Ecolocalisation as an urban strategy in the context of resource constraint and climate change – a (dangerous) new protectionism?

Peter North*
University of Liverpool

Abstract

This article critically engages with eco-localisation as an alternative economic development strategy in an era of climate change and resource depletion. The article argues that arguments, advanced by environmentalists and climate change activists, that we need to refocus local economic development away from insertion into the global division of labour and towards ways to minimise carbon emissions and fuel consumption by producing as much of what we need as locally as we can have merit in the context of climate change. Eco-localisation is, however, diametrically opposed to current economic development ‘common sense’ that ‘trade is good’ and ‘protection bad.’ There are no ‘actually existing’ examples of local economic development with a focus on meeting needs locally. Consequently, arguments for localisation lack credibility in local economic development circles. Stronger arguments for localisation are required, as well as local experimentation in strategies that put carbon reduction at their heart.

Keywords: Localisation, climate change, local economic development, protectionism.

Introduction

This article engages with an emerging conceptionalisation of local economic development policy which has been developed by greens and others centred on economic localisation. Advocates of ecolocalisation argue that urban economic policy needs to pay more attention to the need to avoid dangerous climate change, adapt to unavoidable climate change, and respond to looming resource crises by moving from a global division of labour, whereby things are produced where they can be most ‘efficiently’, with labour and environmental standards ignored, oil cheap, and carbon emissions from transport unquantified, to one where everything is produced as locally as it can be. A recent ESRC-sponsored seminar series on ‘local economic development in an era of dangerous climate change and resource crises’, co-ordinated by the author of this article, has been examining what this critique means for current accepted practice in local economic development policy.
Contemporary urban economic development policy

The settled paradigm of contemporary urbanism, ‘urban entrepreneurialism’ (Hubbard and Hall, 1998; Oatley, 1998; Harvey, 2001) as implemented by a neoliberal new right committed to the ‘rolling back’ of the state (Peck and Tickell, 2002), assumes that to secure their economic welfare cities must now compete for mobile capital in an environment where cheap communications technologies and fuel meant that capital could increasingly seek a ‘spatial fix’ to problems of profitability by moving to places where labour costs are cheaper and levels of labour and environmental regulation lower (Harvey, 1992). Cities must insert themselves into a global division of labour, providing infrastructure and making sure that urban administration facilitates the needs of business. The logic of urbanism is business competitiveness, rather than social justice and citizenship. Inward investment is privileged above endogenous growth from existing businesses. The image of the city is changed to maximise the likelihood that footloose capital will touch down, and stay (Roberts and Schein, 1993; Short, Benton et al., 1993). More recently, entrepreneurialism has focussed on the new ‘creative class’ who are seen as the drivers of postmodern, information based capitalism through cultural innovation (Bianchini and Parkinson, 1993; Florida, 2004; Peck, 2005). ‘Edgy’ cities with a gay quarter, coffee bars and the possibility of living an exhilarating life in an exhilarating place attract knowledge workers.

Of course, entrepreneurial cities have not been without their problems. A successful reinvention of the urban imaginary without change on the ground would just displace poverty, a lack of jobs and enterprise, poor health and education outcomes in the public imagination (Mooney, 2004). John Lovering (1995) famously argued that all entrepreneurialism generated was a range of vacuous mission statements about place that could not be differentiated from each other (Griffiths 1998). Many poorer parts of the city were by-passed or saw social investment decline to pay for new conference centres and capitals of culture (Boyle and Hughes, 1994; Smith, 1996; Beazley, Loftman et al., 1997; Mooney, 1999; MacLeod, 2002). That is certainly a story, but the paradigm has not been without its successes either. My city, Liverpool, has fairly successfully used its year as Capital of Culture to re-invent its image, if not its substance – something that the city’s boosters are not slow in stressing. The city that the Daily Mirror of 1984 said should have been ‘fenced off’, the city that shows all that can go wrong with a city, whose Militant-led council symbolised the antithesis of the entrepreneurial ethos in the 1980s (Parkinson, 1985; Taaffe and Mulhearn, 1988), is now ‘Livercool’, home of the new L1 shopping centre and convention centre (Jones and Wilks-Heeg, 2004).

