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The rocky road of post-capitalist grassroots experimentation.

Abstract

This paper explores more radical notions of social and ecological transitions beyond life as currently conceived under capitalism. It forms an inquiry into the everyday practices of what is called post-capitalist grassroots experimentation. It explores what these practices mean through an empirical case study of a community-led housing project in the North of England. Drawing on six themes which were derived from in-depth interviews with residents, this paper explores how everyday practices in this project give shape to post-capitalist grassroots experimentation: taking risks, transformational change, a fine grained approach to place making, deepening deliberative democracy, embedding security in insecure times, and learning. By drawing on the concept of the urban commons, the paper concludes by sketching out some future issues along the rocky road to post-capitalism. First, exploring these practices as part of a minoritarian politics focused on qualitative development rather than mere quantitative growth offers different perspectives on scaling up. This kind of prototype niche experiment is more interested in breakout from, rather than breakthrough to, the dominant regime. Second, these practices represent hybrid bottom-up and middle-out forms of experimentation, which can help form novel meso-level institutions to deepen a post-capitalist urban commons. Finally, this kind of grassroots experimentation acts as a reminder of the need for deeper critiques of global capitalist urbanization, and that the broader struggle remains resisting the further embedding of capital accumulation and commodification rather than mere environmental or climate change issues. Drawing on Holloway’s (2010) concept of cracks, we can see that the daily practices of niche experiments represent a complex spatial politics of being simultaneously in, against and beyond life under capitalism.

Introduction

Debates on the nature and form of socio—technical and ecological transitions have flourished in activist and academic circles (Trapese Collective 2009; Shove and Walker, 2007; Mason and Whitehead, 2012;
Hawkins et al, 2008; Smith and Stirling, 2010). Different visions of the future as well as roadmaps to get there are pitched, often against each other, ranging from the prospect of future conflict and collapse, liberatory, and some would argue utopian, transformation, business as usual as well as technological and technocratic-led modernisation and renewal (see for example, Holmgren, 2009). Contained within these debates are assumptions and struggles over very different forms of social relations, institutions, values and forms of governance. This paper is situated squarely in these debates, and in an attempt to offer further empirical depth, draws upon the daily experiences, motives and values of residents in a community-led, co-operative cohousing project in the North of England. The project is a cohousing community of 20 straw-bale homes with a common house which is home to 35 adults and 10 children. It is a co-operative society that uses a novel mutual home ownership model to deliver permanently affordable intermediate housing. The particular empirical context for this paper, then, is the long tradition of self-managed and community housing encompassing ecovillages, low impact dwellings, intentional communities as well as cohousing (see Bunker et al, 2011; Durrett and McCamant, 2011; Field 2011; Jarvis, 2011; Peters et al., 2010; Pickerill and Maxey, 2009; Sargisson, 2007; Scotthanson and Scotthanson, 2005; Williams, 2005). All of these have long and diverse traditions and contain more or less radical elements. For example, Sanguinetti (2014) stresses cohousing contexts can be deeply transformatory, as the kinds of inter-personal connections they are based on promotes pro-social and pro-environmental behaviour. However, at the same time, some recent tendencies towards eco-focused community projects reinforce elements of the contemporary market-based neoliberal paradigm through gated and segregated residential ‘lifeboat’ communities (Hodson and Marvin, 2009).

This is a paper about much more than daily community practices in this project. It’s about a deeper philosophical and practical enquiry about the prospect of life after capitalism – or what has been referred to as post-capitalism (Gibson-Graham, 2005). The aim here is to open up new areas of conceptual and practical enquiry based on a rather different political and intellectual project. One of the motivations of
this paper is a sensitive critique towards the explanatory power and intent of these various fields to really capture the practices and motives of grassroots experiments that are committed to life after capitalism.

