

Green and Red? Proposing the Existence of a Co-operative Environmental Niche in Wales

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This paper proposes the possibility of a link between the commitment to building a sustainable economy and the co-operative model of organisation. The analysis is based in an analysis of guild socialist and utopian socialist ideas that supported the development of co-operatives and their links with current green political economy. The co-operative is a natural form of productive organisation as visualised by both these traditions. The research findings reported in the paper relate to an audit of 81 co-operatives in Wales (Arthur et al, 2004), whose sample included 17 co-operatives operating with a clear commitment to the environment. A brief illustration of the practicalities of bringing together these shared ideas and the activity of environmentally-focused co-operatives in Wales is offered. It is suggested that further research into the existence of an environmental niche in Wales and its relationship to guild socialist, utopian socialist and green ideas may be fruitful. Issues of accountability and responsibility are seen as key to the possible sustainability-co-operative link.

Introduction

The Welsh Assembly was created as a response to a referendum in favour of devolution of powers from the UK's seat of government at Westminster. The first elections were held in 1999. The Assembly claims a unique commitment to sustainability. According to its website:

Uniquely among EU Nations, the National Assembly for Wales has a binding legal duty to pursue sustainable development in all it does. This is built into its constitution through section 121 of the Government of Wales Act [The Assembly shall make a scheme setting out how it proposes, in the exercise of its functions, to promote sustainable development.] ... All Ministers are responsible for integrating these principles into our work.

The Assembly is also strongly committed to the development of the social enterprise sector, which is seen as part of the solution to Wales's areas of persistent deprivation, which have emerged following the almost terminal decline of the coal and steel industries. To reflect this emphasis, the WAG has set up a social economy team within the Social Inclusion Unit. For example, the Assembly has favoured the housing co-operative model as a solution to the problem of poor-quality public sector housing through the development of the Community Housing Mutual Model. Similarly, Andrew Davies, the Economic Development Minister, spoke about the important role played by agricultural co-operatives in sustaining rural incomes in Wales at a conference held in Cardiff in October 2004, organised by the Wales Co-operative Centre and Co-operatives^{UK}.¹

As researchers we are intrigued by the possibility that we may be seeing the beginnings of a constellation of interests in practice between the co-operative and environmental business sectors in Wales.² This paper is designed to explore whether there might be an ideological underpinning for that connection through the resonances between the thinking of early socialists and the guild socialists and that of green political economy. Our knowledge of the co-operative sector in Wales is based on a co-operative audit of Wales we conducted in 2003/4. The results indicated the existence of a niche of co-operative activity in what can broadly be termed the environmental sector, where the product or service is determined by concern for sustainability alongside the desire to generate a profit and/or a surplus. While this was enough to whet our research appetites it is not sufficient to suggest a firm link. The results of interviews we conducted with members of three of these co-operatives are presented towards the end of the paper to suggest a possible ideological relationship which we are now planning to explore further.

The Organisation of Labour or the Nature of Work

The development of co-operatives in the UK grew out of a radical economic tradition that opposed the consequences of industrial capitalism for people's conditions of life and work. This tradition is represented by theorists such as Robert Owen, William Morris and Peter Kropotkin; for convenience we refer to their various and distinct contributions under the single heading of 'utopian socialists'. They

theorised a movement they saw developing and also supported its further growth. In this paper we link their writing to the nascent literature which informs the term 'green political economy'.³ We also discuss the theoretical contributions of a group of political economists who stand between these two and within the same tradition: the guild socialists. The link between the two socialist traditions is provided by G D H Cole. While his own writings place him firmly within the guild socialist camp, his seven-volume history of socialist thought (Cole, 1953-60) provides a useful account of what we have termed 'utopian socialism'.

The utopian socialists represent a strand within the UK radical economics tradition dedicated to the development of emancipated local economies. They stand in contrast to the Fabian-inspired socialists who favoured the centralised model of state ownership that achieved political success in the post-war years in many developed economies. This strand has been most closely analysed and linked to green political economy by David Pepper (1984, 1993). Pepper traces the origins of what he refers to as 'ecosocialism' to the work of Kropotkin. He identifies a series of commonalities between the modern environmental movement and the early socialist theories including: the minimisation of resource use; the importance of individuals combining 'hand and brain' in their work; the concern with the issue of scale; and the need for self-sufficiency. He considers that the issue of ownership and control is less important in green political economy than in the early utopian theory, although this is largely because his analysis relies heavily on the work of Goldsmith (1972). This discrepancy has been largely resolved in the work of later green economists. Taking each of Pepper's issues in turn, we will briefly consider the position taken on it by green political economy, and the way this links to earlier socialist political economy. In a later section we relate these ideas to the views of employee-owners in three environmentally focused co-operative businesses in Wales as a preliminary exploration of their practical relevance for active co-operators today.