The emerging green critique of contemporary local economic development policy

Two new urban crises, however, challenge the perception that ‘growth’ should uncritically be the object of urban strategies: climate change and ecological overshoot. The credit crunch does, at a simplistic level, suggest that urban growth needs to be reignited. Those who have lost their jobs and businesses need help. But critics from the Green movement have increasingly developed a powerful critique of growth-based urbanism, arguing that it leads to unsustainable levels of greenhouse gas emissions and is dependent on resources that are being unsustainably depleted. Green councillors, Transition Towns, Climate Reduction Action Groups and Climate Action groups are all developing calls for a new urbanism that will contribute to cuts of in 80 per cent of carbon emissions, and reduce dependency on the hydrocarbons that contribute to global warming. Many argue for economic localisation. In opposition to a
localisation as an urban strategy in the context of resource constraint and climate change – a (dangerous) new protectionism?

Global division of labour where things are produced where they can be most efficiently, often at the cost of lower wages and lower labour and environmental standards, localists argue that everything should be produced as close to where they will be used as possible (Douthwaite, 1996; Shuman, 2001; Woodin and Lucas, 2004; McKibben, 2007; Estill, 2008).

Localisation means that lower standards, fuel consumed and emissions embodied in transport should be taken fully into consideration in location decisions, and that this might change the calculus around where things are produced. If one country cannot undercut another with lower standards, subsidised with cheap oil and with the emissions embodied in moving any given product from where it is produced to where it is consumed, then currently cheap imports might become more expensive. Local production would be boosted, and new jobs and livelihoods would follow. This does not mean there would be a customs post on the entrance to every city, with local economies becoming closed, North Korea-like systems. It would mean any given local economy would try to provide as much of its food, power, face-to-face services and small scale manufacturing as it could, with larger scale manufacturing going on firstly at a regional level, then a national level, then in groups of countries. Benefits of scale would be balanced with costs of transporting a product from where it is made to where it is consumed.

Given that the current ‘taken for granted’ conceptionalisation of local economic development is wedded to the ideology of global free trade, these are radical demands developed by a new range of ecological activists. Local economic development policy has long looked to strengthen local skills and capacities, develop local businesses and local sourcing, and support credit unions, local exchange trading schemes, community businesses and the like (Imbroscio, 1997; DeFilippis, 2004). Any examination of the case studies in the literature (Gibbs, 2002; Bulkeley and Betsill, 2003; Krueger and Gibbs, 2007) will point to a vast range of ways that localities are undertaking environmental actions, reducing their carbon footprint. But as far as I am aware, there are no examples of ‘actually existing’ local economic strategies in the UK focussing explicitly on a reorientation of local economic development policy away from insertion into the global economy in favour of systematically developing local production capacity, and focussing explicitly on meeting local needs as locally as possible. This is only called for by actors currently outside the economic development mainstream.

I was in an event organised by this putative movement in the city that Place, People and Policy online is edited from, Sheffield. The event called for a local Green New Deal, and the key speaker was Colin Hines, author of a number of books and articles on localisation (Lang and Hines, 1993; Hines, 2000). Hines is a key member of the Green New Deal group and a respected environmentalist. Much of his keynote address was an argument for local action on climate change under the guise of a Green New Deal. He called for local bonds to raise money for mitigation and adaptation measures, and for a comprehensive local programme of works to provide work for those recently made unemployed upgrading our unsustainable Victorian urban infrastructure. Adapting our cities to new weather vulnerabilities and higher temperatures requires the same re-engineering of our cities as was undertaken by the Victorian city builders, the Edwin Chadwicks and Joseph Chamberlains who put in the sewers, gas and electric, macadamised our roads, and built the Victorian and Edwardian housing stock that so many of us now find so attractive. The building industry is in deep recession, cuts in interest rates and VAT seem to have little effect, but we could, if we did it right, upgrade our cities for climate change and provide work. If the definition of unjust unsustainability is New Orleans where you lived or died depending on your access to a car, or Paris where older people died left alone in flats superheated by the output of
other people’s air conditioning, socially just adaptation would be collective, not individual.

