonia and the resultant disregard of its voice:

"We are talking to those politicians who ignore that there is a Catalonia to the south of Port Aventura[13]!" (Plataforma per la defensa de la Terra Alta, 2006).

As pointed out by political ecologists (e.g. Robbins, 2004) the distribution of benefits, costs, and risks of environmental change at various scales is vital for understaning this wind farm siting conflict. Decisions taken over the siting of energy generation facilities reflect interests on one (regional and national) scale, whereas reaction and impacts are felt at the local scale. In that sense, environmental (landscape) change brought about with wind turbines exacerbates historical inequalities imprinted upon the energy-generating landscape of the region, which reflects a historical and systematic shifting of the costs of development of the 'centre' to the 'periphery' that goes back to the 50s.

This cost-shifting continues a historical process of 'peripheralisation' of the area that has occurred in the course of the 'centre's' rapid development. This process is evident in the geography of a landscape marked by the massive concentration of energy-generating facilities (the 'massification' issue) and the marginalisation of land propelled by immigration and agricultural decline. Considering the crucial role of energy availability for the significant economic growth of the Catalan 'centre' (i.e. Barcelona) in the second half of the 20th century, such marginalisation could perhaps be conceptualised by a political ecology approach reflected in Harvey's view of uneven geographical development, i.e. as "a structural conditionality for the perpetuation of a capitalist mode of production" (Toscano, 2007: 1131-32). Political ecologists point out that increasing scarcities produced through resource enclosure by state authorities and private firms accelerate conflict between groups, as changes in

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[13] Massive theme park just outside the city of Tarragona.

resource development policy transform existing and long-term conflicts into 'ecologised' ones (Robbins, 2004). Such an interpretation could also apply here, and the Terra Alta conflict could be meaningfully understood within an environmental justice framework, that is as a struggle to redress the imbalance of costs and benefits of locally-generated development and the cost-shifting of the 'centre's' development.

This 'peripheralisation' process is embedded in a dominant discourse over the agricultural landscape of Terra Alta. This discourse focuses on the limited and declining economic value of agriculture and effectively downplays the importance and value of the main features of the landscape. The accepted 'reality' of this discourse is utilised by wind farm supporters and promoters to legitimise their projects as 'necessary', e.g. in terms of jobs created to support a deprived area. In so doing, they simultaneously downplay the importance of arguments that exalt the value of the Terra Alta landscape. As J.M. Rañé, Industry Minister of the GC said in his visit to the area, landscape issues are "value judgements that will not pose an obstacle to the development of wind energy in Catalonia" (Aymí, 21 February 2006).

## Life projects

However compelling, this political ecology explanation of the conflict risks overlooking the importance of local discourses that place value on exactly those aspects of the landscape downplayed or ignored by the unproductive landscape view. These alternative discourses see the current landscape of Terra Alta as replete of attributes of artistic, historical and natural value that could form the basis of a project for the future (Olivé and Alay, 1994), and are evident in a series of locally originating practices that display those landscape values. We term these initiatives 'life projects'

(Blaser and Feit, 2004), a term used in the study of relations between indigenous communities and development to describe resistance activities that could not be explained as solely reaction to state and market-promoted development but as efforts to sustain a purposeful and meaningful life (Blaser, 2004). Life projects are distinguished by their intent to transform power asymmetries, their practice of promoting non-hegemonic projects as a way to stretch to the outside world and their focus on achieving a meaningful degree of control over life and its meaning (Blaser, 2004). They try to address power imbalances as regards 'the global' by elevating local attributes as valuable assets capable of providing livelihood opportunities. In Ogoni and Ijaw territories in the Niger Delta, comparable projects of autonomy are linked in the fight against multi-national companies (Martínez-Alier, 2002). Likewise, in the Colombian Pacific (Grueso et al., 1998) similar projects may take the form of an 'ethno-genesis' of Afro-American communities that then use this re-affirmation of identity to fight for the control of natural resources, such as mangroves, and against the shrimp industry. In Terra Alta, art and war are two themes that characterise local life projects.

Terra Alta has hosted one of the most famous 20<sup>th</sup> century artists. Pablo Picasso paid two long-stay visits to the village of Horta Sant Joan, painting several scenes of the surrounding countryside in some of his first cubic paintings, copies of which are exhibited in the local Picasso centre. While one may wonder what Picasso would see in a landscape full of wind turbines, the centre seems to be an attempt to vest the local landscape with value by illustrating "links between this land and the great artist" and by classifying his paintings as an "effort to link the land he loves (Horta) with the woman he loves (Fernande)" (www.centrepicasso.cat). Given that "many landscapes

remain practically the same as when they were immortalised by Picasso" (Olivé and Alay, 1994: 274) the centre elevates the value of the current Terra Alta landscape in that it conserves those elements that inspired the great artist.

Another project ('Art in the Open') seeks to explore the artistic potential of landscape through a series of sculptures and 'visual poems' installed in Terra Alta paths (Figure 5). The project invites artists in Terra Alta and asks them to create work "integrated with nature, respecting its surroundings and using locally-available material" (Interview 4, artistic director). The objective is to stimulate creator and spectator to adopt new ways of looking and living the landscape, which can help transform conventional means of creating and appreciating art:

> "The aim is to advance the connection between the artist and the material born by this land… Also, we ask people to appreciate a piece of art in its 'birthplace', to enjoy an aesthetic creation by allowing its natural surroundings contribute to this enjoyment" (Interview 4, artistic director)

**Figure 4:** Life projects: Conserving the memory of the Spanish Civil War through monuments built on hiking trails that connect important Battle of Ebro sites.

**Figure 5:** Life projects: integrating art and landscape through sculptures in Terra Alta paths to stimulate new ways of looking and living the landscape. (*The power of wind*, by Mariano Andrés).



Terra Alta is a land whose modern history has been marked by the misfortune of being a stage for nearly all the major armed conflicts that have ravaged Spain. However, the Spanish Civil War (1936-39) has unquestionably left the most visible imprint on the landscape. Between July and November 1938, Terra Alta became the central stage of this war's bloodiest and most decisive battle, the Battle of Ebro during which heavy bombardment destroyed several local villages. Evidence of the battle is still visible on the landscape (e.g. in the broad availability of battle relics) and several local entities engage in activities that aim at conserving the memory of the battle, such as organised walking routes across key battle sites (Figure 4). In 1995, a locally-based initiative created an art installation project inside the old village of Corbera d'Ebre that still stands in ruins as a result of bombardment. The initiative intends to turn the

village "into a symbol of what should have never happened" (Mansanes i Pataques, 2006: 33). Art pieces "have been carefully thought for the location where they have been placed and seek to empower a message of fraternity in the midst of the desolation of the landscape" (Mansanes i Pataques, 2006: 33). Local opposition to wind farm construction emphasises the heritage value of the landscape claiming it as "sacred land for many people around the world" (Nel.lo, 2003).

These life projects manifest local valuations of the landscape through livelihood activities and spatial interventions that express it. By trying to exalt the value of Terra Alta vineyards, olive trees and landmarks of past destruction, the initiatives represent an attempt to imbue the landscape with a value that reflects the particularity of the land and its historical or symbolic significance, no matter if this is valued or not by energy markets and existing rural development policy frameworks. Notably, those involved in such local life projects perceive wind farms as a direct threat not only to a valuable landscape but also to their attempts to raise the profile of the comarca and provide alternative locally-driven means of rural development, as reflected in the words of the Picasso Centre Secretary:

> "But now, we are distressed by a threat … They are projecting a wind farm that endangers the landscapes that Picasso loved and painted: the turbines will tear into pieces our beautiful, still virgin, landscape heritage … These wind-mills will stab our model of development based upon our natural and cultural heritage. These turbines will smash up everything" (Amela, 2006)

Those who see value in the distinctiveness of the current landscape tend to oppose local and regional administration views that the value of the comarca lies mainly in its

wind potential.  It may come as little surprise then that promoters of such life projects

are frequently in the forefront of recent opposition to wind farms:

> "Wind farms will be a blot to a largely well-conserved landscape that people value
>
> and actively choose to live in" (Interview 5, wind farm opponent).

## Procedural issues

The previous two sections discuss the relevance of fairer distributions of costs and

benefits from locally-hosted development and local life projects. On the ground, what

makes these two aspects conflictive is the lack of spaces for their inclusion in

decision-making, which points to a third important element, the influence of wind

farm siting planning. There are two main features here. First, when assessed from a

deliberative democracy perspective decision-making processes are flawed as they are

characterised by elements that encourage instrumental rationality. Second, the

planning process limits stakeholder capacity to contribute to decision-making with

criteria different than those guiding official wind energy policy implementation

(mainly wind capacity).

As regards the first feature, Toke et al. (2008) observes that locally opposed wind

farm projects in Spain can be subject to significant delays but normally end up in

"more money being paid for local projects rather than municipal rejection of the

schemes" (Toke et al., 2008: 1134). The Territorial Sector Plan for the Environmental

Implementation of Wind Energy in Catalonia (the Plan, for brevity) that regulates

wind energy development in Catalonia stipulates wind farm proposals in which

agreements between municipal authorities and companies have the potential to

improve the local economy (Generalitat de Catalunya, 2002: 48). Both Toke et al.'s observation and the Plan's stipulation perhaps explain why companies tend to contact local authorities early on in the process to assure their positive disposition and if possible formal commitment towards projects through pre-agreements.

Such agreements specify a set of obligations for applicant companies (mainly compensations to local municipality and landowners) and local municipal authorities. However, and as seen from one such agreement signed in a Terra Alta village, they can also turn local municipalities to project facilitators by committing them to take action for the smooth running of farm applications and for controlling local reactions:

> "The municipality of La Fatarella is committed to collaborate, to the extent that this is possible, with the wind farm project, materialising such position, when necessary, for obtaining licences and authorisations that depend from other administrations, and in negotiations regarding connection to the electricity grid.
> "The municipality of La Fatarella will also try to prevent and limit possible conflicts of interest that could arise and assume a mediating role with affected property owners" (Conveni, 2003: 11).

These agreements are of strategic nature to companies as they help prevent future conflicts with local authorities by taking them on board the project. However, such strategic attitude is also adopted by local municipal authorities who see agreements as a means to retain benefits from projects to which they feel largely unable to oppose:

> "There came a moment when we [municipal council] decided that we needed an agreement to prevent companies from interfering with village properties without

paying anything… Because... of course you can say no [to a project] but they can

impose it on you" (Interview 13, ex-mayor of La Fatarella).

Another possible reason for signing such agreements involves local micro-politics as

also seen from the case of one village where funds obtained from an agreement were

used to finance a local community centre just before municipal elections. Agreements

are crucial elements of the decision-making process stipulated by the planning

framework that encourages strategic and own-interest seeking rationality (e.g.

political benefits). Not only they facilitate companies to pursue wind farm projects in

a profitable way but also instil instrumental rationality to local authorities in their

involvement in the decision-making process.