There is a growing interest in exploring the meanings and practicalities of transition debates through more radical political motifs such as social justice, a broader ethics of care, networked politics and critique of parochial forms of localism (Mason and Whitehead, 2012; North, 2011; Aiken 2012; Bailey et al., 2009). Moreover, it is now recognised that provocative and disruptive interventions are usefully needed and can lead to some dramatic transformations within the urban system (Radywyl and Biggs, 2013). My aim here, then, is to bring these diverse sets of literatures into further conversation to extend nuances and insights into the daily practices of those attempting to implement socio-ecological–technical transitions beyond life under capitalism.

This paper is structured in three main sections. In the first section, detail is given on the meanings of the terms used, specifically post-capitalism, grassroots and experimentation. By doing this, the innovation in bringing these terms together is stressed and how they add to and extend existing debates which cover this terrain. The second section presents some empirical material drawn from interviews with residents of a cohousing cooperative project. Drawn from interview analysis, five different aspects are highlighted which together outline how the everyday practices of post-capitalist grassroots experimentation unfold: taking risks, transformational change, a fine grained approach to place making, deepening deliberative democracy, embedding security in insecure times, and learning. The final section provides conceptual reflections on the meaning and significance of this daily practice. In particular, it is highlighted that this kind of post-capitalist grassroots experimentation helps us to give further texture to what an urban commons means in practice – those already existing disruptive and subaltern practices that are simultaneously in, against and beyond life under capitalism (Holloway, 2013; Wright, 2013).

Post-capitalist grassroots experimentation
This paper is grounded in the idea of post-capitalist grassroots civic experimentation. First, it is worth stressing that we are dealing with a term that encompasses those who envision more clear ruptures against capitalism, and those exploring a myriad of possibilities of what might come after, as well as building competences and skills in the here and now to facilitate transitions. Specifically, what is explored are the meanings and significance of those transformations that are anti-paradigmatic and in myriad ways pitch themselves beyond the status quo. Second, there is a focus on the idea of the grassroots. What is meant by this term are projects that are self-initiated and self-motivated and removed from the direct influence and values of centralized governments, large institutions or business. Many grassroots groups might be more agitational towards the central state and market capitalism, acting more like social movements seeking paradigmatic change to overturn the status quo and usher in a radically different social deal. The third term is experimentation. This term traditionally refers to the more commonly understood act of experimenting which is undertaken to verify or falsify a hypothesis or to explore causal relationships between phenomena in controlled environments. However, the largely socially constructed nature of laboratory conditions is now well established. Experiments are in fact highly contingent, open and negotiated spaces, far from immune to external pressures and indelibly mixed up with the outside world (Evans and Karvonen, 2013). Urban community settings present particular challenges for experimentation. What we are dealing with in terms of transformatory grassroots projects is something more akin to open field experiments.

The paper focuses on activities which address or indeed attempt to solve perceived societal crises but in a way that foregrounds equality, openness and social justice rather than the needs of the (neoliberal) market. Therefore, the idea of experimentation is used to valorize practices and processes at the grassroots that are counter-hegemonic and embedded in a commitment to envision and develop a post-capitalist politics. What is returned to below is the ways in which post-capitalist grassroots
experimentation is strung between being simultaneously in, against and beyond the present capitalist moment.

**Exploring the contours of post-capitalist grassroots experimentation**

This paper is based on in-depth research with members of a cohousing project in the UK throughout the early period of moving and settling in during 2013. The aim of this work was to get a sense of how residents’ lives were changing as a result of moving, and to explore the broader meanings of this novel and disruptive approach to community life. With the help of two students at the time, members of the project designed and implemented in-depth qualitative interviews with eight households using a standard set of questions which focused on motives for joining the project, aspirations for living there, the relative importance of key aspects, and wider concerns. What the paper does in this section is to build an understanding of the motives and intent underpinning everyday practice in the project by drawing on the resident interviews. The paper draws on a number of sub themes from interviews, which taken together help to flesh out post-capitalist grassroots experimentation in practice.