The wise use of resources

In many respects, the guild socialists were ahead of their time for they displayed an ideological concern for nature and what we might now call the environment that seems almost

contemporary. This was paralleled with a concern for the waste of resources that takes place in a capitalist production system, where resources are used to produce what can be sold for a profit rather than what will increase human well-being. Central to this understanding was the concept of 'sufficiency', meaning the avoidance of wasteful production (Cole, 1930). This had first emerged in the work of William Morris, who decried the manufacture of articles of "folly and luxury, the demand for which is the outcome of the existence of the rich non-producing classes" and which "I will for ever refuse to call wealth: they are not wealth, but waste." (Morris, 1885 [1973]: 91) C H Douglas made this point in particular in connection with the over-production of armaments, which he considered the most wasteful form of production possible, since they are destroyed in use and destroy the material fabric of human society in the process. (Hutchinson and Burkitt, 1997: 62-5)

This theme of the wise use of resources rather than expropriation for profit is repeated in the writings of green economists. According to Pepper: "Alternatives to present forms of production would be planned on the principle that private profit is unimportant compared with social and environmental justice and well-being". (Pepper, 1984: 197) Perhaps the most resounding restatement of this principle is in the recognition of the limitation of planetary resources and the concomitant prerogative to be strategic when deploying them. Schumacher makes this point by using the popular metaphor of the spaceship earth:

A businessman would not consider a firm to have solved its problem of production and to have achieved viability if he saw that it was rapidly consuming its capital. How, then, could we overlook this vital fact when it comes to that very big firm, the economy of Spaceship Earth and, in particular, the economies of its rich passengers? (Schumacher, 1973: 12)

We can hypothesise that the link between responsibility and mutual activity is mediated by the concept of responsibility for the environment as being a specific example of taking responsibility for resolving one's own problems, which is the response that lies at the heart of mutualism. Elsewhere we have argued that co-operatives display an inherent, almost instinctive concern with wider social responsibilities which we would contrast with the

'managed' *ersatz* corporate social responsibility (CSR) policies presently fashionable among contemporary corporations (Cato et al, 2005).

The nature of work

For the guild socialists work was something much more fundamental than a way of earning a living. Along with Marx and their English forebears, John Ruskin and A J Penty, they saw work as being of the essence of the human being. They extended this understanding in a spiritual direction, suggesting that the work conditions inherent in capitalism, especially the loss of control, were almost immoral:

Thus worthy work carries with it the hope of pleasure in rest, the hope of the pleasure in our using what it makes and the hope of pleasure in our daily creative skill. All other work but this is worthless; it is slaves' work - mere toiling to live, that we may live to toil. (Morris, 1885 [1973]: 88)

Following this lead, the guild socialists were concerned about the quality of work and the impact poor quality work might have on the worker:

Although it is desirable to reduce enforced and monotonous work to a minimum, work of some kind is essential to well-being. The texts draw a distinction between necessary work - the exercise of hand, eye and brain for productive ends - on the one hand, and the enforced monotony of the work of the wage slave, on the other. It is a vital distinction, The knitting of a jumper or the digging or ploughing of a field can be intrinsically satisfying. The creation of a jumper or a wheatfield can be a fulfilling and healthy activity. However, knitting jumpers or digging and ploughing ten hours a day, six days a week, fifty-two weeks a year in order to obtain the necessities of life is neither healthy nor satisfying. (Hutchinson and Burkitt, 1997: 65)

There was also a concern for the negative impact of monotonous labour, which was one of the consequences of the division of labour. "Man, it is said, needs to follow many pursuits rather than being confined to one, whereas the division of labour makes him servant to the machine", (Pepper, 1984: 188), a view shared by Marx and Engels who speculated that, under communism, "I may hunt in the morning, fish in the afternoon, rear cattle in the evening, criticise after dinner, just as I have a mind, without ever

becoming hunter, fisherman, herdsman or critic". (Marx and Engels, 1968: 45)

Within this intellectual tradition, there was also a challenge to the single focus on man as a labourer, or as they dismissively called this system of employment for money: wage-slavery. The guild socialists differed from the Fabian socialists in their rejection of the wage system, whether or not it was constrained by powerful trade unions:

Although the Marxian analysis of capitalism informed socialism in general, the emergence of a Labour Party based on a single class of wage-earner was bitterly resented by many socialists as leading to the perpetuation of capitalist-labour relations, and hence of capitalism itself. (Hutchinson and Burkitt, 1997: 18)

The response to these concerns was to propose the return to a system of craft work organised through guilds, and for industrial production the ownership and control of work by the workers themselves through co-operatives. Here they drew heavily on the work of Kropotkin and his description of Medieval craft guilds and co-operatives as examples of 'mutual aid' in spite of some scepticism about the 'co-operative egotism' in the case of the British movement. (Kropotkin, 1902 [1939]: 214)

