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Published online: 14 May 2017.

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ORIGINAL ARTICLE

Permaculture and the social design of nature

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ABSTRACT

Permaculture-based social movements proliferate as a response to environmental challenges, a way to pursue the 'good life', and a vision of a more harmonious way to be in and belong to the world. Ecovillages, bioregionalisation, and the Transition (Town) movement all apply permaculture principles in designing social systems. Core to permaculture is designing based on, and in harmony with, patterns identified in nature. Yet, as is often highlighted, identifying, using, and thinking through 'natural' patterns are problematic. This article takes canonical geographical work on the social reception and (re)production of nature as its starting point. It then outlines permaculture, and particularly their most prominent expression, the Transition (Town) movement, as an ecosophical movement–an attempt to reorientate collective subjectivities as ecological entities. While discussion of Transition (with or without their permaculture heritage) abounds in Geography, paying attention to the ecosophical, and ethical, character of such movements is crucial to grasp their full significance.

Introduction

It is something of a trope to state that understandings of nature are culturally, socially, or locally mediated. Much deeper and more thorough studies of this have already been carried out (Castree and Braun 2001; Latour 2004; Morton 2009; Whatmore 2002). At the outset of this paper, I simply want to note the following quote by Williams, as stated in his book *Keywords*: 'Nature is perhaps the most complex word in the language' (1985, 215). As Castree argues:

> **Ideas about nature** (and, indeed, about everything else in our world) do not exist on the head of a pin nor are they abstract entities that somehow 'touch down' uniformly across time and space. Rather, they **are produced by myriad knowledge-communities** who possess sometimes similar (and sometimes different) outlooks on nature. What we call 'societal' **understandings of nature are**, in reality, '**local' understandings that have leaked out from the sites of their production** so that numerous people come to accept them as valid. (2005, xiv)

Following this, this paper looks to one site where 'nature' is produced, within the permaculture movement. It explores what permaculture's ideas of nature are, and how these are socially designed and (re)produced.

However, the theoretical frame the paper adopts is not from Castree or Williams, but from Said and Gregory. Gregory fleshed out Said's development of *imaginative geographies*: 'this universal practice of … making geographical distinctions that *can be* entirely arbitrary' (Said 2003 [1978],

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54, original emphasis). It might seem strange for an article on nature and permaculture to veer towards a theory outlining and arguing how 'Westerners' – it feels like many of the key terms in this article are in need of inverted commas – perceived the Orient as part of an imperialistic project. But the ways in which other cultures are not presumed to be pre-given, ready to be discovered, essentially cohesive, but are rather imagined into being and produced through various practices is a profoundly useful insight. This article's object of attention is not (an Oriental, 'other') culture, but rather its assumed antonym: nature. It seeks to explore and outline the ways in which this nature is imagined: first approached, understood, brought into being, and grasped, and then practiced, thought-through, and lived-out. In a sense then, the article adopts the analytical lens and style of an imaginative geography, without its typical object of attention: geopolitics or (post)colonialism.

'There is no use in pretending that all we know about time and space, or rather history and geography, is more than anything else imaginative' stated Said (2003, 55). This article then takes this statement, in harmony with both Castree and Williams, and seeks to chart one particular, focused outline of how, and in what ways, nature is imagined. 'Our imaginative geographies are global as well as local' (Gregory 1998, 203–204). They outline not only the local sites of their production, as Castree has it, but also a more sweeping vision that situates oneself in an (imagined) overarching context. These 'geographies are constructed at the intersections of the local and the global' (Gregory 1998, 205). Thus, the focus of this paper is a quest to chart permaculture's imaginative geography of nature. All the while constantly heeding Williams' warning about how challenging a task it is to say anything unproblematic about nature.

Fitting with this special issue, this is also an ecosophical argument. Ecosophy refers to the ways in which people and practices attempt to reorientate subjectivities towards and within the ecological, away from solely the individual, human, or social (Shaw and Taylor Aiken, this edition). It tends to be critical of enlightenment rationality, particularly the identification of the self as separate or distinguished from wider contexts, webs of being, or connections. The ecosophical approach shares two joint inheritances. First, and more typically for an essay on permaculutre, is the ecosophy developed by Arne Næss (Næss and Rothenberg 1989; Seed et al. 1988). Næss built on antecedents such as Leopold's 'thinking like a mountain' (1949) – appreciating the radical otherness of what it must be like to be a mountain – to establish a personal philosophy of 'ecosophy'. The 1989 translation of Næss's 1976 Norwegian work – *0kologi, samfunn, og livsstil* – became first translated into English as: *Ecology, Community and Lifestyle: Outline of an Ecosophy* (1989). The subtitle is important, as it emphasizes how closely related ecosophy was to the project of the more commonly mentioned and referred to *Deep Ecology*. While Næss outlines a rich and varied conceptual framework around deep ecology, with many neologisms and technical vocabulary, he also defined these terms. For Næss, an ecosophy begins at the point at which one's environmental awareness becomes 'deep ecology'. Merely being interested in or concerned about plants, animals, landscapes, ecosystems, or being generally motivated by environmental plight remained for Næss a 'shallow ecology' (Key 2015). Næss instead calls for a Gestalt shift that moves from being *about* to *within* environmental issues, from shallow to deep ecology, what he calls 'from ecology to ecosophy'.

Næss' ecosophy has spawned many subsequent scions: Joanna Macy's 'greening of the self' (Macy 2007, 148–158); ecopsychology (Roszak, Gomes, and Kanner 1995); and Abram's 'becoming Animal' (2011), to name only a few. These all prioritize the *experience* of selves as part of a vibrant earth, our common home (Shaw and Taylor Aiken, this edition). Crucially, Næss-inspired ecosophy is also an ethical approach, continually reflecting on realigning patterns of behaviour and thoughts with the ecological in mind. This ethical injunction can again be seen in the subtitle of one of deep ecology's earliest collected works – *Deep Ecology: Living as if Nature Mattered* (Devall and Sessions 1985). Much of this literature is deeply engaged with, and used as guides to live by, by groups and people akin to those discussed here. Yet, it is often seen as being '"on the fringe" of credible academic thought' (Bragg 1996, 93). The intention in this article – and indeed the special edition – is to outline how these thinkers and theories, however neglected, have much to offer mainstream geographical thought. Writers such as Joanna Macy are all well known and well used within the permaculture

movement, but it is important to outline the second parallel dual heritage ecosophy brings with it, from sources more readily found in geography than permaculture.