**Taking risks**

The first theme that emerged was the sheer riskiness of participation in the project. This is a significant starting point given that we are dealing with housing, an aspect of daily life that people usually regard as central to their sense of stability and identity. To experiment with one’s own housing situation in a context of uncertainty requires courage and clarity. The following quote expressed this:

> actually it’s going to be a huge leap of faith... a weird leap into the unknown. It’s going to be a real shift. And I haven’t really got a yardstick about what my life’s going to be like in six months time.

What the above stresses is the assumption that initial risk is worthwhile as it is likely to give way to increased stability. There seems to be a recognition that this early and risky experimentation will pay
dividends given future potential societal challenges. Coupled with this is a clear statement that risk can be overcome through determination. As one resident stated: ‘I think, with dogged determination, it’s possible to do anything.’ In a context of increased perceived uncertainty, this level of determination legitimises or normalises experimentation, which can then challenge or disrupt what people perceive to be the current status quo. This kind of risk-taking can help to normalise what is previously considered to be deviant, or foolhardy, action.

**Transformational change**

The second theme that emerged from the resident interviews is that living in the project offers the opportunity for changing the world in broader ways beyond one’s individual life(style), and beyond mere environmental change. Overall, there was a sense that members were keen to commit to a ‘step change’ in terms of their environmental impact, and also in terms of the kinds of relations they have with other people and the wider community. This would entail more structural rather than incremental changes in group and individual behaviour. One resident expressed that this kind of bigger change could be a catalyst for further change:

> I’m sort of hoping XXX will allow me to make a step change. I’m definitely making moves in the right direction but I’m hoping that living there will enable some of the other stuff to happen.

One resident expressed explicitly how a low impact co-operative cohousing project encourages a group or community level response to the various social, ecological and economic challenges, and therefore contains a critique of the individualisation of responses: *our input is acting together and supporting each other and creating a model that can spread.*

There was also a sense from some residents of an enthusiasm to embark upon broader changes in their lives, but the way their lives were hitherto structured prohibited this. As one resident commented,
moving to the project foregrounded and supported changes in group and individual behaviour. A similar sentiment was expressed in the following quote where the project itself acts as a supportive platform for enabling individuals to make the changes they want to make:

_I think living in xxx will make it kind of easier, because it’s just built into the actual structure of living itself, living there, there will be certain ways in which you don’t need to make the effort it does it for you, you know, like it should be very low energy consumption in those buildings etc. We won’t have to worry about trying to keep that down, it’ll just be that way, which is good._

What is important in the above is that the actual physicality of the community takes on agency, acting as an enabling device to facilitate broader more structural changes, or as one resident commented, ‘it offers a path of least resistance’.

_Focusing on the fine grain_

Interestingly, especially alongside a clear intent towards broader, structural change, is a preoccupation with the fine grained aspects of place-making. There is a long established body of work which pays attention to the very localised and small-scale aspects of constructing everyday life and how they allow individuals to flourish and intervene in the world (see Hamdi, 2004; Alexander et al., 1977). While these tendencies of transformational along with fine grained change may seem contradictory at first, they are actually highly interrelated and codependent. The transformational step change that many communities can represent are built from the myriad of small practices that are embedded into the rhythms of everyday life over extended periods of time. It is the small, fine-grained changes that can be implemented piece by piece in a way that makes sense to participants and can be expressed in a meaningful way externally.
A recurring theme was that the project offers a village feel within a large city context. This was one of the design intentions of the project as a cohousing approach to design specifically attempts to engineer and design as much natural surveillance and face-to-face, neighbourly interaction as possible. When asked what residents would see as some of the most rewarding aspects of living in the project one resident commented: *The village like situation when you get to interact with people.*

What is of interest here is the recognition that such relations are based upon a novel form of permission beyond regular public encounters in the street. The intimate and interactive nature of the site offers a unique basis for social interaction. This manifests itself in myriad opportunities for micro-interactions, such as collecting post or laundry, waving to neighbours at windows and doorways, conversations from balconies, passing people as they leave the site, or indeed asking for permission to talk more formally about business matters.