The second relevant feature involves the exclusion of local landscape valuations and

cost/ benefit distribution concerns as decision-making criteria. In the words of the GC

Industry ex-Minister J.M. Rañé, the basic requirements for giving wind farm licence

are that:

> "it is outside protected areas, the location of the electricity evacuation line and that
>
> the zone is included in the Map" (Aymí, 2006)

The role played by local authorities within decision-making is quite revealing as to

how such exclusions occur. There are two major scales of planning decisions as

regards siting: the regional (Catalonia) and the local level. On the regional level,

municipalities have limited capacity to formally object wind farm applications as long

as they comply with Map and conservation criteria. Their decision-making authority

is basically limited to issuing Urbanism and Environmental licences (Interview 11,

council secretary). However, Spanish law confers non-discretionary powers to the provision of licences, i.e. if an applicant complies with a series of prescribed criteria municipal authorities have no other (e.g. cost/ benefit distributions) grounds to deny granting a licence. As far as local councils are concerned, the power to provide a licence essentially consists in approving a checklist of criteria strictly prescribed by legal norms (Interview 11, council secretary). This significantly restricts their capacity to object projects within the formal planning process.

However, the limited authority of local municipalities at the regional planning level tells only half the story as to their powers regarding siting decisions. At the local level, their potential to determine cost/ benefit distributions and the impact of wind farms on local landscape valuations is quite significant. This is evidenced by their role in agreements: not only they are one of the two counterparts determining compensation amounts and distribution between affected parties, but they also assume the role of facilitators for siting choices (who will bear landscape impacts). And it is the way they fulfil this role that has been another object of conflict in Terra Alta:

> "For those of us affected by the line the local council did not care at all because they were not going to make any money out of it… they simply abandoned us to face the company and the law on our own… a bit of an unequal struggle if you think about it because you have no power whatsoever" (Interview 6, affected landowner)

Agreements legitimise such differential treatment: in the La Fatarella example, compensations to turbine hosts who are crucial for the fructification of the project, is at its minimum four times higher than those given to neighbouring landowners, while those affected by the electricity line are altogether ignored. Similarly, neighbours

affected by turbine construction works and those visually affected share between them an amount approximately four times lower than that paid to their next-door neighbours who host turbines. The local municipal authority's role in excluding concerns over cost/ benefit distributions and downplaying landscape local valuations is considerable through its contribution to siting decisions. In the same way that regional planning has no space for local municipal authority to express such concerns, pre-agreements allow them to act similarly and reduce the space for potential project 'losers' to voice the same concerns at the local planning level. Agreements comprise elements of the wind farm decision-making process that limit inclusive communication and discussion of local concerns, in other words infringe deliberation. They encourage sides to engage in terms of instrumental rationality and prevent the inclusion of fairer distribution arguments and alternative landscape valuations as compelling decision-making criteria. This underlines a sense of local powerlessness to decisions determined from 'the outside' (state or market), which in turn fuels conflict.


## Conclusions

This conflict is not about wind energy or indeed wind farms: it is the recurrence of an older 'centre' – 'periphery' conflict, which has historically developed with the installation of controversial energy-generation facilities in the broader area. This older conflict is now 'ecologised' by means of arguments as regards the landscape impact of a macro-development, such as the 180 wind-turbine scheme perceived to largely benefit the 'centre' and condition the 'periphery' in its options to use landscape as a livelihood resource. In that sense, opposition is about maintaining local control and ownership of property rights of the wind that blows over the comarca, and opposing the de facto transfer of these rights to the 'centre' through wind-powered electricity

generation. This is the ecological distribution conflict aspect of the situation, which is quite fittingly explained by a political ecology framing of the phenomenon: conflict arises in the course of the periphery been 'expropriated' at a cheap price of its rights over wind while also suffering damage in terms of perceived landscape degradation.

However, the conflict is also characterised by local objections to accept an official discourse of a local 'valueless' landscape, broadly diffused by all sorts of official documents and utilised by supporters and promoters of wind farms. To comprehend this, one needs to witness specific locally-developed landscape use practices instead of reviewing official documentation. There, local landscape appreciations become evident in a series of life projects that build upon past and present human interaction with the landscape in their efforts to bring into evidence its potentiality. Still, there is another aspect to the conflict, which brings together claims for fairer cost/ benefit distributions of locally produced development (energy from wind farms) and alternative landscape valuations. This involves a perceived powerlessness to effectively interfere in siting decision-making procedures and push local claims, which occurs at two levels of decision-making: that of regional planning, where local municipalities feel disempowered to push such claims, and at the local planning level where either disfavoured or disagreeing locals feel unable to establish claims as valid siting criteria. The absence of spaces and, perhaps more importantly, of a spirit of deliberation in the course of decision-making becomes then another element of conflict explanation. These absences imply that fairer distribution and alternative landscape value claims receive little attention as siting criteria, which explains why claimants seek to legitimise them by means of political mobilisation.

As regards policy suggestions, if the objective is not only to increase electrical capacity but also advance smoother and locally more acceptable planning, then the process would need to adopt significantly different stances towards siting standards and consider the introduction of criteria currently absent from decision-making. Firstly, as the issue is not really wind farms, but models of landscape uses, the central government should instigate a genuine debate where local views are considered in the context of addressing centre-periphery issues. Alternatively, and in the cases that this is available, the richness of information from Agenda 21 exercises could be used to get a grip of local perspectives and integrate them in siting decision-making. Admittedly, adopting such a locality-sensitive perspective seems difficult to imagine given the current significance of energy production for the support of the 'superior' good of economic growth. To put things into perspective it is important to keep in mind that although Spain is the country with the second largest installed wind energy capacity in the world (IEAWIND, 2006), it is at the same time among the worst performers of Kyoto Protocol signatories, currently emitting over 53% above its 1990 threshold (EU Business, 2007) and expecting a 37% (instead of the committed 15%) increase of greenhouse gas emissions by 2012 (Rix and Carr, 2007).

Secondly, the importance of decision-making bottom lines such as wind potential (translating into financial profit) needs be reduced. The importance of profitability criteria is perhaps understandable from an entrepreneurial perspective, but from a regulatory perspective the legitimacy of such bottom lines and the marginalisation they effect upon other locally important criteria (e.g. fair distributions) is questionable. Fair distributions of costs and benefits of wind farm developments could be introduced as formal criteria for assessing applications, e.g. local authority permit

concession. Moreover, the negotiation of local benefits should be as open as possible and not conducted in secrecy generating suspicion and low levels of trust. Eliminating or at least introducing some sort of citizen control over particular aspects of the decision-making process could contribute to that end. In particular, the necessity of pre-agreements should be reconsidered particularly in those cases where they operate to preclude local concerns so as to allow for the establishment of more reflexive institutional forms, genuinely responsive to value pluralism.

The study suggests that a political ecology conceptualisation of this wind energy conflict as a conflict over landscape change is a potent alternative to the obsolete NIMBY conceptualisation of wind energy conflicts. Additionally, such an analysis pays attention to institutional aspects of wind energy governance and considers factors in the realm of politics, both crucial elements for understanding those conflicts (Wolsink, 2000). Furthermore, by examining the role of power in wind energy politics, the approach furthers and refines this institutional perspective by revealing the role of institutions (e.g. the Map) in facilitating material imbalances between the centre and the periphery. This explanation seems useful both for explaining conflict and for making yet untried policy-relevant suggestions. However, and notwithstanding the importance of explaining conflict in such terms of larger processes, the significance of agency from local landscape valuations is also important. An approach such as the one here presented that complements political ecology's focus on broader, structural factors of conflict with a more relational focus on agency and a policy focus on procedural aspects of decision-making seems capable to go some way in explaining conflicts over wind farm siting.

# Chapter Five: Global results and discussion: the relevance of power for the study of sustainability governance

The thesis has set out to investigate the sustainability policy implications of a broader view of human action by means of three publications, the first of which looks at the issue conceptually, i.e. through a critical review of the relevant literature, while the two latter explore it empirically. This section puts together and discusses the results of these inquiries in the following way: first, it presents in a nutshell the results from the conceptual (Publication 1) and the empirical (Publication 2 and Publication 3) enquiries; second, it places these results in the context of the relevant literature; and third, it raises further issues that need be considered by each publication and discusses how those issues are treated in the broader literature (i.e. outside ecological economics). This format is repeated separately for each publication, i.e. a brief presentation of the publication's results is followed by an explanation of how these tie with the relevant literature and then by a discussion of limitations and further issues that need be considered; in general (i.e. with the exception of the last publication), these 'further issues' are then treated by the publication that follows.


## Publication 1: Human action and policy for sustainable development: a theoretical inquiry

This publication (Zografos & Paavola, 2008) comprises an inquiry into the literature on views of human action broader than the standard homo economicus construct used by conventional economics to perform policy analysis and into the potential of using such views in environmental and broader sustainable development policy. This

conceptual investigation has started by looking at the limitations of homo economicus for understanding human behaviour as regards the environment. Based on the exploration of motives behind zero bids expressed in the context of valuation studies several scholars have pointed out that moral concerns broader than utilitarianism seem to underlie environmental values. This has led ecological economists argue that environmental behaviour has multiple and plural ethical motivations which underlie environmental preferences. As a result the design of environmental policy needs to consider other consequential, rights-based and even procedural rationalities alongside utilitarianism. The need to consider these other models arises from a need to make sustainability policies more robust, either in terms of effectiveness or in terms of legitimacy. On the one hand, the danger of crowding-out effects points to the need to carefully identify the bases of environmental motivation before setting out policies in order to avoid discouraging environmentally-friendly behaviour with policy initiatives. On the other hand, policies that ignore plural motivations may be perceived as illegitimate or unfair and hence not complied with. Ignoring other than utilitarian ethical premises implies a sort of voice exclusion that not only undermines the democratic legitimacy of environmental policy but can also aggravate environmental problems. In fact, value exclusion may resolve environmental conflict but aggravate environmental problems as in the case of mining or forest exploitation in the Amazon, where indigenous (e.g. spiritual) environmental values tend to be excluded from 'rational' decision-making processes that nonetheless habitually result in resource overexploitation and environmental degradation.

The need to improve the democratic legitimacy of environmental policies is a key point for this thesis and underlies the quest for a broader view of human action that

would allow considering plural motivations and avoid their exclusion from shaping sustainability policy. With this in mind, the thesis draws attention to a central aspect of the homo economicus view of human behaviour namely the understanding of human action as *instrumental*, that is as a means for achieving predetermined goals, be them specific material (or not) outcomes or the satisfaction of moral principles and values. Here the thesis turns its attention to critical theory and in particular Jürgen Habermas who has considered the influence of instrumental action upon the democratic potential of institutions. Habermas (1984) associates the degradation of the democratic potential of major spheres of social life (e.g. state, social organisations, etc.) to their being taken over by models of strategic and instrumental rationality. According to Habermas, this logic submits areas of public life under the logic of efficiency and control by forces of economic (market) and administrative (state) rationalisation, which reduce human relations from communicative concerns to instrumental norms.