Felix Guattari developed this second outline of ecosophy in his later work (2000). Shaw (2015, 152) traces Guattari's mention of 'ecosophical thought' (2000, 33) back to Bateson (1972, 496). Intriguingly, Joanna Macy may be the point where both these lineages converge. She does not, as far as I know, discuss Guattari, but leans much of her argument in *Greening of the Self* on Bateson (Macy 2007, 148–158). Dosse (2010, 392) points to a more distant heritage, Guattari's interest in Japanese Shinto-Buddhism. Guattari's 'ecosophical' can also be seen to be a development from previous collaborative work with Deleuze as 'geophilosophical' (Deleuze and Guattari 1994; Shaw 2015, 161). Key to an ecosophical approach is rejecting the conventional human subject. For Guattari, building on Bateson, ecosophical subjectivity is related between mind and environment; the 'I' being an 'epistemological fallacy' (Bateson 1972; Shaw 2015, 162). In many ways this is the shift that permaculture movement asks of its adherents, it is a design approach so in-depth that one questions one's sense of self and relationships to (ecological) others. For Guattari the ecological crisis is a genuine crisis across all three ecological registers – environment, social relations, and human subjectivity. It is the imbrication of these three that emphasize how the environmental challenges we face are as much about culture as carbon, thinking as acting, and mind as much as matter. Under an ecosophical lens, even approaching the environmental challenge requires a much more thoroughgoing, encompassing, and rigorous conceptual tool kit than has at times been attempted when geographers deal with one of their core considerations: 'the environment' (Shaw 2017). An ecosophical approach then goes beyond the 'earthing of theory' (Shaw 2015, 161), but also moves towards a new 'ethico-political articulation' (Guattari 2000, 19). As in the Næss-inspired ecosophy, Guattari's ecosophical approach is infused with an ethical sensibility – not in the sense of an eco-voluntarism, by placing the agency and responsibility to act on ecological issues within an individual, or even a group of individuals. But rather re-cognizing one's extensions, influences, co-constituting beings and objects begets a call to participate together, join allegiance with, act-alongside, and act-with. 'Thinking like a Mountain' does not mean one acts only on behalf of the mountain, or even acts with the mountain in mind. One must surely act, but that act is as part of mountain. Me-in-mountain, mountain-in-me, bound together in collective processes of subjectification: a more complex and capacious idea of we.

This article outlines permaculture movements as an example of this ecosophy. These are practices moving beyond mere awareness of environmental issues, towards reorientating (collective) subjectivity in the light of identifying natural processes and patterns. These actors seek not merely to focus on or orientate towards the ecological, but also to become (or return to the) ecological. Given the starting points from Castree and Williams at the outset, charting this course is challenging to say the least. This paper seeks to take a critical approach, particularly building on geographical work outlining the social reception and (re)production of nature. However it also seeks to meet with and identify permaculture-based social movements on their own terms, to take seriously what they are trying to achieve and understand their motivations and worldviews.

The remainder of this article is organized into seven sections. The first introduces permaculture as a broad phenomenon, outlining its aims and motivations. This section then delves into permaculture as a social movement, specifically outlining its most well-known manifestation: the Transition movement. Second, the paper examines more closely what permaculture specifically means when invoking 'nature'. Following closely on its heels, section three outlines the meanings, associations, and imaginations in permaculture-based social movements invocation of resilience. Section four is a brief, but important, intermezzo to the paper, providing an analogy from the work of Søren Kierkegaard to outline how permaculture responds to the 'truth' of 'nature'. In section five, specific design techniques – Open Space and the Law of Two Feet – adopted by these movements in the light of their understanding of nature are outlined and investigated. Section six presents empirical evidence of an Open Space event, before bringing the above threads together.

Permaculture and Transition

The first part of this paper introduces permaculture organizations and looks at the way they deploy nature as a resource for the social. The permaculture movement would not see itself as such. A wide and diverse group of ecologists, social activists, gardeners, architects, thinkers, dreamers, and do-ers – to name but a few permaculture adherents – are grouped together here. It is a plural movement, and various permaculturists would describe themselves differently. Wittgenstein might say there is no essence to this grouping, just a family resemblance. It is this family resemblance that I wish to describe here. Permaculture is a portmanteau word combining 'permanent culture' and 'permanent agriculture'. The principles permaculture adopts include: 'work with nature rather than against' (Mollison 1992). Centrally, permaculture adopts 'natural' solutions for agriculture and ecosystems, a complex enough intellectual manoeuvre, but also for social systems.

Nature is not only the topic of focus for these groups, what they work for or on behalf of; for permaculture-inspired groups nature is also the medium through which they conducted their activities (Whitefield 2011). This is why permaculture can be seen as not just an environmentalist movement, but an ecosophical one. For example, the recent *People and Permaculture* book applies permaculture principles 'for people without a garden' (Macnamara 2012). Doing so, it applies naturally derived permaculture design principles to social fields as diverse as health case, personal well-being, and education; the central aim being to 'care for themselves, their friends, family and the earth'. This requires an encompassing, wholesale rethinking and reorientation of one's life and relationships to be more 'naturally aligned'.

Permaculture organizations are – appropriately – as many and varied as the tableau of nature itself. National hubs offer one more formal expression of permaculture and its initiatives, though of course in such a diverse and diffuse movement these are still not entirely representative of permaculture as a whole. These hubs can be prominent and long-established like the UK's *Permaculture Association*, or newer and smaller scale such as Luxembourg's *Centre for Ecological Learning Luxembourg* (CELL). Looking at both covers opposing scales, longevity and linguistic particularity, yet both claim to speak on behalf of permaculture as a wider movement and practice, in their countries.

CELL is 'inspired by the work of the Transition Towns and permaculture movements, and aims to relocalize culture and economy and, in that creative process, improve resilience to the consequences of peak oil and climate change'. They state:

> Learning the skills for creating resilient post-carbon communities, our baseline could be summarised as aiming to: 1. Live sustainably and endorse holistic thinking and action. 2. Foster a culture of solidarity and collaboration. 3. Skill up for living well in a post-carbon economy.[1]

According to the *Permaculture Association*, permaculture has three aspects: (1) It is an ethical framework; (2) It involves understanding of how nature works; and (3) It is fundamentally a design approach, in the light of this.[2] Thus, permaculture seeks to understand how nature works and consciously, and ethically, shape human patterns to mimic this. Permaculture characterizes naturally designed social systems in three 'permaculture ethics': earth care, people care, and fair share (or return of surplus).

As hinted by CELL's positioning of itself, the permaculture-based social movement with the largest impact and profile to date has been the Transition movement and its overarching organization Transition Network. Across Europe many other mutations of this brand can be found: Transition France, Transition Spain, Transition Italia, Transition D/A/CH (Germany, Austria, Switzerland), and many other country hubs, beyond the better known UK 'heartlands'. Many of these groups adopt similar principles and ethics to those seen above – an idealized natural realm which is used as the model for designing a healthy individual life and good society, often in a set of three principles. The permaculture context Transition emerges from has now turned full-circle as Transition practices now begin to influence research practice, and in turn this (re)directs research attention and practice. For example, the *Transition Research Network*[3] is a network of practitioners and activists who seek to

work on transdisciplinary issues surrounding research and with these permaculture movements. Bastian et al. (2012) outline *Transition Research Network* history and the use of permaculture principles in its design, functioning and hopes for future research habits. Henfrey discusses how the permaculture idea of *edge* – 'processes of productive interchange among different elements and/or systems' (2014, 124) – can be used between academics and non-academics to foster collaborative and meaningfully participative research, rather than merely use empirical examples as a source of data. Throughout each of these, the adoption of permaculture principles calls for a thorough reworking of one's focus of research, alongside the manner of this research. It is in these ways that permaculture can be seen as ecosophical, calling as they do for an altered subjectivity, not merely a change in topic or focus. It makes sense then to look in a more focused manner at Transition's permaculture.

In *The Transition Handbook* (Hopkins 2008, 123), founder and former permaculture teacher Rob Hopkins describes two books inspiring Transition. Richard Heinberg's *Powerdown* (2004) examines Peak Oil, providing impetus and urgency for action, preparing for an imminent world without oil; while David Holmgren's *Permaculture – principles and pathways beyond sustainability* (2002) outlined Transition's philosophical underpinnings (Hopkins 2008, 136). Describing permaculture as the glue that holds Transition together, Hopkins states: 'In essence, it [permaculture] is a design system for the creation of sustainable human settlements' (2008, 136). Hopkins was a former permaculture teacher in Kinsale, developing the Kinsale Energy Descent Action Plan under permaculture principles before moving to Totnes to found Transition. Invocating design is a persistent theme in Energy Descent Action Plans, and foundational to how Transition operates and seeks to act: as designers, curating the social along 'natural' patterns and principles.