So far so good. But Hines also got a lot of laughs for his jibes, from a localist perspective, against the claimed benefits of trade – even the fair trade proposed by Oxfam, tradecraft and the like. The audience lapped it up. I agree that the benefits of international trade are often assumed rather than demonstrated, and agree that as a result of climate change local economic policy needs to move away from an emphasis on inserting our cities into a global market. We do need to cut emissions, and long term, the price of oil might make some global connections less economic. But I also could not see these arguments being accepted by an average local economic development practitioner schooled in contemporary local economic development policy, let alone an average businessperson who would have to localise his business supply and distribution chains. Given that the people at the Sheffield New Deal conference and other green activist events like that are not actually able to implement a Green New Deal (that’s for local authorities and their partners, with significant central government funding) and given that neither activists nor economic development practitioners are able to localise a privately-owned, market-based local economy without the support of business and business representative organisations, we need a much more nuanced discussion. This article therefore discusses what the conventional local economic development paradigm would say about calls for localisation, in an effort to provide a more persuasive case for producing more of the things we need as locally as we can, to reduce emissions and dependency on limited oil supplies. Given that, I believe, climate change is a serious threat to our livelihoods, and given that we need to change track from our addiction to growth, we need stronger arguments for changing the way we are going.

**Localisation = protection = bad**

Supporters of the conventional local economic development paradigm would not accept localisation as a serious approach to securing the economic welfare of our cities. First, they would argue, it flies in the face of two centuries of what we think we know about how free trade brings many development benefits through global integration (Wolf, 2004: 194-9). The arguments have recently been pulled together by the World Trade Organisations World Trade Report (WTO, 2008). Classical free market political economy holds that trade enhances wealth, while barriers limit growth. Protection distorts the economy by diverting resources into inefficient protected areas when they may be better utilised in more efficient areas where the country has comparative advantage (Stiglitz and Charlton 2005:6). Trade enables businesses to gain access to a wider resource pool from which to draw human and financial capital, ideas, innovations and knowledge, and to wider markets and more sales. This leads to larger productive units that can benefit from economies of scale, invest more in research and development, and thus provide more goods at a greater variety and volume and at lower cost.

In the long run, workers benefit from increased development leading to higher labour and environmental standards, and higher wages. Money and people can flow to where they can be used best and, through this, less developed nations can trade their way to prosperity. This is demonstrated by the success of nineteenth century Britain, or the twentieth century East Asian Export-Orientated Economies, but the same benefits can even be shown to accrue to cities.

Neoliberals argue that trade even benefits similarly endowed countries, regions and cities trading similar goods and services with each other. Through trade starting with
comparative advantage, economies tend to become more uniform as the economies of scale that tend to support agglomeration is balanced by consumers’ love of variety which tends to support a wider range of competing firms. Economies of scale leads to larger units, love of variety supports diversity, and the two processes balance each other out. The result is more trade between similar goods (Germany exporting Volkswagens to France and France exporting Renaults to Germany). Greens find this wasteful. Woodin and Lucas (2004) argue that it makes no sense to move similar goods between places. In contrast, trade enthusiasts argue that the resulting consumer choice is to be welcomed, as consumers love variety. The alternative would be a poor quality monoculture of products, such as East German Trabants.

Of course proponents of the current local economic development paradigm accept there is a downside to insertion into the global economy. Cities can suffer as well as gain from competition. My own city, Liverpool, suffered greatly from this in the 1970s and 1980s (Parkinson, 1985). But overall, they argue, Shumpeterian creative destruction boosts efficiency and competition. The gains from the winners will outweigh the short term losses, and there should be ways to help the losers adjust. The WTO argues that the overall benefits of globalisation may mean little to those who lose their jobs, especially those who are poorly trained and the poor. The benefits and costs of globalisation have not been evenly distributed, and there are understandable reasons for opposing it. Economic activity can concentrate in certain locations, and this process can become self-reinforcing leading to agglomeration in some places and deindustrialisation in others. Some places are key parts of networks - even some remote places – while other places are shut out of them. The result is that some places always seem to ‘win’, and others always seem to ‘lose’.

But, for the WTO, if local governments listen to the losers, who may just fear change, they will make the wrong choices. Strong groups can successfully demand the continued protection of their positions, which can be undermined by foreign competition. Local governments need to listen to the losers and put in mitigating measures, but not submit to demands for protection. In the 1930s, when national governments did listen to protectionist voices, the WTO argues, competitive rounds of retaliatory protectionism led to the depression.

