

Localisation as a response to peak oil and climate change – a sympathetic critique

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Introduction

In this paper I engage with economic localisation as a response to two inextricably linked, potentially calamitous problems: 'Peak Oil' and the need to avoid catastrophic climate change over the next century. I argue that the need to respond to peak oil and climate change represents an end to the conditions that underpinned the twenty to thirty year period of what Ohmae (1994) called hyperglobalisation. New communications technologies, cheap oil and externalised emissions, it is argued, lead to a global political economy based on a 'spatial fix' of restoring capitalism's profitability by, where possible, relocating economic activity from high to low cost locations, with labour and environmental regulations seen as compromising 'efficiency' (Harvey 1992).

While the global economy has gone through a process of time-space compression (Harvey 1992), the need to cut emissions and reduce energy use means it now needs to go through a process of time-space re-extension where transport costs again become significant in terms of both finance and emissions. Currently very cheap goods produced through globalised production networks will become, and remain, more expensive. The currently near will become further away, again, in a process of 'reverse globalisation'.

The paper critically engages with arguments generated by ecological, anti-globalisation, and climate change and peak activists for economic localisation as a potentially progressive response to the ecological and resource crises. It builds on conversations with advocates of localisation through alternative currency networks over the past fifteen years (see North 2007), interviews with members of agencies promoting economic localisation and responses to peak oil and climate change, analysis of their publications and web-based material, and discussions and presentations at an ESRC-funded seminar series on local economic development in an era of dangerous climate change and resource constraints .

I argue that, contra Swyngedouw (2007), there is no cosy, post-political consensus about what to do about peak oil and climate change, and that the fractured politics of climate change can be examined through an analysis of progressive and reactionary forms of localisation. Drawing out the differences between conceptualisations of 'strong' and 'weak' forms of localisation, I argue that protagonists of localised economies are developing radical new conceptions of livelihood and economy that directly cut against the logic of growth-based capitalist economic strategies and elite conceptualisations that 'we all know' that trade liberalisation leads to wealth while barriers limit growth. I then engage with critiques of localisation: that it is impractical and inefficient – and potentially authoritarian. Few local economies are free of global links, and are unable to meet their own needs without connection.

The paper concludes that to reduce emissions the global economy needs to go through a process of localisation where many currently globalised links are unbundled; but this does not mean a return to a preglobalised past or to an autarkic society. While it is possible to peak oil leading to a move of economic activities incurring high transport costs closer to their markets, with the

result that the global economy becomes less integrated but more regional ('weak' localisation), it is difficult to see what is progressive about such a new regime of accumulation (welcome associated carbon emissions reduction aside). On the other hand, the extent that the emerging social movement around peak oil and climate change has the capacity to enact its vision of a more localised, steady state and convivial economy ('strong' localisation) is currently doubtful. The need would be to build such a movement out of the existing ecological and anti-globalisation social movements (Neale 2008).

Peak Oil and Climate Change - post-political, 'double whammy' or false apocalypse?

I argue that peak oil and climate change are inextricably linked, as solutions to one of the two problems, taken in isolation, might well exacerbate the other (Hopkins 2008:36-39). For example, a technologically optimistic reading would suggest that price rises associated with peak oil might well make currently uneconomic petrochemical resources like tar sands exploitable, given existing or in-the-pipeline technologies, thus bringing the price down again (Donlan 2008:1-22). Coal or gas can substitute for oil. The need to reduce carbon emissions, however, suggests that we cannot afford to release the carbon that exploiting these new resources would entail.

On the other side, if peak oil theorists are right, and we are to be soon approaching a period where humanity cannot rely on cheap energy, we both have no choice but to move to a more localised economy, and if we don't plan this transition, our ability to avoid calamitous climate change might be fatally compromised. The end of cheap oil could have catastrophic effects on the climate from high emission alternatives like tar sands, more coal burning, and greater use of biofuels leading to food shortages. Economic crisis caused by peak oil might mean that climate change is forgotten in the rush to reignite economic growth (although higher prices might also stimulate fuel economy and efficiency, and renewable energy, while less economic growth means fewer emissions). Key localiser and Transition Towns founder Rob Hopkins argues that facing runaway climate change with a collapsed peak oil economy is something to be avoided (Hopkins 2008:39).

Erik Swyngedouw (2007) has argued that climate change, and, by implication I would add, peak oil, is cast by elites as a 'post-political' problem. 'We' are all in danger of disaster, and 'we' must 'all' do something about it. No one is to blame, no one must be made to suffer or be overthrown, and it is clear what 'we' must do - adopt sustainable development. Who could be opposed to something so simple? Who would claim to be 'unsustainable'? In contrast, I argue that there is no cosy consensus, and that responses to peak oil and climate change are deeply political. Following Heinberg (2004), I argue that there are four potential response scenarios to these problems. First, the solution seemingly adopted by neo-conservatism; geopolitical and military struggle aimed at dominating the world's limited supplies of petrochemicals and to manage future climate-inspired conflict (see also Abbott [2008]; Busby [2008]).

Second is the technocentric cornucopianism of elite free-market enthusiasts, critics of 'limits to growth', and climate change sceptics. They argue that market economies are creative enough to solve problems through solutions of which we cannot as yet even dream, and that technology will overcome the peak oil and climate crises. Future generations will be better placed to pay

the costs and generate solutions far more cheaply (Lomborg 2001; 2007). These are the two elite strategies.

The past two to three years has seen the emergence of at least a putative new social movement, responding to concerns about peak oil and climate change. Carbon Rationing Action Groups, anti airport protesters 'Plane Stupid', protesters against coal extraction 'Leave it in the ground', the summer climate camps, and the transition movement are all working quite locally, at grassroots level, to develop local solutions to peak oil and climate change based on developing much more resource-poor yet enjoyable and fulfilling livelihoods based in more localised economies . They support Heinberg's third scenario.