Linking petro-politics and permaculture is not coincidence. Bill Mollison originally developed permaculture in Australia in part as a response to the 1970s' oil crisis. 'Permanent agriculture' moves away from 'artificial' oil-dependent agriculture towards 'principles that will be needed to underpin a post-peak world' (Hopkins 2008, 140). For Transition, society too must move on from this temporary and artificial oil dependence. The principles that underpin Transition are permaculture principles. Specifically, the 12 permaculture principles Holmgren (2002) outlines feed into the original 12 steps of Transition (Hopkins 2008, 138–139). Transition have moved on from this 12-step, climate change and peak oil focus, and now act on a wide and diverse range of activities, but the permaculture influence remains (Hopkins 2014).

The Transition model is based on permaculture design, emphasizing interdependence and interconnectedness. Chiming with complexity theories, emergence and self-organization, Transition focus on an adaptive framework for integrated and multi-dimensional change at local community level. The permaculture basis of Transition can also be found in the biographies of the key protagonists. Many have not just completed the permaculture introductory staple, a 72-hour Permaculture Design Course (PDC), but have also become permaculture teachers. The conceptual and biographical underpinnings also explain the focus and manner in which Transition carry out their activities. Permaculture emphasizes designing change on and through multiple, nested, interconnected, and mutually embedded groupings: communities (Burnett and Strawbridge 2008; Ferguson 2015; Ferguson and Lovell 2014, 2015; Lockyer and Veteto 2013). Thus, Transition seeks to both mobilize community as the agent of change and ecological transformation, but also desires the end product of a socio-ecological arrangement of interconnected, mutually embedded local communities. The former marks Transition as an environmental movement; the latter indicates a deeper, more ecosophical approach.

Community is regularly invoked as the key focus for Transition (Bailey, Hopkins, and Wilson 2010; Kenis 2016; Kenis and Lievens 2014; Kenis and Mathijs 2014; Neal 2013; Taylor Aiken 2015; Wilson 2012; *inter alia*). We can dig deeper though: community is the destination and manner of travel precisely because of Transition's permaculture foundations. Other permaculture themes exist in Transition. Power (2012), for example, emphasizes the Transition movement's reliance on complexity theory and principles of emergence, self-organization, uncertainty, and co-evolution in developing their organizational structure. Scott-Cato and Hillier (2010) characterize Transition

as a primarily rhizomatic social movement, where 'components form unregulated networks in which any element may be connected with any other element' (2010, 287). What these authors both have in common is appreciating that Transition projects are ideally designed and not managed, curated not controlled. As an organization and organism, Transition sees issues multi-dimensionally; each cell, initiative, or perspective has something to offer that any other might not or cannot possess Russi (2015). A permaculturist can design a garden, arranging lines, dots, and patches. These arrangements can comprise plants, buildings, or zones. Transition likewise engages in a form of 'social design', whereby they can facilitate certain conditions that allow more or less harmonious outcomes where a community's 'genuine needs' can come to the fore. For example, Transition stress the importance of devolved structures of networks, a design approach privileging open-source information-gathering and generation. This is justified in pointing to the repeated failure of 'managerialist' top-down plans that do not reflect local character and particularity (for an example of this critique, see Scott 1998). Permaculture phrases this place sensitivity as 'consider the situation' prior to design.

One question that has not been asked often enough about Transition – either directly or indirectly – is what precisely does their object of concern do for the movement? That is, could their medium, the manner in which they seek to achieve their aims – community action, (re)localization, resilience – be applied to various ends beyond merely building resilient relocalized community? To what extent are Transition just another social movement, and to what extent is their focus integral to who they are? Could Transition have a different focus or object of attention than climate change and peak oil? Using the same processes and organizational structure, but a grassroots movement concerned primarily about xenophobia, or illegal immigration? To what extent are they a wider 'ecosophical movement'?

Placing permaculture at the heart and foundation of understanding Transition provides an answer in a way that no other aspect of Transition does, whether community action or resilience. Transition's permaculture heritage provides both their focus of attention and their way of operating. Both means and ends emerge from permaculture. Transition seek to build and move towards the 'resilient relocalized community' because this is the natural pattern they identify in nature and then want to apply in designing the social. Transition works towards this goal through local community action, and adopting the *Law of Two Feet* and *Open Space*. These two organizational techniques are described more fully below; for now it suffices to say both are ways of achieving decision-making within groups. Transition adopt these because, again, these are the principles and ways of organizing as a collective that they find in nature, then seek to harmonize with and reflect as a community.

Without permaculture, Transition would not be. Permaculture infuses Transition, directing their attention towards rebuilding resilient local community. Permaculture also results in a focus on means as much as ends; social design rather than strategic management. It leads them to identify patterns in nature and adapt the social to harmoniously align with this design. But, with the guiding lines from Castree and Williams we began with in mind, we still need to question what are the patterns Transition and other permaculture-based social movements identify in nature. It is to this nature that we now turn.

Permaculture's nature

The use of nature as a model for human behaviour can be good or bad; but to attempt to understand and design human systems without any reference to nature is arrogant, and may prove more dangerous than the risks of simplification. (Holmgren 2002, 176)

Ecological sciences – and particularly systems ecology – are conceptually important to permaculture's heritage. The observation of how 'natural' systems evolve, function, and respond to changes within and from outside is crucial. The specifically permaculture part is to use these observations, or ecologically derived understandings, as a design principle (Henfrey and Penha-Lopes 2016), in

order to design human and ecological systems based on these patterns naturally found (Lockyer 2017). Here, the emphasis is not so much on objects, or things in nature, but the links and relationships between them (Fox, in Lockyer and Veteto 2013, 164–179). Permaculture concerns the reproduction of nature through design, and is inherently relational (Pickerill, in Lockyer and Veteto 2013, 180–194). In this way, permaculture is a generalist and holistic approach; principle 7 puts it as 'design from patterns to details'.

Permaculture is an integrated vision. It looks to the collectives, nature's interrelatedness and connections, commons and commonalities, rather than any particular 'thing' found in nature, hence, focusing on social design echoing nature's patterns. Nature is characterized by a diverse and complex set of relationships. Less important are the specific details of a natural arrangement – a tree, say, or a building – but the relationships these details are involved in. Because of the impossibility of a designer ever fully comprehending the array of relationships and potential connections emerging in any garden, building, or social group, a strong emphasis is placed in permaculture on self-organization, subsidiarity, and principles of emergence. Systems are designed to be as autonomous, self-reliant, and self-perpetuating as possible. Permaculturists mimic natural relationships, informing their social design. Holmgren (2002, 156–158) outlines seven types of natural relationships, from more destructive to constructive: Predatory, Parasitic, Competitive, Avoidance, Mutalism, Symbiotic, and Polar Opposites. These relationships can be more or less appropriate in different situations. But as the quote beginning this subsection indicates, all social design is carried out with reference to these naturally occurring relationships. These relationships, patterns and principles are held to be immutable, and ultimately inevitable.

This characterizes how permaculturists see nature, and what influences the patterns identified. But what permaculture reads into nature is where we now turn. Taking Transition as an example of a permaculture-based social movement, the primary understanding of 'natural systems' is one characterized by Resilience Thinking.