These kinds of micro-interactions and small details may seem trivial but they are incredibly important to everyday well-being. A cohousing context has the potential to build forms of hesitant, modest but affirmative neighbourliness that Painter (2012) talks about. It is the sum of these encounters rather than grand gestures of tehno-fixes that have the ability to accumulate larger scale and longer lasting pro-environmental pro-social change.

The knitting together of community facilities within the overall design both offers a greater sense of connection with the place, opportunities for meaningful interactions and a greater sense of well-being and security. This is mainly achieved through a centrally placed common house at the heart of the site, which contains shared laundry, postal facilities, dining facilities, meeting room, office and shared toolshed, as well as homes that are designed to face towards each other around shared landscaped areas. These are the kinds of additions that could easily be made in existing communities with very little effort.
In fact, there is increasing interest in retrofit cohousing where these kinds of communal facilities could be peppered throughout existing streets through, for example, merging back gardens, closing roads or adapting empty buildings into communal facilities such as dining, kitchen and communal areas.

**Deepening democracy**

Much of the experimentation highlighted in this paper emerges from a renewed desire for democratic engagement and a horizontal and collective approach to governance. Elements of this approach include a focus on process as much as content, attention to difference and conflict resolution, as well as building strong interpersonal relations based on trust and solidarity. The approach to cooperative and community self-governance in the project is embedded within these broader shifts. The formal co-operative structure is the democratic heart of the project where every member has an equal voice. In particular, a deeper sense of democracy is explored through a commitment amongst members to the use of both non-violent communication (NVC) and consensus decision-making. This commitment to deeper democracy works well with a considerable amount of ground work to instill a common purpose. While it needs considerable effort it does pay dividends in the longer term as it allows a shift in mindset from a highly individualised owner-occupier to resident-member with an equal stake in a self-managed, and member-led organization. What the following quote reflects is that this commitment to democracy is not just built up through processes and procedures but a commitment to friendship, trust and respect:

*I think it’s that we like each other. Does that sound silly? I’ve met a lot of good friends through xxx and I think there’s generally a feeling of common purpose. A feeling of like and respect for each other.*

One of the notable features of the approach to democratic governance in the project community is a processual, in contrast to the merely procedural, approach to democratic engagement. In this sense,
rather than simply working out policies and procedures in advance which and implemented, clear processes are supported by trust, friendship and dialogue. As one resident commented: ‘When things go wrong if all you do is open a rule book that’s a really poor community’.

Reinforcing this point, another resident suggested that it generated a commitment from everyone to making life in the society function that allows unanticipated issues to be dealt with effectively: ‘So really you can’t say what things will arise but what you can say is that everyone who signed up to xxx is motivated to want it to work’. Clearly, this approach to governance can be quite a departure from what many people are used to in their daily lives. Foregrounding values within a community setting means accepting conflict and difference within everyday settings.

A further key element is an approach to success judged as both means and ends. the project is not seen as an endpoint, but an opportunity for debate, reflection and improvements in action. Moreover, one of the strengths is that there is an attempt to see problems and failures as learning points rather than times which might break the community. As one resident commented: ‘so I don't think we've got to where we want to go, but it's not a failure’.

Embedding security in insecure times

One of the repeated motivations for moving into the project was balancing the desire for broader structural changes with that of greater security. While this does seem paradoxical, it is the stability and security that the project offers that gives confidence to participants to experiment more radically with change, and to deal with the perceived insecurity of the world around them. The context of greater global financial instability since 2008 was a catalyst for many residents. One of the perceptions of greater security came from the collective context of a co-operative society. As one resident commented:
on a basic level we’ve more security ’cos we kind of stand an fall together, so we’re kind’ve we’re all collectively responsible for making sure we’re all secure.

