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kuuluvaa verkostoituneiden kylien käsitettä. Tutkimuksen loppupäätelmänä on, että toiminta yhdistyneiden verkoston kautta NomadTownin koulutusympäristössä on tehokas tapa muuttaa yhteisöä resilientimmäksi ilmastonmuutokseen valmistautuessa, joskin NomadTown tarvitsee parempia yhteyksiä liike-elämään ja hallintoon.

Avainsanat: Ekolukutaito, eräopastus, erämaapedagogiikka, metsäpedagogiikka, varautuminen / prepping, verkkoteoria, ekosentrismi, maailmankylä

Sammanfattning: Ett praktikfall i landsbygdsresiliens genom en samlingspunkt inom ett utbildningssammanhang i norra Karelien, Finland. NomadTown presenteras: en samlingspunkt (resilience hub) för lärande om krisförebyggande, anpassning samt skapande av positiva samhällseffekter. Utbildningsaspekter av dess subkulturer skissas tillsammans med en mer djupgående beskrivning av den utbildningsmiljö som NomadTown befinner sig i. Sammanhanget för denna miljö beskrivs utifrån ett Foucault-inspirerat perspektiv på maktstrukturerna. Det är fortfarande en öppen fråga huruvida det är ändamålsenligt att på detta sätt inkorporera NomadTown i en föreningsekologi med tanke på syftet att bidra till den nödvändiga stora övergången för att hantera klimatförändringar. En annan öppen fråga är hur lärande på organisations- resp nätverksnivå kan äga rum. Det föreslagna relationsmönstret följer Nahradas Global Village Hypothesis ang. landsbygdsnätverk. Min slutsats är att det utbildningspräglade sammanhanget samt arbetet genom hopkopplade nätverk kan visa sig effektiva medel för att främja resiliens inför klimatförändringar. Dock behöver NomadTown starkare kopplingar till näringslivet och till offentlig förvaltning.

Nyckelord: Miljökunskap, vildmarksupplevelse, nätverksteori, ekocentrism, den globala byn, överlevnad, skogsmulle

Zusammenfassung: NomadTown – ein Beispiel zur Bekräftigung der Global Village-Hypothese: Eine Fallstudie zu einem ländlichen Resilienzhub in einem Bildungsmilieu in Nordkarelien, Finnland. Im Beitrag wird eine Fallstudie zu einem Resilienzhub im Osten Finnlands, NomadTown, vorgestellt. Das Bildungskonzept dieses Resilienz hubs zielt auf Kompetenzentwicklung für Notfallprävention sowie Kreation und Verbreitung von adaptiven und zukunftsfähigen Lebensmöglichkeiten und folgt dem Selbstverständnis eines Resilienz hubs. Zunächst werden die bildungsbezogenen Aspekte der konkreten lokalen, subkulturellen Gemeinschaft vor Ort skizziert. Anschließend erfolgt eine dichte Beschreibung des Bildungsmilieus, in das die NomadTown eingebunden ist. Auf Basis der Foucaultschen Dispositivanalyse wird eine Kontextualisierung des spezifischen Bildungsmilieus der NomadTown vorgenommen. Es wird untersucht, ob die sozialökologischen Bezüge, in die dieses Resilienz zentrum eingebettet ist, geeignet sind, den großen Wandel zu vollziehen, der für die Bewältigung des Klimawandels erforderlich ist, und wie sich organisatorisches Lernen als Netzwerklernen vollziehen kann. Derartige lokale Kulturen und Strukturen wie sie in der NomadTown vorfindbar sind, verkörpern das Konzept des global vernetzten Dorfes der Global Village-Hypothese von Nahrada. Ich komme zu dem Schluss, dass durch diesem Bildungsmilieu und die Netzwerkarbeit in diesem Fall ein effektiver Weg ist, um Resilienz hinsichtlich der Auswirkungen des Klimawandels in unsere menschliche Überlebenssituation zu stärken, aber und zeige auf, dass die NomadTown zukünftig stärkere wirtschaftliche und politische Kooperationenschaften benötigt.

Schlüsselwörter: Ökologische Bildung, Wildnisführung, Wildnispädagogik, Waldpädagogik, Krisenvorsorge / Prepper, Netzwerktheorie, Ökozentrismus, Globales Dorf

1. Introduction

We have developed a world civilisation², with a great amount of technology and wisdom, which seems in sum greater than all prior human wisdom and civilisations. Yet we are in a survival situation. So how can that be? I conclude we are in a survival situation by an assessment of the resource use needed for continued existence of our current civilization and that we are collectively using more than the planet can provide us with over time.

Analysis by the Stockholm Resilience Centre (Steffen et al. 2015; Röckström et al. 2009) has led to a rose diagram showing the transgression of these resources via 5 of 9 planetary boundaries (Figure 1. Planetary Boundaries): Stratospheric ozone depletion, Loss of biosphere integrity (biodiversity loss and extinctions), Chemical pollution and the release of novel entities, Climate change, Ocean acidification, Freshwater consumption and the global hydrological cycle, Land system change, Nitrogen and phosphorus flows to the biosphere and oceans, and Atmospheric aerosol loading.

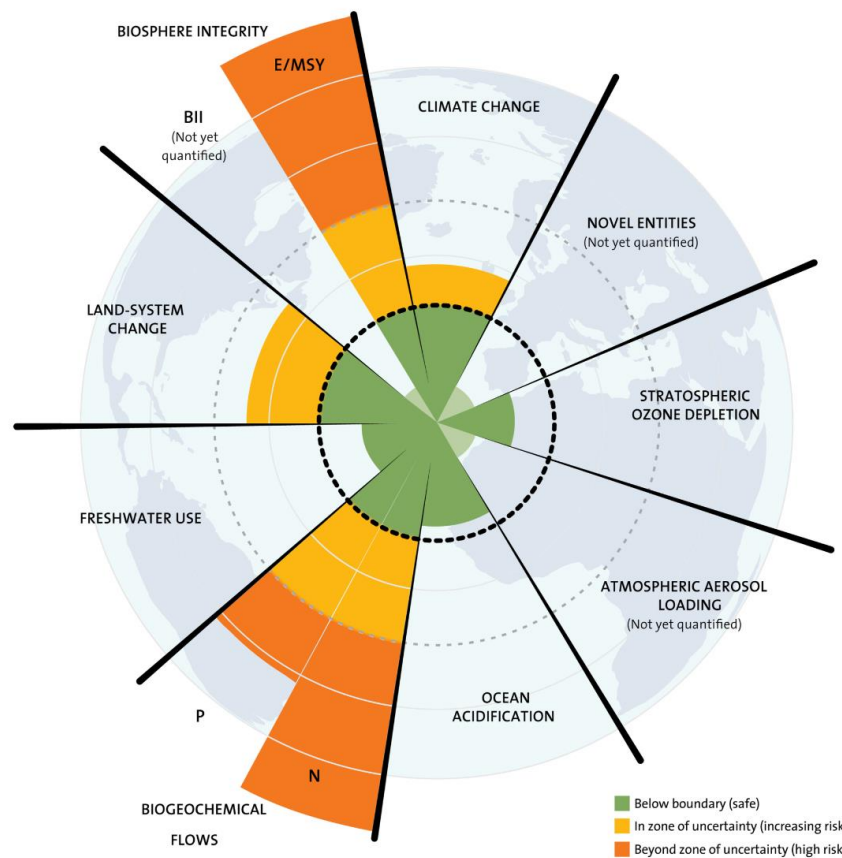


Fig 1. Planetary Boundaries. Source: J. Lokrantz/Azote based on Steffen et al. 2015

The effects of climate and ecological change, via our breach of most of these boundaries (Persson et al. 2022), are so severe and penetrating that we must consider them as putting us in an emergency survival situation. However, dealing with this situation is best thought about, not at an aggregated global level, but at a bioregional level. The bioregion can be summarized as the area contained within a watershed, “the major characteristics of a bioregion; watershed, landform, native plants and animals, soils, climate, and an adaptive human relationship about living in that place” (Glotfelty and Quesnel 2014, 68). An example is Cascadia in North America, which is understood by many as having a bioregionally coherent identity (Freed 2015).

² Here I write about human civilization, and likewise below human culture and a human mediated biocultural landscape. This is not obvious as it is possible to consider a biocultural landscape as consisting of biological cultures contributed to by different lifeforms. It is an anthropocentric arrogance to indulge in ignoring how significant forests and other biological cultures have co-created where we are situated.

In juxtaposition with the distributed bioregional concept, we can observe that collectively how humans have been increasingly living is in concentrated places, that is in cities. This is unsustainable long term (Jensen 2006). In fact, cities are a very recent phenomenon, in geological or even historical terms, and other possibilities from our evolutionary past should be considered to help us find ecologically sustainable habitats for humanity.

Thus, when we consider our social systems and look for a sustainable way of going on, one conclusion is that we should focus on viable rural communities and ask: How do we adapt them to this emergency? This requires looking at our social technologies and the context in which they are used to facilitate the great transition (Petz 2019; Wals 2020; Geels 2011; Köhler et al. 2020; Newell et al. 2020) from our current ecologically unsustainable civilisation to a sustainable one.

In this article, I explore the associations and connections that, manifesting as a network, provide an educative milieu in which NomadTown is embedded. I discuss the community education aspects found around this rural resilience hub. My hypothesis is that this networked learning holds lessons for other locations. And that these lessons offer rural resilience hubs, which are different from urban resilience hubs, as a possible way of transforming rural society to greater sustainability.

2. Background to Resilience and Resilience Hubs

The concepts of resilience and sustainability need clarifying (Ong et al. 2016). What is resilience? Resilience is the ability to withstand shocks to a system and for that system to still then function. The functional attributes may be changed, e.g., feeding a population from oats or potatoes or wheat would be a resilient food system.

Sustainability is the inherent ability of a system to carry on doing what it has been doing into the future. Sustainability does not mean that a society continues to do everything it has been doing, but that it continues to do things that are important, things that define the society. So there is a normative implication in "sustainability". We would not say that society is unsustainable if harmful or insignificant practices are discontinued. Ecological, economic, and social sustainability aspects are all relevant.