Much of this critique of the system of work under capitalism is reproduced by green political economists, whose critique of work is based on the exact same principles: the injustice of expropriation; the loss of control over work with its negative social and psychological consequences (Merry, 1997); and the loss of power to provide for subsistence outside the wage economy:

Historically, the separation of people from resources, as a result of the enclosure of the commons, made the acquisition of money a prerequisite for fulfilling needs. At the same time, the idea of work as 'disutility' entered into for monetary reward represented another act of enclosure. This enclosure may be understood as the transformation of 'work' into 'labour'. (Barry, 1999: 178)

Green political economy is contrasted with other prevailing economic theories because of its emphasis on people as playing a multiplicity of roles. Socialism has focused strongly on rights at work, in the productive role, whereas green theorists are sensitive to the multiple

perspectives of a citizen who is a consumer as well as a worker. The co-operative is proposed as the ideal form for balancing the needs of the producer and the consumer of goods. Work is to be organised on a community basis: this requires a local scale and self-reliance not only to minimise resource use but also to generate a less alienating form of production. In the words of the *Blueprint* (Goldsmith, 1972), people should not be forced to choose between 'jobs and beauty'.

The emphasis on maintaining one's power in the work environment relates to the co-operative organisational form. James Robertson, a leading green theorist of work, links the need for empowered work directly to the co-operative form:

The direct way to enlarge people's freedom to change the kinds of paid work they regard as valuable and to organise it for themselves under their own control, is to alter the conditions in which paid work is done ... The creation of many more co-operatives and community businesses, the conversion of existing companies and other organisations into these forms, and their acceptance as normal parts of the mainstream economy, will bring wider opportunities for people to work together in pursuit of their own shared aims and values. (Robertson, 1989: 31-2)

This point is echoed in a more detailed analysis of the nature of employee governance within co-operatives by Turnbull (2005).

Greens also share the philosophical and sometimes spiritual values associated with privileging work as a social, humanising process and not merely an instrumental necessity. Robertson (1985) develops a concept he calls 'ownwork', only part of which is in the formal economy. He argues for the revival of the informal economy and the encouragement of 'homegrown' local economies, along with local self-reliance and the expansion of the third sector (1989). 'Ownwork' is explained by reference to a quotation from Khalil Gibran, "You work that you may keep pace with the earth and the soul of the earth. For to be idle is to become a stranger unto the seasons, and to step out of life's procession that marches in majesty towards the infinite" (1989: 65). Schumacher makes a link to the Buddhist concept of 'right livelihood', which is a means of achieving subsistence without causing offence to one's own values, to other people or to one's environment.

The concern for operating as a rounded person in one's work, and for developing craft and skill, is addressed by the co-operative form, where skills are shared and workers take responsibility for all tasks, rather than using a narrow range of skills within a structure dictated by the division of labour. Empowerment is a key concept. The co-operative form enables workers to maintain power over their own work, a central requirement for both early socialists and green economists. A co-operative requires a pooling of skills and for everybody within the co-operative to be prepared to involve themselves in all the tasks required. Co-operatives also provide a structure for maintaining all the value of work within the group of workers, which was a concern for both sets of theorists.

Issues of scale

The utopian socialists harked back to a pre-industrial era when lives were organised within small, local economies. The reason for the movement from this structure to a system of factories and cities may not have been solely for reasons of efficiency: "Kropotkin thought that capitalists did not amalgamate and centralise for technical reason (ie greater economic 'efficiency') - rather they did so in order to dominate markets". (Pepper, 1984: 190) Kropotkin argued against this centralisation on the basis of the need to exploit economies of scale: "But small-scale autonomous industries could overcome disadvantages of market weakness by federating into co-operatives for buying raw materials and marketing goods." (Pepper, 1984: 190) William Morris concurred with the need for "the aggregation of population having served **its** purpose of giving people opportunity of inter-communication and of making the workers feel their solidarity, will also come to an end". He described a future utopia where "the huge manufacturing districts will be broken up, and nature heal the horrible scars that man's heedless greed and stupid error have made". Efficiency and lower prices would be less important than pleasant and beautiful communities. (Morris, 1887 [1973]: 196)

This lead was followed directly by the guild socialists, whose name itself harks back to the Medieval era of organisation within city states. For them the issue of scale was important more for reasons of accountability and resistance to authoritarianism than because of environmental concerns. A R Orage, editor of the guild socialist

paper *New Age*, was typical of the group, being “strongly hostile to bureaucracy” and holding that “men could not be really free as citizens unless they were also free and self-governing in their daily lives as producers”. (Cole, 1960: 244) However, the seminal work of the movement, *Restoration of the Guild System* by A J Penty praised the social arrangements of the middle ages for their simplicity:

To medieval social arrangements we shall return, not only because we shall never be able to regain complete control over the economic forces in society except through the agency of restored Guilds, but because it is imperative to return to a simpler state of society. (Quoted in Thompson, 1996).