Instead, Habermas advances communicative action as an alternative to instrumental action. He argues that the essence of rational action can also be to reach understanding between oneself and other actors or society in general, instead of achieving instrumental goals. Action embedded in communicative rationality may thus reflect logics that go beyond instrumental seeking of pre-defined ends and Habermas believes that communicative rationality is better placed than instrumental rationality to advance the democratic development of society through discussion and quest for consensus instead of instrumental action that seeks to achieve one's own ends. With this in mind, advocates of deliberative democracy have established communicative action as the basis of a model of 'genuine' democracy due to its

potential to generate consensus solutions through dialogue, reflection and preference change. However, such forms of inter-subjective communication and decision-making could be distorted by institutionalised forces or extra-institutional agents. This is why advocates of deliberative decision-making complement communicative rationality with the requirement that reflection induced through inter-subjective communication is made in a non-coercive fashion and that it is free from deception, self-deception, strategizing, and manipulation in order to achieve genuinely democratic decisions (Dryzek, 2000)[14].

The broader view of human action encompassed in communicative rationality, which is based on the observation that preferences shape up in interaction, introduces a distinct criterion for judging the quality of governance intervention, namely its *capacity to induce reflection* on preferences. Deliberative democrats require that beyond other outcomes policy generates a *public domain* where reflection upon preferences is stimulated. This take on policy-making poses challenges for policy analysis, which models of deliberative policy analysis try to address. Such analyses explicitly attempt to identify the best means of integrating value pluralism in policy making by focusing on how 'identities of shared preferences' develop through deliberative decision-making processes. The objective is to learn more about the

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[14] Another development related to the recent policy emphasis on deliberation, concerns the failure of the scientific discourse in some cases to provide definitive answers for some environmental issues (e.g. debate on global warming) which has helped substantiate the claim that scientific values are merely one more set of values that needs be considered side by side with other (e.g. lay) values. This has contributed to the emergence of post-normal science (Ravetz & Funtowicz, 1993) and the promotion of more interactive and inclusive forms of decision-making such as extended peer reviews, activist knowledge, etc. that bear characteristics of deliberative decision-making.

conditions where people re-position their distinct preferences during deliberation

occurring in the context of interactive policy-making practices, particularly inside

policy networks and the network society (Hajer & Wagenaar, 2003). This is mostly

done by looking at how conflicts of value pluralism and identity are dealt within such

processes.


### *Deliberative ecological economics*

Ecological economics scholarship has quickly detected the value of deliberative

democracy for the study of environmental decision-making. The potential of

deliberative processes to improve the legitimacy of policy decisions seems an

obviously attractive prospect to a discipline long concerned with the legitimacy

shortcomings of conventional methods of environmental decision-making such as

cost-benefit analysis (e.g. Paavola & Adger, 2005; Howarth & Wilson, 2006). As the

capacity of preference aggregation to provide a genuinely democratic means for

capturing the social value of the environment comprises a main concern with such

methods (Martínez-Alier et al., 1999) the possibility of reflection and deliberation

towards establishing some sort of 'consensus' group values advanced by deliberative

decision-making unavoidably resulted attractive to ecological economists. Moreover,

the communicative action view that preferences are formed during inter-subjective

communication also coincides with ecological economics insistence that rational

action may be better understood as procedural rather than substantive (van den Bergh

et al., 2000). The emphasis on considering preference formation as a process instead

of seeing preferences as a priori held like conventional environmental decision-

making methods such as cost-benefit analysis do has proved useful to ecological

economics. As ecological economics has long held that preference formation is

socially constructed through institutional influences (Paavola & Adger, 2005; Vatn, 2005b) it has also argued that an attention to securing open, encompassing and democratic value articulating institutions is crucial for legitimate and successful environmental decision-making (Vatn, 2005a). Deliberative democracy's aim to pursue a public sphere of information, reflection, deliberation and consensual decision-making free of coercion as a policy objective, provides a pertinent model of such a desirable value articulating institution.

The view of preferences as procedurally-formed, non-aggregative and socially constructed and the suggestions from the deliberative democracy literature as regards desirable types of value articulating institutions prompted some ecological economists to consider using deliberative-type forums in order to study and elicit group environmental values via a method of 'deliberative environmental valuation' (Wilson & Howarth 2002; Aldred & Jacobs, 2000; Sagoff, 1998). Deliberative valuation comprises an attempt to turn the value elicitation process into a preference-constructing process in order to deal with the issues that people do not hold pre-determined preferences towards the environment and that such preferences should be deliberatively derived (Zografos & Howarth, 2008). Such attempts have provided some interesting insights as regards the applicability and improvement of environmental valuation (e.g. MacMillan et al., 2006) but have also attracted scepticism over the potential to combine what appear to be two potentially conflictive processes of valuing the environment (Holland, 1997) and whether such a method is trying to combine two incompatible valuation processes (O'Connor, 2000). Some ecological economics scholars argue that in practice deliberative valuation has been applied as a means for justifying stated preference methods by adding often

superficial forms of deliberation or discussion and that the relevant studies in essence establish that the economic model they use is unsuitable for understanding particular sets of social values as regards the environment (Spash, 2008).

Ecological economists have also shown interest in combining multi-criteria appraisal with deliberative processes in order to arrive at more 'precise' and legitimate environmental preferences (Gregory & Wellman, 2001). This is not surprising given the methodology's concern with incorporating multiple values in environmental decision-making (Munda, 2008) and the interest of scholars with the potential of multi-criteria evaluation to transform policy analysis into a learning (communicative) process (Munda & Russi, 2008; Gamboa & Munda, 2007). On the main, most attempts employ processes of deliberation and reflection for getting at a decision over the allocation of weights habitually used in multi-criteria analysis as a proxy for social preferences regarding the importance of the various goals that the model tries to satisfy. Relevant applications have proved useful for revealing the thinking and reasons lying behind environmental preferences (Kenyon, 2007), have shown potential to help understand crucial aspects of complex decision-making problems (Proctor & Drechsler, 2006) and have produced critical insights regarding the contrast between stakeholder policy priorities (derived via the method) and government allocations of available resources for tackling environmental issues (Cook & Proctor, 2007). Although this literature has not yet been critically assessed, the applicability of the criticism regarding the superficiality of deliberation raised against deliberative valuation should also be considered here – particularly for studies where deliberation is reduced to an one or two-day process.

A second area of enquiry of the literature that combines deliberation with ecological economics has recently emerged. This goes beyond the decision-making applications to focus on the study of the politics of sustainable development and their influences upon environmental policy decisions (Zografos & Howarth, 2008). At the basis of the deliberative democracy paradigm lies an awareness of the need to acknowledge and legitimise plural values in public policy and decision-making. Several contributions in ecological economics share a concern towards the potential of today's materially intensive and growth-oriented capitalist economy to achieve genuine 'green' outcomes (O'Connor, 1994) and its apparent failure to dematerialise (Roca et al., 2001). Given that the imperatives or emergent properties sought by such a system may end up punishing the introduction of some types of necessary 'green' structures in the economy (Dryzek, 2000), the study of institutional orientations (rationalities) that do not exclude non-utilitarian values has become an important aspect of research in ecological economics (O'Neill & Spash 2000; Vatn 2005a).

This field has emphasised the need to investigate the politics of sustainability and in particular the linkages between these politics and environmental policy by stressing the importance (Sneddon et al. 2006) and showing the value (Norgaard, 2007) of embracing a plurality of epistemological and normative ideas, interpretations and practices as regards sustainable development. Furthermore, it has underlined the need to open up public spaces for debating and enacting a politics of sustainability that will advance the concept and practice of sustainable development (Norgaard, 2007). Calls for value pluralism both in its epistemological and political dimensions also favour the adoption of critical views regarding the marginalisation of plural values as valid discourses and practices of sustainable development and raise attention to issues

relating to conditions and principles that are necessary for facilitating deliberative sustainability politics. Contributions in this field of cross-fertilisation between ecological economics and deliberative democracy have examined the importance of inclusive discourses over policies addressing serious environmental challenges such as climate change (Riedy, 2008) in an effort to identify policy principles better placed to facilitate inclusiveness of views and deliberation over sustainability.

Considering value pluralism in environmental governance is also useful in a positive (i.e. as opposed to a normative) sense, i.e. for improving understanding of governance. Different value premises may inform different policy areas and such differences may be reflected in policy solutions that become predominant in each area. For example, ecocentric policies (e.g. guided by a principle of care for non-human entities) and policy instruments may prevail in nature conservation governance, while at the same time purely anthropocentric policies may dominate energy policy. In that sense, accepting that there exist plural, and not only own-utilitarianism, values influencing environmental governance is crucial for explaining policy heterogeneity. Still, the case may be that some institutions (e.g. those responsible for conservation governance) are not successful enough in transforming 'predominant' values into policy solutions, which may end up in observing policy differences between areas (e.g. conservation and energy policy) which do not properly reflect the different (or indeed, the same) value premises of governance in each area. These are issues that could deserve closer scrutiny in the future in order to improve our understanding of environmental governance.

In sum, the initial inquiry over broader views of human action that has been attempted with the first thesis publication, suggests that communicative rationality could be a promising alternative model to homo economicus, and that this broader view of human action has one clear important sustainability policy implication: decision-making processes should function as 'public spheres' for deliberation to facilitate preference shifts. Deliberative policy analysts agree on the centrality of dialogue for legitimate decision-making and underline the importance of conceptual tools to make such dialogues possible. Building on work done in interpretive policy analysis (e.g. Yanow, 2000) that puts emphasis on the meanings (imposed, challenged, intended and interpreted) of policies, deliberative policy analysis scholars focus on discourse coalitions formed around different meanings of policies (Hajer, 2003a). As preferences are seen to shape up in interaction, researchers suggest tools such as discourse analysis in order to analyse political formation, mutual positioning and the influence of particular policy discourses that bring together groups in the context of policy-making (Hajer & Versteeg, 2005). Similar developments in ecological economics have underlined the value of Q methodology for identifying discourses and linking them to environmental policy in order to improve the latter's legitimacy by including plural and multiple values in sustainability policy (Barry & Proops, 1999). Nevertheless, ecological economics scholarship shows a dearth of applications that try integrating discourse coalitions into the rationale of sustainability institutions as a mode of advancing more legitimate decision-making. Such an attempt to directly integrate policy principles held and advanced by stakeholders of sustainability institutions seems to be important from a democracy perspective as it could facilitate bottom-up styles of decision-making over sustainability. Moreover, experience shows that when multiple discourses are identified and included early on in the policy

process institutions do not need re-adjust their design to accommodate discourses and much controversy can be avoided (Hajer, 2003a).

The first empirical inquiry of this thesis uses discourse analysis to contribute to the generation of a deliberative public sphere in the context of policy-making. The study employs Q methodology to study underlying aspects of a conflict over the drivers and future role of an institution set up to promote sustainable development through environmental, social and economic regeneration projects in rural Scotland. It then moves on to show how this information can be used to advance a sustainability institution design that is more inclusive of plural values regarding sustainable rural development and the role of such an institution.