The double whammy of peak oil and climate change fatally damages the neoliberal project of building a globally integrated free market economy based on producing goods and services wherever they can be produced most 'efficiently', i.e. the most cheaply, and under a political economy of cheap oil and externalised emissions. Peak Oil means the end of cheap oil, while climate change means that currently externalised emissions will need to be counted, fundamentally changing the calculus about where economic activity should be located.

Localisers argue that peak oil and climate change should be seen as an opportunity to build more ecologically sustainable, more local and more convivial economies. Xenophobes provide Heinberg's final scenario: an end of all travel and pulling up the drawbridge to protect the climate change winners and those sitting on energy resources from the losers . Given the reality of fuel poverty and the reliance of many in rural areas on affordable fuels, social movement struggles could emerge arguing for cheap, not less, oil, such as those that emerged in Britain in 2000 (Doherty, Paterson et al. 2002; Robinson 2002; Doherty, Paterson et al. 2003; Robinson 2003).

Of course, we have been here before. Human history has been a catalogue of imagined catastrophe, apocalypse, millennialism and the "end of days." In the past, catastrophe has been real as societies have come up against ecological limits (Diamond 2006; Homer-Dixon 2006), real barbarians, or succumbed to disease (Diamond 1998). But we have also had many false alarms. Malthus erroneously predicted mass starvation in the early 19th century, while neo-Malthusianism predicted disaster in the 1880s (before nitrate fertilisers solved the problem), at the turn of the twentieth century (as guano ran out, before synthetic fertilisers), and again in the 1970s (before the green revolution) (Ehrlich 1971; Meadows 1974). Humanity would be doomed in the 1930s from mass air attack, and in the 1960s-80s from nuclear war and nuclear winter. Environmental disaster would come from the shutdown of the Gulf Stream or from ozone layer depletion. Religious doom was foretold by millennialism, studies of the Book of Revelation or of Nostradamus, or by numerology. Apocalyptic Christian Zionism predicts the immanent rapture, where the saved are whisked off the planet before the end of days. The Y2K 'Millennium Bug' meant the death of technological society. Collapse is regularly foretold, while real problems – such as economic crises – are seldom accurately predicted. Sherden (2000:1) quotes Issac Asmimov: "If I were to guess what people are generally most insecure about, I would say it is the content of future. We worry about it constantly".

Any analysis of peak oil must have this in mind, especially when advocates of peak oil rule out the possibility that there may be new discoveries of oil in currently inaccessible places, and are

over-sceptical about the possibility of technological advancement (see Kunstler [2006:100-146]; Roberts [2004:66-90] and Heinburg [2004:117-138]). In their response to the Club of Rome's original "Limits to Growth" report, the team at Sussex University (Cole, Freeman et al. 1973) argued that a report on the year 2000 written in 1870 would not have seen oil as a resource at all, foreseen mass private transport, aircraft, or considered the possibility of nuclear power, plastics, or synthetics, (or, we might add, technologies emerging after the 1970s like the mobile phones or the internet).

There is a difference between problems that come up against fundamental engineering, geological or physical limits, and problems that we just haven't solved yet. The global oil price rises of mid-2008 were as much result of high demand from the BRICs, speculation, geopolitical insecurity and a lack of refining capacity as – yet – global limits (Pratley 2008). Peak oil advocates, of course, argue that the fundamental problem of lack of new discoveries remains, and that price volatility is to be expected around the peak: "the days of skyrocketing oil prices will be back soon enough. Will we be ready?" asks Heinberg (2008) in his blog. September 2008 saw the highest ever one-day rise in oil prices. We do not know the reality.

If there is no agreement on peak oil, there does, however, appear to be more of a consensus about the dangers of climate change, according to the IPCC (2007). Global long series temperature readings and observable extreme weather events from the mass deaths from heatstroke in Europe in 2005, Hurricane Katrina and South Asian cyclones, European flooding, droughts in Sudan, Southern Africa and Australia, and forest fires in Greece and California all suggest that the planet is warming (Lynas 2007), perhaps dangerously heating (Lovelock 2006).

While the levels of historical and existing emissions mean that global warming of 2o is probably unavoidable, immediate action is required to avoid dangerous, runaway climate change as the 'sleeping giants' of positive feedback mechanisms kick in. Heating much above 2o might well mean the unfreezing of methane hydrates in permafrost and the deep ocean, pumping billions of tons of greenhouse gasses fourteen times as potent as CO₂ into the atmosphere, leading to mass heating, the switch off of the Monsoon, the drying of the African and South American rainforest, and rapid, catastrophic climate change literally within a few years (Pearce 2007).

This paper is written from the perspective of those who argue that while doom has been erroneously forecast in the past, and that the peak oil debate may be latest manifestation of this given that there is so much debate on the real extent of the planet's petroleum reserves, the threat of runaway climate change now seems immediate given the observable consensus on this issue and the marginality and dubious political economic connections of the few sceptics (Dale 2007; Jacques 2008) - and rules out solutions to peak oil given existing technologies. Of course, a technologically optimistic reading would be that the fecundity of capitalism will prevail over ecological crises (Buck 2006), as through ecological modernisation technology will generate solutions to climate change (Nordhaus and Shellenberger 2007; Walker and King 2008).

But again, this is a political position. It cannot be assumed in advance that technological breakthroughs are inevitable – the necessary technologies might not be available in time, or there might be fundamental physical or engineering problems that mean some of them never come to fruition (Tyndall Centre 2008:46). We cannot assume that a free market capitalism that led to two world wars and endless imperialist conflict throughout the twentieth century, or that

can provide endless consumer variety for the globally wealthy but not clean water for the globally poor will prioritise a problem that will manifest itself far beyond this quarter's figures. For technological solutions to be forthcoming, we need an effort like Roosevelt's New Deal or the Manhattan or Apollo projects (Nordhaus and Shellenberger 2007; NEF 2008). Doubts remain about the likelihood that the political will for this is there, or that free market economics is up to the task (Neale 2008).