Resilience scholars often make a distinction between plain resilience and transformative resilience. So resilience can also mean that a society changes for the better and is regenerative. Here, change is qualitative, perhaps from conventional agriculture to permaculture, and not only an oats to potatoes type of change. These are 2 quite closely related concepts; both the resilience and sustainability concepts have this normative/transformative aspect.

As socio-cultural actors, we want to keep on acting within our cultural systems, but we do not necessarily do the same things as before – so resilience can be a better focus for assessing our cultural survival.

Adaptation in light of the planetary boundaries being exceeded necessitates we look at deep adaptation, which Bendell (2018) described as the “deep adaptation agenda of resilience, relinquishment and restoration [which] can be a useful framework for community dialogue in the face of climate change. [Whereby:]

Resilience asks us “how do we keep what we really want to keep?”

Relinquishment asks us “what do we need to let go of in order to not make matters worse?”

Restoration asks us “what can we bring back to help us with the coming difficulties and tragedies?”

There is a social technology which explicitly aims at increasing ecoliteracy for the purpose of deep adaptation, it is the resilience hub. Resilience hubs appeared in the USA and started in Baltimore as a development from disaster planning (Coffee 2016), particularly inspired by Hurricane Katrina and FEMA’s criticized response at the community level (Lansford et al. 2016). This reactive development has been combined with urban renewal agendas and marginal (the socially excluded) and people of color considerations.

Resilience hubs are now however, not focused on disaster response, but more planning and climate

change mitigation akin to development agendas. They aim to adapt to change and build community resilience. This description is confusing when considering the disaster cycle of:

- 1° Prevention Preparedness Pre-impact,
- 2° Prevention Response Trans-impact followed by
- 3° Prevention Post- impact (Kano et al. 2010)

yet the chronic nature of the wicked problem of the type 2 survival situation³ we are in means all 3 degrees can be seen when looking at our current situation.

A successful example of a long-standing resilience hub equivalent, which has long been doing this capacity building, is the Centre for Alternative Technology in Wales (CAT 2015). Set-up as a reaction to the path dependent problems, which could be seen in development discourses, CAT aimed to prompt alternative directions which could be taken. It has a visitor centre in Machynlleth, where scientific knowledge is conveyed to the public.

This CAT visitor centre is equivalent to a discovery centre, which science and technology museums such as Heureka – The Finnish Science Centre have adopted, where self-learning and discovery by the public is the main pedagogical approach (Adjas 2009). For example, the “Facing Disaster” exhibition which “lets visitors practise their crisis tolerance – resilience – in gamified exhibits and experience the forces of nature as audiovisual art installations” (Heureka and Bordos 2021).

CAT runs residential courses and carries out extension, to have a bigger societal impact, via consultations and publications. CAT hosts the Zero Carbon Britain Hub and Innovation Lab whose Zero Carbon Britain project reports “can be used as a template to help citizens and local and national policymakers develop and deliver zero carbon action plans” (Allen and James 2019, p.x). Writing environment conscious policy is one thing, implementing it is another, with various factors important for success (see Hoppe and Coenen 2011 re successful implementation related to Agenda 21). In CAT’s case, the recent CEO (Adrian Ramsey) is now the co-leader of the Green Party of England and Wales, so the education and policy revolving door with political power aspect is operationalizing such implementation at a national level. Internationally it is part of a bigger resilience building network, “a platform to support closer cooperation. This European meta-network for community-led action on climate change and sustainable development, known as ECOLISE” (O’Hara and East 2017, 7).

The rural setting of NomadTown as a resilience hub, is different from the urban network of resilience hubs in the USA. Yet, many of the operations of those resilience hubs (local contextual development, small scale, future oriented, working with marginalised people, long-term sustainability building) are common to many countryside communities in Finland.

This resilience capacity building concerns rural development, not urban renewal nor regional development and operates under a different paradigm. This is a paradigm which “must be effectively linked, on equal terms, with regional and urban development: it will not be achieved merely as a by-product of regional development or by ‘diffusion’ from urban development ... [and falls] within a broader framework of rural policy” (Dower 2013, 30).

Nevertheless, a resilience hub maybe connected to a city or large town to help transform it directly (for this ecocity / greening the urban approach see Gatlin 2012). As the urban is ultimately not sustainable, rather than a major settlement undergoing retrofitting (Holmgren 2018) or such minor tinkering, action should be taken more at a bioregional level. To do this bioregional learning centres are suggested (Brewer and Riede 2018), one is under development by Earth Regenerators (Brewer 2021; Janes and Snyder 2020) with the local community in Barichara, Colombia.

³ Type 1 and Type 2 Survival Situations are so categorized by us in NomadTown. Type 1 is an acute emergency like a car crash. Type 2 is a chronic situation, and more insidious, like air pollution.

3. Background to Community Resilient Adaptation

As humans, we live in a cultural system which, as well as interacting at a socio-cultural level with other people, interacts with the natural environment (Archer 2017). When we want to consider human cultural interaction within the planetary boundaries, we can use Kate Raworth’s framing as “doughnut economics” (Raworth 2017), to map how socio-economic factors manifest to make functioning biocultural landscapes (Splechtna et al. 2009).

Raworth encapsulates her social foundation as inclusive of (Figure 2. The Doughnut of social and planetary boundaries): Food security, Health, Education, Income and work, Peace and justice, Political voice, Social equity, Gender equality, Housing, Networks, Energy, and Water. The interrelationship of these as a foundation and planetary boundaries means we should not conceive of them as atomised and separated, but in many cases as acting in concert. This is an integral economics position (Lessem and Schieffer 2010).

We thus can see if we are transgressing socio-economic boundaries (the social foundation) and can better relate our human-centric societies to the more abstract breaches of the planetary boundaries (the ecological ceiling). However, there is a lack of consensus over what are foundational needs or derived instrumental ways of realising them, e.g., is energy only a way to achieve food or is food security essential in its own right?

How about education: Surely, we need some knowledge, gained through education, rather than just relying on instinct and our inherent capabilities to survive? Perhaps, there is an assumption of already having these aspects or vice-versa? We can see such confusions in other cases, for example, instrumental and intrinsic values (Justus et al. 2009) or in confusions resulting partly from Maslow’s work.

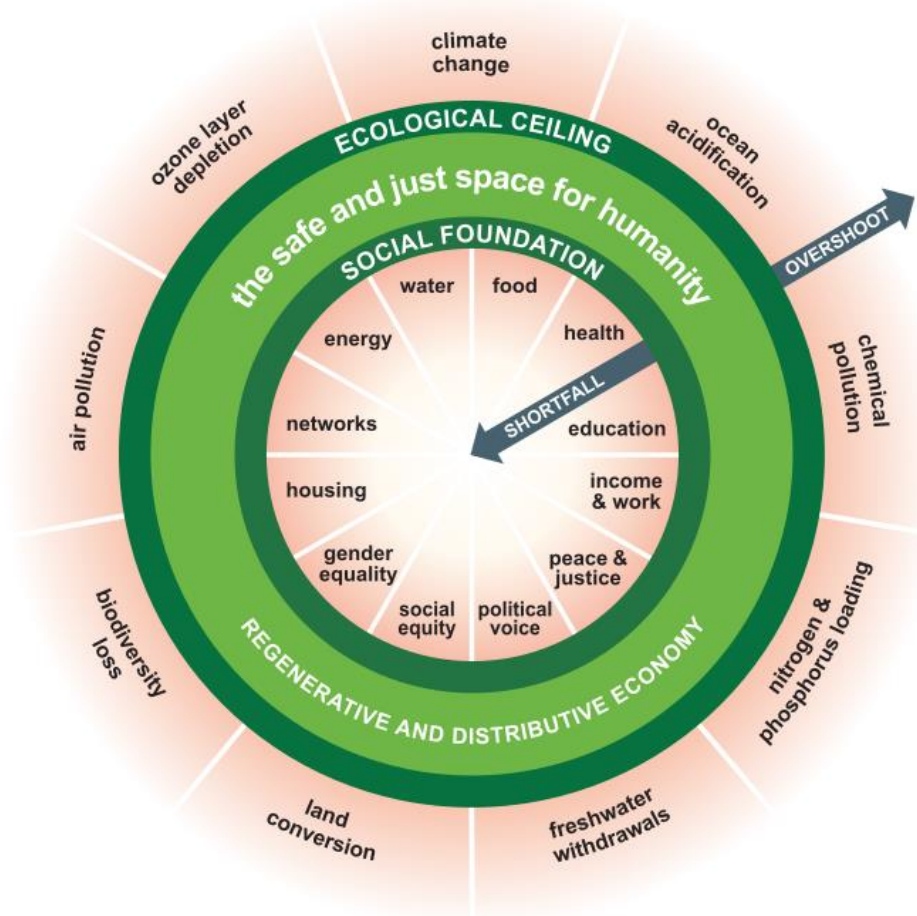


Fig 2. The Doughnut of social and planetary boundaries. Source: Kate Raworth and Christian Guthier. CC-BY-SA 4.0 based on Raworth 2017

Maslow had 2 different pyramids; a Hierarchy of Basic Needs, and a Hierarchy of Cognitive Needs (Sosteric 2019), which interact as a matrix (Grogan 2012). So, self-actualization and transcendence needs only partially rely on the “basic” or “essential needs” being met for an individual and often the scientific and derived literature omits that duality (Sosteric 2019; Sosteric and Raktovic 2020). In any case, Maslow produced a debased written version of indigenous oral history wisdom from the Blackfoot Confederacy, which is more “centered on multi-generational community actualization versus [Maslow who focused] on individual actualization and transcendence.” (Blackstock 2011, 75).

Rather than individuals, organisms provide us with the ultimate adaptive technologies, “the chemistry, processes, structures and designs [...which...] they have evolved and tested over millennia” (Pauli 2010, 7b: xvii). Thus, as an alternative to the individualistic norm, we can conceptualize an organism within the ecosystem / milieu as an approach (Ostachuk 2019). Here, rather than looking at the planetary boundaries in a disconnected-from-the-natural-systems way, we consider our survival priorities from within it and from the NomadTown perspective there are 6: Food, Water, Air, Shelter, Health, and Community. There is some overlap with the social foundation of Doughnut Economics.