## Publication 2: Governance implications of sustainability discourses

This publication (Zografos, 2007) focuses on the need to understand the contradictory stances among social enterprise stakeholders towards the role and drivers of Development Trusts (DT) in rural Scotland, a debate expected to significantly influence the future success of this vehicle of sustainable rural regeneration and development. This research project employed Q methodology to explore the 'rurality' discourses underlying the views of rural DT stakeholders (e.g. DT employees, public servants, politicians, etc.) regarding the future of this sustainability institution (rural social enterprise). The study found that the debate regarding the role and drivers of DT is linked to broader concerns over the qualities and the future of rural areas. It then moved back to the literature and found out that as regards rural Europe there exists a set of 'rurality' discourses (Frouws, 1998) that try to address these concerns. Further, the study went on to examine how these discourses informed stakeholder

views as to what the role of DT in rural Scotland should be with the objective of exploring ways of forging inclusive visions of sustainability as DT institutional priorities. Results indicate that a reformist position (the 'enterprise' discourse) mostly employs elements of a utilitarian 'rurality' discourse and that radical positions mostly employed arguments of a hedonist 'rurality' discourse, itself split into three sub-discourses. Overall, hedonist discourses stress the importance of DT facilitating the handing down of real power to communities to shape their environment, mainly by means of retaining local capacity and wealth for community benefit. Nevertheless, they diverge among them on the issue of securing the future sustainability of DT. One approach ('anti-commercial hedonism') supports that DT will persevere if they comprise participative democratic forums for local people to collaboratively tackle the issues that matter most to them. Another approach ('pragmatic hedonism') questions the potential of participatory democratic forums to guarantee future DT sustainability and holds that becoming social entrepreneurs and making partnerships with the state and other rural regeneration actors is a better option. Yet, a third hedonist view ('small 'r' radicalism') shows aversion to state dependence and believes that DT should support active individuals and have more restricted purposes in the community. The split of the hedonist rurality discourse supports the view expressed in the literature that social representations are inherently elusive and that they are able to sustain contradictory aspects as a result of which individuals tend to hold an amalgam of representations (Halfacree, 1995). In that sense, the study both builds upon and takes forward the point that there is a need to study and put more attention to the variability, contradiction and variety of representation and articulation of rural discourses instead of their consistency (Pratt, 1996).

In terms of policy implications, the study of variability is important as it can help improve the democratic legitimacy of DT in two ways. First, the study sketches the boundaries of variability by identifying consensus issues, i.e. matters where difference of stances is not really an issue. Identifying agreement allows distinguishing matters whose inclusion in the future role and goals of DT would clearly helps making the institution more in accordance with a consensual stakeholder view. Policies should take into account these common priorities if they do not want to run into stakeholder opposition or apathy and if they want to avoid being undemocratic by ignoring stakeholder priorities. This can occur in two stages of policy-making (Parsons, 1995): agenda-setting and policy implementation. At the first stage, common priorities should form part of the agenda of the institution (here, rural social enterprise) while at the second stage support policies for the institution should be designed in a way that is sensitive to these priorities. For example in this study, results suggest that policies promoting a service-providing role for DT in rural Scotland should be avoided to prevent stakeholder objection, as all discourses disfavoured such a role. The study thus points out that the legitimacy of this sustainability institution lies significantly on supporting DT that develop their own agendas and activity in pursuit of rural regeneration than try to substitute unsuccessful local authorities or state agencies. Eventually, such a role should be precluded from the institution's policy agenda, its aims and its mission, and future public policies should avoid offering (financial, institutional or other) support to DT to undertake activities previously undertaken unsuccessfully by local authorities or state agencies.

The second way in which the study of discourse variability can help improve the democratic legitimacy of rural social enterprises (DT) as sustainability institutions is

by bringing to light discourse differences, whose negotiation can take place in the context of a deliberative form of decision-making. In that sense the study can contribute to the creation of a public sphere for the debate, reflection and preference shift of stakeholder priorities regarding the institution, by specifying the issues at hand and the relevant postures. For example, this study does not resolve the dilemma whether DT should be "a market instrument or a democratic forum" but establishes that this issue is at the heart of disagreements among discourses and highlights the specific points of tension (e.g. the issue of future sustainability) between differing views. Both types of information could be used to focus the agenda and mission of a reflexive dialogue among stakeholders (e.g. actors in rural networks) that needs be promoted by public policy in the process of seeking legitimate and democratic solutions regarding not only DT but also broader rural sustainability. This way of relating discourses produced by Q methodology to consultation and planning decisions is in concord with practice in the USA (Eden et al., 2005) where it has been pointed out that making stakeholder viewpoints more explicit is beneficial as it enables policy-makers to see 'real' differences and focus debates accordingly (Steelman & Maguire, 1999).

### *Limitations of deliberative policy models*

Committed to a use of discourse analysis and Q methodology suggested in the ecological economics literature (Barry & Proops, 1999) the study focuses on identifying discourses with a view to integrating them into policy (e.g. agenda-setting) which also explains the emphasis on policy implications of consensus statements. Moreover, such emphasis is also explained by the study's commitment towards deliberative decision-making and communicative rationality. This line of inquiry also

coincides with Q applications that study the formation of 'policy communities' within the context and as a result of policy-making choices (e.g. Robbins & Krueger, 2000) and seek to understand how such communities converge to form alliances in political struggles over environmental resources. Identifying such 'discourse coalitions' is important not only in terms of finding ways of including their preferences in policy debates and priorities but also in terms of comprehending which themes mobilise groups to participate into a more democratic policy formation (Hajer, 2003a).

In that sense, grasping the breadth of relevant discourses can help to either better establish future social enterprise goals and roles or as a benchmark for checking the legitimacy of future directions and support policies for the institution. This highlights an important aspect of discourses which underlines the value of their study: that they comprise key socio-political legitimising mechanisms as they are used to justify future institutional functions and practices and inform future institutional strategies and modes of development. Importantly, this aspect also links to one of the main limitations of this study, in particular that it is an application of discourse analysis that does not consider the influence of *dominant* discourses in policy-making and thus risks omitting some real-life obstacles to meaningful communication in the policy arena.

Other applications of discourse analysis in the deliberative policy analysis literature have highlighted exactly this need. For example Hajer & Versteeg (2005) suggest a type of discourse analysis that juxtaposes official policy (mainstream/ dominant) discourse and practice to that held by others (e.g. stakeholders, dissent groups, etc.) suggesting in such a way a more critical use of discourse analysis than merely

employing it in order to discern discourses and suggest ways of integrating them into public policy. In particular, they argue that concepts (e.g. sustainability) and policies are not always simply imposed from the above but are continuously contested in struggles regarding their meaning and implementation. Within such a context of policy-making, the study of discourse can reveal how diverse actors try to influence the definition of an issue and in this way delimit the range of available policy options and instigate particular policy outcomes (Litfin, 1994). In essence these are studies of power, in the sense that they try to show "how distinct actors exercise power through trying to impose a particular frame or discourse onto a discussion" (Hajer & Versteeg, 2005:177).

This power-related issue reveals one of the main concerns raised as regards the importance of both Habermas's ideas for public policy and the real potential of deliberative processes for policy-making. Overall, the relevant literature that has developed during the last ten years or so seems to suggest that the ideal of communicative rationality is attractive and at least an attempt to approximate it seems an important goal that should be sought after with public policy (e.g. Innes & Booher, 1999). However, on the ground experience with its application through deliberative forums for environmental planning shows that formal and informal aspects of power prevent a fulfilment of public participation based on the power of citizens or the empowerment of weak groups in the sense of Habermasian communicative rationality (Pløger 2001). This effect has been attributed to the fact that power relations are not simply left out of the door of deliberative forums the moment that actors enter them but are instead brought into and end up significantly shaping deliberation processes. For example, dramaturgical behaviours (Goffman, 1969) have been observed within

deliberative forums, whereby front-stage performances or modes of interaction

adopted by actors hide a very different power-shaped reality that exists at a back stage,

although ironically those artificial front-stage attitudes are taken to represent reality.

This is the case of business representatives in some deliberative forums who avoid

openly expressing their values and objectives in the deliberative process thinking that

they may be too conflictive and instead prefer "alternative communicative channels to

make their 'substantive' representations" (Bickerstaff & Walker, 2005:2131) to

influential bodies such as government agencies. Moreover, the heavy focus on ways

of improving and innovating the format of deliberative institutions seems to have

resulted in deviating attention from thorny issues such as the study of forums' actual

impacts particularly in terms of designing institutions and structures for democratic

decision-making (Bickerstaff and Walker, 2005). Hence the argument that efforts

which emphasise the fairness and competence of decision-making processes are

important, but more basic questions regarding the distribution of political power

(inside and outside deliberative forums) and the institutional capacity for democratic

change need be addressed to fully consider the importance of deliberative institutions

(Bickerstaff and Walker, 2005). Similar points have been made regarding ways in

which the participatory management of local natural resources by village communities,

which is now widely accepted as an institutional imperative in development initiatives,

can exclude significant sections (e.g. women) and hence generate 'participatory

exclusions' (Agarwal, 2001) and 'value exclusions' (Martínez-Alier, 2002).


These points reflect a deeper, more conceptual criticism of Habermas's ideals

regarding the creation of ideal public spaces as a goal for public policy for its failure

to take into account the power aspect of discourses in the sense meant by Foucault

(Hajer & Versteeg, 2005). This perspective underlines the normative effects of discourses upon social practices, i.e. that particular discourses comprise a language of power communicated by and embodied in the specifics of particular social practices (e.g. legal punishment). In that sense, scholars criticise deliberative ideals for failing to notice that "participation (or discourse) is constrained by, hides and at the same time perpetuates certain sets of power relations" (Bickerstaff & Walker, 2005: 2125). As a result, contributions in the planning literature flag the concern that the result of struggling to find shared values through deliberative processes may as well be the silencing of values instead of giving them voice (Tewdwr- Jones & Allmendinger, 1998).

In his critical evaluation of the importance of Habermas's discourse ethics for a politics of democracy, Flyvbjerg (1998) explains that the study of processes for establishing consensus is at the centre of Habermas's work and that his main methods for achieving 'progress' (in the sense of democratic improvement) are the writing of constitutions and institutional development. Flyvbjerg argues that a lack of agreement between ideal and reality underlines the key weaknesses of Habermas's political model. This incongruity he traces down to a deficient conception of power which ends up with Habermas producing a description of a utopia (communicative rationality) but with little insight as to how to get there. Specifically, and as regards barriers to the ideal speech situation, Habermas is silent on the relations of power that create such barriers and offers no suggestions as to how to tackle power and lower those barriers in order to work towards the sort of institutional change that can bring about more democratic forms of decision-making. Flyvbjerg's evaluation is that Habermas's analysis "lacks the concrete understanding of relations of power that is needed for

political change" (Flyvbjerg, 1998: 215) given that he seems to overlook that "communication is at all times already penetrated by power" (Flyvbjerg, 1998: 216), which deems "meaningless to operate with a concept of communication where power is absent" (Flyvbjerg, 1998: 216). Flyvbjerg doubts Habermas's assumption that rationality can be viewed in isolation from power and suggests that his efforts to achieve more rationality divert attention from crucial relations of power, which in turn reduces our possibilities to achieve more democracy.