If the sceptics are right, all those concerned about climate change have done is waste their time and forgo consumption, whereas if the consensus is right and no action is taken or technological fixes do not emerge, the results could be horrific. Taking the precautionary principle therefore seems prudent. And as given existing or in the pipeline technologies localisers cannot see a solution to peak oil that involves the exploitation of new sources of oil that is compatible with the avoidance of dangerous climate change, this paper assumes we do seem face a double whammy rather than another false apocalypse, and that responses to it are political, not consensual. On this basis, I now go on to examine the political implications of one of the possible responses, localisation.

Localisation as a response to globalisation, climate change and peak oil

Responding to peak oil obviously means that we need to organise economic affairs in such a way as to minimise the use of increasingly scarce petrochemicals. Avoiding 'dangerous' climate change requires deep cuts in carbon emissions quickly - of 80% to 95% from today's levels by 2050 (Monbiot 2006; McKibben 2007; NEF 2007). This double necessity, localisers argue, requires the at least a reduction of avoidable emissions, at worst a fundamental restructuring of currently unsustainable capitalist economies (Blühdorn 2007). Transport and trade are targeted for reductions as global transport is responsible for 13.1% of emissions; with industry for 19.4%, agriculture 13.5%, forestry 17.4% and energy supply 25.9% (IPCC 2007:36). Transport is the only area in which emissions are expected to be higher in 2020 than in 1990, the Kyoto baseline (Tyndall Centre 2008:46). Given that total world trade in 2007 was \$27,510 billion (WTO 2007:11), a significant proportion of industry, agriculture and forestry products are traded, and energy is needed for travel, travel and trade must be targets for cuts in avoidable emissions if goods and services can just as easily be consumed much nearer to where they are produced.

The UK Department of Environment, Food and Rural Affairs (Weidmann, Wood et al. 2007) calculated that 21% of UK emissions were embedded in imports to the UK, and that embedded emissions are higher in imports to the UK produced abroad under lower environmental standards than in exports from Britain. Emissions from aircraft are even more damaging: was aviation allowed to grow at its present rate, it would account for between 39% and 79% of the EU's carbon budget by 2050, depending on which stabilisation scenario was chosen (Anderson, Bows et al. 2006:6). For reasons of global justice, emissions embedded in goods produced in the global South and consumed in the North, and the emissions and oil burned in transporting, should be part of the North's carbon allowance. Localists consequently argue against regions and countries exchanging similar goods and services that could just as easily be produced for local consumption, without the associated carbon emissions (Woodin and Lucas 2004:148).

If the need to point out that we have erroneously forecasted catastrophe in the past only for technology to generate solutions, there is a second caveat. Obviously, localisation is not the only

foreseeable solution to peak oil and climate change. Irrespective of the likely development new technologies, solutions to the energy crisis could be found, as the British Government and James Lovelock (2006) argue, in the development of a new generation of nuclear power stations. Environmentalists would object that they will not come on stream quickly enough when compared with local energy micro-generation, there are doubts to their safety, and there is no solution to the problem of spent fuel. Others point to the potential of second generation biofuels that do not impact in the same way on food production as did for the first generation.

It also cannot be assumed that doing things locally inevitably reduces fuel consumption and hence emissions. Of course, a progressive programme to avoid dangerous climate change and respond to peak oil would need to examine how to heat homes and power economic activity, grow food etc. Emissions will not automatically be reduced by producing more locally as it may involve fewer emissions, for example, producing food in the open air in Southern countries than in a heated greenhouse in the North (Walker and King 2007:242-4). Some things can be moved around the world at a slower pace through a new generation of sail ships, or electronically. If localisation is to have any impact on peak oil and climate change, we must go beyond the global 'bad' and the local 'good'. The levels of carbon embedded in which goods and services is affected by where they are produced and how they are transported. This is the key issue.

'Strong' and weak 'localisation'

'Localisation' in this paper really means 'economic localisation', rather than the political project of devolving decision making to local communities. The core of localisation is a claim that economic decisions should focus not on profit maximisation and economic efficiency to the exclusion of all else, but on meeting needs as locally as possible. In contrast with neoliberal globalisers who call for the deregulation of economic decision making, localisers call for the re-regulation and re-embedding of economics into nations, regions or local communities. There are debates between those I call 'weak' and 'strong' localisers.

The former see localisation as little more than a pragmatic and sensible reform that will remove the excesses of globalisation, while now being an obvious response to peak oil and to climate change, and achievable without major transformation in the power relations in a market economy. 'Strong' localisers argue that peak oil and climate change mean that neoliberal global capitalism is doomed, and we have a chance to build a better world out of the crisis. They see localisation as both necessary and desirable: the climate and peak oil crises could lead to a more human-scale, steady-state, convivial, ecological and egalitarian society than highly dynamic but unstable, unequal, consumption-driven and unsustainable capitalism. In this, and contra Swyngedouw (2007), they are making a political and contestable statement about what the good society is.

'Weak' localisation

Shuman (2001:6) argues that localization "does not mean walling off the outside world" in a nationalist autarkic project. Rather, it is an argument against an integrated world economy based on a global division of labour without the regulation of labour and environmental standards. Against unsustainable and unequal neoliberal globalisation, localists argue that decisions about where to locate any given economic activity should not be based on cost alone,

subsidised by cheap fuel and with CO2 emissions externalised. Localists argue for a focus first on producing as much as possible as locally as possible, then within the shortest possible distance, with international trade only as a last resort for goods and services that really cannot be produced more locally (for example, tea or citrus in the UK).

