learning to last

skills, sustainability and strategy

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Responsibility, education and the risk society

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Risk society by the German sociologist Ulrich Beck was first published in Germany in 1986. Instead of the normal sales of two or three thousand copies one might expect for a sociological essay, it sold 60,000 copies in 5 years. In Britain, where it appeared in 1992, it went through four editions in 4 years. It clearly struck a chord that is still reverberating.

I first read Beck's work in bed recovering from flu: not *Risk society* but a second book, *Ecological politics in an age of risk* (1995). On the radio was a piece on the tenth anniversary of Chernobyl; another on BSE and CJD. These issues, which traditionally had only walk-on parts in the conventional drama of politics, his book put at the centre of the stage. Its spotlight fell not on debates in parliament but on the political economy of information, on its generation, control and interpretation. A single statement by a scientist, said Beck, could more rapidly bring an industry to its knees than any parliamentary decision. Issues such as freedom of information and access to the data on which the safety of new technologies was assessed were as significant in the post-industrial order as was the freedom of the Commons in the pre-industrial one.

Beck argues that science can no longer be considered as a neutral authority. Scientists are at the centre of the production of chemical, nuclear and genetic advances that lead to hazards that are no longer calculable. They operate on the basis of probabilities which do not exclude the worst case. He traces a dialectical process in which the production of risks is the result of scientific and political efforts to minimise them. There is no longer an unambiguous path of scientific progress: in addressing one problem, scientists create another. Unintended side effects have become the motor of history. This is at the core of his idea of an 'Age of Risk', an era of 'manufactured uncertainty'.

For Beck the process of controlling the introduction of new technologies is highly political, for on it depends what degree of risk is assumed and who will bear it. The distinction between the laboratory and society breaks down. With much science now driven by the competitive imperatives of private capital, it can no longer avoid becoming entwined with interests. Unsurprisingly, there are major conflicts over the knowledge and assessment of risks, which need to be analysed in terms of political economy and the sociology of science. Even if risks are known, science cannot say which risks are acceptable. This, too, is a political issue. But the politicians are at a disadvantage because, when it comes to assessing risk, they are playing on away ground. It is the scientists and the arguments between them that shape these outcomes. Science is necessarily politicised.

One of Beck's provocative theses is that there is a shift in politics from a focus on the distribution of goods (wealth and income) to the distribution of bads (environmental risks). Some of these risks are pervasive, for example the dangers of contaminated food. Others have effects concentrated on particular areas (such as the neighbourhoods around nuclear plants) or groups (as with certain medicines). Chemical plants and waste incinerators tend to be sited in poorer areas where political opposition is weaker. There is a clear pattern of toxic processes and wastes being shipped to developing countries and to the former Eastern bloc. The distribution of risks involved is less tangible than the distribution of income. But the risks may often have greater long-term effects on welfare and are the subject of ever-more intense political conflict.

Beck's central proposition is that we have reached a new technological stage. There have always been risks associated with industrialisation. What distinguishes the present is that the risks are so profound and pervasive that they can no longer be confined and managed as in the past. They are literally uninsurable. 'Dangers are being produced by industry, externalised by economics, individualised by the legal system, legitimised by the sciences and made to appear harmless by politics' (Beck in Franklin 1997). This is his summary reading of the new 'risk society' as it relates to our changing relationship to external nature.

But the idea of the risk society is not confined to environmental risk. There is a second strand to his argument, which relates to inner nature. The erosion of traditional institutions – from the nuclear family and defined gender roles, to social classes, the church, secure employment

and the welfare state – leads to increased choice for and responsibility being placed on individuals. Stable structures that in the past acted as limits and in many cases served to define identity are now weaker, and this necessarily increases uncertainty. Freedom and uncertainty go together. Responsibility is the other side of risk. The less we can rely on traditional securities, the more risks we have to negotiate. The more risks, the more decisions and choices we have to make.

There are two interpretations of these trends. One is that they represent a liberation of the self from traditional constraints, the other that they pose far-reaching questions about the construction of identity. People are now having to construct their own biographies rather than having them determined for them. Beck refers to the emergence of 'an enormous subjectivity' resulting from this process of individualisation. Individual self-fulfilment and achievement is now, he says, the most powerful current in Western society.

For Beck this process of individualisation does not mean the collapse of the society. Rather he sees it as institutionalised individualism, reflected for example in the changes of provision in the welfare state. Paradoxically individualisation implies a collective life style. There may be an increased feeling of isolation, a weakening of cultural integrative processes, and a levelling of social structure. But this does not mean less society. Rather it is society in a different form.