Contrasting Habermas's discourse ethics to Foucault's analytics of power in terms of their implications for democracy, Flyvbjerg points out that their main difference lies in the frame of reference they use to understand and achieve empowerment: one (Foucault) uses conflict, while the other (Habermas) uses consensus. He further explains that this is not a mere difference of approaches but a tension that is central to the study and evaluation of modernity. Consensus approaches overall embrace the project of modernity (pointing out its democratic capacity and effects) and study its coming about through social consensus, whereas conflict approaches are more critical of the project (precisely on democratic grounds) and focus on the conflicts it has untapped (and still brings about) in the course of its implementation. Although appreciating Habermas's quest for a universal rational foundation for democratic institutions in order to establish a safeguard against relativism and nihilism, Flyvbjerg (1998: 228) contains that there is by now substantial evidence:

> ...that social conflicts produce themselves the valuable ties that hold modern
> democratic societies together and provide them with the strength and cohesion they
> need; that social conflicts are the true pillars of democratic society (Hirschman, 1994:

206)… [Hence] if conflict sustains society, there is good reason to caution against an idealism that ignores conflict and power.

### *Power and environmental decisions: political ecology*

In analytical terms, these points suggest the need to focus on conflicts rather than consensus in environmental policy and include an analysis of power over environmental decision-making if we are to advance the generation of legitimate sustainability decisions. The second case study that forms part of the thesis, deals also with an issue of incommensurability of environmental (landscape) values and a situation where the rational profit maximiser (homo economicus) model does not suffice to explain opposition to policies promoting sustainable development (wind energy). However, and instead of looking for ways of unearthing and establishing the multiplicity of relevant discourses for legitimate decision-making (as in the first case study), this second study seeks to understand the practical workings – or else 'the politics' – of power and their influence on the conflict. In other words the study examines power influences over environmental decisions and the institutional designs and structures that facilitate such influences. In doing this, the case study adopts the political ecology conceptual framework, perhaps the most fully developed approach for the study of power as regards environmental issues and a paradigm with already established links to ecological economics (e.g. Martínez-Alier, 2002).

Max Weber (1978) defines power as "the chance of a man or a number of men to realise their own will in a social action even against the resistance of others". Political ecologists study power and its relevance for environmental issues in particular by looking at the influence of power over environmental change, governance and conflict.

Paulson et al. (2003) advance a political ecology approach to power that goes down two main lines of enquiry. First, in line with Hornborg's (2001:1) definition of power as "a social relation built on an asymmetrical distribution of resources and risks," they emphasise the importance of exploring how power circulates among and between different social groups, resources, and spaces. This is a view of power as something that "presses on the subject from the outside, as what subordinates" (Butler, 1997:2) which has proved very useful for political ecology research. The second way of looking at power is by examining the ways people, resources, and places are constituted. This outlook follows Foucault's view that power is formative, that it becomes embodied in social practice (it can even literally form the shape of human bodies) and that in this twisted way it may be seen "as providing the very condition of [a subject's] existence and the trajectory of its desire" (Butler, 1997:2). It should be noted here that this second view is not meant to celebrate power but to provide a more nuanced means of identifying and studying the phenomenon.

Under these views, politics are "found in the practices and mechanisms through which power is circulated" and political ecology focuses on "politics related to the environment, understood as biophysical phenomena, together with human knowledge and practice" (Paulson et al., 2003:209). Political ecologists see politics as "a contested and negotiated domain in continual dialectic relationships with biophysical environments" (Paulson et al., 2003:206). Thus, politics is expressed in "the practices and processes through which power, in its multiple forms, is wielded and negotiated" (Paulson et al., 2003:209) on multiple scales and in multiple contexts. The observation of power in political ecology has resulted in "developing an understanding of politics that goes beyond institutions of governance to encompass

struggles over human practice, meaning, and representation in relation to the environment" (Paulson et al., 2003:213). Political ecologists use such "explicit conceptualisations of power and politics to better operationalise research on environmental changes and conflicts and to develop better ways of addressing practical problems of resource degradation and social marginalization" (Paulson et al., 2003:209). These specific political ecology understandings of power and politics have informed the conceptual framework and research directions of the third publication.

## Publication 3: The power and politics of environmental values

This publication (Zografos & Martínez-Alier, forthcoming) attempts an explanation of wind farm siting conflicts alternative to the homo economicus-based and obsolete (according to the relevant literature) NIMBY explanation. Instead, the study follows political ecology and looks at the influence of power upon decisions regarding landscape change in order to understand the conflict. It considers how power influences decision-making procedures in the context of a case study of a conflict over wind farm siting in a small rural area of Spain, the comarca of Terra Alta in southern Catalonia. First, the politics of conflict are examined by looking at how the distributions of costs and benefits from wind energy implementation have an influence upon local opposition to wind farms. This political ecology explanation of the conflict as a result of inequities in the distribution of costs and benefits of landscape change (i.e. as an ecological distribution conflict) between the 'centre' and the 'periphery' is complemented by two more elements identified through fieldwork. One, that opposition also rests upon the fact that some wind farms are seen to interfere with local 'life projects' that comprise and are based upon local landscape valuations; and two, that particular planning and wind farm decision-making practices operate in

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such a way that locally-advanced arguments for a fair distribution of costs and benefits from wind energy implementation in the area are excluded. As a result, the study proposes a combined scheme for explaining wind energy conflicts, specifically one that combines political ecology, the appreciation of local landscape valuations (i.e. locally-based attempts to obtain agency from the landscape) and the study of procedural failure (in terms of absence of communicative rationality in the decision-making process) of the planning system.

In terms of policy recommendations, results suggest that the planning process needs to adopt significantly different stances towards siting standards and consider the introduction of criteria currently absent from decision-making. Getting a grip over which those criteria might be requires instigating a genuine debate over centre-periphery issues and using available information (e.g. Agenda 21 exercises) regarding local landscape valuations. Reducing the importance of decisional bottom lines such as wind potential (translating into financial profit) is also key in pursuing more deliberative and democratic decision-making and seeking less conflictive results. Moreover, to avoid the marginalisation effect that such bottom lines impose upon locally important priorities, criteria such as fair distributions of costs and benefits of wind farm developments would need to be introduced as formal criteria in assessing the planning potential of applications. This could also help improve the legitimacy of decisions taken. Furthermore, the negotiation of local benefits should be as open as possible and not conducted in secrecy (as currently done) generating suspicion and low levels of trust. Finally, it would be beneficial to consider eliminating or at least introducing some sort of citizen control over particular aspects of the decision-making processes that constrain the potential for communicative rationality and deliberation.

This for example would involve re-considering the role of pre-agreements between companies and local authorities which some times operate in such a way that local concerns and claims are precluded.

The study suggests that this conflict over the installation of wind farms is not a dispute over whether local landscapes or sustainable energy generation is more important to achieve as a social and policy goal: instead, it is a conflict over democracy and the way decisions regarding the future of rural areas are taken. This issue underlies opposition and eventually conflict over wind farms and creates a questioning of legitimacy of sustainability policies (i.e. policies supporting clean energy generation) and institutions (i.e. wind energy) in this case. Concerns over unequal power in the decision-making process are at the centre of such legitimacy issues and disputes over the value or lack of value of the local landscape. In this study of the politics of environmental (landscape) value, power is initially seen in the Weberian sense of one's ability to impose their will even against the resistance of others. Several political ecology insights regarding power are manifested in this study. A historically developed context of asymmetrical distribution of costs and benefits between the 'centre' and the 'periphery' serves as a springboard to build power relations by which renewable energy companies can effect their will even against existing or potential local resistance. In other words, the historical economic and political marginalisation of the broader area has facilitated the installation of adverse energy generating facilities that have significantly contributed to the economic growth of the 'centre'. Furthermore, this marginalisation is still useful today to those seeking to install even more conflictive facilities in spite of local protest. This is evident in the discourse of the 'poor' and 'badly in need of development' area which seems to create

some sort of a path dependence for carrying on with even more marginalisation and unequal development. It also serves for making local people feel powerless to stop any sort of development coming from the outside, which they largely see as inevitable.

The 'politics' of environmental value are traced down in this study by exploring how power circulates among and between different social groups, resources, and spaces through practices and mechanisms (Paulson, et al., 2003) which in this case are used to determine landscape value. Agreements between companies and local municipal authorities have thus been identified to constitute one such mechanism of power circulation, which serves to transfer the power to decide over local resources from local authorities to wind developing companies. This becomes clear when such agreements are used to put pressure upon local communities to decide not to oppose wind farms as such a reaction would incur the payment of compensation for lost income by local communities (municipal authority) to the companies (Aymí, 2008). However, politics are also traced down in the processes through which "power, in its multiple forms, is wielded and negotiated" (Paulson et al., 2003:209). This could be seen for example in the practice of some local authorities to try and block wind farm development initiatives to which they do not agree by changing urbanism plans and declaring potential sites as 'Areas of Special Landscape' before authorisation processes start or by hindering applications through administrative obstacles. Both are practices through which local players try to negotiate and possibly gain power. Finally, and in accordance to political ecology scholarship, the study tries to develop "an understanding of politics that goes beyond institutions of governance to encompass struggles over human practice, meaning, and representation in relation to the environment" (Paulson et al., 2003:213) by looking at the operation of life projects.

The role of these projects as local landscape value enhancers highlights how the politics of environmental value go beyond governance arrangements and encompass struggles over the meaning of landscape. All these "explicit conceptualisations of power and politics" (Paulson et al., 2003:209) attempted by the case study seem to serve quite well in order "to better operationalise research on environmental changes and conflicts" (Paulson et al., 2003:209).

This study of power observes that power is not necessarily binary and imposed but also relational and formative, an insight that links better to the second line of enquiry of power proposed in political ecology (Paulson et al., 2003). In this case study, it appears that power is not only exercised by one dominant 'class' or group (e.g. the companies, the government, etc.) but also by other groups (such as the local authority) who on one hand experience (e.g. in their inability to stop facility building within formal decision-making process) and on the other hand exercise power (e.g. upon local opponents). These insights seem to suggest that no one sole group benefits and is in possession of the privilege to exercise power (although by all means there might be inequalities in its distribution and exercise). Such a phenomenon has been pointed out as a limitation of those class analyses of power that consider that behind exploitation there is one big group of people (e.g. the Bourgeoisie) achieving their ends at the ignorance of real people (Merquior, 1991) as well as by other analyses of power that find out that exploitation is a multi-directional social phenomenon and not the privilege of any one class (Kingsolver, 2000). Similarly, the case study observes that in the process of making and achieving 'desirable' decisions as regards the rural landscape, power is manifested as a diffused phenomenon, i.e. not as the exclusive privilege of one sole group. This highlights a Foucauldian aspect of power that is that

power is not only multi-directional but also omnipresent ("it comes from everywhere"), further evidenced in the fact that in the case study power relations operate in different decision-making spheres (e.g. macro policy-making environments such as the regional map of wind resources, as well as within local village council meetings) regarding the rural landscape and the future of rural areas themselves. In that sense, power seems to also be 'formative' or else 'productive' of the specific conflict relations observed in the case study. The case study however has not delved into a detailed examination of power and the consideration of its formative effects; it has simply observed in the field that indeed power does also operate in such a way.