Others, from a survivalist background, formulate these differently, for example including security (Carr 2011; Wiseman 2013) and/or warmth / fire (Kochanski 1991; Carr 2011) / electricity / energy (Black 2008), perhaps describing them as “essentials” and indicating other things are needed as a basis such as knowledge / education (Cobb 2014; Canterbury 2015) or attitude (Mears 1990; Ryan 2003; Wiseman 2013), which could all be subsumed under our 6. These are of course simplifications, which are easy to bring to mind, for purposes of allowing rapid assessment, which works in a short-term type 1 emergency situation.

In our 6-priorities conceptualization, the community priority encompasses many of the relational aspects needed for self-actualization and transcendence, while the other priorities cover physiological, safety and security needs. I consider it is important to not only think of individual survival, but collective survival and lived community knowledge over the long-term in place (the organism with-in its milieu).

So settlements (which are a place-based community) should think on all these priorities while considering themselves as embedded in the bioregion. There is a nuance here, with hard bioregionalism being equivalent to strong / hard sustainability and not replaceable and thus prioritizing the natural foundation of a region; Or being conceived in a more normative way, where culture can mediate and thus privilege via a more weak / soft sustainability over and beyond the natural features of a region (see Ong et al. 2016, on soft/hard; and Gutés 1996 on strong/weak, sustainability conceptions).

We can consider that food provisioning, and reliance on fossil fuels to produce and transport the food, makes not only cities, but also many other areas fail in terms of meeting the needs for survival endogenously – this failure puts us in a survival situation. Raworth seems to be more focused on a globally connected urban resilience perspective, though this is implicit rather than explicit. Her work latterly in Amsterdam, in aiming for a more local / regional (yet still urban) perspective (Raworth et al. 2020), is only partially facing this failure.

In contrast to meeting our needs globally, Carr (2004) suggests civil society should look “to establish bioregionally self-reliant economies of “place” networked geographically across “space” via communications and limited trade links” (ibid, 70). Hence local, smaller scale and the rural, which is necessary for survival. And thus, this is where our foundational focus should be. It is the philosophical perspective taken in this paper, which owes much to an agrarianism (Schultz and Harre 2011) or more accurately a ruralist Weltanschauung. Nevertheless, once meeting the immediate survival priorities, we have other long-term needs which we must adapt to meet.

We need to adapt to the situation we are in and shortly to be in (Janes and Snyder 2020). Adaptation here means not only the biological, evolutionary adaptation, but also a culturally mediated place-based adaptation which takes into account the challenges thrown-up in the Anthropocene – the Earth as altered by the actions and mis-actions of man (Cracknell and Krapivin 2009). It requires we look at how to transform to a situation where we gain the knowledge, knowhow and especially wisdom to make the required adaptive changes at a community level.

4. Background to Milieus and the Ecological Perspective

The bioregion is a geographical or even geomorphological concept (“geomorphology is the scientific study of landforms and land-forming processes” (Sack and Orme 2013, 1)) and does not fully account for the human community influencing aspect of culture. There is a concept that does combine these aspects. It is the biocultural landscape.

Hong (2014, 5) has defined “biocultural landscape” as:

“the overall and cyclic characteristics of: a space that acts as a buffer so that biocultural diversity (which is rapidly diminishing but deserves to be preserved) may be developed in a sustainable manner, ecological knowledge utilizing diversity and dynamics of the space, mechanisms to maintain the landscape development process, and an ecosystem which has an influence on the space”.

Landscape is a contested term (it is a human construct and has various strands in its genesis; (see Newland 2016 for a discussion) and is also related to nature – another contested term (Ginn and Demeritt 2009) and prone to interpretive variation based on its framing (see Kieninger et al. 2009). Adding cultural to landscape does not remove the contention (Selman 2012). Nevertheless, this agglutinating term – biocultural landscape – has gained currency within the academic community. How can we analyse it?

I suggest that the concept of the milieu is useful. Milieu was adopted in French to interpret the word fluid or flow. This process came from incorporating the work of Isaac Newton, around flows and fluid mechanics, which emerged within the 18th century mechanistic enlightenment philosophy of the machine, into the French scientific culture. Beyond the metaphorical understanding, akin to an engineering approach, further co-option by natural scientists took the word milieu into their lexicon with the idea of penetrating forces. Latterly postmodern philosophers have purposed milieu in their analyses of the dispositif within a given social system. This evolution can be traced in the work of Michel Foucault with his outline of this etymology (Foucault 1972; 2009a [1978]; 2009b [1978]).

Foucault (2009a [1978], 20–21) defines milieu thus:

“What is the milieu? It is what is needed to account for action at a distance of one body on another. It is therefore the medium of an action and the element in which it circulates. It is therefore the problem of circulation and causality that is at stake in this notion of milieu. ... The milieu, then, will be that in which circulation is carried out. The milieu is a set of natural givens—rivers, marshes, hills—and a set of artificial givens—an agglomeration of individuals, of houses, etcetera. The milieu is a certain number of combined, overall effects bearing on all who live in it. It is an element in which a circular link is produced between effects and causes, since an effect from one point of view will be a cause from another. ... So it is this phenomenon of circulation of causes and effects that is targeted through the milieu.

Finally, the milieu appears as a field of intervention in which, instead of affecting individuals as a set of legal subjects capable of voluntary actions—which would be the case of sovereignty—and instead of affecting them as a multiplicity of organisms, of bodies capable of performances, and of required performances—as in discipline—one tries to affect, precisely, a population. I mean a multiplicity of individuals who are and fundamentally and essentially only exist biologically bound to the materiality within which they live. What one tries to reach through this milieu, is precisely the conjunction of a series of events produced by these individuals, populations, and groups, and quasi natural events which occur around them.”

Foucault here goes beyond a simple description of population in an environment that suffers influences in a neutral way as to what the milieu is, to suggest that there is a normative and manipulative aspect with such influences to be found acting upon the milieu too. Other postmodernists accept his premise in their analyses and term the concept of manipulation and normalization of these systems by what they term biopower (Liljaa and Vinthagen 2014), the exercise of which is carried out by biopolitics (Foucault 2009a [1978]). The bio, acted on, in these terms, refers to human populations.

There is something unsatisfactory in this description. We have the machinery, the elements it acts on, and where it is acting, but somehow, we seem to have lost the flows and fluidity. Yet we can envision them acting within this milieu. A way to think of them is to think of them as current-sees, or currencies or capitals that are flowing. Knowledge capital, social capital, and financial capital for example. For a discussion of capitals and capital flows, see Petz (2020). Rather than the machinery or machine we can use the term *dispositif* / *dispositive*.

Dispositif is somewhat of a slippery fish with an analogous developmental path in concept to milieu. A brute translation would be apparatus or device. However, it is not a concrete thing, rather it is an abstraction that is an aggregation of other dispositives that share a commonality as an ensemble. We see an implication as “disposition” in Descartes (who likes his machine metaphors) as an arrangement of parts (in Canguilhem 1952); that is later used as a term by Canguilhem (1952), who prefers seeing things as organisms and adjuncts of them. Foucault (1980) takes up *dispositif* and regards it as the non-material, who according to Braun (2014) passes it to Deleuze where anything with some connection goes! After, Agamben (in Braun 2014) puts his spin on Deleuze’s take, as anything with an influence, and finally (so far) it ends up with Braun with his “*dispositif of resilient urbanism*” (Braun 2014) where it is government, effectively being management in an ad hoc impromptu manner.

I follow Foucault with the *dispositif* being:

“a thoroughly heterogenous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions ... which has as its major function at a given historical moment that of responding to an *urgent need*.” (Foucault 1980, 194–5).

That urgent need, in our case, is the all too real dystopia of climate collapse. Lastly, my perspective of an “integral” insofar as it serves to harmonize nature and culture, society and economy” (Lessem et al. 2016) approach, which goes beyond a postmodern atomizing approach (Berry 1999: 598), leads to a slightly different usage of these perspectives as tools. Tools not only for a descriptive analysis, but to give a prescriptive action-oriented output, in “a field of intervention” (Foucault 2009a [1978], 20–21), that is ecocentric rather than anthropocentric.

5. Background to Networked Learning

Mapping, followed by connecting, and transforming is aimed at when taking an action research approach to the milieu. I supported the development of NomadTown as a Regional Information Coach (ERDE 2009) and as an Earth Regenerator (Janes and Snyder 2020) with just such aims. Such rural networking has been suggested before, with thematic villages (Kłoczko-Gajewska 2013), as a system of interacting mutually supportive local communities. This rural interaction is called the “Global Villages Hypothesis” by Nahrada (2007).

Franz Nahrada runs the lab GIVE. He states that the:

“GIVE (= Globally Integrated Village Environment) project ... *was conceptualized ... out of the experience of rapid decay of mountain villages and sparsely populated areas. ... GIVE is about a new synthesis between rural villages and global culture that emerged from cities. The idea is to combine peace and tranquillity of rural areas with empowering people to work together in the most rewarding way locally and globally, and transform their rural villages into “Global Villages”*”.

Nahrada further states there are “*three main pillars*”:

- *start a transformative process from educational institutions to show people the opportunities of local development...*
- *build on local matter/energy cycles and integrated space use, use environmental technologies as main source of wealth and integrated resource management. Try to discover deep links with human – supported nature, combine architecture and horticulture, automation and appropriate*

technologies.

- *although the lifestyle of Global Villages is thus totally different from urban lifestyle and they tend towards informal economies ...At least some “villagers” should be able to participate in the “knowledge economy” and get the means to acquire necessary tools and technologies.”* (Nahrada, 2007)

The Global Villages Hypothesis takes advantage of the "space of flows hypothesis" (Castells, 1997) where time and space are compressed (Harvey, 1990; Hornborg, 2003) – not only as they are within a city, but also between rural locations, the ramifications of which could be explored at a global level (Hornborg, 2009). Traditionally, rural areas more poorly access relational capital, providing a significant disadvantage contrasted with urban areas.