Beck has remained insistent on linking these two strands of risk society. He sees them running in parallel. The first process he refers to as the end of nature, the second as the end of tradition. Nature, through the work and place of science, has become culture just as culture becomes (in part) nature. What both do is extend individual and social responsibility. If nature can increasingly be made through human agency, then how it is made becomes a central social and political issue, just as who you are and how you define yourself are increasingly self-determined.

Beck uses the term 'reflexivity' to describe this growth of individual and social freedom. While he sympathises with the 'fear of freedom' and the anxieties to which it gives rise, his response is not to return to an 'unmade' nature or to traditional institutions, but to steer into the skid and ensure that these new choices are made democratically and with supportive structures. In other words, his response is not nostalgic and conservative, but an extension of the enlightenment project for human emancipation.

He refers to a second modernisation, a 'reflexive' one in which the central politics are concerned with the way in which the 'new' is made, rather than whether to go on making the 'new' in the first place. He draws new dividing lines in the political sand that move beyond left and right. On the one hand, there is a conflict between a counter-modernity which inscribes, promises and elaborates new and old rigidities and limits, and a reflexive and radicalised modernity which accepts and broadens insecurities (and freedoms). On the other hand, there is a conflict between reflexive and linear modernities, linear modernisation failing to grasp the multiple possible modernities that exist and siding with the existing structure of power that determine the pathways chosen. This is why, for Beck, identifying the critical points of power in the making of the new is so important, as is understanding the different ways in which they can be contested. His proposition of alternative modernities is thus set against two types of conservatism, the first which aims to reverse modernity, the second which seeks to continue it but without challenging its structures of power and their version of the future.

Problems with *Risk society*

The scope of Beck's thesis, and the way in which he re-interprets politics to give a central place to areas of activity and living that have previously been considered outside or at best marginal to it, is clearly one of the main attractions of his work. But it is also the focus of much of the criticism with which it has been received. In what is by now a large literature I will mention three lines of critique.

First, risk is not new. Many of the risks analysed by Beck have long been experienced by particular classes, genders, ages and ethnic groups, not least in the south where economic depression has been felt more deeply and regularly than in the industrial countries of the northern hemisphere. Risks have intensified at times (like the present) of economic transition and the restructuring of the labour force, whether the change is from boom to slump, from the country to the towns, or from the coal mines to McDonald's. Care must be taken therefore in identifying what is distinctly 'new' about modern risks, how persistent they are likely to be, and to what forms of 'risk management' they are likely to give rise.

Second, Beck runs together quite different types of risk, each with its own character and history. There is technological risk,

by drugs like thalidomide, and the growing hazards around materials and climate change are of major concern to the insurance industry and therefore the economy as a whole. What is striking here is that these risks – which might be called objective risks – are quite different from the subjective risks arising from the disruptions in 'inner nature'. Indeed it is striking how so many people screen out the wider risks, and live as if insulated from these current dangers. It is as if humankind cannot bear too much risk and finds that one of the most effective ways of managing risk is to ignore it.

This leads to a third point. Screening out is a mechanism employed by the powerless. If you feel you cannot alter things, then it is best not to think about them. Beck paints a liberal picture of the scope for social 'reflexivity', and of the potential for redirecting modernity, but he runs the risk of underplaying the increased polarisation of power and control of information. His vision of reflexive democracy is discursive and participative. He provides ideas about what a new reflexive politics should focus on and how it might be structured (the opening out of advisory bodies and offices of standards, the inclusion of counter-experts in the decision-making process and lay judges). He pinpoints a new space for democratic action. What is less discussed is power, and the forms and conditions of social action that will have the strength to challenge those who currently monopolise technological decision-making.

Beck's significance

These lines of critique do not invalidate Beck's argument, but rather serve to clarify it, and point to further work. Fifteen years on, his central propositions remain more than ever relevant to understanding the nature and alternative directions of modernity. They provide a new chart of the present and its possibilities.

First, he has redrawn the political landscape. The concept of the distribution of risk and liability moving to the centre of politics has yet to be reflected in Britain's formal politics. The Greens have not had the impact here that they have had in Germany, Holland, Scandinavia or France, principally because of the 'first past the post' voting system. But in the informal politics of 'civil society' the issues and perspectives of Beck's 'risk politics' are becoming ever stronger. The local protests against the hazards of incinerators and waste landfills have now reached levels formerly only generated by nuclear power plant proposals.

The food movement – centred on the hazards of intensive farming and food processing – has continually gained in strength over the past 20 years. It has transformed the supermarkets and led to a surge in organic consumption that has taken all sections of the food industry by surprise. There have been similar developments in alternative health, in the campaigns against new roads and for sustainable transport, and in renewable energy.