Consequently, localisation is seen as at best misguided or backward, at worst it is outlawed by WTO rules. Since the repeal of the Corn Laws in the UK in 1846 it has been axiomatic that free trade is good, and that attempts at protection limit wealth generation and are counter-productive. Thus even at the height of the global financial crisis of September and October 2008, George W. Bush (2008) argued that the unprecedented global action undertaken to restart global financial markets was to ensure that protectionism was avoided:

As our nations carry out this plan we must ensure the actions of one country do not contradict or undermine the actions of another. In our interconnected world no nation will gain by driving down the fortunes of another. We're in this together, we will come through it together. I’m confident that the world's major economies can overcome the challenges we face … There have been moments of crisis in the past when powerful nations turned themselves against each other, started to wall themselves off from the world. This time is different.

Conventional local economic policy consequently follows the logic that we all now ‘know’ that too much regulations stifles economic creativity. The Financial Times’ Martin Wolf (2004) argues that localisation would mean the breaking up of large firms into hundreds of small, local ones, and a customs gate at the entrance to each locality. This, he argues, is impractical and inefficient – and potentially authoritarian. Writing at
the height of free market euphoria, and before the international financial crisis beginning in mid-2007, Wolf asserted that arguments for localisation are a cover for arguments for regulation, made by those who have lost the global economic battle of ideas. Concerns about climate change and peak oil are used to argue for the re-regulation of free markets and the re-introduction of the forms of planning that the collapse of socialism in 1989 should have consigned to the dustbin of history.

Lang and Hines (1993: 4) make the distinction between what they term the ‘old’ and the ‘new’ protectionism. The former is the historical practice of protectionism used by big business and powerful interests to pursue their goals while the latter seeks to protect public interests, against the interests of unrestrained trade:

Both free trade and what we call the old protectionism have been approaches to trade and markets that have benefited the powerful. In contrast, the new protectionism seeks to protect and heal the environment, to reduce economic inequalities and to meet basic social and human needs for all, not just the privileged few or a few countries.

‘Protection’ they argue, is ‘good.’ The police offer protection from crime, the state offers protection from enemies, and houses offer protection from the weather. Lang and Hines want to reclaim the language of protection, asking what should be protected, why, and for what ends. Of course, the global economic crisis has put free market enthusiasts on the back foot. It seems hard to argue for light touch regulation given the evidence of what this lead to in the financial sector. But localists are not even arguing for a planned, regulated economy. They are arguing for the full costs and benefits of producing any given good and transporting it to market to be made transparent, with the result, they argue, that more will be produced locally than at present. They are arguing for a better balance between local benefit and economies of scale, and against arguments that any considerations beyond those of ‘efficiency’ automatically equate to illegitimate protectionism.

Localisation is ‘pulling up the ladder’?

A second critique of localisation is that it would limit growth in the global South and is thus inequitable. Pro-globalisers argue that poor people in the south should be able to trade their way to prosperity. Many local economies are not rich enough to meet their own needs, given poor climate and resources. How do you get goods that will not fit local climatic conditions or are not produced locally? Localisation would cut the poor off from the ability to get what they need from wealthier regions through trade and redistribution. In response, localisers (including Hines in his talk in Sheffield) agree with Chang’s (2003) contention that ‘free’ trade is essentially a sham designed to preserve the economic status quo; that is to keep the South poor and the North rich, and prevent any future rivals to Northern economies from emerging. The Breton Woods institutions structurally prevent Southern countries from charting an independent course by making it inevitable that they will need to structure their economies to attract hard currencies to repay debt, and they can then be destabilised by the periodic crises to which capitalism is prone and which are amplified by open capital markets. Localisers argue that the global division of labour associated with neoliberal globalisation leads to the destruction of (mainly manufacturing) livelihoods in the global North through competition with goods and services produced in places with lower labour or environmental standards in the global South, while in the global South rural livelihoods are destroyed by the dumping of subsidised EU or US agricultural produce (Norberg-Hodge, 2001). Murudian and Martinez-Alier (2001) see
trade as an unequal ecological relationship in which potentially ecologically valuable resources are transferred to the global North at a price that does not reflect their potential, only for the energy embodied in them to be utilised in the North, with the benefits accruing to the North.

Echoing an older critique developed originally by dependency theorists like Raúl Prebisch and André Gunder Frank, contemporary Southern localisers like Walden Bello (2002) or Vandana Shiva (2005), and Northerners like Maria Mies (1999) and Helena Norberg-Hodge (1991) argue that the global North is not committed to real free trade, but keeps the global South in a position of dependency whereby they have to export often niche or low value primary products on unfair terms and where terms of trade can change rapidly to the detriment of Southern producers. It also may involve unsustainable emissions moving goods from South to North.