Localisation suggests developing diverse economies in places, localities and regions firstly, then countries, or groups of countries, at the lowest level it makes sense to locate that activity. It is an argument for economic subsidiarity (Scott Cato 2006). Localists do not argue against connections out of the locality per se: rather they argue against a reification of connection as always inevitable and always good. Connections should be consciously entered into, controlled, and ended when they are damaging. Localisation is not autarky or complete national self sufficiency as practiced by Soviet Russia or Nazi Germany in the 1930s, Cuba in the Special Period, or North Korea or Myanmar today. Ed Mayo (in Douthwaite 1996:ix) argues: Some ... imagine the aim of economic localization is complete self-sufficiency at the village level. In fact, localisation does not mean everything being produced locally, nor does it mean an end to trade. It simply means creating a better balance between local, regional, national and international markets. It also means that large corporations should have less control, and communities more over what is produced; and that trading should be fair and to the benefit of both parties. ... Localization is not about isolating communities from other cultures, but about creating a new, sustainable and equitable basis on which they can interact." Woodin and Lucas (2004:69) quote the New Economics Foundation. For NEF, Localisation is: "a relative term. It means different things to different people and depends on context. For example, your local TV station is likely to be further away than your local corner shop. For some of us local refers to our street. For others it means our village, town, city or region. However we think of it, 'local' usually connects to a group of people and the things they depend on - whether shops, health services, schools or parks. Think of local as that surrounding environment and network of facilities that is vital to our quality of life and well-being."

Woodin and Hines (2004:30) argue:

"By 'localization', we mean a set of interrelated and self reinforcing policies that actively discriminate in favour of the local. In practice, what constitutes 'the local' will obviously vary from country to country. Some countries are big enough to think in terms of increased self reliance within their own borders, while smaller countries would look first to a grouping of their neighbours. This approach provides a political and economic framework for people, community groups and businesses to rediversify their own economies ... Localisation involves a better-your neighbour supportive internationalism where the flow of ideas, technologies, information, culture, money and goods has, at its end goal, the protection and rebuilding of national economies worldwide. Its emphasis is not competition for the cheapest, but co-operation for the best."

Thus, for aeroplane production, a regional block of countries might be appropriate. (Hines 2004:38). This is not necessarily a particularly radical project, and weak localisers arguing for more national-level control of the economy can find eminent support for their views which were pretty much taken as axiomatic during the Keynesian period of the global economy, from the political responses to the crisis of the 1930s through to the 1970s (Chang 2007). The previously hegemonic commitment to Free Trade broke during the 1930s.

During the threat of a trade war between Britain and the Irish Free State, JM Keynes (1933) delivered a celebrated speech against free trade, and in favour of national self-sufficiency. He said: "I sympathise with those who would minimize, rather than with those who would maximize economic entanglements among nations. Ideas, knowledge, science, hospitality, travel - these are things that of their nature should be international. But let goods be homespun whenever it is reasonably and conveniently possible, and above all, let finance be predominantly national."

"When the facts change", he famously said, "I change my mind". Keynes began to argue that the age of mass migration of the nineteenth century made the global spread of investments, technologies and innovations both inevitable and necessary. But in the 1930s, he argued, the disadvantages of capital flight outweighed the advantages of global integration given that "modern mass production processes can be performed in most countries and climates with almost equal proficiency", and that as an economy develops, tradable goods become a smaller part of national wealth compared with houses, face-to-face personal services and local amenities which cannot be traded internationally.

"Decadent international but individualistic capitalism" he argued "is not a success. It is not beautiful, it is not just, it is not virtuous, and it doesn't deliver the goods". We should be our own masters, not at the mercy of world forces trying to reach equilibrium. While neoliberal advocates would argue that the break down of the global trade system from the 1930s to the 1970s was an aberration and not to be advocated, Chang (2007:27-30) argues that the global South achieved annual growth rates of 3% in this period, compared with (at best) 1-1.5% under neoliberalization.

Contemporary problems with 'peak oil' and climate change, not to mention the current global economic instability emerging from the US sub-prime housing crisis, all suggest that the facts have changed again. In particular, business has been responding to higher fuel prices through what analysts are beginning to call "Reverse Globalisation". We are beginning to see references to this in the business press:

For example, CIBC World Markets argues:

"Globalization is reversible. Higher energy prices are impacting transport costs at an unprecedented rate. So much so, that the cost of moving goods, not the cost of tariffs, is the largest barrier to global trade today. In fact, in tariff-equivalent terms, the explosion in global transport costs has effectively offset all the trade liberalization efforts of the last three decades. Not only does this suggest a major slowdown in the growth of world trade, but also a fundamental realignment in trade patterns." (Rubin and Tal 2008)

ABC News reports:

"As the cost of shipping continues to soar along with fuel prices, homegrown manufacturing jobs are making a comeback after decades of decline. The cost of oil and shipping leads some companies to bring jobs back home. While it once cost \$3,000 to ship a container from a city like Shanghai to New York, it now costs \$8,000, prompting some businesses to look closer to home

for manufacturing needs. ... Furniture designer Carol Gregg used to have her signature Chinese chests assembled in China, but such a luxury no longer seems viable, considering that some of her pieces now cost five times more to ship. So now Gregg is having the chests made in North Carolina, simply because its cheaper." (Alfonsi 2008)

Time World Business Briefing argues:

"With brutal efficiency, the oil price is beginning to duff up a monster of the 20th century: globalisation. ... The extraordinary rise in the price of crude oil is wrecking outsourced business models everywhere and distance from your customer is no longer merely a matter of dull logistics. Whether you are selling coiled steel or cut flowers, the cost of transport is a problem." (Mortishead 2008)

These at present straws in the global wind suggest that the geography of a global production might change as one integrated global economy fractures into three global regions. The balancing of low cost production with transport costs may mean that China and India begin to produce more for their huge home markets, while production for the American market moves to Mexico, and to East-Central Europe for the EU.