There is a link from this to the concern with scale evident in green political economy whose most famous adage is probably ‘small is beautiful’. In fact, the theorists do not demonstrate a slavish adherence to smaller units, rather the preference is for appropriate scale, ie organising business at the level which is best suited to serve the needs of producers, consumers and the environment. According to Schumacher, “For every activity there is a certain appropriate scale, and the more active and intimate the activity, the smaller the number of people that can take part”. (Schumacher, 1973: 64)

The agenda has now developed into a call for localisation of the economy, as in the work of Colin Hines (1989). Woodin and Lucas (2004: 68-9) sum this up as follows:

Economic localisation is the antithesis to economic globalisation. This involves a better-your-neighbour supportive internationalism where the flow of ideas, technologies, information, culture, money and goods has, as its end goal, the rebuilding of truly sustainable national and local economies worldwide. Its emphasis is not on competition for the cheapest, but on co-operation for the best.

It also includes the concept of ‘trade subsidiarity’, meaning that goods are produced and supplied from as close to the consumer as reasonably possible.

The size of a co-operative business is naturally limited so long as the requirements of direct democratic governance are adhered to. This is because once the number of workers has grown beyond the size of their ability to debate issues, the co-operative principle of

democratic decision-making will have reached its limit. In such circumstances, the natural response may be to spin off of one part of it or divide the business into two.

Self-sufficiency

In contrast to reliance on the state, the utopian socialists stressed the importance of taking responsibility for one’s own problems and finding mutual solutions. As William Morris remarked:

that individual men cannot shuffle off the business of life on to the shoulders of an abstraction called the State, but must deal with it in conscious association with each other ... Variety of life is as much an aim of true Communism as equality of condition, and ... nothing but an union of these two will bring about real freedom. (Morris, 1890)

In the case of Robert Owen, this principle was taken to a utopian extreme, with his vision of a “new system of largely self-subsistent Villages of Co-operation exchanging only their surpluses one with another”. (Cole, 1954: 94)

The guild socialists were equally keen to draw attention to the role of work as for the provision of one’s needs, in contrast to what they considered the wage-slavery of the capitalist labour-market:

Capitalism and the wage system must be abolished; they are twin monsters which are eating up the life of the world. In place of them we need a system which will hold in check man’s predatory impulses, and will diminish the economic injustice that allows some to be rich in idleness while others are poor in spite of unremitting labour; but above all we need a system which will destroy the tyranny of the employer, by making men at the same time secure against destitution and able to find scope for individual initiative in the control of the industry by which they live. (Russell, 1917: 28)

These principles find an echo in the work of green economists, who share this conviction regarding the importance of economic self-reliance: “A dominant principle of green political economy is thus to decrease the gap between production and consumption as much as possible”. (Barry, 1999: 177) This is paralleled by the growth of the co-operative movement which has promoted localised solutions to the problem, initially by providing oneself with food.

In the case of the green movement this is linked to the need to strengthen the local economy both for the reasons of control and security but also to reduce the environmental impact of the transport of goods for exchange. The ownership structure of a co-operative is necessarily local, hence its attractiveness to the proponents of the localisation agenda (Hines, 1976).

In green political economy the discussion of work is not separate from the question of subsistence. Green approaches to the economy have an attitude towards work that is quite distinct from that of mainstream economists. According to Barry (1999: 182):

Where green politics differs from other political theories such as liberalism or socialism is that whereas the latter view the link between production and consumption in terms of ensuring full employment in the formal economy, the green view is to encourage an ideal of self-provisioning, both individually and collectively, within the informal economy, as much as possible, and restructuring the 'formal' productive sphere so as to enhance the internal goods of work.

The co-operative organisational form addresses these issues of the need to maintain control over the nature of one's work, although the issue of providing for one's own needs is more apparent in retail co-operatives than in worker co-operatives.

Ownership and control

Concern with ownership and control lay at the heart of the original ideological justification for co-operation, in the labour theory of value formulated by Robert Owen, which was later made the cornerstone of Marx's economic theory:

Owen argues that the natural value of things made by men depends on the amount of labour incorporated in them, and that this labour is measurable in terms of a standard unit of 'labour time' ... Labour, he contends, should supersede money as the standard for measuring the relative values of different commodities; and the exchanging of one thing for another should be done in terms of their relative values thus ascertained. (Cole, 1954: 95)

Anti-capitalist economists at the time argued for workers to own the full value of their labour

through the creation of worker co-operatives. Meanwhile the co-operative movement outstripped Owen's own thinking during the 1820s, which he spent in America:

What they had in mind was a new kind of democratic structure that would emancipate them from capitalist and middlemen's oppression and allow them to run their own affairs; and Owen had to accommodate his propaganda to their mood. (Cole, 1954: 103).