Of course it is not just neoliberals who argue this: advocates of fair trade argue that the promise of global integration should be made real for the global South by the North opening its markets to South, with goods receiving a fair price and produced under good labour and environmental conditions. The South has a right to development, even in a globally constrained world, and should not be expected to pay the price for problems caused by high mass consumption in the global North (Baer, Atanasiou et al., 2007). From this perspective, the response to climate change and peak oil should not be localisation, but an equitable sharing of the right to emit and to burn oil, such as Aubrey Meyer’s proposals for ‘Contraction and Convergence’, carbon trading, and the Clean Development Mechanism.

In contrast to those committed to ‘fair’ rather than ‘free’ trade, localisers argue that trade from the South to the North, even on better, fairer terms, is not necessarily the optimum solution. They argue that for generations, throughout much of the global South, village-level self sufficiency has generated vibrant and fulfilling livelihoods for millions through unmonetised, often communal economies (Norberg-Hodge, 1991; Bennholdt-Thomsen and Mies, 1999; Shiva, 2005). They claim that localisation in the South would mean greater living standards by meeting basic needs, and that in the longer run it would lead to more diverse livelihood opportunities than economic and ecological monocultures created by focussing on exports. Local economies in the global South might also find that they too are better off if they meet more of their needs locally and build local economies that are more resilient than the monocultures global trade can produce. Yes, it might currently be in Kenya’s interest to supply the global North with cut flowers, and it may be that CO₂ emissions are lower producing them under the Kenyan sun than in a heated greenhouse in the Netherlands. But this also means that Kenya’s environment is destroyed by a flower producing monoculture which depletes water resources, while Kenya also becomes vulnerable to changes in flower-buying preferences in the global North, and how has to import grain to feed itself (again making it vulnerable to changing prices). What if the long term price of oil makes that trade uncompetitive?

Free and Fair trade advocates would see this as a rather romantic vision of an idealised Rousseauvian, uncorrupted and bucolic rural global South that occludes the local tyrannies, grinding poverty and backbreaking work associated with subsistence economies. Some Southern groups do want to engage with globalisation, but on their terms, through fair, not free, trade. Of course market opportunities change from time to time, so competitive advantage is fluid. The solution is not to try and set things in aspic, but build the capabilities of people in the global South to be resilient in the face of change and take advantage of changing, kaleidoscopic comparative advantage whereby opportunities change over time (Bhagwati, 1998).
However, the Northern ‘romantics’ do have supporters as Southern environmental actors have challenged conceptions that wealthy localisers in the global North want to ‘pull the ladder up behind them’ (Chang, 2003), cutting off the global South from opportunities for advancement through fair trade, through their own experiments with localisation. The South boasts rich histories of alternatives to export growth-led development, going back to Gandhi’s objection to the then hegemonic British-championed conception of free trade:

Free trade for a country which has become industrial, whose population can and does live in cities, whose people do not mind preying on other nations and, therefore, sustain the biggest navy to protect their unnatural commerce, may be economically sound (though, as the reader perceives, I question it’s morality). Free trade for India has proved her curse and held her in bondage. (Gandhi, 1936, quoted by Lang and Hines, 1993: 28).

Contemporary Gandhian alternatives championed by intellectuals such as Vandana Shiva, Walden Bello and Martin Khor (Bello, 2002; Feffer, 2002; Shiva, 2005) include the KRRS (Karnataka State Farmer’s Union) which organises small farmers at a village level and Movimento Sem Terra (MST), the movement of the landless in Brazil, which have sought to produce alternatives to neo-liberal forms of agriculture (Branford and Rocha, 2002). Argentina’s alternative currency networks challenged the hold of the global finance system on that country after the crisis of 2001 (North, 2007: 149-173), while its recovered factories continued to produce for local markets once their owners declared them unprofitable (Dinerstein, 2007). In Honduras, COMAL is a network of 46 small co-operative producers and 30,000 consumers providing for basic needs locally, in opposition to the planned FTAA. These alternatives produce forms of strong localisation generated in the global South (see also Bennholdt-Thomsen, Faroclas et al., 2001).