Transition and resilience

The subtitles of Hopkins first two key books outlining Transition's ideals and praxis demonstrate the key role of resilience: *The Transition Handbook: From Oil Dependency to Local Resilience* (2008), and *The Transition Companion: Making Your Community More Resilient in Uncertain Times* (2011). Resilience helps show the connections between this wider permaculture philosophy and Transition. In the oft-quoted phrase of Canadian ecologist Crawford Stanley Holling, resilience is any system's 'ability to absorb change and disturbance and still maintain the same relationships between populations or state variables' (1973, 14). Resilience can be a vague and general term – Anderson, for instance, holds an 'axiom that resilience is many different types of things' (2015, 60) – but it is one with a specific lineage tied to Holling. Permaculture claims to be a unique inheritor of the varieties of resilience on offer. The term was originally developed to describe ecosystems, and fits snugly with the permaculture applications of patterns identified in nature, applied normatively to the social.

Walther, Schulz, and Dörry (2011) trace how resilience has come to be applied to financial centres, not as a characteristic adopted from neo-classical economics or ecology but towards resilience building: increasing capacity to 'bounce back' to previous wealth levels after a crisis. In UK state emergency planning, Anderson and Adey (2012, 29) outline how

> resilience has emerged as the solution to the problem of how to plan for the consequences of multiple events in a networked society … Resilience is, then, the name given for the potential to respond to emergencies and return to normality.

This is an important awareness. Seen more clearly in these non-ecological examples, positing any given arrangement as natural and normal is – at the very least – contested, and always a political move. Resilience as a bouncing back to normality then becomes a conservative impulse, literally

so in regard to the permaculture movement – conservation, conserving, and conservative all etymologically linked. This focus on preserving and sustaining systems is often seen as problematic, perpetuating injustices or power differentials. MacKinnon and Derickson state: 'the concept of resilience is conservative when applied to social relations' (2013, 253). Others contend that increasing the resilience of a system can lead to the transformation, rather than a staid preservation, of that system (Wilson 2012). Yet the heart of resilience is a mentality of 'keeping the show on the road', or where change is involved, more akin to Burke's 'change in order to preserve'. Resilience is a means to preserve a given system or community. The question is what one seeks to preserve.

The Transition and permaculture use of this term is one of 'community resilience'. Holling himself attempted to translate resilience's ecosystem heritage to apply to human communities (Gunderson and Holling 2002). When MacKinnon and Derickson (2013, 256) outline the various definitions of resilience on offer, the two geographers they mention (Adger 2000; Katz 2004) both apply the term to community. Robinson & Carson point out that resilience is not a unitary concept but is 'inherently fuzzy and difficult to assimilate in the context of human communities' (2015, 2). They, alongside many others, are skeptical of the manner in which a concept can be seen to emerge within a field in an uncontested manner, and then be unproblematically translated or transplanted to apply to human communities. As Wilson argues, 'human systems [such as community] are inherently complex, non-linear, dynamic, and often unpredictable in their quest for strengthened resilience' (2012, 216). Robinson and Carson (2015, 5) rest a large proportion of their critique on the ways in which the literature on resilience is fused together with community. This is a particular form of community, understood to exist 'naturally' within a locality and small-scale set of normative (and often moralized) social relations. They aptly argue, 'rarely is the problematic nature of "community" addressed in the context of community resilience' (2015, 5). Too true, and similar critiques have been levelled at Transition and their use of community (Mason and Whitehead 2012; Neal 2013). While many within these permaculture-based social movements find the community rhetoric appealing and enabling, Transition's idealized community is identified as problematic (Aiken 2014, 2012; Barr and Devine-Wright 2012; Chatterton and Cutler 2008; Feola and Nunes 2014; Grossmann and Creamer 2016; Taylor Aiken 2017). Rather than investigate the nuances of community here, this article seeks to trace the lineage from identifying particular processes and arrangements as natural, then seeking to normatively apply and design the social in this light. The remainder of this section looks more directly at this particular permaculture vision of nature.

In this form of resilience thinking, everything exists in a constant state of flux. Ecological systems exist in flow between four stages, outlined by Gunderson and Holling (2002) and seen in Figure 1.

The first stage addressed here – these phases are cyclical, and one can start anywhere in Figure 1 – the rapid growth (r Phase), is the exploitation of readily available resources. Characterized by intense activity, developing all available opportunities, ecologically these would be weeds, or pioneer plants. Socially these would be new start-ups, entrepreneurs, or seen in the explosion of sharing economy start-ups, such as Uber or Airbnb.

The conservation phase (K Phase) proceeds incrementally. This is the storing of energy, materials, and consolidation of previous rapid growth (r). Ecologically this phase results in organic mass on the forest floor; socially it can be seen in the acquiring of human capital and knowledge.

The Release Phase (Ω Phase) can occur suddenly. The previously placid conservation shifts to what seems like chaos. Many of the apocalyptic statements from environmental activists can be seen to place society in the K phase (what some have called 'consensus trance'), with the inevitable onset of Ω to come. A chaos once predicted climate change and peak oil hit. (For a critical analysis of this tendency, see Skrimshire 2014, 2010; Swyngedouw 2011, 2010). In an ecosystem, Ω could take the form of forest fires, insect pests, and disease – for instance, the ash tree disease entering the UK in late 2012. Socio-economically it could take the form of a market shock or new technology entering and disturbing a previously perceived equilibrium. On a system level, this could be seen as some form of 'failure'.
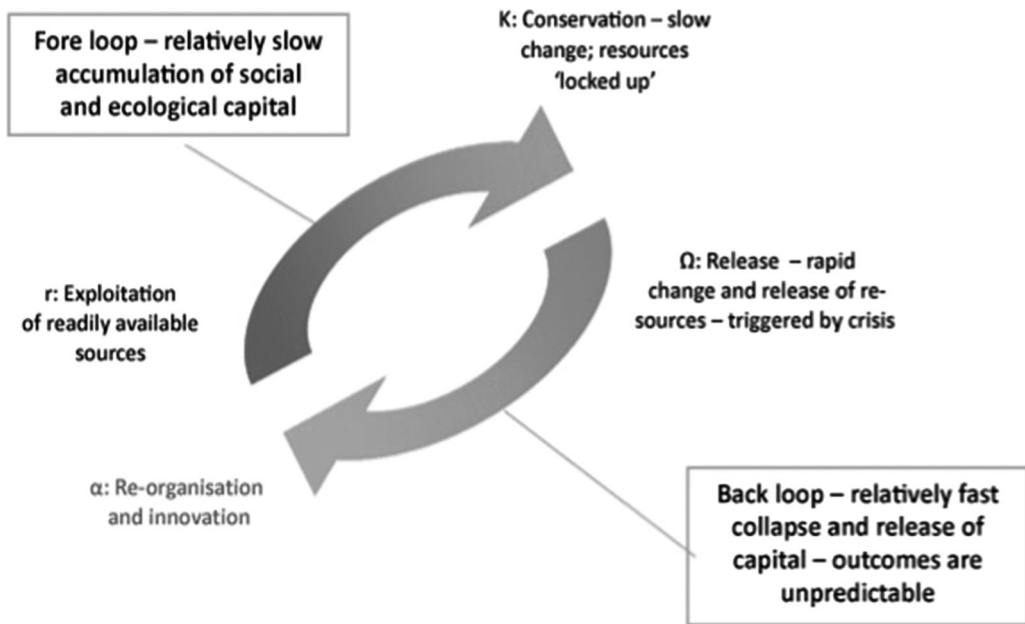
Figure 1. From Gunderson and Holling 2002. (Found in Walker and Salt (2006, 82)).