This case study of NomadTown investigates what I term an educational milieu (though it is also a resilience milieu and an associative milieu i.e., associations connecting), and regard as crucial for resilience hub efficacy. This connection possibility rests on an alternative way of mobilizing relational capital by an enabling ICT dispositif with techno/neo/traditional nomads transferring learning.

The realization of this potential leads to new product possibilities (and in NomadTown’s case services, with an educative thematic network) and is made on the basis of new space-transcending infrastructures: not just telecommunications, but a web of intensive shared information. Rather than a hierarchy from big cities to small villages, we can have networked villages (in our case projects as nodes / hubs) to meet the demands of a resilient ecosocial human society.

For such a network to work properly, 3 dimensions in the network have to function:

- the comprising villages, in themselves;
- by microregional clustering;
- and in aggregate, in networks.

In this paper, I describe NomadTown (the functioning “village” in itself); the nascent aspects of this network (microregional clustering), which NomadTown is part of; and partly its global connections (aggregate in other networks).

Innovation studies have considered aggregation in terms of technology clusters, but with a focus on the business sector rather than civil society (Malmberg 1996). Nevertheless, the key features that are important in the formation of a milieu are also applicable to non-commercial areas of life, namely clustering occurs in human social environments as a “decentralized regional network-based system” (Saxenian 1996, 8) due to: “the social structures and institutions of a local economy” (Saxenian 1996, 6) which depend upon the characteristics of actors being open, and with “an element of cooperation” (Malmberg 1996) where infrastructure and knowledge are present to facilitate this culture.

Useful ways of exploring clustering can be found by looking at the helices models; that have extended beyond the triple helix (University, Industry, Government) to the quadruple helix (adding Civil Society) to the quintuple helix (further adding the Natural Environment), which explicitly aim at the concept of the knowledge society for (economic) innovation (Volpe et al. 2016). However, here we are seeing such learning develop in a human community (social capital) which is not focused on financial capital.

How does NomadTown connect into the wider landscape, and particularly the educational landscape? There is a matter of perspective which is important to understand the connections that are relevant. We can look in an atomized way at individual features such as people, places, or projects. This is often what is described around a network, rather like looking at the trees in a forest. Or we can look at the connections between these elements, the space between and what makes the landscape cohere, rather than looking at the mycorrhizal network in a forest, which allow nutrients to flow so the forest is a coherent whole and supports less viable areas to flourish.

A focus on this networking can be applied to settlements, the bioregion and the cultural landscape that form a biocultural landscape. Such an integral approach means we must be minded how the cultural and

the biotic are both important as a social ecological dyad (Yletyinen et al. 2021; Woods et al. 2021). Even though this paper focuses on describing the human educationally related aspects, they are strongly influenced by the natural endowment (Sun et al. 2018).

The learning which is described is organizational learning. The pedagogy is that of connectivism, whereby learning is influenced by a “diversity of networks” with “complex learning...[from]... diverse knowledge sources” and is “social, technologically enhanced” with knowledge transfer by “connecting to (adding nodes)” (Seghroucheni et al. 2014). This can be seen by the resilience hub connecting to other organizations and the network learning, collectively learning. This is not individual learning, but organizational and the growth in learning and knowledge in this didactic triangle (knowledge-apprentice-master) can be seen and measured by looking at the nodes and depth of learning (by the presence of learning artifacts, social technology practices and other objects) within those nodes organizationally.

We can usefully think of education here being a theme. And if we think thematically rather than in a place-based way then the specific locations, organizations, and individuals described below are ways of accessing that theme. Useful concepts are:

- Thematic Networks – Thematic networks may share knowledge within a particular domain across a wider geographical area. Individual and group members belong to the same community of interest. We can see that with thematic villages, for example book towns (Seaton 1999).
- Platforms – facilitate practitioners to practice, continuous professional development, by providing a shared space where the like-minded can share opportunities and actions. Individuals join to explore and develop new things. For example, Pixelache a transdisciplinary arts platform (Paterson 2016).
- Nomadism – founding networked connections by individuals that are mobile. Individuals, who are influenced by the philosophy of nomadism and have mobile cultures with more of a concept of outreach take and bring ideas between different places and sub-cultures.

This leads to the research question:

How does NomadTown interact with its cultural milieu for successful climate mitigation?

6. Research Aims, Data and Methods

6.1 Aims

The initial impetus for this research was the type 2 survival situation we are in. The aim was activism and not academic research in initiating NomadTown. Thus, the experimental nature of this research is the manifestation of NomadTown as a functioning entity within its milieu. This is action research, with the emphasis on the action side.

Action research (Carson and Sumara 1997; Lagae 2012) is closely connected with artistic interventions (Crawshaw and Gkartzios 2016; Douglas 2005) and here there is a public outreach aspect (Botero and Saad-Sulonen; Nielsen and Nielsen 2016; Egmoose et al. 2020). Both Christof “Huck” Middeke and I discussed NomadTown as a way to reach a wider audience with our specialist knowledge of survivalism, bioregionalism and resilience prior to NomadTown being initiated. This is very much in line with social representation theory, where the aim is “the transformation of scientific knowledge developed by lay people and the media into common sense” (de Rosa 2013: 31).

In social representation theory, this process is called objectification, whereby something abstract (e.g., resilience) is turned into something more concrete (e.g., NomadTown as a lived experience). To objectify (create an artifact or object) meaningfully, a new phenomenon (objects, relations, practices, and experiences) must be given coherence within a milieu, which is called anchoring. Anchoring is so named as it means an object is anchored, and thus integrated, into an existing worldview, so it can be understood in familiar terms by those holding that worldview (de Rosa 2013).

This is an artistic process. And in our case, “climate change, new forms of interaction and social practice” (de Rosa 2013: 31) were anchored into the existing agrarian viewpoint of the local community, and

the wider subcultures connected to those of us doing this, our milieu. Thus, we aimed for anchoring to create social representations, which would form collective representations in our milieu. The milieu can then share and transmit those representations more widely, and this dissemination is an explicit aim of this research (see Arnaboldi et al. 2017; Gladwell 2002 on networks and information diffusion).

We came to this decision to carry out this action research partly due to a tool, which has been developed as a social technology called S.T.O.P.

S.T.O.P. is interesting for research on networking as an object. It is, in this form of praxis as a social technology, new. Its dissemination is relevant, in how it relates (anchors) to our resilience related milieu and can be mapped. As of yet, it has not spread in NomadTown's milieu very far. Yet it has been prototyped, and the initial stages of identifying the possible directions of spread have been identified: S.T.O.P.s as a social technology developed in NomadTown have been used in Norway, Sweden, Germany, Australia and elsewhere in Finland and once digitally as a cyber-S.T.O.P.

So what is S.T.O.P.? S.T.O.P. as a tool seems to be about 50 years old. Although there are precursors, that suggest similar methods were being carried out decades before, I have found no documentary evidence to link them with S.T.O.P. It appears that it originated in the United States of America as a survivalist technique. After this, it has spread through military, survivalist, and prepper communities.

It is important to note that the mass media creates discourses and perceptions, which are liable to different interpretations on these terms, a deep exploration of these is outside the scope of this paper. However, the military, for example, may be seen as an aggressive warlike force in some cultures, yet in others seen as an extension of existing rescue services during disasters; survivalists can be seen as post-apocalyptic fanatics or those practicing woodsman skills of living close to the land; and preppers as those with right-wing extremists' agendas keen to implement a fascist gun-toting society or those ready for any unfortunate situation should it arise within the existing civilization.

The earliest references I found are in Montana Outdoors, with "S-T-O-P! ... Stop Think Observe and Plan" (Wojcik 1974) and Eugene "Gene" Fear's *Surviving the Unexpected Wilderness Emergency* (Fear 1972). Briefly, S.T.O.P. is a mnemonic, with the letters in NomadTown's S.T.O.P. standing for:

S. Stop – Sit down, go on Strike, and Stop what you are doing.

T. Think – and also Thank – and Tea – take a cup of tea!

O. Observe – Orientate toward the Opportunities we have.

P. Plan – Make a plan and then, if possible, Proceed to carry it out.

In NomadTown as a stepwise innovation from a tool to be used by an individual in a type 1 acute emergency, we in NomadTown have developed S.T.O.P. to be a social technology to be used by a group in a type 2 chronic emergency. It can also be used at a single stand-alone event, or longer term in an ongoing evaluative process.

S.T.O.P. development was then funded from the European Union DEAR programme run by the DG DEVCO via the Bridge47 project (Hendry 2019). Bridge47 aims to promote Global Citizenship Education of the United Nations (Nikolitsa-Winter et al. 2019) for realisation of the UN Sustainable Development Goals. Global Citizenship Education has much in common with Global Service Learning (Da We Yu Hills 2014; Hartman and Kiely 2014b; 2014a; Battistoni et al. 2010).

And as a part of that Bridge47 project NomadTown was investigated scientifically. So the praxis of S.T.O.P. is the praxis of NomadTown and the praxis of sustainable development.

6.2 Methods

Community-based participatory action research (Lagae 2012) was the main methodology used to develop NomadTown. Methods included a deep hanging out, a form of participant observation (Geertz 2000), video documentation and thematic events carried out, which could be described as an ethnographic approach using serial hanging out (Sandhu et al. 2007) that is appropriate to the rural environment

NomadTown is culturally situated in.

There are several methodological approaches embedded in this research, which are largely out of scope of the article, but can be of interest to the reader. Case study research has a variety of different questions in just how scientific is it? Here, I followed the philosophy and praxis found in Yin of carrying out scientific case study research (Yin 2018), with influence from the idea that Thacher (2006) of normativity where a “normative case study also holds special promise for policy-oriented research.” See Lincoln et al. (2018) for further exploration of what a case study can be.