Those involved in the new environmental movements have faced the very politics of information, science and regulation that Beck describes. The Environment Agency fiercely restricts access to its information, and rules that there is nothing to fear from modern incinerators, at the same time as communities and workforces in and around the plants are experiencing levels of contamination – which they have had to uncover with their own independent testing and employing their own 'counter-experts' – that grossly exceed any permitted levels of safety. The politics of food has revolved around conflicts between 'scientists' and counter-scientists on the impact of intensive agriculture and food adulteration. The movements in health, food and waste have had to provide their own detectives to challenge official agencies, and have brought to bear the evidence of the field against that of the laboratory. In all these cases the challenges have been met with the charge that they are a brake on modernisation, whereas they should rather be seen as part of a search for an alternative modernity.

Second, Beck's proposition that unintended side effects have become the motor of history prompts a new view of the economic landscape. The current 'fifth wave' transition in the economy has been interpreted largely in terms of the information revolution, but there is increasing evidence that Beck's idea that the environment is now at the centre of capitalist accumulation – an idea that remains only a suggestion – reflects remarkable foresight. The extent of the demands made on industry to change their processes of production, their material and energy technologies, and their products is leading to pervasive changes parallel to (and in part reflecting) those of the information revolution.

In this instance the process of environmental economic transition is distinct from many earlier technological waves. Instead of new technologies and systems being generated and diffused through the market, environmental transition is triggered by environmental movements and codified by the state. These codes and tax regimes define new economic spaces that then play host to private innovation and accumulation. Politics thus plays a role at the very centre of the economy, a telling example of Beck's 'reflexivity'.

This role is reflected not just in changing the terms under which existing producers operate, but in opening up the possibility for the development of quite new types of productive systems. These systems reflect an ecological model applied to the economy, with their emphasis on diversity and decentralisation of responsibility, on multi-polar information generation and analysis, on flexibility in place of system-wide rigidity, with the task of synthesising these distributed systems being played by shared information, and by cooperation and trust around common values rather than hierarchical control.

In these alternative systems human beings are firmly at the centre as economic actors. Rather than being passive consumers the new householders are 'producers' . They play a critical role in energy and water use, in the way they sort their waste, in the purchase and preparation of food, and in their active role in healthy living. Alvin Toffler referred to this as 'prosumption', with the 'prosumer' taking on a new range of responsibilities in the operation and direction of the emerging ecological economic systems.

From here emerges one answer to the question of power. If part of the power of making alternative environmental systems comes through engagement in daily economic life, then the householder has a reason to set aside the shield erected against risks. For now they can do something about them. One of the interesting findings from studies of the introduction of recycling schemes is that the simple operation of setting out a weekly box of old newspapers and cans raises the level of environmental awareness. Action precedes consciousness or, more accurately, action permits consciousness.

This is a common story from the consumer movement. Consumers have the power of purchase and this leads to a demand for information. There has been a striking increase in the past decade of consumer interest in the origins of products, in how and under what conditions they are made, in what their effects might be on the shopper's household and on the environment when remnants of purchases are discarded after use. The growth of green and ethical consumption has been another critical influence in shifting the economy onto a more environmentally sensitive path.

Third, Beck's link between the inner self and the outer world is in many ways the most ambitious and innovative part of his work. The criticism he has met with on this score is not a reason for breaking the link but developing it. One facet of the link is technological. People are being forced to make choices about technologies that have

a direct impact on the self – from reproductive decisions to immunisation and forms of medical treatment, and everyday issues such as food and furnishings. How they make them – the extent to which identities are expressed through commodities and the extent to which they can take on board the external environmental issues surrounding particular commodities – is at the very core of the individual experience of the new 'reflexive' responsibility.

The connection here is technological in its object. But the subjective link between inner and outer nature is first and foremost emotional. Beck's attempt to link the two (the 'inner and outer planets' in the similar formulation of the Italian sociologist Alberto Melucci) opens up many new approaches to the inner and outer worlds. One is the parallel ecological 'models' of the self and external nature. Another is the need to refashion the way we see ourselves and our personal relationships (and how we deal with their limits and conflicts) if our relation to nature is to change. A third is how we handle the responsibilities of conflicts in the external environment, avoiding the Freudian death instinct, for example, when confronted with the enormity of the environmental issues raised by Beck.

All this suggests that one path to an environmentally sensitive modernity is through the self, just as the path to the reflexive self passes through the environment. In Beck's terms, we live in an age of both/and rather than either/or. The concept of the individual is not set in opposition to society and nature, but only adequately realised through them.