Much of this energy which began as a demand for the value of labour was diverted into creating trade unions to bargain for a greater share relative to the share of capital, but the point was returned to by the guild socialists some 50 years later.

The first ten years of the twentieth century saw a vibrant debate within British socialism over the issue of ownership and control. Alongside the Fabians, who argued for state control of industry, were the guild socialists, who argued for worker control of individual workplaces through guild organisation and the syndicalists who favoured direct action and placed all their faith in trade unionism.⁴ In contrast to the industry-wide control or state ownership of the Labour Party, for the guild socialists, "the 'workers control' they stood for was, above all else, control by the actual working group over the management of its own affairs within the framework of a wider control of policy formulated and executed as democratically as possible, and with the largest diffusion of responsibility and power." (Cole, 1960: 246-7)

Empowerment is one of the key concepts of modern political life that emerged from the green movement and includes in its scope the issue of who owns labour and its products, which is also important to the co-operative movement.

Co-operatives directly address one of the central problems of capitalism by putting ownership and control back in the hands of the people who do the work. This eliminates the possibility of exploitation and profiteering, since profits will either be shared between workers or invested in the business. (Cato, 2004: 65)

While green political economy does not object to the market as such it offers a strong critique of the current structure of the market which prioritises the central role of capital accumulation. The resultant growth imperative has produced an 'economics of oligopoly' with

excessive and unaccountable power accumulating in global corporations and the reduction of all value outcomes to an economic nexus. It is widely argued that such developments pose a threat to the lives of global citizens and the planet they share. Co-operatives are viewed as a key socio-political mechanism for the restructuring of markets that is considered necessary:

The non-capitalist market within green political economy is generally understood to refer to the operation of voluntary exchange primarily at the level of the local economy. Examples of this market institution include local forms of money systems such as local employment and trading systems (LETS) ... community economic development strategies, co-operatives and alternative producer-consumer relations, and combination of municipal economic and political governance of the local economy. (Barry, 1999: 161)

Again we see the key importance of localisation, combined with that of control. The importance of 'keeping locally produced wealth locally', so important to green economics, is achieved through the ownership structure of the co-operative through a process of 'capital anchoring'. (Arthur, et al, 2004) The hostility of green political economy to global capital accumulation is undercut through this form of organisation, since ownership and control are vested in members of the local community, preventing the siphoning off of value through external capital accumulation. Within green economic thinking capital mobility must be limited both to avoid this loss of value and to increase the efficiency of resource use, since its resources will be used to produce the maximum output, rather than maximising profit as under the present, capitalist assumptions (Barry, 1999).

In summary, we find some support for our hypothesis of an ideological link between the original co-operative movement with its commitment to empowered, locally organised, work and the green movement. As prefigured in the work of Pepper the link revolves around five principles that lie at the heart of a green approach to political economy:

- The wise use of resources.
- The nature of work: the importance of control over one's own work and the concept of 'right livelihood'.

- Issues of scale: appropriate scale replacing the growth dynamic.
- Self-sufficiency or, as a minimum, self-reliance within strengthened local communities.
- Ownership and control: an opposition to rigid hierarchy in the workplace and a commitment to sharing of the proceeds of work.

In the following section we present the results of an attempt to engage those actively working in three environmental co-operatives in Wales with these issues directly. This is a preliminary exercise to lay the groundwork for more thorough exploration of the link between a specifically red-green ideology and environmentally focused co-operative activity in Wales. First we provide a brief overview of some findings from our 2003/4 audit of co-operatives in Wales that relates to their relationship with environmental activity.

A Practical Response to the Theory of a Red-Green Link

The suggestion of the existence of a 'co-operative environmental' niche in Wales arose from data drawn from an audit undertaken in 2003/4 (Cato et al, 2004). The aim of the audit was to make contact with all co-operatives currently in business in Wales, working with a database from the regional development agency, the Wales Co-operative Centre which was cleaned and supplemented to generate 127 businesses operating along mutual lines in Wales. We made contact with 81 of these and 44 gave us full responses to a questionnaire. Of the 127 co-operatives for whom we gathered information, 17 were operating a business which can be considered to have concern for the environment. Of these 7 were in the renewable energy sector, another 7 in organic farming; the remaining three were in the educational, engineering and arts fields. We have full data on half of these co-operatives and of those 5 have existed for between 1 and 3 years, with one established this year, 1 having been in existence for between three and five years, and the longest established having been in business for more than five years. Most of the businesses were started as co-operatives (6 out of 8), which is the case with around two-thirds of all co-operatives in Wales. Of the other two, one is a spin-off and the other a buyout. This is clearly a very limited data-set but the information we gathered for these businesses did suggest that there may

be a guiding ideology relating to utopian socialism and/or green political economy along the lines suggested in the theoretical sections. We followed up on this in a preliminary way by discussing the core themes we have identified above with three of these businesses.