I decided to present NomadTown using a research case study approach due to its “contemporary nature” and “lack of control” over how it manifested during the research phase (Yin 2018). The Covid-19 pandemic restrictions prevented us taking S.T.O.P. to other settings, including the art festival Norpas, as action research to explore the nomadic nature of NomadTown’s technology within the associational milieu. As a result, the nomadic aspect of individuals moving through a network could not be investigated as hoped for.

Much of our focus was thus around development of the S.T.O.P. technology and not the wider milieu. Or rather the focus was at practical level on: How do we run a workshop? and Who do we know that is interested? Climate change is quite abstract for many people, and they just cannot connect it to their lived realities. As a result, in NomadTown, we do not talk about climate change and instead try and communicate on common ground between practical actions and these more abstract climate or ecologically related concerns.

Furthermore, those running a wild-plant foraging workshop were not actively thinking at the metalevel on how this connects to an educational milieu and may have a long-term decadal transformational / adaptational effect, more they were focused on meeting the requirements of the funders to run the workshops they had promised and at a more basic level on: How do we connect-up people locally who are active in our organization?

Nevertheless, those engaged in planning the EU S.T.O.P. project were more aware of the long-term implications and networking aspects for this metalevel application and did (as done here) consider the aspects embedded in this research question in our praxis as explained below.

6.3 Data

We have recorded as participants audio interviews, video recordings of summaries from sessions. Journaling of events also proved a useful source of information, with around 15 facilitated communal different S.T.O.P.s having taken place. We produced podcasts, and some teaching on courses. For example, at the National Preparatory Study Days, which promoted the public information campaign, 72 Hours: Home Preparedness – Useful Tips for Disruptions and Emergencies (SPEK 2020).

This article is autoethnographic (Buchli and Lucas 2001; Harrison and Schofield 2009; Adams et al. 2017) in much of the way that it describes the subcultures which I am an active member of. There are no others in an othering sense (Das 2015), and it can be thought of as something I am rather than something I do (Petz 2010). I am myself a co-learner (Nagel 2008), co-teacher / peer mentor, student, scientist, practitioner, activist (scientivist and activist), as are others in my culture. It is very much a thick description (Geertz 1973).

Analysis has been carried out by iterative reflection on different elements of S.T.O.P. This has been done with the principal informant, Christof “Huck” Middeke, individually, over email and via telephone conversations and collectively at events. This is described as peer mentoring. Further comments and conversations with Teppo Eskelinen, Tatiana Ryba, David Crookall and Andrew Paterson have helped develop the paper.

Talking circles which are a part of S.T.O.P. events, but also occur outside a #FullMoonFullStop, which is a regular monthly S.T.O.P. event which takes place in NomadTown allowed collective introspection from the wider community around NomadTown. Additionally, I have taken into account ethical considerations and requirements in those I have worked with. As a result, human participants are anonymized where

necessary and personal or sensitive data is not used.

Social media were used during this research (Batrinca and Treleaven 2015). Facebook, a social network; WhatsApp, a messaging service; Twitter, a broadcasting service; and YouTube, a video hosting platform all have relevant content, though it is often siloed. See Luttrell (2018) for more info on these different social media. Generally social media were used to identify relationships and connections and explore knowledge transfer.

They were tools for carrying out project administration and knowledge transfer and not only mined for data. As this is action research, they serve this dual purpose of: creating a record of what was done and are doing, while doing it; and revealing relationships between different actors and people over time when looked at using an archaeology of the recent past methodology.

An online media survey found mentions in local newspapers: Karjalainen (Sievaläinen 2018; Koistinen 2018; Kauhanen 2020; Leinonen 2020); Heili (Dannenberg 2018); and by YLE, the national broadcaster (Nurmi 2019; Laininen 2021), which were used for clarification of what had happened.

Having gathered the data, the theoretical side was carried out by consulting the literature. I used Google N-gram Viewer (Islam et al. 2012) for analysis of S.T.O.P. development. Wikipedia, a crowd sourced encyclopedia; Google Scholar, an indexing service; and Sci-Hub, a journal sharing platform, have proven useful for literature surveying and reaching some sources.

7. Presentation of Maaseutuyhdistys Sydänlanka ry and NomadTown

Maaseutuyhdistys Sydänlanka ry (Rural Association Heart-thread) is a small association located in North Karelia, Finland. Sydänlanka was founded in 2016 “to strengthen people's relationship with nature and increase community” (Sinkkonen 2019). As a dynamic, future focused organization its membership “wants to constantly teach and learn something new. Through creative activities, the association wants to awaken and empower people in different life situations” (ibid). Thus “Active members of Sydänlanka organize workshops, excursions, cultural events, sharing circles, community workshops and spending time together, caring, sharing and rooting as a collective” (ibid).

Sydänlanka's values “include working together, nurturing the connection with nature, locality and spiritual growth” (ibid). Recently, Sydänlanka has been developing a resilience hub called NomadTown. The name NomadTown has several facets. No Mad Town – referring to that NomadTown is not a mad way of going on, was noticed after it was spoken by native Finnish speakers, and by implication that the way that urban living often manifests (which is not ecoliterate) is a mad way of going on. NomadTown sounds good in English due to the vowel combinations. “Town” is used here to mean a small settlement (a village) rather than a big city.

Nomad refers to nomadology (Muecke and Roe 1996) and the mobile possibilities within the project, which were conceived into the design of the project. At present, NomadTown manifests as a small intentional community situated about 7km from Joensuu's market square. There are some permanent residents, although there is capacity for up to 18 (as initially planned for), most do not live there year-round, though some lived for several months, moving through who are neo-nomadic (D'Andrea 2006).

It is “a place where others can come and participate and try what works and where are their edges” (Middeke in Laininen 2021). NomadTown, although close to the larger settlement Joensuu, is not just for transforming Joensuu, but also in connection with other actors is creating a network of transformation.

The residents live in yurts, tents (and in one case with only a hammock) or similar constructions that are planned to be mobile so the whole settlement could move. There have been 2 on-site living experiments to try and subsist by avoidance of fossils, rubbish or money. Some gardening is done to explore sustainable small-holder food production.

NomadTown was developed through a process of conversations with different people, sketches, and design thinking about what it could include and how it could manifest. In the case of NomadTown there is a “utopian propensity” (Manuel and Manuel 1979, 5) in that exercise of “a different sovereignty”,

similar to that found in an intentional community (Liljaa and Vinthagen 2014). It was thought of as living into reality sustainable adaptation to our current situation (i.e., we are in an emergency situation, we are not just preparing for one that may come).

NomadTown has been inhabited from August 2019 by Christof “Huck” Middeke (Nurmi 2019), who is a member of Sydänlanka ry, and the main driver of the project. Huck is a wilderness guide and comes from an environmentalist activist background (a “standby” Greenpeace employee). I have been giving scientific support from prior to its foundation and met Huck when I was the National Coordinator Extinction Rebellion (Naukkarinen 2019).

Members of Sydänlanka have been supportive in meetings, talkoots (communal work actions) (Köppä 2010) and other activities, such as a weekly sauna at NomadTown. Thus, as an adopted child of Sydänlanka, NomadTown has been influenced by the Karelian culture that the mother association has grown up in. Though the influence is not particularly strong, with other palearctic cultures also influential in the mix. Karelian culture⁴ gives the spiritual origin, through myths and legends transferred by traditional runo singing (Oras and Sarv 2017) of much of the Finnish ways of being (Fingerroos 2012). Beyond these romantic cultural origins, Finno-Ugric land-using relationships have been influenced by:

1. Nomadic reindeer herding culture, embodied today by the Sámi people. Within the lifetime of a landscape, over deep time, such nomadic practice and associated philosophy was widespread (Helle and Helama 2007) and can be seen in the memory of the silent witnessing forest. However, in our lifetimes the form the Sámi reindeer herding takes is organised / controlled by nation states through an agricultural land-use system (paliskunta in Finland). In other words, today, it is not a nomadic practice. Yet in Scandinavia, there is some revival of the traditional formats, which have been kept as a cultural memory, called siida (Sara 2009). Such land practice did not occur significantly in the area where NomadTown is currently located, though awareness due to this contact culture is present.

2. Manifesting in the south of Finland is the farming and even forest-based agricultural way of living which has shaped much Finnish culture (Reitala 1987; Peltola and Leskinen 2009; Kimmo 2012). Trees are effectively farmed and grown like crops rather than interacted with as wild woods and this farmed / forested landscape can be considered the *natural* “natural givens” of NomadTown’s milieu. Farmsteads were settled houses for yeoman farmers with larger being mansions (kartanot) (Jutikkala 1962), which were related to larger market and administrative towns (linnat – or castles) in a feudal system, which restricted where goods could be traded, and people could live (Heinonen 2021).

NomadTown straddles these ways of existing with rural skills (Marks 1977; Logsdon 2017), green skills (Vona et al. 2015; Diep and Hartmann 2016), and country living (Emery 2008; Gehring 2010), which includes foraging (Kallas 2010) and low environmental impact technologies (Judd 2007 [1897]) taking place in NomadTown. They have also been called “climate skills” (Laininen, 2021). While these are practical skills, they can be found in many settings and there is a generalizability to many other settings.

The ry (rekisteröity yhdistys) in Sydänlanka’s name means it is registered with the Finnish Patent and Registration Office, which gives a particular legal status (it is an officially recognized association and after 3 years can get some grants, but must keep a membership list) and gains certain financial benefits (it can have some subsidised workers fully paid for, pays a lower tax rate in some ways than companies and has some state grants available) as a result.

There are over 106 000 such associations (PRH 2020) in a country with a population of 5.528 million

⁴ NB Pers. Comm. Teppo Eskelinen, Department of Social Sciences, Joensuu, University of Eastern Finland: it is good to note that “Karelian culture” is not only cultural heritage, but to some extent also an invention of the Finnish 19th century elite, to support the Finnish national independence movement (and, inevitably, Finnish nationalism). “Karelia” has also later been symbolically very significant to Finnish fascists, such as Akateeminen Karjala-Seura, for whom “reuniting” eastern Karelia with Finland was a key goal. So expressing political goals by reference to “Karelia” potentially has this semi-fascist connotation. Also, to the extent that Karelian culture exists, Joensuu is not culturally part of Karelia, but rather the eastern extension of Savo. It was just branded “North Karelia” after the Winter War in 1940, when Karelia became Soviet territory and Finland wanted to claim that “Karelia” still belongs to Finland.