Ray Hudson quickly dismisses localisation as 'unfeasible' without demonstrating why and (as we discuss in more detail later) conflating localisation with closed, reactionary autarky, but he also argues that climate change and peak oil might lead to new opportunities for more integrated forms of regional development through the production of regions as sustainable integrated economic spaces minimizing wastes and transport costs, developing interdependent networks of enterprises that collaborate, exchange resources, recycle, and use each others waste as inputs. Through collaboration based on proximity, regions may become important spaces of innovation (Hudson 2007:3).

Localisation here is a business decision, driven by cost, not politics or the need to reduce emissions. A hard reading would be that there is nothing radical or progressive about this. The economics of global production may be changing, with localisation as much a process as is globalisation. It will not be an overnight process, as we know that hyperglobalisation boosters have consistently underestimated the 'stickiness' of economic transformation (Cox 1997). Sunk costs in plant and human capital, supply and distribution networks were not lightly written off as firms moved from global North to South, and will not be lightly written off again in a reverse move from South to North.

Some forms of global trade will remain for activities from which transport costs are low or communication costs close to zero, or those that result globally in few emissions (for example, services traded over the web, light goods that can be transported more slowly by sea). They will no doubt remain where the benefits of international communication and trade are worth the emissions, once avoidable emissions have been eliminated and transport technologies improve their efficiency - back to Keynes' call for global trade in ideas and homespun manufactures. How the geography of global production changes as a result of peak oil and climate change is obviously a key element of any future research agenda that seeks to integrate environmental and resource constraints with economic geography (Bridge 2008)

Weaker forms of localisation then represent no localised utopia that breaks the limits of what neoliberalization can work within: its logic is neoliberal but with a different calculation of costs and benefits, and with a different degree of openness, leading to a different geography of production. In their article "Stabilisation Wedges", Pacala and Socolow (2004) argue that we can effectively solve problems associated with climate change by seeing each sector of emissions as a 'wedge' which can be addressed by existing technologies. Small cuts in many wedges make up big cuts overall.

Avoidable international trade that does not include other desirables, like human social intercourse or knowledge transfer, should be seen as one of the stabilisation wedges that we need to decarbonise through localisation. This is not a completely open system, just a bit more closed than today – perhaps more like the middle of the last century. It is, perhaps, barring a breakdown of society into warring localised tribes after a crisis caused by rapid climate change or resource crisis, as described in Cormac McCarthy's dystopian novel 'The Road' (McCarthy 2007), the more reactionary form of localisation. Business as usual, same exploitation, but carbon-free and with shorter distribution networks.

On the other hand, it can be argued that more radical forms of localisation are unlikely to generate the economies of scale necessary for global action of climate change argued by those who support a New Deal or Apollo Project effort on the part of humanity. While Keynes did support a move towards more self sufficiency as a response to the financial crisis of the 1930s, he qualified his support thus: "those who seek to disembarrass a country of its entanglements should be very slow and wary. It should not be a matter of tearing up roots, but training a plant to grow in a different direction" (Keynes 1933). Keynes argued that self sufficiency, the localisation of his day, should not be adopted in doctrinaire, hasty or intolerant ways.

He would argue that we should be similarly wary of tearing up links that might produce the solutions to our problems that we need. On the other hand, if the danger of climate change is immediate and potentially catastrophic, and peak oil real, strong localists would be loath to wait for a political commitment that seems unlikely to materialise. More radical change, they would argue, is necessary (given climate change) and inevitable (given peak oil). As the two or three crises hit, strong localisers argue, weaker forms of localisation will increasingly be seen as inadequate, and the process will deepen as global trade begins to shut down.

'Strong' localisation.

Historically, we can identify a long tradition of localisation and decentralisation in progressive thought, going back at least to the different utopias developed by William Morris and Edward Bellamy. Against the centralising Soviet model of socialism, Guild Socialists and Distributists looked to build local and small scale societies through the 1930s (North 2007:62-3) while the North American homesteading movement of the 1940s and 50s suggested return to the land and to local food production (Loomis 2005). In the 1960s communes grew up across North America and Europe and young people experimented, with varying degrees of success, with alternatives to the 'big system' of industrial capitalism (Melville 1972; Houriet 1973).

In the 1970s and 1980s radical local authorities examined community-based ownership of closing enterprises as what became known as 'restructuring for labour' (Boddy and Fudge 1984;

Clavel 1986; Mackintosh and Wainwright 1987). A locally-owned social economy was also seen as a response to the job losses associated with the recessions of the 1990s, and later, to the loss of manufacturing jobs to the global South more generally (Imbroscio 1997; Amin, Cameron et al. 2002; DeFilippis 2004; Defilippis, Fisher et al. 2006). It has formed a minority strand within the wider antiglobalisation movement, by no means accepted by all (Ashman 2004).

Contemporary localisation is advocated by Green Parties (Woodin and Lucas 2004; Wall 2005; Scott Cato 2006), by advocates of small-is-beautiful alternative production (Norberg-Hodge 1991; McKibben 2007), by participants in local currency networks (North 2007), by opponents of supermarkets and other 'big-box' large retailers (Mitchell 2006; Simms 2007), and by members of localist think tanks such as the New Economics Foundation, the EF Schumacher Society, the Institute for Local Self Reliance, or the International Forum on Globalization (Lang and Hines 1993; Hines 2000; Shuman 2001; Cavanagh and Mander 2004). It is now proposed as a solution to Peak Oil and climate change (Heinberg 2004; McKibben 2007; Hopkins 2008).

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 you should be protected, why, and for what ends. There are two sets of reasons why localisation is advocated as part of a progressive project - to protect the local from what are seen as problematic global forces, and to reduce carbon emissions.