The particular mutual home ownership society (MHOS) model which this project uses is perceived to lock in further security. In an MHOS residents pay a monthly member charge which is set at 35 percent of their net income. These payments accrue equity for the member which, after additions and deductions, they can take with them when they leave. The value of equity is indexed to earnings rather than house prices which therefore radically deflates speculation and ensures permanent affordability for future generations. The mutual home ownership society in particular was seen to be a source of greater stability. Setting monthly payments for housing at 35 percent of net income gives members greater stability and longer term management over household financial planning. Moreover, the commitment to member support within a co-operative society ensured that several mechanisms are in place to support members in times of financial hardship. An important point to note is that before moving to the project, the average proportion of income spent on rent/mortgage was around one fifth of earned net income. In the project, given the proportion of income required to be spent on rent through a monthly member charge is 35 percent, this shows a conscious financial assessment made on more than cost of housing. These other factors include greater perceived security, as well as lower costs of living through formal and informal patterns of sharing. Moreover, the greater level of interaction that is designed-in to the project offers a greater sense of security. This kind of sentiment which links a community context to greater security was particularly noted by older age groups in the project, which is a notable feature in many cohousing communities (Bamford, 2005). While it is important that cohousing does not retreat into generational ghettos and that the principle of intergenerationality is preserved, there are really clear benefits derived from collective housing situations for more senior age groups.

Learning
A final feature that emerged was that of learning. This manifests itself in different ways. There is both group learning between members and a wider commitment to acting as a learning exemplar for the outside world. Internal learning helps people to focus on learning from each other, especially in terms of working through differences. The following illuminates this:

*That behaviour change stuff might get accentuated as we live there and start to feed off each other. Learning tricks around people about how to do things differently that stuff will really start to kick in.*

The process of learning can be a path fraught with problems and tensions. However, it was regarded that the journey of community formation created strong bonds of trust and solidarity which allowed the project to learn collectively and flourish. The kinds of learning that emerge in this context speak less to social learning (see Boss et al., 2013) but are more akin to the longer traditions of popular education where learning is aimed at a commitment to social and personal transformation (see Horton and Freire, 1990; Freire, 1979; hooks, 2004). This latter tradition stresses the anti-paradigmatic nature of education, where the process of learning is focused on recovering some of the lost skills and practices of (re)building community.

**Conclusion. Deepening the urban commons**

In this concluding section, this paper sketches out some of the broader implications of what this kind of post-capitalist grassroots experimentation might mean for our understanding of spatial politics and strategies. If we embed a deep commitment to social and environmental justice as well as undermining and reversing capital accumulation and surplus value, what does this add to our understanding of grassroots experiments? Strategically, it means that any socio-ecological transition that fails to address the mechanisms that reproduce capitalism at a daily level is not a transition worth making. It is likely to
lead to ‘lock-in’ to weak carbon gains and perverse rebound effects, deference to technological solutions and opportunities for extending value production, and all the attendant problems of exploitation, alienation, competition, depression, powerlessness and status anxiety, into more areas of our lives.

So what are the alternatives? This paper proposes the concept of the commons to extend our understanding, a concept around which there is growing debate and interest (De Angelis, 2007; Dyer-Witheford, 2001; Hardt and Negri 2009; Linebaugh, 2008; Midnight Notes, 1991; Radywyl and Biggs, 2013). The commons, and in particular the urban commons, has become a well-used conceptual and practical devise for thinking through and enacting social and spatial political forms beyond the status quo. The commons at its most basic level is a widely understood spatial motif, evoking bounded entities, which exist to nurture and sustain particular groups. In this simple historical form, the common (the fields, the village greens and the forests) are geographical entities governed by those who depend upon them - the commoners. It is also important to look beyond these basic physical attributes and see a common as a complex organism and web of connections which combine to articulate particular spatial practices, social relationships and forms of governance that produce and reproduce them. The common then is made real through the practice commoning, which reflects, not so much a set of bounded, defensive or highly localised spatial practices, but dynamic ones.