(Statistics Finland 2020). Along with the project funding or capacity-building support that exists within the country, to help create organizational resilience, this associational dispositif manifests as an effective third sector in Finland. As part of this dispositif, Sydänlanka networks with several associations.

8. The Actors in the Milieu

Having described how NomadTown is related to its institutional environment I now turn to the “artificial givens”. These givens are comprised of individuals, associations of various kinds and networks. They could be described as actors, Aurenhammer (2016) states “Networks generally consist of actors (which are nodes that i.e., hold one’s own individual capacities and willingness) and vectors (which are their interactions/-relations i.e., of in-/formal, non-/material capacities.”

There are several issues that arise with the term actor, namely: Is a network an actor or a construct as an emergent property used by actors, even a vector? There is an issue of scale, is an individual an actor in the same way as an association or even several associated organizations reaching a national level organization? This is not made very clear by just using the term actor. Thus, there is a normative filter and in our case the evaluation of an educative milieu is our perspective, based on our records of connections with others in that milieu. See Aurenhammer (2016) for a relevant discussion around aspects re actors and network research.

Activities are carried out by individuals, even within associations, and disentangling a community or population from an individual to ascribe it a status as an actor is fraught with challenges. Consequently, my description mentions some key actors (Figure 3. Actors in the Educational Milieu of NomadTown), which I think are significant to NomadTown’s milieu due to intersecting circles of action (Helix cluster focus). They, if successful in bringing about transformational change, could be described as “firebrands” (Hoppe and Coenen 2011) or “pioneers” (see Eckerberg, Forsberg and Wickenberg (1998) for a discussion of pioneers in educational environments in a Nordic country).

The whole network can be described as a hairball, and it is necessary to winnow the core or most significant elements from the mass. Unfortunately, the weak ties who are peripheral, liminal, and marginalized are often more responsible for the network effects of knowledge transfer than the most noticeable or core participants. It is with the weak ties where there are many interactions between sub-cultures and contact cultures. Social representation theory shows this diverse exchange spreads ideas between the periphery and cores of those cultures, and thence to the mainstream culture. This is done by bumblebees, nomads, troubadours.

Mobilizing strong and weak ties from general network theory does have merit. Yet focusing on such a concentration would lose the overall description of how the educational milieu looks, which I want to identify, and thence use to support other incipient resilience hubs bioregionally.

Status	Actor Mentioned in the text	Helix Cluster Focus	Level of action / Role re NomadTown split into: the functioning “village” in itself; microregional clustering, and aggregate in other networks
Individuals	Christof “Huck” Middeke	Civil Society, Natural Environment	the functioning “village” in itself; microregional clustering; and aggregate in other networks
	Marcus Petz	University, Civil Society, Natural Environment	the functioning “village” in itself; and aggregate in other networks
	Jussi Sinkkonen	Civil Society	microregional clustering; and aggregate in other networks
	Lasse Nordlund & Maria Dorff	University, Civil Society, the Natural Environment	aggregate in other networks
	Ossi Kakko	Industry, Civil Society, Natural Environment	aggregate in other networks
	Small Groups	Sydänlanka ry	Civil Society, Natural Environment
NordicByNature		Industry, Natural Environment	microregional clustering
Tampere Bushcraft Group – for English speakers		Civil Society, Natural Environment	microregional clustering; and aggregate in other networks
Larger Groups	Marttaliitto (Martha Organization)	Government, Civil Society, the Natural Environment	microregional clustering; and aggregate in other networks
	Extinction Rebellion (Elokapina)	Government, Civil Society, the Natural Environment	microregional clustering; and aggregate in other networks
Platforms	Pixelache (including Pixelversity)	University, Industry, Civil Society	aggregate in other networks
	FINGO	Government, Civil Society	aggregate in other networks
	SAMMAL Village Technologies	Industry, Civil Society, the Natural Environment	microregional clustering; and aggregate in other networks
Networks	Foraging & Herbologies Network	University, Industry, Civil Society, the Natural Environment	aggregate in other networks
	SUCH (Sustainable Change Research Network)	University, Civil Society, the Natural Environment	the functioning “village” in itself (soon); and aggregate in other networks
	SKEY – Suomen Kestävän Elämäntavan Yhteisöt ry (The Finnish Association for Sustainable Lifestyles)	Civil Society, the Natural Environment	the functioning “village” in itself; microregional clustering; and aggregate in other networks
	Utopie Camps	University, Industry, Civil Society, the Natural Environment	aggregate in other networks

Fig 3. Actors in the Educational Milieu of NomadTown. Source: own elaboration

8.1 Individuals

The S.T.O.P. tool in its adapted form has been shared in survival trainings through NordicByNature, which is a collective of several wilderness guides who offer survival and bushcraft courses as a commercial service (Turunen 2015; Middeke et al. 2018) and at lessons given by Huck at Joensuu seudun kansalaisopisto (Joensuu Community College), originally a free college, much influenced by the ideas of community education in the folk highschools. The Finnish folk highschools (kansan opistot) are subtly different from the other Nordic folk highschools, (Lövgren and Nordvall 2017).

The colleges, and especially historically these folk high schools, were aimed at adults in the vein of Workers Educational Association courses, which are a mix of recreation, learning and skills aimed at broadening community “learning opportunities ... for all ... to make good things happen in our communities and bring change to our society” (Widdowson 2019, 5). This flexibility allows those of us in this milieu to present sustainability topics in a context and pedagogical style of our own choosing.

I have taught in such colleges with elements of resilience in my teaching. However, two other individuals of note in working to promote sustainable ways and acting much as contemporary agricultural extension services do (Research, Extension and Training Division, Food and Agricultural Organization of the United Nations 2000; Benson and Jafry 2013), but in the field of resilience building, in several educational projects are Ossi Kakko and Lasse Nordlund⁵.

At the cooperative-ecovillage-school Kyläosuuskunta Gaija (Osusuuskunta Gaija 2017) Ossi Kakko told me in 2020 that he works “to produce an educational environment for studies of nature and sustainability” He is in his “approach anti-academic, which means “academic people” have gone through such an organized alienation that they are failing in sustainability due to lack of capacity to comprehend systems of life.” and finds the “Similar problem seems to be non-existent in the non-academic world of practically illiterate people, who are to [him] more properly educated than any of the doctors in any academic context”. He regards that broadly the “Academic community is a great disaster for the planet ... as is any other community of alienated people”.

Lasse Nordlund and Maria Dorff (Väänänen 2019) have started a school called Omavaraopisto (The School of Self-sufficiency) in collaboration with the folk high school Kainuun Opisto (Nordlund and Dorff 2019). Omavaraopisto is further supported by SUCH, the Sustainable Change Research Network (see below, 9. Networks). All of us explicitly want to reach out more widely in a reformist way, as the folk high school movement did in the 19th century, to achieve societal change not only individual capacity building.

8.2 Small Groups

NomadTown is influenced strongly by the prepper or survivalist mindsets. The prepper mindset can be thought of as a practitioner oriented one, which is analogous to that found in first aiders learning basic medical knowledge (Katona et al. 2015), in both cases for emergencies. “An emergency is a threatening situation that requires immediate action but may not necessarily result in loss or destruction. If an emergency is managed successfully a disaster may be averted. A hazard is a possible source or danger that, upon interacting with human settlements, may create an emergency situation and may lead to a disaster” (Kano et al. 2010).

Preppers aim to know how to deal with such a situation, and be prepared (prepped) for it, with knowhow and equipment, respectively. An example of such a location-based group engaged in such prepping is the Tampere Bushcraft Group – for English speakers, which is geographically limited and culturally mediated by a cultural-linguistic framing (although it’s around 40 adult members that are from Finland, the UK and Japan). Meeting in an ad hoc way, it explores food technology, shelter construction and technology adapted to wildlife guiding and survivalism.

⁵ Ossi Kaako has given a foraging and compost building workshop at Hirvitalo in Tampere, a contemporary art gallery run by a community arts association directly relevant to community education. Lasse Nordlund has also launched a pamphlet (Nordlund 2008) around an event there. I ran a sustainability scenario workshop there too.

Learning in the group occurs as microlearning (Hug 2005) via Facebook (which I and Huck have been active members of), a social network, e.g., the exploration and evaluation of Google Lens to identify plants (Shapovalov et al. 2020), discussions on animal traces and kit. But community embedded learning also takes place in physical meetings in wilder areas. There are various traditions that can influence how this praxis manifests, with adult members having children that have engaged in related learning environments.

For example, I went with my son Saxifrage on a nature trail minibeast hunt to Pynnikki Nature Reserve and heritage area, Tampere (Lievonon et al. 2002). This was with Saxifrage's preschooler peers from Enkku – The English School of Tampere following a forest schooling approach (Leather 2018). In Finland, this approach is often known as luontokoulu (nature school), and several have been run by Suomen luonnonsuojeluliitto (Finnish Association for Nature Conservation).

Waldpädagogik – forest pedagogy (Bolay 2015) and the scouting movement (which includes bird identification, orienteering, campcraft and a wide range of skills taught for merit badges) are influences on others' children too and thus affordances⁶ (Rantala and Puhakka 2020). Affordances (Gibson 2014 [1979]) here means that what is possible and thought to be possible by Tampere Bushcraft members is affected by their experiences with the scouts (and others) in nature settings, as the environment is perceived "in terms of affordances the emphasis changes from a physical description to a functional" one (Brymer et al. 2014).

Finnish scouts have family and young children's groups (age 7–9) and slightly older child groups (ages 10–11; 12–14; 15–17) which do ask adults to help with setting up camps or as volunteers, even if only their children are members of the scouts (adults can become scout members). One child sea scout from Tampere (Nettle, my daughter) has participated in NomadTown, in co-creating a podcast about it. Several of the Tampere Bushcraft Group members have trained as wildlife guides in Finland (as have some NordicByNature members), which adds to the affordances mix.