By far the most well-known environmental co-operative in Wales is the Centre for Alternative Technology (CAT), which is discussed in detail below. CAT has also spun-off a number of environmentally focused businesses: Dulas, the sole environmentally focused co-operative in the engineering and construction sector in Wales, is a spin-off from CAT, as is Bro Dyfi Community Windfarm. Bro Dyfi is another first for Wales: it is the UK's first community windfarm, opened in April 2003. The windfarm is owned by Bro Dyfi Community Renewables Ltd, an industrial and provident society company operating on the principle of one vote per shareholder. The company has 59 shareholders, two of them corporate and eleven of them earning their shares through 'sweat equity'.⁵ The minimum shareholding was £100 and the maximum £1,000. The expansion of wind-power in the UK is now limited not by national political will or market structures but by the opposition of local people to planning decisions. In this environment it is interesting that there was very little local opposition to the Bro Dyfi windfarm, suggesting the importance of co-operative organisation and community advantage for the expansion of this sector. The capital cost was £81,000, £45,000 of which was for the construction contract which was undertaken by CAT. Significant grants towards the costs were also received from the European Regional Development Fund, the Energy Savings Trust, and Scottish Power Green Energy. The single turbine, known as *Pwer Pobl* or People Power, has a maximum output of 75Kw, enough for nearly 50 households. CAT is the sole customer for the windfarm, which sells 80 per cent of the electricity produced into the national grid.

Centre for Alternative Technology

The role of CAT in supporting the growth of renewable energy in Wales is clear and is an indication of the way that environmental niches can develop around one powerful and ideologically committed innovator. CAT was founded in 1973 on the site of Llwyngwern slate quarry near Machynlleth which had been disused

since 1951. CAT's mission statement is "showing practical solutions to environmental problems to carry us into the twenty-first century." The phrase "a holistic approach to its work" features prominently on the website homepage, a phrase which echoes an approach to work that has been outlined in the theoretical section above. Rather than education in the traditional sense, the Centre has always led by example, for it is a community involved in providing active hands-on demonstrations of environmentally sensitive living. CAT also demonstrates a commitment to the co-operative structure: "Through its resident community and work organisation, CAT is also committed to the implementation of co-operative principles and best achievable environmental practices." (CAT Homepage) This account is based on information provided by Amanda Roll-Pickering, CAT's Media Officer, in a telephone conversation and in her 2004 publication.

The issue of wise resource use is CAT's *raison d'être*. When it was founded in the 1970s it was clear that oil and coal would run out. At that stage Amanda considers that self-sufficiency was the first response, cutting ties with the conventional economy and trying to provide for one's own needs for food and energy. As she says, "We have moved on from self-sufficiency. Nowadays it is much more about the local economy - supporting local energy producers, farmers' markets and local economic development schemes". CAT is very conscious of its responsibility to the local labour-market in a high-unemployment area where it is the largest employer.

Although she shares the commitment of green political economy to the need to end economic growth she does not see any problem with expansion, citing the Mondragon model as a case where the co-operative ethos has survived as the business has grown. However, she thinks expansion will take the form of moving into different sectors and spreading CAT's values in that way, rather than geographical expansion.

In the early days of CAT, work was very much a shared activity - "There was very little distinction between 'work' and 'life'. The pay packet was seen not as wages but as a living allowance" - but this has changed as the Centre has grown and people have become more specialised. Along with this, the flat pay-structure has become a three-tier structure, but the general commitment to wage parity continues and wages are low. However, there is still some

shared work and some variety in work: "We all pull together for some work, and we organise rotas for some jobs like guided tours in the winter and cleaning. We also organise periodic work days when all staff come together to complete a specific task. This helps to keep people in contact and you know what other people are doing."

Amanda does not see a necessary link between sustainability and co-operative organisation, since she has examples of co-operatives that do not operate sustainably. CAT is not legally structured as a worker co-operative, being partly an educational charity and partly a private company established to attract development funding. It does, however, follow co-operative principles, its management structure being somewhere between the non-hierarchical pattern of its founding and a more conventional board structure. All staff have some involvement in decision-making. Amanda sees this as a key part of sustainability: "The principles of our way of working are part of the concept of sustainability: empowering people."

The historical experience of CAT's development has been that specific businesses have spun-off rather than staying within the same organisation. Two of the most successful spin-offs are Dulas, a renewable energy consultancy, and Aber Instruments, a company developing biotechnology monitoring equipment. The working relationship between CAT and its spin-offs might be seen as that of a family, rather than the hierarchical relationship of the traditional business group. However, Amanda says that this is because of a decision taken early on not to develop marketable products, so once these become available it is necessary to create a new business, rather than any ideological concern for limiting the size of the Centre.