The reorganization phase (α Phase) sees the uncertainty unleashed in Ω begin to coalesce around new emerging certainties. Ecologically this can be the chance for new species enter an ecosystem, or for old one to 'regroup', for instance after a forest fire. Socially, from the fall-out of previous 'failed' groups or social movements can emerge new initiatives, collectives, or alliances.

As seen in Figure 2, key to the system's stability, and continuing functioning – its resilience – is its ability to flow through this figure of eight. A crucial component is the Ω or chaos phase. This allows the build-up of tensions to be released, resources to scatter, coalesce, and then re-order the filtering and resettling of components. A forest fire can aid resilience long term, and conserving or sustaining a forest without any form of release could lead to a rapid, uncontrollable descent down the chaos phase, and destruction of the whole system. According to this model, sustaining a system in the K phase can destroy longer-term resilience. Paradoxically, chaos and release can help long-term resilience according to this view. As Walker and Salt tellingly state 'The longer the conservation phase persists the smaller the shock needed to end it' (2006, 77). When applied to the social realm, the folly of attempting to institutionalize, control, and 'sustain' certain groups or 'naturally occurring communities' becomes clear.

What is important is not each stage in isolation, but rather the continued flow through each successive one, each phase having its own particular approach and aspects. For permaculture the flow through these is done as an action learning technique under the principle 'observe and interact'. At first observing, learning about the particular dynamics at play, how they work and what they lead to. Later, interacting, getting involved and starting to 'work with nature rather than against' as Bill Molliston put it. Key to permaculture design then is not designing for any given stage in this cycle, but embedding action learning cycles within the design process, so that lessons can be learned and included from previous stages. This is also included in the permaculture design principles adopted in the Permaculture Association's research strategy, and ECOLISE,[4] a network of permaculture and Transition researchers. These phases are important in how they relate to and follow one another, not as discreet episodes.

So Transition, emerging from and existing within a permaculture context, has a vision of community as both natural but also that communities without a period of breakdown and build again
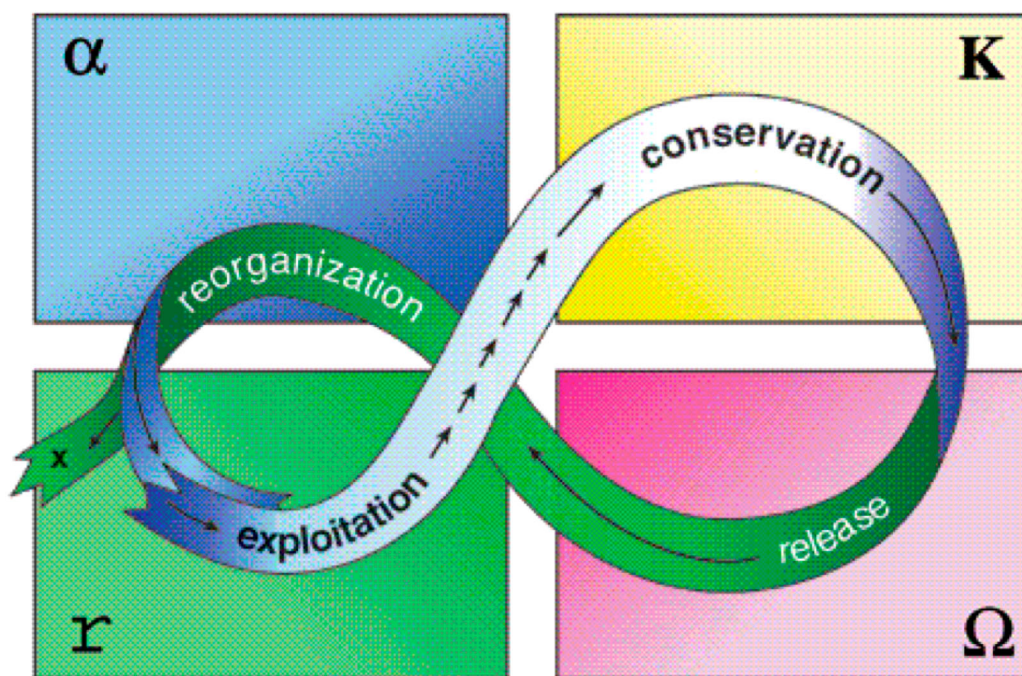
Figure 2. From Gunderson and Holling 2002. (Found in Walker and Salt (2006, 81)).

would never be fully resilient. Transition therefore wish to avoid a sustaining of the K Phase, and build in a controlled chaos phase. This is akin to what Deleuze and Guattari, again building on Bateson, term a plateau of intensity – 'a continuous self-vibrating region of intensities whose development avoids any orientation towards a culmination point or external end moment of release' (Deleuze and Guattari 2004, 24). A plateau of intensity outlines a point of release and 'end', but not in a linear form. Seeing this pattern in their book, they playfully state 'we have given it a circular form, but only for laughs' (Deleuze and Guattari 2004, 24). Examples of the K phase would be managed forest fires, fire breaks in large forests, or setting strip fires to moorland – so that when the chaos (fire) hits, the cycle can be orderly ushered through the α stage. For Transition, it is primarily oil that sustains artificially this social K Phase. As part of their understanding of peak oil, without effective designed demise to release some of this resource build-up, a more profound chaos phase will be inevitable, with the shocks and fall-out far more serious.

This model is both descriptive and normative. Descriptively, it is used to outline and explain observed natural phenomena. Yet, it is also normative. Groups such as Transition take these observed principles, such as awareness that all ecological and social arrangements are destined to flow through these stages, to ensure inbuilt demise, 'will to fail' and the flowing through these phases as essential to the dynamism, health, and longevity to any community. This helps understand Transition's *memento mori* – their first step being 'set up a steering group and design its own demise from the outset'. What can appear to be a death drive, embracing death and willingness to die is rather being composted in the faith that the system as a whole remains stronger and more resilient in the long term.

Interestingly, this awareness that the birth of the new always shells out through the dying of the old, fits with the biographies and beliefs of many key Transition actors. Much of this is of various strands of Buddhist teaching,[5] and again the work of Joanna Macy looms large here. Ecopsychology (Roszak, Gomes, and Kanner 1995) also advises ways to work through environmental despair and grief, holding and dealing with, rather than burying and ignoring profound questions such as

'Are you aware the planet is dying?'. Conversely, Dickinson (2009) outlines the opposite trajectory: denying death, pretending 'immortality', heroic individualism, egoism and the resulting difficulty of cognitively coming to terms with climate change and ecocide from within a Western mindset. Crucially, this figure of eight model is important not only for the fact the release, breakdown, chaos and death phase exists, but, if appropriately gone through, can strengthen the health of the system as a whole. Here, learning how to then go through the reorganization phase assumes added importance. For a permaculturist this designing includes not only designed demise, but also designed reorganization and exploitation.

The key characteristics of this vision of naturally occurring resilience then are: a self-directed flow through set stages of growth, consolidation, release and breakdown, and finally reorganization. These stages are seen as natural laws of equivalence to gravity: all ecological arrangements will flow through these four stages. Technological factors, or the use of oil, can at most postpone the 'inevitable' next stage. But central to permaculture is not only identifying such patterns in nature, it is designing the social in harmony with such principles. Therefore, this pattern is adopted by permaculture groups in the way in which they seek to achieve these aims. How does this permaculture and resilience approach inflect Transition's activities, or ways of operating? The remainder of this article will focus on ways Transition adapt this natural death drive towards a 'designed demise' of the social, how they seek to 'change in order to preserve'. First though, the article looks at the manner in which permaculture activists relate to the patterns they identify in nature. In order to set the ways groups and individuals stand in the light of and relate to such a totalizing concept such as the 'nature' described here, an analogy from the ideas of Søren Kierkegaard is helpful.