Cavanagh and Mander (2005) argue that localisation is inherently a subversive project in relation to neoliberal globalisation. They argue that it necessarily entails fewer opportunities for the involvement for multinationals to generate super profits for elites. Localisation would be a simpler economic system, with fewer opportunities for 'middle men' to add value or pass goods or services or money on, taking their cut en route. Before the recent revival of neoliberal globalisation, they argue, much of the planet's economic activity was off limits to globalisation, with peasant subsistence in the South and many basic services nationalised or under local government control in the North - e.g. municipal electric, gas, water (2005:105). Much of social and economic life, they argue, should be off limits to globalisation. The radical project, they argue, is the defence of the global commons, un-monetised and collectively used for use, not exchange value, from commodification.

Localists object to the loss of local control associated with neoliberal globalisation. They object to decisions about a local economy being made by elites far away with no commitment to or even knowledge of the places they affect through their decisions, often to its detriment. Economic assets should be therefore be locally or communally-owned and controlled (DeFilippis 2004). In practice, localisation means developing community-owned local economic

institutions like worker-owned and run co-operatives, communal gardens and restaurants, local power generation, local money, and communal forms of land ownership. Major parts of the economy and ecosystems should be held in common, off limits to monetisation, privatisation and commodification (Wall 2005). This community, or solidarity, economy is counterpoised to the privately-owned and run capitalist economy.

Normatively, localisers argue that local diversity and local distinctiveness are good in and of themselves. Globalisation, they argue, is the 'McDonaldization' of society and economy, (Ritzer 2004) the domination of the global brand (Klein 2000). Drawing on conceptions of what is thought to be good about the natural world, localisers argue for societies and economies that are diverse, interdependent and resilient. A variety of local economies mirrors nature's diversity, facilitating experimentation and the development of more effective practices and models.

Localised economies connected to each other combine diversity with interdependence without uniformity. They claim that diverse localised economies across space are more resilient in the face of external shocks. Economies reliant on economic monocultures are vulnerable to price fluctuations and changes in demand for the single product created by the monoculture, whereas in diverse and connected localised economies, if demand for the product created by one part of the economy breaks down, there are plenty of alternatives to take its place.

For strong localisers, the process of time-space re-extension will go very deep as the price of global connections makes international trade unsustainable. Ted Trainer (1995), radical localist and champion of a post-materialist, small-scale technological society, consequently argues for a society constructed from many highly self-sufficient small settlements and localised economies, inhabited by people living lifestyles characterised by significantly reduced personal consumption, compared with those currently practiced widely in the global North and by elites in the global South (Trainer 1995:56-111).

The price of fuel and need to reduce emissions would mean that people would have to decide to travel less. Cities would be 'villagised' so people could meet more of their needs from their neighbourhood without commuting or trucking goods and services around urban areas, while avoidable long distance travel would be cut down drastically. Power would be generated locally, from renewable means. The vast majority of goods and services needed would be produced locally in decentralised small workshops and through community businesses that people could walk or cycle to.

Small businesses would multiply, becoming the norm, and staying small. Crumbling transport infrastructures would be given over to community-owned farms growing food, grazing livestock, or for fish farms as unused motorways and airports are reclaimed for cultivation. There will still be some importing and exporting of goods that could not be produced locally, but it would be insignificant. What he calls "the simpler way", he argues, is unavoidable if we are to avoid dangerous climate change .

Trainer's rather hairshirt vision is at the extreme end of the strong localising perspective, although a delegate at one of the seminars on which this paper is based, where Trainer's ideas were presented, described them as "probably the strongest statement about the sort of society I want to see that I have ever heard". It runs as a thread through Rob Hopkin's (2008) "Transition

Handbook", which has inspired the Transition Towns movement. It is a fundamentally more radical, utopian vision of a society which has transitioned to a post-carbon economy based on inclusion, local distinctiveness, equality and freedom. As such, it is deeply political, and has drawn its critics. It is to critics of localisation that analysis now turns.

Neoliberal Critiques of localisation.

Of course there are a number of objections to localisation, especially strong localisation, as a 'serious' response to peak oil and climate change. First, seemingly, it flies in the face of two centuries of what we think we know about how free trade leads to development.

Neoliberalisers conflate localisation with protectionism, arguing that it would mean forgoing many development benefits that global integration can bring (Wolf 2004:194-9). From the position of classical free market political economy, they argue that trade enhances wealth, while barriers limit growth and distort the economy by diverting resources into inefficient protected areas, where they may be better utilised in more efficient areas where the country has comparative advantage (Stiglitz and Charlton 2005:6).

In response to the success of the anti-globalisation movement, the World Trade Organisation argued that it is timely to revisit the arguments for and research that shows the benefits of global integration (WTO 2008). It argued free trade creates wealth for all in the long run, if everyone trades what they have a comparative advantage in. Restricted trade is better than autarky. 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. Consumers love variety, so benefit from this.

In the long run workers benefit from increased development leading to higher labour and environmental standards and higher wages. The WTO argues that 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 similar countries trading similar goods and services. Through trade starting with comparative advantage, different national economies tend to become more uniform as the economies of scale that tend to support agglomeration is balanced by consumer's love of variety which tends to support a wider variety of competing firms. The result is more trade between similar goods.

The WTO agrees that there is a downside, but argues that overall Shumpertarian 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 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, the WTO acknowledges, and there are understandable reasons for opposing it. Industries concentrate in certain locations, which 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. But, for the WTO, if governments listen to the losers, who may just fear change, they will make the wrong choices. Strong groups such as powerful trade unions, military-dominated or civilian conglomerates can successfully demand the continued protection of their positions, which can be undermined by foreign competition. Governments need to listen to the losers and put in mitigating measures, but not submit to demands for protection. In the 1930s, when governments did listen to protectionist voices, competitive rounds of retaliatory protectionism led to the depression.

Consequently, at best 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. This has been a regular reaction of local economic development practitioners when they meet arguments for localisation. Reverse globalisation in the face of high fuel prices should not be celebrated, and the best way deal with climate change is to create wealth. Although he does not say if he welcomes or deplors it, Curtis (2008) argues that global warming and peak oil will undermine the logic of the current economic division of labour, and this will result in raised prices and lower consumers income, make food less plentiful, and perhaps turn growth negative.