Sundance Renewables

Sundance Renewables, based at Ammanford at the western end of the South Wales Valleys, is a worker co-operative that "aims to help community regeneration through appropriate and sustainable methods and the development of renewable energy projects". Sundance carries out feasibility studies for wind, solar and biomass energy systems, and installs photovoltaic systems. Their most recent project is a biodiesel plant, making vehicle fuel from recycled vegetable oil, the first community-based co-operative in this field in the UK. Sundance advertises its co-operative status and gives

detailed information about its co-operative organisation on its website. It is a small firm with five worker-owners of whom one is on an apprenticeship. The interview was conducted with Jan Cliff, a founder member of the co-operative.

Jan was clear about the importance of keeping a small scale of activity. She wanted to see biodiesel production and distribution spread more widely, but not by increasing the size of Sundance:

What Sundance is hoping to do is to encourage other groups to set up similar things like the biodiesel enterprise, but not for it to be Sundance: we're not trying to make an empire here. I think that small scale and local distribution of all sorts of enterprises is very useful and most appropriate.

She also felt that there was a natural size for their business, and that this should be created by a balance between the size of the market, the income and the number of employees. In the case of Sundance, the size of the firm is fixed by the amount of biodiesel that can be produced. Jan also felt that it is difficult to keep the co-operative ethos as scale increases, suggesting a natural linkage between a localised economy along the green model and co-operative organisation.

Linked to this sense of scale was an emphasis on self-sufficiency which Jan considers "the key to a genuinely sustainable future". She holds this for reasons of environmental protection, because of transport-related carbon dioxide production, but also because of the need for security of supply. Overall she is enthusiastic about the possibility of self-sufficiency: "It's brilliant when you can be as self-sufficient as possible ... I think it is in everyone's interests to be as self-sufficient as possible." Clearly the business of Sundance is about making the best use of energy resources. Jan feels that minimising resource use is an essential part of a sustainable economy and that the resources are likely to be used more efficiently when they are shared, as they are within a co-operative structure.

When discussing work, Jan focuses strongly on the value of what is being done rather than the money earned. At Sundance work is shared between all the members of the co-operative, and although some concentrate more on physical rather than intellectual tasks, "everybody does a bit of everything", it is, quite literally in

this case, “all hands to the pump”. She also fits into the green economy model outlined above with her comment that, “I get a lot of pleasure and satisfaction from doing something because you know it is a good thing to do and you are not just doing it because it’s a job”.

Jan was clear about the failings of the corporate model, which result in lack of accountability because of the loss of power from workers to management:

The trouble with the corporate model, as I see it, is that it is based on a very hierarchical structure and that does disempower people working within it even with the better run or managed corporations, that have managers with a degree of corporate social responsibility.

She feels that in larger organisations, workers feel disconnected from the consequences of their actions, and the corporation takes on a personality of its own, but without moral restraint. Thus her conclusion is that a sustainable economy would need small-scale co-operative organisation so that workers can take responsibility for their actions and the environmental consequences of their work.

Cambrian Organics

Cambrian Organics is a secondary co-operative of 18 farms in West Wales. As well as selling to the local market through local shops and farmers’ markets the group also runs a mail-order business via a website. The farms in the group produce organic beef, lamb, pork and poultry. To increase added value Cambrian Organics is moving into the development of prepared meals, beginning with hamburgers. Cambrian Organics is typical of many farmers’ co-operatives in Wales, which have sprung up as a result of supermarket power over producers and the poor profit margins in the meat industry, and also because of the foot-and-mouth crisis. It is unusual in having a niche market in the organic sector, and one whose customers are likely to be concerned for the nature of the production process in human terms as well as for the animals they will end up eating. Cambrian Organics has recently ceased to have the legal structure of a co-operative, although it still distributes the meat products of the same group of farmers. The need for investment to fund the expansion of its ready meals business, and the increase in workload this would entail, led to a change of structure with a smaller number

of directors taking over control of the business and it ceasing to be a co-operative. However, the suppliers have retained their shareholder status and will continue to receive a premium.

Bill Lawrence, one of the founders and now a director of the company, makes it clear that he is primarily concerned with commercial success and that he was initially attracted to organic farming because of higher margins and because it was the way the market was going rather than for ideological reasons.

It is true to say that a lot of people went into organic farming for commercial reasons and not environmental reasons. They were sceptical about organic farming but made the decision to get out of the rat-race commercial farming had become. Having gone down that route I have become more of a convert, having seen the birds and the butterflies and how many of them there are around the farm now.

His convictions about the value of organic farming have increased while he has been involved in the co-operative.

Bill made it clear that values were very important to his work, and that he was concerned that the principles that lay behind the decision to start the company as a co-operative should be maintained. He saw this as linked to the scale of the company, “Personally I would hope it didn’t get that big to lose touch with reality and the original principles”. He sees problems with very small businesses, though, especially in the food sector where the negotiating power of supermarkets is so great. In fact, this was one of the reasons for establishing the marketing co-operative, because the bargaining power of a single farmer was insufficient: “you have a voice by being larger”. This links back directly to Kropotkin’s view of the need for small producers to federate together to increase their power in the market. Issues of ownership and control are important in terms of Bill’s vision for the future of Cambrian Organics which he sees as “a farmer-controlled business to benefit future generations, locally rooted and pursuing and maintaining the values and images of small farms, and supporting and promoting them.”