In sum, the political ecology conceptualisation of wind energy conflicts as conflicts over landscape change is useful both for explaining the phenomenon and for making policy-relevant suggestions. At the same time this explanation seems to be a potent alternative to the obsolete NIMBY conceptualisation of wind energy conflicts. This is why it useful to first consider the relevance of the practical context of power that surrounds planning decision-making processes by using political ecology as a conceptual framework. This explanation focuses on the effect of long-operating, macro-level politico-economic forces (Paulson et al., 2003) which is apparent in the area's history and the set up of the siting process. However, fieldwork revealed that power is also moulded locally and relationally, i.e. it is produced among and by stakeholders in the course of their contact either within or in the context of policy processes (i.e. during decision-making or with expressions of political dissent, e.g. demonstrations), and challenged by local landscape use practices (life projects) and valuations. Furthermore, the study links the context of power to the types of rationalities that dominate the decision-making process, observing that instrumental

rationalities function in ways that preclude distributional fairness arguments and local landscape valuations. In short, an approach such as the one here presented that complements a focus on broader, structural factors of the conflict with a more relational focus on local challenges to power, while not losing attention from the deliberative potential of decision-making processes, seems to be able to go some way in explaining conflicts over wind farm siting.

### *Structural and relational aspects of power*

This thesis has highlighted the importance of understanding the operation of power in environmental decision-making in order to advance more legitimate and democratic ways of pursuing sustainability. With this in mind, the thesis now turns its attention to broader issues that underline the study of power in social science with the objective to draw lessons regarding the proper focus of the study of power in environmental decision-making. To reach this objective, a brief review of basic aspects of the main models studying power and the issues that have been raised with these models is first presented, followed by an explanation of how those insights have been integrated into political ecology in its distinct focus on the relations between power and environmental change.

The divergence of focus between structural and relational aspects of power underlines a fundamental debate in the study of power, the debate over the relative importance of structure and agency in the explanation of social phenomena. Broadly speaking, agency implies intention and consciousness of action with the implication of possible choices between actions and is used by scholars influenced by Weber who employ 'agency' in contrast to 'structure' (which implies constraint on action, i.e. that actions

are constrained by some external structure or structural force) in order to explain

social reality (Barnard & Spencer, 2000). The focus on structure of early studies on

power has created insightful analyses of institutional power as for example in the

form of Weberian exploration of the power of bureaucracies in state societies and

their methods of perpetuation of institutional authority. Kingsolver (2000) points out

also the usefulness of Wright Mills's structural analysis of the ways in which social

stratification and hierarchy are forcefully maintained by 'power elites' who mobilise

power to transcend 'ordinary' social environments and make decisions that pertain to

the lives of people they will never meet, which has served to conceptualise

phenomena such as the itinerant power of trans-national corporations. Gramsci's ideas

of hegemony as the totalising power of the state or a popular majority who dominate

civil society through every means, have helped think about pervasive institutionalised

power and have stimulated subaltern studies (e.g. Guha & Spivak, 1988) that focus on

the powerful ways in which colonial subjects had been left without a voice in strategic

discussions about their identity, resources and future (Kingsolver, 2000).

Perhaps the most influential structural approach to power remains Marxism, whose

class analysis has emphasised the importance of the material underpinnings of power

relations. For Marxism, the core of social inequality is to be found in society's

property relations, as for example in feudal society where productive relations were

exploitative due to the appropriation by landlords of peasants' surplus labour in the

form of rent (Rigby, 1995). The approach emphasises the economic *base* of social

inequality considering that legal, political and ideological aspects of society constitute

a *superstructure* which reflects or expresses class interests, particularly obvious in

cases where political power functions as "the organised power of one class for

oppressing the other" (Rigby, 1995:3). In that sense, non-material aspects of social inequality such as political power reflected in the superstructure are subsequent to material aspects such as the economic power of the base that are more crucial for explaining historical change and social phenomena.

However, Marxist analyses have been criticised for putting excessive emphasis on the predominance of economic power over political power, i.e. for seeing the latter as a consequence of the further. Analyses based on this assumption fail to explain social inequalities based on political rather than economic relations as for example in China or the ex-USSR where economic power seemed to have been the consequence of political power[15]. An alternative, more pluralist explanation of the works of power considers that politics and ideology are a constitutive part of social inequality – instead of a consequence of property relations – and this has been adopted by some Marxist analysis (Rigby, 1995). A related concern with class analysis considers its potential to explain inequality in complex contexts where exploitation is multi-directional, i.e. where exploitation is not the privilege of only one class. One reformulation of historical materialism that attempts to deal with this issue is Giddens's theory of structuration, which considers that power is generated in and through the reproduction of *structures* of domination, which may rely on the allocation of material resources (keeping with Marx) or non-material resources such as for example information and surveillance (Kingsolver, 2000). These observations seem to indicate that the study of social conflict can also focus on *domination* and

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[15] Relevant concerns had been raised in the First International and contributed to the clash between Bakunin and Marx.

subjection instead of only material exploitation, in which case property rights are only a special case of broader, authoritative rights of control (Rigby, 1995).

Another interesting and influential structural approach has been advanced by Lukes. This scholar has considered the many ways in which potential issues are kept out of politics, whether through the operation of social forces and institutional practices or through individual decisions drawing attention to the function of social structures into which people are born and socialised and which become accepted as enduring elements of 'reality' (Lukes, 1974). From within, such social institutions appear natural and self-evident, and their acceptance constitutes a measure of individual 'rationality' (e.g. today, the market increasingly constitutes the measure of individual, corporate and state 'rationality') although these structures are no more 'real' than those of previous eras, and are under continuous pressure from social forces that either seek to maintain or change them (Gale, 1998). The capacity to ensure that the arbitrariness and even bias of social institutions is either ignored or taken as natural in order to achieve that a particular social order is taken for granted, has also interested another scholar who has developed an influential theory of power. Pierre Bourdieu has long analysed the importance of symbolic capital (e.g. prestige, honour, etc.) as a vital source of power, which allows those in possession of it to exercise symbolic violence by means of employing common systems of meanings (culture) in order to impose particular categories of thought through which dominated social agents perceive the world as just and legitimate (Bourdieu, 1989). Bourdieu's interest and concern with symbolic power reveals his position that conflict occurring in the course of struggles to reproduce structures of domination cannot only be understood in economic terms because it involves many other types of social relationships that are

not economic, such as cultural ones. Eventually, the increasing perception that environmental issues have important social underpinnings has resulted in structuralist approaches expanding the notion of 'material resources' to include not only the economy (i.e. productive relations) but also nature's services as sources of materials and energy and as pollution sinks. This underlies a crucial link between political economy and political ecology and justifies the claim that ecological distribution conflicts are the main focus of study for political ecology (Martínez-Alier, 2002).

Conversely to structural explanations of power, relational explanations have tried to shift attention away from studying the structural control of resources by individuals or groups with static institutional authority and focus on contexts of action and interpretation (Kingsolver, 2000). Here Foucault is normally credited with the responsibility of initiating this shift with his view of power as *productive* of reality and individuals (bodies and minds), particularly reflected in his work on discipline and punishment where he sees the 'self' as a tool of power and a product of domination (Merquior, 1991). Foucault considers that the human 'self' is a product of power effected upon body and mind by means of discipline, a form of exercise of power that he ascribes to modernity and describes as one of the greatest inventions of bourgeois society (Foucault, 2003 [1976]). However, he considers that the need for discipline reveals that power is in itself problematic given that it requires constant persuasion (achieved through discipline) and holds that power is omnipresent not because it engulfs everything, but because it comes from everywhere (Foucault, 1990 [1976]). His views have helped shape ideas that power is not an institution but a strategic situation not only achieved by force but also by everyday language and practice (Kingsolver, 2000).

Foucault's intellectual project was to conduct an enquiry into modern rationality by looking – as a 'historian of the present' – at the history of reason as knowledge applied to deal with particular issues (e.g. madness, crime): he specifically aimed at identifying the historical conditions of the rise of reason in the West and checking how we now stand regarding the historical foundation of rationality as the spirit of modern culture (Merquior, 1991). In the course of doing so, Foucault's work presented some clear novelty value, as for example in his conceptualisation of power not as a structure but as a complex strategic situation (Foucault, 1990 [1976]) which allowed him to identify some intimate workings of power not easy to distinguish when following binary (e.g. Marxist) theories of power and liberal theories of subjectivity and identity. Moreover, his encouragement for critical attention to the genealogy of modern humanism and his deep suspicion of liberal assumptions, reflected in his arguments and theories of power and knowledge and their role in the production of modern subjects have proved useful for insightful studies of discrimination and resistance (Barnard & Spencer, 2000).

However, several concerns have been raised as regards Foucault and Foucault-inspired types of analyses (although according to Kingsolver (2000) not all writings influenced by him reproduce his views of power). Some feminist critics argue that binary models of structural power have been useful for theorising oppression and that the totalising models of power advanced by post-modern social criticism (inspired by Foucault) are less useful for understanding and addressing inequality: by seeing power pervading every aspect of social life they fail to provide a useful direction as to what social sites should one go about working to transform (Kingsolver, 2000). In a

somehow more profound criticism of Foucault, Merquior (1991) suggests that a

deeper problem with his views is that they are very far from any idea of liberty that

has ever been advanced by western philosophy:

> "Foucault's scorn of interests, in his analysis of power, left him without much use for
>
> the concept of freedom as personal independence, his conflation of subjectivity and
>
> subjection … made mockery of the idea of freedom as individual autonomy. As a
>
> consequence, Foucault had no room for the traditional recognition of basic
>
> differences between liberal regimes and despotic polities – a recognition shared with
>
> liberalism by mainstream radical thought, beginning with classical Marxism"
>
> (Merquior, 1991:117)

Merquior's criticism seems to resound also other criticism that points out that

Foucault's analysis is limited as it says nothing about how and why power is

conquered, employed or held on to (Said, 1984). More importantly perhaps, it

resounds criticism that his analysis is not action oriented as he hesitates to give

directions for action, and he directly distances himself from offering "What is to be

done?" formulas, due to his belief that 'solutions' of this type are themselves part of

the problem (Flyvbjerg, 1998) i.e. they form part of disciplining discourses of

modernity.  The common point of all these criticisms seems to be their allegation that

a major undesirable implication of Foucault's – not just rejection of modernity and its

values, but mostly – denial to explicitly adopt and defend specific normative values in

his analysis results into a negativist and nihilistic attitude in the study of social

phenomena.

Notably (and interestingly for this thesis) a source of criticism to Foucault is

Habermas who criticises Foucault's replacement of the repression/ emancipation

model initially advanced by Marx and Freud and developed by early 'critical theory'

by an analysis of the plurality of discursive and power formations which he denies to

differentiate according to their validity (Habermas, 1987 [1985]). Habermas points

out that this underwrites a denial of a rational theory which collapses social critique

into a negation of contemporary society, and even goes at such lengths so as to call

Foucault a 'neo-conservative' for his lack of theoretical justification of an alternative

to the status quo in advanced capitalism (Merquior, 1991). With this criticism,

Habermas tries to reveal the theoretical implications of Foucault's refusal to draw a

model society due to his belief that abstract notions such as truth, justice and human

nature are bound to mirror dominant class interests and that universal truth is just

another name for power disguised as the criterion of knowledge, "in league with

'humanist myths', and ultimately with the power structure of modern society"

(Merquior, 1991:149).