Responding to the critics

Some of the neoliberal and pro-global critiques are stronger than others, and may have more validity as critiques of stronger than weaker versions of localisation: but they are all problematic. First, they conflate ‘growth’ in GDP terms with human progress, which given climate change is inadequate. Climate change activists argue that this sort of ‘growth’ is incompatible with the real ecological limits set by the planet’s ability to absorb carbon, and by ‘peak oil’ (the end of the period where oil was easy to extract and consequently cheap – not the end of the world’s oil supply). Consequently, they argue, we need to move away from a conceptualisation of human progress as material growth, in favour of steady state, post carbon economies.

Second, neoliberal critique of localisation confute it with autarky – we will all end up like North Korea or Myanmar. In contrast, localiser Richard Douthwaite (1996: 8) argues surely there can be a middle way lying between the extremes of almost complete self-sufficiency on one hand and near total-reliance on supplies and welfare payments from the outside world on the other? Few localisers argue for either hairshirts or complete autarky, cutting local economies off from each other and they are generally not, therefore, ‘isolationists’ (contra the assertion of Desai and Said, 2001). The response of the autarkic nationalist Myanmar military government to the devastation of Cyclone Nargis in 2008 must graphically show the limits of autarkic localisation – at the very least some connection is required for aid to flow. When localisation is contrasted with actually existing autarky, its scope becomes clearer.
Thirdly, neoliberal critics overstate benefits of unregulated free trade based on theoretical modelling rather than observable experience. We do not have free markets – the debate is about the type of regulation and openness. Stiglitz and Charlton (2005) argue that trade liberalisation (reducing barriers) should not be confused with openness (having no barriers). It is difficult to see how many countries could develop completely without external trade, but the debate is not a binary choice between unregulated openness and total autarky but about what mix of openness and regulation is best. Generally, strong countries have argued for openness in areas where they are economically strong, but closure in areas where they are weak. The development success of the East Asian ‘tiger economies’ is the result of strong government leadership and intervention, land reform, consistent macroeconomic policy, low inflation, the rule of law and an appropriate exchange rate – not deregulation and openness. Comparative advantage told South Korea to specialise in rice, not computers. Chang (2007) shows how the currently global rich industrialised behind trade barriers, as well as through acquiring resources and destroying potential competition through imperialism. Latin American Import Substitution Industrialisation led to huge development gains in the 1950s and 1960s, while deregulation led to the ‘lost development decade’ of the 1980s. Stiglitz and Charlton (2005) and Wade (2004) show that arguments claiming that free trade automatically leads to development cannot be empirically sustained.

Conclusion

The localisation debate is about what should be produced where, given the need to balance arguments that larger markets do lead to efficiencies, more consumer choice and cheaper goods, and the right of poor countries to trade their way to prosperity (not through openness, but with some protection and with government intervention) with the need to reduce transport costs to limit CO₂ emissions and respond to peak oil. It is a fundamental change from the paradigm that has guided local economic development policy since Gerald Ford’s refusal to bail out New York City in 1975. It has been axiomatic that cities cannot assume that economic welfare will come to them – they need to create it, through engagement with a global economy based on free trade and the global division of labour, and subsidised by cheap fuel and uncounted carbon emissions. That world is passing and a new local economic development paradigm is emerging. But it will not be built on the back of unconvincing populist rhetoric to the convinced. Hopefully this short article has contributed to the development of stronger arguments for more localised economic development policies that will strengthen local production for local needs, cutting out avoidable emissions, using less oil, and not built on lower environmental and labour standards in places far away, out of sight.

Notes

1 ESRC seminar series no RES-451-25-4261 “Challenges to local economic development in an era of climate change and peak oil.” For more details see: [http://www.liv.ac.uk/geography/seminars/ESRC-funded_seminar_series.htm](http://www.liv.ac.uk/geography/seminars/ESRC-funded_seminar_series.htm)

2 See [http://www.gci.org.uk/contconv/cc.html](http://www.gci.org.uk/contconv/cc.html)

3 See [http://www.cafod.org.uk/honduras/looking-for-alternatives](http://www.cafod.org.uk/honduras/looking-for-alternatives)

Correspondence Address: Peter North, Department of Geography, University of Liverpool, Liverpool, L69 3BX. Email: P.J.North@liverpool.ac.uk.
Ecolocalisation as an urban strategy in the context of resource constraint and climate change – a (dangerous) new protectionism?

Bibliography


Ecolocalisation as an urban strategy in the context of resource constraint and climate change – a (dangerous) new protectionism?