So what does an urban commons approach offer for deepening our understanding of the future potential of the kind of grassroots experimentation outlined in the project project? The ‘so what?’ question is so prevalent, and so pernicious, that it must be addressed, if only partly. In particular, debates in transition management are concerned with the scalability and impacts of niche innovations and these are actually issues of political strategy. Micro-level niche experiments still need to be committed to contributing to more widespread change. But when we move onto the terrain of post-capitalist change, the specific characteristics of this scaling process needs interrogating.
First, Tormey (2004) makes the usefully distinguishes between minoritarian and majoritarian politics, the former more focused on the qualitative nature of development, with the latter more on quantitative growth. What we see in the commons are experimental forms of association that can begin to act as a bulwark against the centralization and hierarchy, and obsession with growth, embedded in majoritarian political strategies. We depart from the idea of actually scaling up, and shift emphasis towards a networked micropolitics that can spread mimetically and virally through decentralized swarming, networking and infiltrating, countering and corroding the dominant regime as they connect (Scott-Cato and Hillier, 2011). Their effects, then, can be discerned far beyond the quantitative number of projects, and this is where innovation and transition studies may encounter an ontological blind spot. To use the language of the multi-level perspective, prototype experimental niches like the one in this paper are less interested in breakthrough, but more in break-out. These are not daily practices interested in simply looking to scale-up and influence the mainstream. Usefully, Radywyl and Biggs (2013: 168) call this tactical urbanism which facilities disruptive innovation in the urban system. Moreover, what needs to be recognized are the highly uneven outcomes for those trying to put down markers against the status quo. We need to recognise that more sinister tendencies can indeed thwart grassroots experimentation. These can take many forms such as infiltration by police, informers or political opponents (Lewis, 2013), or direct oppression.

Second, this is not merely micro-level, bottom-up innovation. The connections forged through these counter-topographies have the potential to form novel meso-level institutions to deepen the institutional forms of a post-capitalist urban commons (see Albert, 2004). These kinds of experiments do not just represent a potential for diffusion, but also the corrosion of the dominant regime, attempts to weave together cracks that will eventually lead to the undermining of the status quo. This is not just a bottom up process, therefore, but a middle-out one through the formation of community-led and -owned
institutions (Janda and Parag, 2014; Hamann and April, 2013). Here, statutory agencies take on a role as enablers and facilitators of innovation that can further embed the urban commons.

Third, there are points of departure around value and intent. One of the surprising elements of contemporary debates on transitions is the marginalization of longstanding and formative critiques of industrial society, especially in the context of a rapidly globalized and urban world. Since the Limits to Growth report (Meadows, 1972) and the foundational work of E.F. Schumacher (1972), a whole body of thought and action has emerged across the globe (see Douthwaite, 1999; Jackson, 2009; New Economics Foundation, 2010; Simms and Chowla, 2010; Schor, 2010; Bookchin, 1992; Sale, 2000; Mander and Goldsmith, 1997) which has presented not just a sustained argument against recent neoliberal casino-capitalism, but a post-growth critique of the whole development project of modernity, and even further the deep schism that has emerged between humans and the natural world with which they are intertwined and codependent. What we can take from these debates is a commitment to experimentation as an attempt to sow the seeds of what places might be beyond capitalist urbanization.

So what can we take from the snapshot of post-capitalist grassroots experimentation in action? There is novel and disruptive innovation geared towards transformation, risk-taking, deep democracy, learning and a search for security - and this is framed by the complexities of real world processes. To conclude, this paper returns to Holloway’s (2010) concept of cracks which is useful in helping to understand that niche experiments represent a spatial politics of being simultaneously in, against and beyond life under capitalism, or as Wright (2013) articulates it, transformation that is ruptural, interstitial and symbiotic. It is these complexities that give texture to our understandings of this post-political urban commons. Experiments like the one explored in this paper exist in the daily quagmire of the status quo, but are keenly aware of the need to break out from it, as they embark upon the rocky road of building post-capitalist grassroots commons.
Selected References

Albert M 2004 *Life after capitalism* Verso, London


Bailey I, Hopkins R and Wilson G 2009 Some things old, some things new: The spatial representations and politics of change of the peak oil relocalisation movement *Geoforum* 41 595-605


Bookchin M 1992 *Urbanisation without Cities: The Rise and Decline of Citizenship* Black Rose Books, Montréal

Bulkeley H 2005 Reconfiguring environmental governance: towards a politics of scales and networks *Political Geography* 24 875-902