One wildlife guide is Tampere Bushcraft Group founder, Dan Fraser, who writes the "group is for like-minded individuals to get together and discuss matters of bushcraft, wilderness travel, and nature in the Tampere area. The intention is that we all have our different levels of knowledge and ability, and we can all teach and learn from each other. All members should be active in participating in this group. Keep the knowledge and friendship flowing." (Fraser 2018) Trips to explore wild areas have investigated camp crafting, trail making, fire-lighting technology, fishing, fungus forays and wild foraged food cookery.

These weak ties connect via individuals the small groups to NomadTown and collectively form a resilience milieu. The variety of projects and themes realised are carried out in concert with an ecology of small associations (such as Tampere Bushcraft), but also some larger ones. For example, NomadTown residents participating in wild food foraging courses, e.g., Jotakin hortoilu – something to eat, run by the Martha Organization.

The Martha Organization (founded 1899), which deals with "Home economics: ... Food and nutrition; Home gardening and environmental protection; Household economics and consumer issues." (Lindqvist 2016) operates nationally and "take part in a variety of campaigns together with other organizations and authorities" (Lindqvist 2016). For the Marthas "Adult education is an important field of activities and is implemented in study groups. [Wherein ... themes vary from human relations, women and development, gardening and environment to cooking and healthy eating." (Lindqvist 2016).

Thus Marthas, as do other associations, are building capacity within their milieu. The Marthas (Finnish: Marttaliitto) have a gendered aspect, which is significant. In the 20th century, they along with the Mannerheim League for Child Welfare (Finnish: Mannerheimin Lastensuojeluliitto ry) and Lotta-Svärd ry (catering, clothing and material support group) gave place for women to be involved in society. This triptych embodied the Finnish aspects of Kinder, Küche, Kirche.

⁶ Gibson in his concept of affordances "described what the environment affords animals, mentioning the terrain, shelters, water, fire, objects, tools, other animals, and human displays. ... the complementary of the animal and environment" (Gibson 2014 [1979], 119) which includes "What other persons afford, comprises the whole realm of social significance for human beings" (ibid, 120).

The Marthas have this history, although now they have moved away from being a specifically women's organization with some Martha men's local groups. This broadening is seen with other groups, for example the girlscouts (Finnish: Sinisiskot), which have unisex groups; and the 4H-liitto (partly developed by the Marthas), which started off doing agricultural extension and is now focused on child and youth entrepreneurialism.

Sydänlanka's networking extends beyond interaction with the well-established Marthas to being connected with small funding opportunities for projects. For example, S.T.O.P. development was supported as a project by FINGO (the main Finnish NGO development platform). There was also some support from the Global Resilience team of Global Support by Extinction Rebellion. These bigger organizations start to transcend small group dynamics, and have emergent properties, which makes them act more like networks.

9. Networks

Beyond place-based groups, we can find thematic networks, which may share knowledge across a wider area. One such is the Foraging & Herbologies Network (Pucena 2020), set up by Andrew Paterson as a part of Pixelversity. Pixelversity is a part of the Pixelache "transdisciplinary platform for emerging art, research, design and activism" (Paterson 2016). This Network contains members that experiment and explore different uses of plants within the biocultural landscape. It has been quite food focused, with mushrooms and berries being used in art projects (Pucena 2010) and cottage production (Petz and Haas 2017).

Yet Foraging & Herbologies Network members go beyond culinary arts and question if modern agricultural culture can be replaced and how, with a more direct living from wild food, thus reversing the foraging-farming transition (Weisdorf 2005), to one of farming-foraging or permaculture (Holmgren 2002). The purpose of Pixelversity is to be a platform, which in the case of the Foraging & Herbologies Network, facilitated artistic research practices (Hannula et al. 2005), ecoliteracy (McBride et al. 2013) and practitioners' continuous professional development. However, members mostly take a dilettante approach and do not live self-sustainably from their foraging, this is in common with other foraging groups (Hall 2013).

Attempts to move beyond this amateur approach (Hall 2013) can be seen by looking at the ecovillages within Finland, which are commonly linked with the wider intentional communities and ecovillage movement (Wolf 2009; Farkas 2017). A good example of exploring more widely the different facets such communities try to cover can be seen with the Sammal Village endeavour. Sammal Villages, inspired by design thinking from architectural traditions (Katoppo and Sudradjat 2015), attempts to systemize and cover the priorities in an operationalized way.

Ecovillages are often founded on back to the land sentiments (Halfacree 2006; Jacob 2010) of former urban dwellers who are fleeing the cities. They may be self-contained and somewhat isolationist (Dias et al. 2017). Beyond these intentional communities can be found networked connections, which are influenced by the philosophy of nomadism and mobile cultures with more of a concept of outreach. Sammal Village Technologies is looking at identifying and sharing more widely its findings.

"SAMMAL Village Technologies is created in order to learn, support and develop independent, self-sustainable communities, housing and technologies for the highest life quality on the planet" (Kirjalainen 2017).

Sammal Village Technologies "divide village tech into five domains of 1) Energy and Water, 2) Construction and Accommodation, 3) Food, 4) Social Organisation and 5) Healing. In each domain, we look into production, conservation, distribution and optimisation of the resources, products and services in question.

You are welcome to post, discuss, teach and learn. Our objective is to a) gather information, experience and data from and to a range of ongoing and planned projects around the world, b) create a database for Village Technologies and c) work towards understanding, envisioning and building the most advanced, primitive, fun, sustainable, life-supporting and beautiful Nomadic Communities" (ibid).

There are other networks that NomadTown is connected with which are also looking to spread awareness of new ways of being. One is SKEY – Suomen Kestävän Elämäntavan Yhteisöt ry (The Finnish Association for Sustainable Lifestyles) (Tammenpää et al. 2019), which is an established authority in the development of rurally resilient communities.

SKEY “Promotes a sustainable lifestyle and community.

- Strengthens co-operation between Finnish ecovillages and other communities striving for a sustainable way of life, also internationally. The association is a member of the European ecovillage network GEN-Europe.
- Supports the formation of new ecological housing communities and connects people who are looking for community.
- Follows research and activities that support a sustainable lifestyle and communicate good practices.
- Organizes excursions, gatherings, training, projects, parties and other happenings – for all interested in a sustainable and communal lifestyle!” (SKEY 2019).

Another is SUCH. SUCH is the Sustainable Change Research Network. It was created by Pasi Heikkurinen (2021) from the Helsinki Institute of Sustainability Science at Helsinki University.

“SUCH network contributes to sustainable change with research-based activities. The network is transdisciplinary and it aims to challenge – as well as to propose alternatives to – the unsustainable societies of today. We call for sustainable change at all levels, from the individual to the national and global levels, and at all sectors, from the private to public and third sectors” (SUCH 2019).

A scientist approach follows as “Network members conduct research-based activities with mixed methods without limiting actions to scholarly work. SUCH promotes experimentation with novel forms of communication, favours artistic expression, tells alternative stories, which are not limited to science and encourages participation in public debate. We interact with diverse stakeholders and engage in academic activism” (ibid).

10. Discussion

So, from an independent idea, NomadTown now interacts with associations and goes toward an institutionalization via a norming process that groups go through from a group which “can do many varied things” to a group that is defined by what it does, which limits it to “we do this” as a group. The influence is coming from the rest of the milieu – so for example, formal project management has exercised this power with its structuring requirements.

There are also influences from wider society on what is acceptable re means of natural human habitus, so having children living in NomadTown is made challenging for reasons of schooling. This leads to the disruption of family life – although as a kick-back from this biopower there is also at least one family that has decided to move to NomadTown.

Similarly, the capitalist society, or rather the dispositives around funding and fundraising affect what can happen, or are required for auditing and reporting requirements. Here, the affordances (Gibson 2014 [1979]), which are available are limiting and enabling where things can develop. Sydänlanka has been “rather successful in getting small project monies” according to the main administrator Jussi Sinkkonen, and indeed there have been a variety of projects which have been funded. However, what is funded is decided from outside the organization and perhaps from outside the milieu.

There are exceptions, as some financial resources also came from Extinction Rebellion and that money was mobilizable without a long bureaucratic evaluative process via a small general grants programme from Extinction Rebellion’s Global Support fund. Yet, other funding applications were not successful, and this has affected the work of all the actors mentioned to some extent too.

The Tampere Bushcraft group was unable to gain a yurt offered from a Tampere Universities project initially funded by the KONE Foundation – it was instead given to Tampereen seudun Työllistämisyhdistys Etappi ry an unemployed people resource association, which charges for its erection, thus making less accessible to the wider milieu.

Ossi Kaakko has applied for several grants without success (too little money available for those seeking grants and biases in grant funding are some of the reasons for lack of success) and others he has been prevented from applying for due to not holding a PhD qualification nor formal affiliation to a university. Instead, associations are where he might make a difference.

Is the social ecology of associations a good way of altering our society? The different individuals and small groups are analogous to the tribal existence which humans in small bands evolved modern nation state cultures from (Johnson and Earle 2000). Even though aspects of this Rousseau inspired development story are contested, times of greater gatherings in between small band cultures seem to have existed (Graeber and Wengrow 2018).

There is great flexibility with the ease of setting up associations. The dispositif thus does offer a fairly rapid way to make deep adaption accessible (though it relies on individuals' voluntary participation rather than external financing). Several of those mentioned in this paper have family situations that do create a challenge to living nomadically or lightly on the land in a mobile fashion.

Children need to go to school and must be cared for in certain ways or social services intervene. Aside from this exercise of biopower over family lives, there is a genuine desire for parents to raise their children to function in the wider society and not for them to live off-grid completely outside of it. Ossi, Lasse and Huck have lived successfully off-grid and have all been touched by demands of family.

If we look at Ossi Kakko and Lasse Nordlund, they are both living the reality of small sustainable livelihoods and thus have gained wisdom and tacit knowledge. They have used a variety of media to transfer knowledge of what has been learned by them from those experiences.