Secondly, 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. It is an attack on freedom, by the enemies of liberty. O'Neil goes further;

"The environmentalist ethos is hostile to free movement, too. Behind the greens' attacks on road-building and cheap flights there lurks an agenda of enforced localism. What most of us experience as a liberty - the ability to drive great distances or to travel overseas, something our forebears only dreamt of as they spent their entire lives in the same town - has been relabeled under the tyranny of environmentalism as a "threat to the planet" (O'Neill 2008).

Writing at the height of free market euphoria, and before the international financial crisis beginning in mid-2007, Wolf (2004) argued 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.

Thirdly, neoliberals argue that localisation would limit growth in the global South and is thus inequitable. Poor people in the south should be able to trade their way to prosperity, they argue. 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 agree with Chang's (2003) contention that 'free' trade is essentially a sham designed to preserve the economic status quo, ie 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 crisis 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 relationship in which potentially ecologically valuable resources are transferred to the global north at a price which 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 Martin Khor or Vandana Shiva, and northerners like Maria Mies and Helena Norberg-Hodge 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 Mayer'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. What if the price of oil stays high, and transport costs make 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 (see the discussion of the attitude of the San to intellectual property rights associated with their traditional medicines chronicled by Vermeylen [2008]). 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, Faraclas et al. 2001).

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 is deeply problematic. It may be that this sort of 'growth' is incompatible with the real ecological limits set by the planet's ability to absorb carbon. Second, they all conflate localisation with autarky.

Even social ecologist Murray Bookchin (1995:250-1) argues: “self-sustaining communities cannot produce all the things (people) need – unless they return to a backbreaking way of village life which historically always prematurely aged its men and women with hard work and allowed them very little time for political life beyond the confines of the community itself.”

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.

Secondly, 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 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 that free trade leads to development cannot be empirically sustained.

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. If it is possible to see weak localisation as an economic adjustment as a result of high transport costs, would localisation be a progressive response to peak oil and climate change? It is now to left critiques of localisation that analysis turns.

Progressive critiques of localisation

Left critiques of localisation focus on four major issues. First, they argue that localists conflate the ‘local’ with progress and sustainability. For Andre Gorz:

“...[C]ommunal autarky always has an impoverishing effect: the more self sufficient and numerically limited a community is, the smaller the range of activities and choices it can offer to its members. If it has no opening to an area of exogenous activity, knowledge and production, the community becomes a prison ... only constantly renewed possibilities for discovery, insight, experimentation and communication can prevent communal life from becoming impoverished and eventually suffocating.” (Gorz quoted by Frankel [1987: 59])

Radical social ecologist Murray Bookchin agrees: “No community can hope to achieve economic autarky, nor should it try to do so. ... Divested of the cultural cross fertilization that is often a product of economic intercourse, the municipality tends to shrink into itself and disappear into its own civic privatism ... Small is not necessarily beautiful” (Bookchin 1995:237). Localities, like all spaces, are differentiated by class, gender and a range of other local oppressions, and the left has generally preferred international links with other subalterns to alliances with local elites. But on the other hand, recognising that localisation should not be confused with autarky, Bookchin also argues:

“We cannot ignore the fact that relatively self-sustaining communities in which crafts, agriculture, and industries serve definable networks of confederally organised communities enrich the opportunities and stimuli to which individuals are exposed and make for more rounded personalities with a rich sense of selfhood and competence (than those produced in globalised sweatshops, for example.)” (Bookchin 1995:248, my emphasis)

Cavanagh and Manders (2005:160-163) agree the local can be small scale and oppressive, but argue this cannot be assumed: it need not be. As we show above, localisation must be contrasted with autarky. Even radical localiser Trainer still argues for an international exchange of ideas and culture, particularly through information technologies. Opportunities for cyber and teleworking would remain, and for transfer of information and technologies by the internet. Once global carbon emissions have been brought down as much as possible by localisation and other ‘powerdown’ processes (Heinberg 2004), then possibilities for international connection might still be great.

Secondly, ecosocialists like Kovel (2007) and Wall (2005) have little time for what they call a naïve neo-Smithian valorisation of small, local economies, arguing that capitalism and markets are intertwined and that markets have an inbuilt tendency towards growth and monopoly – the classic Marxist position. Frankel (1987) argues that firms within markets have an innate tendency to growth or they lose their competitive edge. A Smithian localised economy would soon grow into a conventional capitalist market as the utopian economic practices of which it is composed would not be able to compete with globalised capitalism. Firms would either grow out of the locality or die as capitalism requires businesses to compete with each other.

Unless all capitalists agreed not to grow their businesses, steady-state capitalism is an oxymoron. Cavanagh and Manders (2005) agree that local businesses can be exploitative, but, as with locality, this cannot be assumed. The work of JK Gibson-Graham (Gibson-Graham 2006a;b) is useful here: it objects that arguing that productive or economic units are inevitably capitalist or growth-orientated ‘businesses’ is like assuming all women are maternal or child orientated. Some ‘businesses’ do focus on growth, but there is a much greater diversity in economic forms.

We can do more to explore the contribution of worker-owned enterprises and co-operatives, working in solidarity economies rather than capitalist economies, (eg see de Sousa Santos [2006]) to post carbon politics.

A third problem for the left is to identify who the localising agent is. Defilippis (2004:33) argues that "since localities are not agents, however, they cannot own anything. Instead, forms of local ownership are created by collective ownership or ownership by institutions that are place bound or place dependent." For Defilippis, localisation should be better thought of as community control, or at least community control of economic resources like credit unions, communal forms of housing and local money networks. Through localisation, local collective control would be put on local investment and disinvestment, and therefore facilitate control of the production of the locality in ways that local residents, rather than actors far away want. This production, he argues, can be counter hegemonic, (2004:35).