Designing nature: the nature that is true for me

To grasp the way permaculturists relate to this 'nature', it may help to use an analogy from an old argument on another concept equally in need of inverted commas: 'Truth'. Kierkegaard's important contribution to understanding truth was to distinguish between propositional, ontological, or 'objective' truth and what he called existential truth (Caputo 2013, 166–169; Kierkegaard, Hannay, and Kierkegaard 2009, 286). In objective truth whoever says '2 + 2 = 4' does not matter to its veracity, only that the statement itself is verifiable and true, regardless of context. Existential truth requires a different category of understanding. What matters for Kierkegaard is not the particularities of whatever you say, but what he called the 'subjective appropriation', how any subject is related to that object. His point is not to deny objective truth, but rather that 'truth which is true for me … the idea for which I am willing to live and die' (Kierkegaard and Hannay 1996, 32–33), as he put it, is not to be confused for objective truth, and is in many ways far more important.

Kierkegaard famously wrote 'subjectivity is truth' (Kierkegaard, Hannay, and Kierkegaard 2009). While this has been much discussed and interpreted, that 'truth' requires more than objective knowing, or propositional claims is a key addition. Truth for Kierkegaard involves commitment and a way of life. By analogy, this helps get a handle on how these activists stand before what can otherwise be seen as a totalizing and universalizing concept: for Kierkegaard – truth; for permaculture – nature. For Kierkegaard, Truth means living *in truth*. For Permaculturists, Nature means living *naturally*. This is what Kierkegaard called the 'subjective appropriation' of how the existing subject relates to the object. As important as *what* you believe, is *how* you believe it. Permaculture is as much the *what* of nature, as it is the *how*. This then begets the ethical approach integral to ecosophy. Significantly, I am not arguing here that nature does not exist, or there is no such thing as objective nature. Kierkegaard argues not that there is no such thing as objective truth, but that the more existential way of relating to that truth is a far more important, relevant and neglected consideration. Likewise, for permaculture, nature is not to be bracketed out – à la Derrida's *sous rature*, nature as nature – as a problematic but necessary concept. Nature is not to be dismissed out of hand, or assumed to be a complete construct. Nature is the thing Kierkegaard would say permaculturists are 'willing to live and die for'. It is the nature that is true for them.

For permaculture, nature is true in *both* an existential and objective sense. Nature does actually exist in a tangible, real sense. It is not a figment of our imagination, and we can find out how it works. There are truths that can be seen as 'objective': say the water or nitrogen cycles. However what matters for permaculture is not so much these 'objective truths', which would always be seen to be the case regardless of who spoke them, scientist, permaculturist, or lunatic. Rather, what matters following Kierkegaard is a sense of existential truth. That is how we as subjects stand before and relate to this objective truth (in this case 'objective nature') that matters. Positing nature as 'objective' does not mean that nature is seen in the same way by different permaculturists. Kierkegaard provides a useful analogy in that groups view nature as objective, and then need to respond to that objective reality in turn.

Still, there are two obvious problems with this analogy. First is how the 'objective truth' of nature is received. That is, how nature is socially mediated, and culturally translated. Many Geographers have long contended something along the lines of Castree's quote at the outset; Smith states clearly: 'the concept of nature is a social product' (1991, 15). It is clearly different to posit an objective truth about nature compared to how that nature is then socially received. As this article continually returns to point out, the production of nature – even an 'objective nature' – is placed and locally produced. Here, Gregory's awareness that imaginative geographies form at the intersection of the local and the global, the particular and the universal, is relevant. Second, the way in which permaculture-based social movements relate to their objective truth of nature in a subjective way is uneven. Different groups respond in different ways and stress different aspects as more or less important. One can read across space and time great differences in how nature has been socially understood, even within the permaculture movement or Transition, regardless of how 'objectively true' nature is consistently seen to be.

But highlighting the, at first glance tangential, analogy between permaculture and Kierkegaard is valuable for at least two reasons. First, permaculture groups and related environmental activists do often relate to nature as a form of objective truth – as a set of immutable laws ordering reality. When Naomi Klein (2014) points out that capitalism and dealing with climate change are incompatible, she phrases it as the laws of nature are inconsistent with the principles of economics: only one of these we have the power to change. Environment activists often have rallying cries along the lines of 'we are only following the science'. The implicit assumption is nature is objective, and it 'tells us' we need to overhaul our economic system. The widespread assumption in permaculture is: principles of nature are true; they exist as objective truth. Second, Kierkegaard is helpful in characterizing the way in which permaculturists seek to realign themselves and their designs (gardens, buildings, social arrangements) with these seemingly objective laws and principles. Given the existence of the laws of nature, the 'nature that is true for me' is not a completely relativist position. Permaculture ethics do not permit a cavalier attitude to one's environmental relations, or have scope for any and all environmental relationships. Akin to ecosophy, in this way permaculture is an ethical approach. Permaculture ethics are (an inter-) personal and community realignment with these natural laws and principles. To complete the analogy, for Kierkegaard it is beholden on people to 'stand truthfully' in front of and in relation to Truth, his idea of ultimate reality, or God. For permaculturists it is beholden on people to 'stand naturally' in front of and in relation to Nature, their ultimate reality.

For permaculture the truth of the principles come from their descriptive character. However once these principles are used to inform and design social arrangements in the light of them they become normative, in the manner of Kierkegaard's 'truth that is true for me'. Following Kierkegaard, permaculturists seeking to identify 'the nature that is true for me' do not rely on acting however one wishes, or using natural laws as a stick to beat other people with. These ethics could be used to point fingers or call out (perceived) hypocrisy in others.[6] It calls for self-reflection and realignment with the natural. A focusing on the self that again reaffirms what we are dealing with here is an ecosophical subjectivity, beyond the self as I, towards a collective self, where we is distinguished from I not by number, but by depth. The can be seen in an oft-repeated quote from permaculture expert, David Suzuki:

> There are some things in the world we can't change – gravity, entropy, the speed of light, and our biological nature that requires clean air, clean water, clean soil, clean energy and biodiversity for our health and well being. Protecting the biosphere should be our highest priority or else we sicken and die. Other things, like capitalism, free enterprise, the economy, currency, the market, are not forces of nature, we invented them. They are not immutable and we can change them. It makes no sense to elevate economics above the biosphere.[7]

The way permaculturists seek to identify the 'nature that is true for me' in Transition has been done in two ways: the Law of Two Feet, and Open Space Technology. These are addressed next.

Open space and the law of two feet

So far we have an array of concepts and ideas spread out: that nature is a difficult concept to talk about unproblematically; geographical theories of the ways in which spaces and realities are imagined; swirling with notions of ecosophy, resilience, Transition, Kierkegaard, and, of course, permaculture. The task in the rest of the article is now to bring these together. The argument will be that the natural patterns permaculture identifies, and then seek to emulate and design in alignment with, are themselves part of an iterative process of (re)production of natural patterns and principles. Only one narrow example is chosen, but by going into this example in depth we can more clearly see that the natural patterns identified, such as the resilience figure of eight, then influence the specific social design techniques adopted, in this case Open Space. Permaculture's social (re)production of nature is a performative and an imaginative geography, a way of 'standing naturally'. Yet this in turn helps to reproduce and outline these imaginations. With this in mind, this section dives into one experience of the most common way in which Transition performs this imagination of nature.