Lasse has travelled around and shared his wisdom (Nordlund 2008), thus nomadically influencing others in diverse communities. The SUCH Network has brought his work to a wider university-based international researcher audience. SUCH, due to my RIC activity, is now interacting with NomadTown. Ultimately, the school Lasse is creating (Väänänen 2019) has the potential to actually bring his ideas into reality for real transformation.

Similarly, Ossi has reached out via a variety of methods. There have been online articles in YLE (Rahjola 2011; Siirilä 2018), the national news agency; workshops, and practical events that he has hosted. However, Ossi himself has found that academia and networks such as via Pixelache (Ossi is a part of the Herbologies and Foraging Network) have only gone so far. His focus is now not on Pixelache activist events, but rather working within the community he is based in as a sheep farmer and at a nearby school to encourage an actual lived reality rather than only theory.

The educational milieu is having an effect. Ideas are certainly being transmitted between different groups, for example, Tampere Bushcraft has learnt from individuals in NomadTown via Facebook and vice-versa. Individuals have shared foraging knowledge from the Herbologies and Foraging Networks through activities, not only online (Pucena 2010). Ascribing change to this knowledge, rather than the lived realities within small groups, is more challenging. Key individuals that have transmitted knowledge can be identified.

The educational milieu has provided an environment where some of this knowledge can be shared to build collective wisdom. Interactions with formal education are possible. Here, we can see that university involvement of NomadTown with the University of Jyväskylä, the University of Eastern Finland, based in Joensuu and Pixeliversity (part of Pixelache), has been happening.

SUCH has had a blog post about NomadTown and this has gone through peer revision and is read by members of that network internationally. Similarly, the Bridge47 project report has been shared via FINGO in Finland to the EU (the Directorate-General DEVCO as part of the EU Commission who ultimately provided some funding saw this as global education) and ultimately to the social scientists that are

networking from those connections. And now, this paper is sharing this knowledge with you through an academic peer reviewed publication.

However, informal, and non-formal knowledge transfer has also been happening (see Coombs 1985 over education types). Extinction Rebellion (Elokapina as called in Finland) have held a summer evaluation meeting at NomadTown at which experiential learning of resilient living took place, this is organization and not only individual learning in action. There have been seminars in which Huck has taken part as an expert with other professionals e.g., Ulos-Ut-Out a national outdoor learning conference (Ihantola, 2020) where the ideas around NomadTown could be shared and questioned.

Utopie-Camps (Utopia-Camps) events took place with NomadTown as a participant camp host. The camps were linked with the Leuphana University of Lüneburg and took place in August 2021 to explore concrete futurist ideas in a university led process branded as the Utopie-Sommer (Utopian Summer) (Schmahl, 2021). German speaking scientists attended the camp in NomadTown and other organizations took part as a result of NomadTown networking.

It is not unusual for small intentional communities to fund (at least partially) their existence by courses and seminars and this selling such educational services model could be followed more closely by NomadTown. A mixed model of funded and pro bono actions is a viable choice (viable in terms of financial capital, but for knowledge and social capital, it is less clear if it has an effective outreach and transformative potential).

In summary, it can be seen that NomadTown does have some transformative effects, but looking long-term at others (SUCH, SKEY, SAMMAL Villages) who are trying to influence society for a resilient transformation, it is the use of vectors via larger networks that are scaling. The individuals who are successfully using those networks are acting as nodes for educational purposes.

For NomadTown to be effective, it has to leverage those networks and use those channels which are part of the educational milieu. As an organization, Sydänlanka has built capacity to do that to some extent via NomadTown and its other projects. Even though it is a relatively new association the continuity is being considered. Sydänlanka has made use of volunteers, funding for workers and more recently taken advantage of the työharjoittelu⁷ (on the job tryout) and palkkatuki (supported salary) schemes running in Finland. This development is also developing individuals as nodes who can carry the ideas further.

This method of development is also something that is very much part of the culture of NomadTown. It is called Coyote Mentoring. A mentor we can regard as someone with great experience who instructs someone broadly around that subject area. They do have prior lived experience, the affective (values) and cognitive (knowledge) domains along with the psychomotive domain (skills) and can focus on bringing experiential awareness to someone that does not have that experience. In peer mentoring, the peers share some feature(s) of commonality, but not the same lived experience.

The concept of “coyote mentoring” is popular within the context of wild pedagogy (Jickling et al. 2018). The mentored is ideally not aware of a mentoring relationship. Coyote mentoring happens by listening and asking relevant level questions. By level I follow Bloom and Krathwohl (2002) and Costa (1991) in thinking of lower-level questions being factual recall (cognitive domain), then progressing to the more conceptual, which require a higher level of thinking and broaden into more, higher levels in the affective and psychomotive domains too.

Coyote mentoring is aimed at supporting the mentee's own interests and strengthening their relationship, curiosity and passion for the rest of nature. The name comes from the Wilderness Awareness School in the USA and is described thus:

⁷ These are 2 schemes run in Finland by the TE Keskus (Training and Enterprise Centre – which is effectively the job centre provision in Finland for encouraging employment. In theory, the schemes are quite good, the työharjoittelu (job tryout should include on the job training and a 3–6-month placement in an employment situation for a little more money than workless benefits) and the palkkatuki (supported salary) should pay someone a basic salary to do the job as an employed person, again with the implication they will learn how to do the job. In praxis, in many cases the training element and even learning element is missing.

“With Coyote Mentoring, your deeper purpose unfolds, not all that different from the Trickster stories. To the people you serve, it may seem like nothing but running through woods, playing games, and listening to stories. An underlying intention they never realize lies beneath this surface evidence. By subtly and invisibly using Child Passions to get people to practice Core Routines and so read the Book of Nature, you engage them in learning without them ever knowing it. You are running an "Invisible School". (Young, et al. 2010, 15).

That invisible school runs at NomadTown, in Tampere Bushcraft Group and the other actors where people are living experiences rather than formally learning them. For example, Piknik Frequency ry that runs Pixelache, which is a platform, does not hold formal courses to train cultural producers how to put on events, rather cultural producers run events and participate in them and thus learn in an apprenticeship or peer learning type arrangement. This extends to an open process of including potential producers.

For example, Norpas Festival had Huck take part in a production of content, while some others were able to take part in the festival from Pixelache circles with an awareness of their financial situation allowing free access. Some of those same individuals from Norpas and Pixelache were able to take part in an event which members of the Finnish Bioart Society participated in.

Key nodes or individuals can be identified who are encouraging this culture of sharing and using these resources. For example, the yurt mentioned above has been used by Andrew Paterson, after producing the Pixelache Festival 2021 #BURN___ as part of a project on nomadic tourism run by Hirvitalo while moving around Finland and during that travel was able to discuss this paper and other aspects of ecological sustainability with me. I in turn ran a workshop on resilience at #BURN___.

Ultimately, at the metalevel, I identify that, crucially, organizational learning, manifesting as network learning, which is enabled by the adaptive mind of key individuals, who are nodes or even hubs, within that network is taking place.

11. Conclusion

While undoubtedly, the educational milieu is having an effect, on individuals and associations through networks, a question remains about how effective it is at transformation. That how transformation is considered by transition towns (Transition Network 2019). They are taking existing settlements and mapping to a point and then engaging in cultural scaffolding (Wimsatt and Griesemer 2007; Caporael et al. 2014), which manifests as community-based educational scaffolding (Howe 2013; Scott-Cato and Myers 2011) called “action learning” (Morley and Trist 1993; Rehm 2002), social technologies and co-creation within their cultural milieus to make culturally appropriate changes (Scott-Cato and Hillier 2010).

How transition towns interact with their surrounding cultures is relevant if we want to explore how NomadTown is interacting with its surrounding culture in a similar place-based transformation (could NomadTown better transform rural rather than urban settlements?). An educational process, necessary for transformation within a (place-based) community, takes place within both:

- a. an affected community (the members of which are transformed somehow); and
- b. the interactions with its surrounding culture’s institutional arrangements (as a facilitating, enabling or at least permissively tolerant medium), if the knowledge is to move from potential to action.

There is a slight difference in purpose, which means that NomadTown cannot be termed a transition town. That is transition towns are more akin to retrofitting, and thus not fundamentally creating de novo a transition society; whereas NomadTown takes the more radical position of creating in a more missionary way a new utopian society. Transition towns are also fixed in place whereas NomadTown, even though the resilience hub aspect is more important for its identity than the nomadic potential, could in conception move location.

Transition towns network and connect to each other like hyphae or mycorrhizae in the forest and create a network. NomadTown is not yet connecting to other NomadTowns or other rural resilience hubs (which do not exist in Finland yet – though in the Utopie-Camp, we concluded there could realistically be about

5 others in Finland) in this way. The milieu, NomadTown is part of, begins with preppers, considers some pioneering individuals, networking, and vectors in that milieu, and ends with ecovillages.

Ecovillages are perhaps not so much about preparedness and avoiding disasters (which resilience hubs are to a greater extent), but about a sustainable lifestyle generally. This reveals the movement from individual agency in dealing with an emergency situation (a type 1 emergency) to transformational action of the whole society (on response to a type 2 emergency). Thus, there is the creation of a new dispositive within the bioregion. All these strands form the milieu, a small community such as NomadTown finds itself in.

NomadTown is connecting though other networks in a symbiotic relationship, it does connect to survivalist groups, it does connect to ecovillages and significantly it does connect to educational institutions. There are connections to the University of East Finland (Joensuu campus presentations), University of Jyväskylä (this paper), Helsinki University (via the SUCH Network) and several people connected to opistos too.

Yet there are poor connections for NomadTown in terms of industry and government and the university aspect could be made more explicit. These are core sectors in the helix models. Perhaps connecting in partnership with others in the milieu, notably FINGO and the Marthas, could operationalize this more effectively. It remains to be seen how transformative the current educative milieu will prove to be in making the great transition (Petz 2019; SUCH 2019) needed to deal with climate change. The networks which NomadTown is a part of are crucial for effective change to be achieved.

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