The risk society and education

Much of the recent emphasis in further education has been on developing individual learning and skills for a post-industrial labour market. Beck's work suggests that there needs to be a parallel development of learning and skills for a post-industrial politics. Part of this is a matter of content, and making provision for the analysis and discussion of those issues raised by Beck as critical for exercising 'reflexive' responsibility. But there are also suggestive avenues for skills development in relation to the forms, methods and finance of education.

First, if people are more ready to address issues of environmental risk when they feel they can do something about it, it is important to link education and practice. Starting from the educational end,

this underlines the value of project-based learning: the location of learning in specialist centres such as museums, or initiatives like the Eden Project or the Earth Centre, or the inclusion of productive projects as part of the learning curriculum (community-shared agriculture for example, or working on a recycling project).

Alternatively, learning can be approached from the productive end. The production may be individual or household based, and range from house building or repairs to gardening and cooking or managing a household's use of resources including their waste. It may involve the productive demands of acting as a reflexive consumer, or work on the self. When we look at these as productive activities and a primary site for reflexive action, then it is clear that skills and information are involved. Much of the learning is provided informally, through specialist magazines and TV programmes, or clubs, or over the internet. Some is paid for. But there has also been an expansion of publicly funded specialist advisers, extending the model of the ante-natal clinic or the health visitor to environmental practice and personal development.

One of the most successful environmental initiatives of this kind has been the Ontario Green Communities Programme, which has now been extended throughout Canada. It is centred round home visits to assess household efficiency in the use of energy, water and waste. The visitors offer advice on potential improvements, provide information on alternative equipment, and access to cheap finance to purchase it. In some towns the local council funds compost advisers to help households with home composting. In others, the green community organisation has taken over derelict land and turned it into parks and community gardens. In all these cases the front-line advisers have a prime educational function – focused on the development of environmental life skills and the understanding of the wider environmental meaning of the activities.

Because these skills are related to personal and household activities, they have been given less emphasis in many formal educational programmes than market-oriented skills. Finance has often come from environmental or social services budgets rather than educational ones. The fact that environmental costs and benefits are not adequately reflected in the market has its parallel in the field of education. Yet the burden of Beck's argument is that these 'externalities' should be internalised in educational programmes because they are central to reflexive activity.

Equally significant is the learning potential of collective projects. There is now considerable experience of the methods that are effective in developing 'learning organisations'. Larger organisations, both public and private, are increasingly being required (not least by the major insurance companies) to re-orient their practices to take account of environmental imperatives. They have developed their own learning programmes, around waste, toxicity and resource productivity.

There have also been fertile developments in the social economy, in projects and enterprises which have been set up explicitly to address environmental issues. The community recycling network, for example, now constitutes the largest kerbside recycling organisation in the UK (with more than 250 members). There has been a mushrooming of food box projects delivering (mainly organic) food directly to peoples homes. There are innumerable other projects of this kind – bicycle clubs, car sharing schemes, tree planting and 'greening the city' groups, community composters, ecological building organisations, bio-mass charcoal networks, and wind energy co-operatives.

Many of these are not only learning organisations in themselves but act as a wider force of environmental education. A food box scheme for example may require providing advice to householders on how to cook raw food; some box schemes have linked back to farmers and forward to local supermarkets and the purchasing policies of local chefs. Those engaged in the projects find themselves simultaneously students and teachers as well as the organisers of alternative systems. They have been part of a collective experience of reflexive modernisation.

One of the lessons of these projects is that a critical skill for such 'productive economic democracy' is the capacity for self-organisation. The most successful projects have been those which have been able to draw on organisations and individuals with established organising and inter-personal skills – churches, co-ops, and social and environmental movements for example. In the course of the projects these skills are spread.

There have been similar experiences in initiatives to democratise government. The people's budgets in Brazil have involved large numbers of people collectively considering how to allocate given budgets on spending in their neighbourhoods. The New Deal for Communities programme in the UK has involved strategic and financial responsibility being taken by neighbourhood representatives, who have confronted the kind of issues considered in community economic development schemes: how can housing

be planned and/or repaired differently; how can alternative affordable public transport be arranged; how can a swimming baths be converted into an environmentally oriented healthy living centre; or a park be created or redesigned?

Each of the economic and political examples has been a centre of learning, a laboratory and a space for 'reflexive' production. Yet both the operation and the funding of these schemes have been largely separate from recognised education. There would be much of value in closer links between them.

From the perspective of education and employment, the environmental projects constitute an economy of small things, just as the Brazilian 'people's budgets' and the New Deal for Communities represent a politics of small things. In a world facing increasing diseconomies of scale, many of them environmental, the capacity to deal with the diverse world of small things is one great strength of these initiatives. They also provide one way of responding to the central challenge posed by Beck, which is how the space of economic and technological possibility opened by modernisation can be shaped by a pluralistic rather than monopolised structure of power.

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