Open Space is a fundamental tool or technique of Transition movements. Coined by Harrison Owen (2008), Open Space is an organizational technique and methodology designed to efficiently reach consensus and decision-making in groups. The key feature of Open Space is that each participant helps to determine both the agenda and content of meetings. Owen describes it as having four principles:

(1) Whoever comes are the right people.
(2) Whatever happens is the only thing that could have.
(3) Whenever it starts is the right time.
(4) When it's over it's over.[8]

Open Space is designed as a way to combine: gathering all interested stakeholders; deciding what the critical issue(s) are; focus on these issues; and then outline the decisive action to be done, by whom and when, all in the same meeting. Owen also outlines certain necessary conditions for this to work effectively, such as those present having: passion for the issue; a sense of urgency; and initial internal disagreement as to the correct course of action. This can be seen to accurately characterize the assumptions and demographic of Transition groups, often comprising informed and passionate people. Transition participants also tend to have a shared belief that 'something must be done' on a wide variety of environmental issues, ranging from the local to the global. Less often do these participants have harmony or consensus as to what precisely the way forward is.

Open Space is sometimes linked to the 'unconference' format: events without a clearly defined and managed structure. There are instead loose principles that guide and orientate the conference purpose. The idea is that ideas and 'agenda items' exist in the participants minds, rather than the formal organizers. A key part of Open Space is 'the Law of Two Feet'. Often certain tasks are left undone, or set-aside breakout areas and groups of chairs unoccupied – say, in the hall where the planning of those tasks was to be discussed. People have 'gone where the energy is' and been recycled into the groups/tasks they were more drawn to leaving other tasks and areas empty either because the task was completed or found too boring. Either way, different aspects are rendered obsolete. This is what is described as 'designed demise' or 'composting' of the groups. This 'composting' is not

arbitrary or random, but rather often occurs whenever the task is complete or no longer desired to be worked on. Composting sums up both Transition's permaculture beliefs and the practice experienced in the next's section's research.

Those praising Open Space claim it 'ensures meaningful involvement and substantial interaction among participants' (Power 2012, 107). When reflecting on what is most attractive about Transition, volunteers regularly mention Open Space, and ways of organizing that – at least on the surface – avoid hierarchical forms of authority, or pyramid power structures. Crucially, for Transition and permaculture-based social movements, Open Space sets the right 'tone' for how groups should work, self-regulate and naturally reach decisions and agree on what should be done. Open Space is not a perfect tool, and has downsides. This form of relentless focus on the present, living in the now, is designed to encourage action and decision-making. Yet it can also forestall some reflection, thought and counter-factuals that can be useful. Sometimes, the important tasks are not the same as where people use their two feet and follow their interests. For example, activities such as administrative tasks are essential but often unattractive. Interestingly, there is also a curious link here between the Buddhist sensibilities of many of the ecosophical authors important within the permaculture and Transition movement, not least Joanna Macy, and this insistence on the present.

Open Space is seen as fitting the permaculture emphasis on design over managing. A key Open Space guidebook used by Transition groups captures the overarching desire for designing holistic and systemic change: *The Change Handbook: Today's Best Method's for Engaging Whole Systems* (Holman, Devane, and Cady 2007). Open Space has a separate genesis to permaculture, yet because of Transition's prior assumptions about what is a 'natural' and good way to operate is adopted relatively easily. It is difficult to imagine what Transition would be like without Open Space. In the original '12 steps' of Transition, no. 6 simply advised: 'Use Open Space' (Hopkins 2008, 162).

The point here is not to evaluate the usefulness or otherwise of Open Space as a management or organizational technique. Rather it is to trace the lineage from diagnosis about the state of the world or nature (peak oil, the unity of nature-culture), and the conclusion that 'something must be done'. Because of the beliefs and understandings of resilience thinking, this 'natural' way that groups operate is through the figure of eight described above. The belief is that successful groups must come together with energy and ideas (r phase); to collaborate and discuss the ideas until reaching an awareness of 'what must be done'. This is then noted down in one of the small breakout groups so a record is kept of the conversation and thoughts coalescing, and can be seen as a point of maturation, a K Phase. To keep the group healthy and on the move though, this group then must breakdown, with ideas and people scattering across the room, to other small groups. This release or chaos phase is necessary before a reorganization (α stage) where people and ideas come together in another of the breakout groups. Because 'naturally' all social and ecological systems flow though the resilience figure of eight, this then means that Open Space is adopted.

A key part of Open Space, and ensuring that groups of people flow through the stages in the figure of eight described in resilience thinking, is the possibility for parts of the Open Space process to be 'composted', to self-immolate wherever the flow of ideas or energy is weakest. For this, the Law of Two Feet is a central aspect of Open Space.

An open space event

The following is a report and reflection on an Open Space event that took place on the 24th January 2015, held in a secondary school in Luxembourg City. I attended this meeting addressing the Transition movement and in particular their direction at a regional and national level, as part of a wider project based at a local university. Most of the attendees (c.100) were from Transition groups nearby (nobody reported travelling more than 100 km); however a significant minority had no formal

Transition affiliation. All can be assumed to be interested in Transition as a movement and set of ideas, and with at least a little prior awareness of Transition principles and practices.

The guiding questions sent to all participants before this event were as follows:

- What synergies can we create on our common journey?
- How to consolidate and develop the Luxembourgish Transition network with concrete action and a common strategy?

These were deliberately open-ended and intended to produce emergent discussions, not foreclosing answers or setting out expected responses from participants.

On arrival, a warm welcome was given with hot and cold drinks offered. A significant snowfall on this particular morning allowed easy icebreakers, such as 'how did you get here?'. In the centre of the room lay a circle of chairs, which gradually volunteers and organizers encouraged us to take our place in. The meeting began with all of us sat in the circle and a brief 20-minute introduction to the pattern of the day, what the intended outcomes were (clarity on how the Transition movement could develop in the region), and some of the principles of Open Space that allow it to work. These principles were explained on colourful posters surrounding us (see Figure 3). We were then encouraged to say what we felt were the challenges and issues that Transition could speak to. People raised issues from the systemic – changing the education system, the global financial system – to the more locally particular – the challenges of relocalizing an international and multilingual location. These were written up on a board, and discussed again as a big group, consolidating overlapping topics. These condensed topics became the different breakout themes that we moved into. Each theme was allocated a place to meet and discuss in smaller circles and chairs around the venue. Someone took responsibility for making notes and reporting back to the whole group. Over the morning, this was repeated so attendees had the chance to see more than one topic. Some groups were well attended, others not so. At the end of the meeting a plenary session was held, where the groups collectively began a document outlining the ways forward for the Transition movement in this region. More involved volunteers then committed to writing up this document in the following days. Afterwards the organizers used googledocs with other event participants in order to continue the collaboration after the day itself.

As those attending reflected on the methods adopted in this meeting, they emphasized their novelty, and at times linked to an assumption that these ways were closer to the natural: 'mother nature finds a way'; 'people will naturally gravitate to where they are most productive'. After a bring-and-share 'pot luck' lunch, the afternoon focused on bringing together emerging threads. Overall the day was well-designed to facilitate interactions, mixing and incidental conversations. Those behind the organization of the event valued this way of making decisions and reaching consensus. In conversation, the organizers and volunteers highlighted the lack of boundaries to what could be discussed or what issues could emerge, and also that topics cut across typical areas of interest or even social groups amongst the attendees.