Habermas upholds rationality as important for both analysing and limiting oppression,

suggesting that instead of modernity itself, the problem is with the take-over of

modernity by forces that advance their narrow interests (e.g. capitalism) by means of

imposing instrumental views of rational action. Subsequently, and as exposed into

some length earlier on in this thesis, Habermas moves on to suggest his

communicative view of rationality as a cornerstone of fairer, more legitimate and

democratic, and in the long run more emancipating modern institutions. Nevertheless

and as also explained earlier on in this thesis, the sometimes limited focus on

decision-making processes by Habermas-inspired environmental policy analysis has

left little room for considering the practical contexts of power that surround, infiltrate and at times end up significantly influencing sustainability policy outcomes.

*Environmental governance and procedural power*

Considering this Habermas – Foucault debate in the context of deliberative decision-making involves considering two very different views over communicative rationality: to Habermas, this is a means for bringing about a democratic society, whereas Foucault sees it as a factor contributing to the lack of such a society. In other words, one sees it as a solution, whereas the other as a problem. Interestingly, the political ecology approach to power with its simultaneous focus not only on processes but also on decision-making outcomes could perhaps offer a way out of this dilemma. By considering the material expression and grounding of social inequality in terms of asymmetrical distributions of resources and risks, political ecology offers some direction for judging the democratic potential of decision-making processes that generate material outcomes. In other words, research can first consider the asymmetry of such material distributions and then go back and examine the communicative character of decision-making processes to evaluate their democratic capacity. This approach is demonstrated with the thesis's second case study, which has tried to link concerns over the absence of communicative rationality in the decision-making process with objections over the ecologically unequal distribution of costs and benefits from the development of economic institutions for sustainability (wind energy).

The approach also emphasises the importance of studying procedural aspects of power, which seem to be both less studied in ecological economics (Gale, 1998) and

lie at the interface of political ecology with ecology economics (Martínez-Alier, 2002: 271):

> "Power […] appears at two different levels: first, as the ability to impose a decision on others, for instance to steal resources, to locate an environmentally damaging plant, to destroy a forest, or to occupy environmental space and dispose of residues. Externalities are understood as cost-shifting. Second, as the procedural power which, in the face of complexity, is able nevertheless to impose a language of valuation determining which is the bottom-line in an ecological distribution conflict. Governance requires the integration into policy (whether greenhouse policy or European agricultural policy or local urban policies) of scientific and lay opinions, sometimes contradictory among themselves, relevant for different scales and different levels of reality. Who then has the power to decide the procedure for such integrated analysis? Who has the power to simplify complexity, ruling some languages of valuation out of order? This is one basic issue for ecological economics and for political ecology".

The issue as to whether a Marxist or a post-structuralist approach is more suitable for analysing the operation, generation and negotiation of power has also been raised in political ecology. Although examples of work following only one of those traditions can be found in political ecology (Paulson, 2003), in practice many scholars opt for combining both explanatory schemes employing hybrid approaches for explaining environmental phenomena (e.g. environmental conflict, ecological degradation, etc.). Such an approach seems attractive both due to its openness and because it allows examining the limits and applicability of each scheme on a case by case basis. A very pertinent example of such hybrid approaches can be found in the long standing work

of Piers Blaikie. Forsyth (2008) points out that on the one hand, Blaikie favoured post-structuralist analysis for overcoming many of the simplifications of structuralism, by means of emphasising "politics rather than economics, alternative accounts of reality rather than the author's own environmental and social data, and agency and resistance, rather than structural inequality" (Blaikie, 1999: 133). On the other hand however, Blaikie also criticised post-structuralist deconstruction of narratives for rarely attempting "to fill the vacuum which results from deconstruction with its own version of environmental or social truth" (Blaikie, 1999: 142). In effect, Blaikie's own approach although driven by a neo-Marxist view of environmental degradation (Guthman, 1997) also included a less centered, Foucaultian view of power which helped expand political ecology analysis to consider not only the actions of government but also governmentality (Dove & Hudayana, 2008). Such a combined form of analysis helps see the importance of not just formal policies, which may or may not be implemented, but of the everyday practices of others involved in governance (e.g. government officers) and the ways that their actions may liberate or constrain the landscape for local peoples (Dove & Hudayana, 2008).

Similarly, and as regards the issue of whether structure or agency are more pertinent for explaining human action, Blaikie favoured chains of explanation that combined structure and agency for understanding environmental change (Muldavin, 2008). Adopting such hybrid approaches, Dove & Hudayana (2008) demonstrate how a focus on everyday practice can be useful in order to theorise the relationship between larger political dynamics and local actions (manipulations of the environment, e.g. soil practices). They show how fodder management in an Indonesian village, which encompasses state-approved and state-disapproved activities in different areas of the

village, reproduces the ongoing stand-off between village illegality and state ignorance. In addition, they show how fodder management reproduces the contested landscape itself by suppressing the growth of trees and encouraging the continued growth of grasses. In these and other ways, daily resource management activities in the village reproduce the structure that permits them to take place. Earlier and more celebrated work combining structure and agency approaches for the explanation of environmental phenomena include Guha's (1989) study of the Chipko movement and Peluso's (1992) study of forest access and control in Java, Indonesia. All these pieces of work seem to suggest that constrained constructivism can be useful as long as it forms part of an engaged scholarship which implies a scholarly commitment with the normative principle "to promote a just, accountable, egalitarian and democratic environmental future" (Blaikie, 1999: 144) instead of the 'ethical refusalism' of deconstructivist critiques of universalist, western-derived concepts (Dove & Hudayana, 2008). Such assertions seem to suggest that constructivism is useful when it contributes to the original Frankfurt School emancipatory project (Zografos & Paavola, 2008). Social justice (seen as a concern for those vulnerable to environmental change) constitutes a main normative interest for a political ecology that simultaneously analyses environmental degradation and social marginalisation (Forsyth, 2008).

The study of implications of environmental policy implementation here undertaken (i.e. wind energy conflicts) suggests that sustainability policy can be fruitfully explored within the broader context of environmental governance. This involves studying the politics of sustainability decision-making, in the sense of practices and mechanisms through which the power to decide (over environmental issues) is

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circulated, imposed, wielded, contested and challenged. Here is where political ecology looks promising as it offers a well-developed framework for considering power in environmental relations, given that it allows combining or contrasting Marxist and post-structuralist approaches to power for the interpretation of particular case studies of environmental conflict, which in turn allows refining analytical models and improving understanding of environmental governance challenges. However, this compelling strategy for analysing power has still to engage with studies of procedural power, and particularly of those mechanisms (e.g. environmental valuation methodologies) employed to facilitate the imposition of single languages of valuation that determine what is the bottom-line in deciding the outcomes of ecological distribution conflicts. Moreover, this is an area where Foucauldian analyses of governmentality could be employed vis-à-vis Marxist models to theorise the operation of procedural power in an effort to improve the framework and advance a scholarly commitment with the normative principle to promote just, accountable, egalitarian and democratic environmental futures.

In sum, the study of the influence of power in sustainability decision-making should carefully consider not only structural but also procedural and relational aspects of power, i.e. not only how power constrains but also how it might be productive of environmental relations (be them between human groups or between human and non-human groups). Moreover, although the importance of asymmetrical material endowments for possessing and exercising power is undeniable, non-material influences (such as politics and ideology) and their focus on domination rather than material exploitation need be considered for a better understanding of the phenomenon of environmental governance. Finally, a normative focus of studies of power (i.e. one attempting to suggest institutionalised ways of addressing

environmental inequality produced by power) is important, as it permits conducting socially-engaged research that seeks improving currently problematic aspects of the environment-society interface. Social and environmental justice are suitable normative principles of such a research agenda and are better facilitated by adopting a plurality of ways of studying and explaining the operation of power in environmental relations.

The overall strategy adopted by this thesis seeks to point out that combined approaches are much more revealing as regards the study of the operation and implications of sustainability decision-making and provide more instructive insights for addressing their shortcomings. In that sense, the thesis has underlined that an increased focus on the need for communicative rationality in environmental governance to obtain more democratic (in line with deliberative democracy) and legitimate decisions should be combined with analyses of the influence of power in environmental decision-making. Furthermore, the thesis has found out that a study of power influences in environmental decision-making can bring about enhanced insights if it combines structural and relational views as to how power operates.

# Chapter Six: Conclusions

The first part of this chapter summarises this thesis, while the second part is dedicated to the discussion of the thesis' contribution to the body of knowledge known as ecological economics and particularly in its relation with political ecology. This latter is basically done by means of outlining lessons learned from this thesis and by putting these in the context of the ecological economics literature on deliberative decision-making for sustainable development that is relevant to this thesis. Finally, future areas for research that spring out of the thesis are considered.

Several public policies that aim at promoting sustainable development either generate social conflict or fail to find public support, both considerable failures given the effort and cost of policy-making and the urgent requirement for economies to adapt to pressing environmental needs. Scholars attribute such reactions to the reduced legitimacy that such policies have with the public and indicate that one of its causes lies in the flawed application of a constraining view of human behaviour when analysing policy alternatives. This homo economicus view of human action is particularly criticised for its failure to integrate the multiplicity of environmental values and ethical bases that underlie human motivation resulting into undesirable crowding out and voice silencing effects. This assertion has in turn produced calls for examining the sustainability policy implications of broader views of human action. The aim of this thesis has been to identify a broader view of human action that could serve for sustainability policy analysis that contributes to more legitimate decision-making, and consider its policy implications.

A key feature of homo economicus is its instrumental view of rationality, whose legitimacy for public decision-making has been seriously questioned by models of communicative action that entrench rationality in inter-subjective communication. Communicative rationality comprises a view of human action that underwrites deliberative democracy, a model of decision-making that seeks to generate legitimate forms of public decision-making by considering multiple ethical values via un-coerced dialogue, reflection and deliberation that seeks consensus. A body of methods that seek to facilitate deliberative decision-making and examine the deliberative potential of public institutions has developed in the last decade or so, which on the main attempt to integrate multiple ethical bases in the formulation of public policy. The relevance of this approach for environmental policy has been considered by some ecological economists who emphasise the importance of focusing research on decision-making processes as spaces of preference formulation and change. This focus has resulted out of an understanding that environmental values and preferences are not fixed and pre-held, as suggested by conventional economics, but are rather constructed socially. This deliberative ecological economics scholarship has mainly studied the formation of common, consensual environmental preferences in the context of deliberative-style forums by developing a type of deliberative environmental valuation and deliberative multi-criteria methods. Another 'branch' of this scholarship studies the politics of sustainable development focusing on ways in which disparate disciplinarian, political, ethical, etc. worldviews (discourses) over sustainability can be given space and voice within the precincts of a deliberative policy formulation process.

Following this second line of enquiry in deliberative ecological economics, the first case study of this thesis employs discourse analysis (Q methodology) to help policy identify ways of sustaining and improving the legitimacy and support for sustainability institutions. The study focuses on a particular type of sustainability institution, namely a type of social enterprise (Development Trust) whose mission is to advance sustainable regeneration in rural Scotland. Identifying differences and commonalities of diverse visions regarding such institutions does indeed help to both point towards more legitimate and acceptable future shapes, designs and support policies regarding sustainability institutions and, perhaps more importantly, helps specify key aspects and the environmental value roots of conflictive issues that need be considered by deliberative decision-making processes. Although there are several and at times conflicting approaches concerning the role and future of the rural social enterprise in question and indeed concerning rural Scotland in general, commonalities emerge and must be considered by policy initiatives that seek to effectively support this sustainability institution. The study further reveals that main differences between discourses evolve around questions over the best means to control and retain local capacity and wealth, as well as on the issue of whether commercial, state-supported or locally-empowering rural social enterprises are the best vehicles for securing the future survival of the institution. This information is useful for focusing the scope and effort of deliberation regarding the activity and future shape of the institution within a context of promoting a communicative approach for the design of the social enterprise. However, experience with communicative approaches in environmental planning indicates that they can be limited as they tend to overlook the relevance and influence of power over discourse and policy-making. This is crucial, as it may result in that the

search for consensus through deliberative decision-making processes ends up with silencing instead of enabling voices.