The type of work undertaken by the members of the co-operative was one of the tensions that led to the change of organisational structure. While some of the members extended their work into areas such as administration, contract negotiation and marketing, others were content to stick to the farming they knew. All members

were running their own businesses, alongside their involvement in Cambrian Organics. They did not all feel an equal responsibility for the co-operative, so the practice of sharing all types of work was never genuinely addressed, leading to unfair burdens being carried by some members. It also seems likely that some farmers are committed to neither the co-operative structure nor the principles of sustainability, their choice of organic production being more about commercial advantage.

The nature of Cambrian Organics as a marketing and secondary co-operative seems to explain the lower level of commitment to co-operative organisation. Secondary co-operatives are generally established to gain higher premiums rather than to create democratic workplaces. However, some of the values of mutualism have survived: they have prioritised collective self-reliance, the importance of economic activity rooted in the locality and resistance to excessive expansion of the business. It is interesting to note that a co-operative established primarily for commercial objectives has nonetheless developed some strong mutual values, but Bill did not see any essential link between organic farming and co-operative organisation – “I don’t think it has a direct bearing on sustainability” – although there do seem to be indirect links.

Conclusion

When conducting the audit of co-operatives it became clear that those in the environmental sphere were, in the main, committed to this type of organisation for ideological reasons. Their founders and members saw it as a part of their vision for a new type of economy, that it should be both sustainable and egalitarian, so that commitment to fairness in the distribution of surplus value was just as important as protection of the planet.

Within all businesses there is a tension

between commercial and social objectives. This is also true of co-operatives, which cannot continue to exist unless they sell enough of their product for a sufficient price. The extent of this commercial pressure obviously relates to the nature of the economic environment. Co-operatives have a set of principles which they must adhere to, but each balances these against their commercial objectives in different ways. What also appears to emerge from the interviews reported here is that Sundance, CAT and Cambrian Organics are establishing a different balance between these two but all three are indicating more commitment to sustainability and to their own values than would be expected in a corporation, where the profit motive is dominant and CSR is usually an add-on and often little more than a PR manoeuvre.

There does appear to be an ideological thread linking the founders of the co-operative movement and the proponents of green political economy, as we have argued in the theoretical sections. We are interested in assessing to what extent this has influenced the environmentally focused co-operatives currently operating in Wales. The three interviews presented here providing a tantalising hint of the possible existence of a red-green ideology within these businesses, although they also suggest that this has a different level of salience in different cases. Our final conclusion is the suggestion of the need to follow up on these interesting but limited findings with a wider research programme. We would suggest that the focus of that research should be the concepts of responsibility and accountability, which have emerged from this work as key ideological drivers. As Jan Cliff put it “Workers [in a conventional business] can think it is the bosses’ problem; it’s not my problem.” Mutualism is about taking responsibility for solving one’s own problems and in the environmental niche this appears in the form of taking responsibility for the need to live in harmony with the planet.

The authors are based at the Wales Institute for Research into Co-operatives, which was established in April 2000 as the first Welsh centre providing basic, strategic and applied research covering all aspects of the social economy. It is based at the Business School of the University of Wales Institute, Cardiff. WIRC members provide academic analyses to raise the profile of the social economy and especially the co-operative sector within the academic community, while keeping a strong policy focus and sharing their academic skills to support co-operative enterprises in Wales. Further information on the authors appears on the WIRC website at <http://www.uwic.ac.uk/ubs/research/wirc/people.asp>

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Footnotes

- 1 The conference itself is further evidence of the link between sustainability and co-operatives: 'Securing the Future: Co-operative Approaches to the Sustainability Agenda'.
- 2 It is important to note that the concept of a co-operative that we are using here is an ideal type. Co-operatives come in all sorts of shapes and sizes, as the three we interviewed for this research indicate. There is not space to go into the issue of definitions here, short of mentioning that the key issues are those of ownership and control, so that for a business to be a co-operative its may not have external owners who profit from dividends, and that a significant amount of decision-making authority rests with those working in the business.
- 3 See articles in the first issue of the recently launched International Journal of Green Economics as well as Barry (2006) and Woodin and Lucas (2004).
- 4 The argument for workplace control was particularly strong in the South Wales coalfields, viz The Miners' Next Step, a pamphlet from 1912 produced by an Unofficial Reform Committee of the South Wales Miners' Federation (Tonypanydy: Robert Davies and Co).
- 5 A system whereby in the setting up of the co-operative unpaid labour is remunerated in shares.