Permaculture as imaginative and performative nature

This article has charted the links between one of the practices of permaculture-based social movements, and their actions on and understanding of the natural. It takes a guiding principle from Castree that certain ideas of nature are locally produced. Permaculture movements are mobilized by their understandings of nature and thus mould themselves in this image. It is this understanding that allows Transition and the wider permaculture movement to be seen as ecosophical. Here nature is cyclical, and any ecosystem, plant, or human community must flow through four stages, consecutively.

So what does this tracing give us? First, we can say we better understand this particular social movement, their motivations and theoretical imperatives. But this conception and then performance
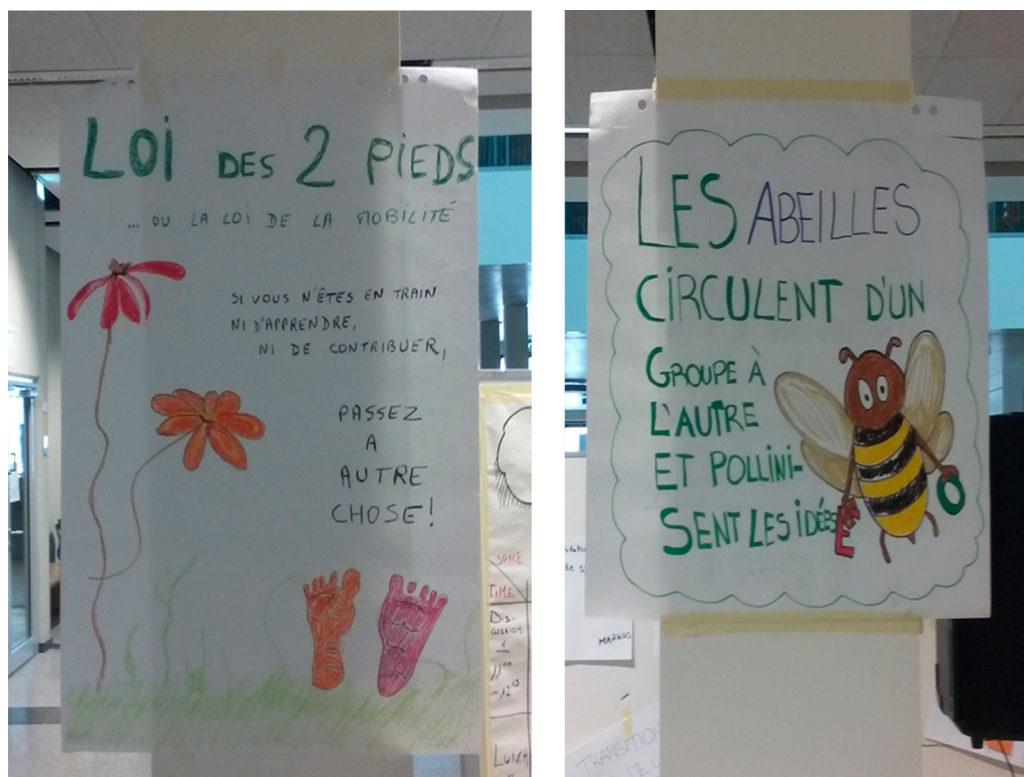
Figure 3. Examples of posters outlining the principles of Open Space, surrounding the venue room.

of 'the natural' is useful theoretically too. The permaculture vision of the natural and its reproduction can be seen as an imaginative geography. Imaginative geographies have been more readily used to understand grander geopolitical situations. From Said's *Orientalism* (2003), to Gregory or O Tuathail's use of the concept in relation to the 'War on Terror'. This essay has a smaller scale in mind. Focusing as it does on small groups of environmentally inclined citizens, it is literally more down to earth. Yet the same forces are at play here: concepts and understandings of the 'natural order' of the world. If this is an imaginative geography, it is not as Gregory has stated a 'construction that fold[s] distance into difference through a series of spatializations' (2004, 17). It is rather an imaginative geography that folds (temporal) sequence into difference through a series of collective arrangements. The assumed principles behind this ordering – 'nothing can last', 'decay is inevitable', 'all groups or organisations must go through the chaos phase' – are an imaginative geography made temporal. But it is still a way of characterizing some spaces, groups, and ideas as 'more resilient' than others. This then imbues their theoretical outlook; a preference for flat hierarchies, a suspicion with directed or managed transitions, a rejection of 'expert knowledge', a focus on the present – 'when it's over it's over' – and a fatalistic, almost Panglossian acceptance of the status quo: 'whatever happened it the only thing that could have'.

Because Transition's means and ends arise from their permaculture heritage, they can be seen as attempting to get to grips with aligning their social settings along natural principles and patterns. This design is done in the manner of Kierkegaard though and not as a translator, photocopying what one finds naturally onto the social. It is beholden on a permaculturist to 'stand naturally', that is continually figure out and relate to the natural one sees around oneself. The article's turn to Kierkegaard makes it clear that the intention of the argument is not to reject the concept of truth or nature. Rather the point is to draw an analogy from the work of Kierkegaard of how and

in what ways permaculture activists see themselves 'standing' in front of totalizing, universal, or global concepts. The article does *not* argue that nature is either objective or subjective. What the article is centrally concerned with is rather how permaculture activists relate to nature. These actors take nature to be objective, but their key concern is not this 'objective nature' but rather how they relate to this. Hence the invocation of Kierkegaard, not denying the objective (in his case truth, rather than nature) but arguing what is more important, is how one relates to that so-called objective.

The permaculture view of nature is imaginative; it is also performative. It produces the effect it describes. Most obviously permaculture collectives produce this vision of nature in the way they socially arrange themselves – deliberately and self-consciously designing social configurations mimicking natural ecosystems. 'Imaginative geographies are not only accumulations of time, sedimentations of successive histories; they are also *performances of space*' (Gregory 2004, 18–19 italics in original). This can be seen most clearly in a purposive way in which these groups arrange their meeting space with Owen's Open Space and the Law of Two Feet. This performative enacting of space is a deliberate form of ethnomethodology on the part of these actors: the manner in which they act in and respond to the world as they understand it is the same as the world they describe and know.

The tracing of this paper outlines the permaculture heritage of Transition, appreciating the ways in which they seek to design the social in way that emulates natural patterns, including a closer look at just what it means to describe something as natural. Techniques such as Open Space are used for their seeming likeness to natural (eco)systems. Posters with invocations to 'cross-pollinate' and 'think like a butterfly' encourage a social gathering as a mini-model of an ecosystem. In this way, the natural systems that are identified are brought into the social realm and designed. However, rather than just having a surface similarity with the ways permaculture and Transition understand nature, these principles can also help (re)produce this view and vision of nature.

Notes

1. http://cell.lu Accessed February 8, 2017.
2. http://www.permaculture.org.uk/knowledge-base/basics Accessed February 8, 2017.
3. http://www.transitionresearchnetwork.org Accessed March 8, 2017.
4. http://www.ecolise.eu Accessed March 8, 2017.
5. The links between the figure of eight model and the 'Eightfold path' are more than semantic, and would require another paper to fully explore.
6. Permaculturist James Piers Taylor helpfully phrases this as 'permaculture ethics are for us, not for "them" '. http://permaculturediploma.blogspot.lu Accessed March 8, 2017.
7. From http://www.sector39.co.uk/blog/?p=3006 Accessed March 8, 2017.
8. From: http://www.openspaceworld.com/brief_history.htm Accessed April 8, 2016.

Disclosure statement

No potential conflict of interest was reported by the author.

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