As the analysis of the operation of power in sustainability decision-making is crucial, the second case study explores the potential of such an analysis by using the conceptual framework of political ecology that has been developed precisely for the study of power in environmental relations. The study considers the influence of power over conflicts regarding the siting of wind energy facilities by analysing the politics of shaping and contesting environmental (landscape) values. Results show that the absence of a communicative logic in environmental decision-making processes combined with power influences over sustainability decisions can undermine the legitimacy of environmental policies (i.e. development of renewable energy). The study puts forth this explanation of landscape conflict instead of the commonly held NIMBY explanation that bases conflict on individualistic attitudes towards local landscapes. It maintains that making space for criteria that consider the equitable distribution of costs and benefits between the area and the 'centre' can improve the legitimacy of environmental planning decisions and sustainability institutions (wind energy) and reduce conflict locally. Moreover, conflict can be further reduced by eliminating mechanisms of exercising power that the current planning system tolerates (e.g. company-local authority agreements) and which seriously limit the democratic potential of the system by allowing some groups to realise their will against the resistance of others. However, the exercise of power is not the 'privilege' of only one group (e.g. companies): the diffused nature of power allows more groups (e.g. local authorities) to seek benefits for their own ends by means of exercising power. Finally, landscape value arguments materially expressed via the creation of

'life projects' which are put forth to oppose wind farms comprise concrete practices of power contest and negotiation. The study concludes that power influences in political ecology could be better studied and understood through a combined examination of structural, relational and procedural aspects of power.

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In terms of lessons learned, the thesis starting point has been to examine the policy implications of a broader (than homo economicus) view of human action. An issue with homo economicus rationality is with the instrumentality of behaviour implied in the model's view of human action. Conceptualising human action as instrumental is constraining because it reduces communication upon rational premises down to mere strategic behaviour. Moreover, generating institutions governed by instrumental rationality is problematic because it suppresses and weakens human competence to communicate and argue upon rational premises. In that sense, communicative rationality offers a radically different alternative to homo economicus because it entrenches rationality in inter-subjective communication instead of individual quest for predetermined ends. This is attractive first in normative terms, as it offers a springboard for more legitimate decisions due to communicative rationality's view of decision-making as a situation of integrating multiple preferences through communication. Furthermore, it is attractive in analytical terms, because such focus is also in tune with the recent proliferation of attempts to forge deliberative forms of decision-making in the network society that seem to be taking over more traditional forms of public decision-making (Hajer & Wagenaar, 2003). In that sense, communicative rationality provides a model that can be used to benchmark the

workings of participatory governance in the network society. The literature indicates that ecological economics has readily considered the implications of deliberative democracy for sustainability decision-making (Zografos & Howarth, 2008). However, the sub-discipline has not sufficiently reflected over these deeper implications of deliberation's embeddedness on a model of communicative rationality in contrast to embedding decision-making on the instrumental rationality of homo economicus, and this is something that this thesis does (Publication 1).

As regards policy implications of adopting communicative rationality as a model of human action, the main insight is that the creation of a *public sphere* for the deliberation of sustainability matters is a distinct policy objective to which ecological economics scholarship should try to attend. More specifically, this implies that the generation of public spheres should be a policy objective on its own, beyond – although certainly side-by-side with – more 'traditional' ones pursued by ecological economics such as inter-generational and intra-generational equity and efficiency. Some contributions in ecological economics have highlighted the relevance of communicative action while trying to address the important requirement of developing effective processes for the formulation of sustainability policy (e.g. Vatn, 2005b). These contributions suggest that the success of deliberation lies on the potential to disengage from disciplinary and institutional rigidity and consider a reformulated sustainable development process (the 'discursive community'), which articulates strategy through genuine stakeholder collaboration based on a learning process (Meppem, 2000). Furthermore, they point out the importance of communicative planning approaches for environmental planning and implementation, as well as its potential to mobilise the environmental movement by explicitly dealing

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with the assumptions and motivations of contested positions in the sustainability

debate (Meppem & Bourke, 1999).

Again, ecological economics has taken on board some of the insights from the

deliberative democracy literature through work on deliberative multi-criteria analysis

and deliberative valuation (Zografos & Howarth, 2008). Nevertheless, these attempts

focus more on using deliberation to extract more representative group environmental

values or preferences in a quasi-experimental environment rather than examining the

policy potential and limitations of deliberative processes. Criticism of deliberative

valuation suggests that in practice they function as a means for justifying stated

preference methods by adding often superficial forms of deliberation or discussion,

and that they essentially point out that the economic model they use is unsuitable for

understanding particular sets of social values as regards the environment (Spash,

2008). Moreover, the study of the deliberative potential of existing participatory

decision-making arrangements is less advanced in ecological economics. In one

exception, concerns regarding the application and full potential of deliberative

processes as regards environmental decision-making have been raised (Kallis et al.,

2007). This work points out that the framing of the processes is key so much

regarding the assumptions that underlie them and the assumptions of those

participating into them. The authors argue that although deliberative processes can

help improve how stakeholders work together they are not necessarily effective for

developing and planning actions, particularly in contexts where a collaborative culture

is absent and where mechanisms for integrating the results of deliberation with

broader processes of policy or social change are weak. Those insights broadly

coincide with wider criticism of the use of deliberative forums in public policy, which

point out limitations as regards their capacity to effect change and their tendency to be appropriated and used as legitimating mechanisms for policy actions that in fact promote existing resource inequities and power relations.

In effect, another lesson learned concerns the articulation of the need for ecological economics to make a leap towards more critical stances as regards the use of deliberative processes in sustainability decision-making and the thesis contributes towards this direction. It points out (with Publication 2) that although potentially useful for institutional design, the identification and specification of multiple environmental values, motivations and discourses around sustainability institutions needs be complemented by analyses of the operation of power in the decision-making process. To that end, the thesis proposes a political ecology approach to analyse *politics* of environmental values. It further specifies the analytical meaning and content of the concept 'politics of' as the study of negotiating power, from which ecological economics should not shy away if questions of reduced legitimacy (and effectiveness up to a point) of environmental decision-making are to be addressed.

To that direction, the thesis presents specific working definitions of power existing in political ecology and looks at their relevance for the study of environmental value conflicts. In this way, the study contributes to an area (studies of power influence in environmental decision-making) that is barely dealt with in ecological economics, although its importance is regularly acknowledged. For example, Paavola & Adger (2005) underline the importance that changes in power structure may bear upon institutional change and Gale (1998) acknowledges the need for "a fundamental restructuring of social power relations to achieve strong sustainability" (Gale, 1998:

131). This author reviews several models of power potentially useful to ecological economics and ends up suggesting an eco-centric view of power, which is based upon the idea of seeing power as the capacity to produce effects. However, and perhaps with only the exception of Martínez-Alier (2002) and his views on procedural power discussed earlier in the thesis, ecological economics seems to not have followed through on the subject of power in environmental decision-making and this is something that this thesis does (with Publication 3 on the politics of landscape value). The main lesson learned here is that a comprehensive examination of power influences in environmental decision-making should combine classical Marxist (structural) and relational conceptual models for the study of procedural power (i.e. the power to impose decisional bottom-lines) in order to better explain environmental conflict and understand environmental value disputes.

Overall, the main lessons learned with this thesis could be summed up around the statement that the adoption of communicative rationality as a broader model of human action holds a series of analytical implications for ecological economics, such as:

– Consider communicative rationality as a benchmark for assessing the desirability of deliberations occurring in the context of decision-making in the network society

– Adopt the creation of public spheres for deliberation over sustainability solutions as a policy objective; facilitating the fulfilment of this objective should be pursued by critical ecological economics scholarship

– Consider the relevance of power influences over deliberative decision-making arrangements concerning sustainability

- Analyse procedural power influences by combining structural and relational approaches as regards the operation of power

Overall, the thesis has embarked on considering the relevance of a broader view of human action for generating more legitimate sustainability policies and has ended up in examining issues pertaining to power and democracy for sustainability governance in the network society. Studying those issues has required adopting an interdisciplinary analytical treatment. To that end, this thesis conducted in the broader knowledge area of environmental studies has combined concepts and methodologies from economics (homo economicus), sociology (discourse analysis), social theory (communicative rationality), anthropology and geography (political ecology), environmental planning (environmental governance), and political science (deliberative democracy, case study analysis). As a whole the thesis contributes to the second area of study of deliberation by ecological economics (the politics of sustainable development)[16] in two ways. First, by building on political ecology literature to study sustainability politics and the relevance of power in influencing decision-making; and two, by suggesting ways in which this could be integrated in the study of sustainability policy-making through deliberative processes. In doing this last, it also coincides with relevant attempts in the deliberative policy analysis literature (Hajer, 2003a) that attempt bringing the study of power inside the study of deliberative processes, i.e. examine how the power context of decision-making is both brought inside and addressed by deliberative decision-making processes.

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[16] See 'Results' chapter for more details.

The identification of future areas of research is based upon the lessons learned with this thesis. Considering the real democratically transformative potential of deliberative decision-making processes is thus important and cannot be studied unless vis-à-vis and in a combined fashion to issues of power. The politics of deliberative decision-making over sustainability is an attractive field for furthering this research. Knowledge in this area is necessary to avoid falling into the trap of becoming naïve about the potential of current deliberative spheres and how they function. Policy analysis needs to study power infiltrations in public spheres of deliberative processes for sustainable decision-making with the objective of attempting to minimise direct and indirect coercion exercised through the re-production of power relations within deliberative decision-making. To tackle this issue some scholars (e.g. Hajer, 2005; Hajer, 2003b) suggest studying decision-making processes as rituals wherein stakeholders demonstrate performative attitudes. This involves analysing how power is communicated and performed in the course of making decisions inside deliberative processes, aiming to minimise those aspects of the setting that allow for such phenomena to occur. However, this would need be related with a study of broader power factors outside but with a bearing upon decision-making processes, such as in the political ecology sense of the study of politics of environmental value. In other words, the power context of deliberative processes needs be accounted in order to better understand how such relations are played out inside those processes. This combined type of analysis can be used to look at negotiations in the network society that span different scales and types of decision-making (e.g. from climate change negotiations on the national level down to local decision-making processes, such as planning committees). Moreover, studies of power influences over decision-making processes can also complement research whose main objective is to perform

deliberative valuation or deliberative multi-criteria analysis. Side by side with these exercises a study of the politics of deliberation can take place, focusing on a study of how power relations are negotiated through deliberation over group environmental values (deliberative valuation) and the negotiation of weights of importance (deliberative multi-criteria analysis).

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