However, Defillipis (2004:148) also understands that many of the community-based organisations localisers put faith in often do not have an oppositional politics themselves. They see themselves as promoting social inclusion, or as practical, non-political alternatives. They are often dependent on grants and loans, and disconnected from a wider social change movement. Localisers may claim them, but they do not necessarily see themselves as part of an oppositional network. They may even aggressively defend their claims to be common-sense, non-political organisations to win grants and respectability in the eyes of elites.

The question then arises as to who exactly will build a localised, convivial economy that goes beyond the new neoliberal regionalism described above, if much of productive wealth is held by private sector elites. Harman (2007), for example, argues that George Monbiot's "generally excellent book Heat (2006) ... does not show is how to create the agency, the active mass force, that can compel the governments of the world's most polluting states to implement such measures. He puts forward a generally excellent political programme for a political force that does not exist." The question of agency is a key one for a radical politics of peak oil and climate change.

A Marxist conceptualisation of social change sees a total revolutionising of society through struggle, whereas localisers seem to see change as coming through moral exhortations for consumers to change their consumption patterns and buy more locally produced goods, through direct action to wake the masses out of their complacency, or through convincing government of the strength of their case. The most interesting politics comes from the Transition Towns movement, which specifically looks to build local movements arguing for and prefiguring post-carbon economies (Hopkins 2008). To some extent, this is an inspiring, grassroots insurgency, but with an extremely optimistic conceptualisation of the possibility of transforming the currently unsustainable economic practices associated with contemporary global capitalism through local, citizen-based action (Trapese 2008). Here the issue is less the lack of an agent than the ability of subaltern groups to move beyond the politics of prefiguration and to challenge local and global systems of domination.

The fourth critique from geographers on the left is that localisation is a worthy but ultimately limited 'militant particularism' of local utility, unable to make a contribution to wider, 'universal' questions of emancipation (Harvey 2001:158-187). It is not good enough to say

simply that the global ('them', people we don't know, far away) is 'bad', while the local ('us', people we know, nearby) is 'good'. The emancipatory project, it is argued, is built on connection with others, localisation on building in more disconnection. Harman (2007), for example, points to the connection between Mexico's Tortilla March and Northern consumption: "Filling SUV fuel tanks in California was causing hunger in Mexico".

Massey (1994) famously argued for a 'global sense of the local', that local places are built on global connections and that nowhere can be cut off from global flows except through xenophobic political practices. Localisation, it is claimed, suggests that local elites are given preference over subalterns elsewhere. It could therefore be seen as a dangerous practice, against left conceptions built on the unity of the vast majority against a small oppressing, perhaps local, minority.

Elsewhere, David Featherstone and I (2009, forthcoming) argue that these objections are problematic as they conceptualise 'local' and 'global' political strategies as separate, even defined against each other. Localisation would inevitably lead to xenophobia, while internationalism inevitably leads to connection and solidarity. We argue for more relational accounts of the local which understand that the 'local' and the 'global' are co-constituted in global places (Swyngedouw 1997). Arguing for local food production in Mexico understands that pressures against it are created globally, but that is not the same as arguing that because food chains are often global, it is either foolish, reactionary or misplaced to support rioting subaltern groups in Mexico in their call for more local control of the means of life itself - food.

Attempts to argue for either exclusively local or global strategies, in opposition to each other, are false and destructive of political possibilities (Massey 2005; Featherstone 2008). While localisation must not therefore be seen as an impossibly autarkic strategy, there is also no future for carbon-fuelled internationalisms dependent on technologies that produce emissions that exceed the capacity of the ecosystem to absorb them.

Again, the politics of peak oil and climate change are contested, this time from the left. Localisation, not counterpoised to internationalism, can be seen as a way of building forms of social organisation where people are more connected with each other and with the natural world, where livelihoods are built on conviviality, resilience and vibrancy rather than on material goods and 'growth' for its own sake. This is a radical, not a post-political vision, that cuts to the heart of the neoliberal project.

Conclusion

In this paper I critique Swyngedouw's conceptualisation of the politics of sustainability as 'post-political', arguing that climate change and peak oil are contested, and that we may well see a move away from an integrated global economy either to a new regionalism or to a new convivial economy. The question is, who is the agent? Localisation is not autarky - it is a different calculus about where economic activity should be located. There are strong and weak versions, with the weaker ones just really meaning that business will carry on as usual, but with shorter distribution networks, and a globally integrated economy will become more regionalised into the three blocks (the Americas, the EU, east Asia) that some globalisation

sceptics have long argued is a better conceptualisation of the current global economy than that of hyperglobalisers (Hirst and Thompson 1996).

If we take a view that localisation does not specify any particular scale, just that goods should be produced as locally as makes sense, and these goods can include say aircraft; that there will not be a toll booth outside every city; and that peak oil will guide business to do the right thing for climate change as fuel prices stay high, then we can see a less globalised capitalism as a new regime of accumulation, with technology able to provide solutions to both problems. Deeper localisation, as suggested by Trainer and the Transition movement, seems a far more fundamental critique of neoliberal globalisation. The questions here are whether climate change and peak oil activists are able to construct a social movement able to put localisation into practice, and, if this represents a fundamental attack on neoliberal capitalism, how capitalism's supporters will respond. We have already seen a police attack on the climate camp at Kingsnorth in August 2008: were the localisation movement to become more obviously anticapitalist then things could get interesting.

The Transition movement argues that its professed non-political stance, that has seen its arguments appearing on mainstream radio soap operas, in MP's summer reading lists, and by conservation organisations mean it can work 'under the radar'. It may be that the full implications of the climate and resource crises for neoliberal capitalism have yet to be fully perceived by elites. Time will tell, and the climate change movement will have to work out how to work within a changing political environment, building alliances and withstanding or avoiding attacks where necessary.

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