De Angelis M 2007 *The beginning of history* London, Pluto

Durrett C and McCamant K 2011 *Creating Cohousing: Building Sustainable Communities* New Society, Gabriola Island Canada

Evans J, Jones P and Krueger R 2009 Organic regeneration and sustainability or can the credit crunch save our cities? *Local Environment* 14 683–98

Geels FW 2005 Technological Transitions and System Innovations: A Coevolutionary and Socio-Technical Analysis Edward Elgar, Cheltenham

Geels FW 2010 Ontologies, socio-technical transitions to sustainability and the multi-level perspective Research Policy 39 495-510

Gibson-Graham JK 2006 A postcapitalist politics University of Minnesota Press, Minneapolis

Hamann R and Kurt A 2013 On the role and capabilities of collaborative intermediary organisations in urban sustainability transitions Journal of Cleaner Production 50 112-21

Hawkins R, Hunt C, Holmes T and Helweg-Larsen T 2008 Climate code red Public Interest Research Centre, Machynlleth


Holloway J 2010 Crack Capitalism Pluto Press, London

Holmgren D 2009 Future Scenarios: How Communities Can Adapt to Peak Oil and Climate Change Chelsea Green, London

Homer-Dixon T 2006 The upside of down: catastrophe creativity and the renewal of civilisation Souvenir Press, London


Jarvis H 2011 Saving space sharing time: integrated infrastructures of daily life in cohousing Environment and Planning A 43 3 560-577


Linebaugh P 2008 The magna carta manifesto: Liberties and commons for all Verso, London

MacKinnon D and Derickson K 2013 From resilience to resourcefulness: A critique of resilience policy and activism *Progress in Human Geography* 37 253-270

Mason K and Whitehead M 2012 Transition urbanism and the contested politics of ethical place making *Antipode* 44 493–516


Moulaert F, Martinelli F, Swyngedouw E and Gonzalez S 2010 *Can neighbourhoods save the city?* Routledge, Oxon

Nevens F, Frantzeskaki N, Gorissen L and Loorbach D 2013 Urban Transition Labs: co-creating transformative action for sustainable cities *Journal of Cleaner Production* 50 1111-1122

North P 2011 The politics of climate activism in the UK: a social movement analysis *Environment and Planning A* 43 1581 – 1598

O’Neill D 2011 Measuring progress in the degrowth transition to a steady state economy *Ecological Economics* Ecological Economics 84 221-231

Parag Y and Janda K 2014 More than filler: Middle actors and socio-technical change in the energy system from the “middle-out” *Energy Research and Social Science* 3 102-112

Pickerill J and Maxey L 2009 Geographies of sustainability: Low Impact Developments and spaces of innovation *Geography Compass* 3 1515-1539

Radywyl N and Biggs C 2013 Reclaiming the commons for urban transformation *Journal of Cleaner Production* 50 1159-170

Sargisson L 2007 Imperfect utopias: Green intentional communities *Ecopolitics* 11 1-24
Scott-Cato K and Hillier J 2011 How could we study climate-related social innovation? Applying Deleuzean philosophy to Transition Towns *Environmental Politics* 19 869-887

Scotthanson C and Scotthanson K 2005 *The cohousing handbook: Building a place for community* New Society Publishers, Gabriola Island Canada

Seyfang G and Smith A 2007 ‘Grassroots innovations for sustainable development: towards a new research and policy agenda’ *Environmental Politics* 164 584-603

Seyfang G 2009 Community action for sustainable housing: Building a low carbon future *Energy Policy* 38 7624-7633


Smith N 2005 Neo-critical geography, or, the flat pluralist world of business class *Antipode* 37 887–899


While A, Jonas AEG and Gibbs D 2010 From sustainable development to carbon control: eco-state restructuring and the politics of urban and regional development *Transactions of the Institute of British Geographers* 351 76 – 93

Williams J 2005 Designing neighbourhoods for social interaction – the case of cohousing *Journal of Urban Design* 10 195-227