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Report

Sowing the Seeds of Degrowth Futures: Reporting back from Degrowth Vienna 2020

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Abstract

Excessive global resource use is a major driver of ecological breakdown and biodiversity loss. To start envisioning democratic and sustainable futures we must question the assumptions behind endless economic growth. This article reflects on the use of a novel seed pathways methodology during a workshop in the Degrowth Vienna 2020 conference. The framework is applied to five 'degrowth seeds' (small initiatives that embody degrowth values) to identify the obstacles and enabling conditions needed to empower communities to imagine, create and experiment with degrowth-inspired futures.

Keywords

Degrowth, Sustainability Transitions, Transformations, Futures Studies

Introduction

Currently, global annual resource use stands at ~100 billion tons per annum; the ecological footprint equivalent to 1.6 Earths worth of consumption every year (Hickel & Kallis, 2020). This is a major driver of ecological and climate breakdown (Parrique, 2019). Our excessive resource use far outpaces the relative gains of (absolute) decoupling through technological innovation, whilst being characterised by extreme carbon inequality (Haberl et al., 2020; Wiedmann et al., 2020). Furthermore, the latest empirical evidence shows that that it is neither possible nor feasible to achieve absolute global decoupling of environmental impact from economic growth, especially at speeds required to meet the Paris Agreement and maintain the Earth system within a safe operating space (Haberl et al., 2020; Parrique et al., 2019). As economic growth is considered the primary goal through policymaking in modern society (Schmelzer, 2016), we need to explore alternative sustainable future visions and trajectories that do not rely on economic growth (Fauré, 2018; Svenfelt et al., 2019; Videira et al., 2014). Because of the uncertainty and complexity of how these challenges and potential solutions will play out, scenarios are often used as a tool to investigate assumptions and outcomes for alternative trajectories (Raudsepp-Hearne et al., 2019). Moreover, desirable, and positive futures, rather than dystopic visions, can possibly inspire and motivate engagement (Ishihara & Marcos Valls, 2017; Wiek & Iwaniec, 2014). The "seeds" framework is one approach to build scenarios that are socially, ecologically, and economically desirable, while being radically different from the present (Pereira et al., 2018b). Here, seeds are initiatives that exist, at least in prototype form, and that represent a diversity of worldviews, values, and regions, but are not currently dominant or prominent in the world (Bennett et al, 2016). They can be

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ecological, social, technological, or economic ways of thinking or doing. In line with this, this report describes the outcome of applying the seeds framework to explore degrowth futures in a workshop at an online conference. In the following sections, this paper will first reiterate what degrowth is (and isn't), how it relates to our social imaginaries and its relationship with existing sustainability transition theories, before discussing whether degrowth 'seeds' can help bring about this necessary post-growth transformative change based on the outcomes of the workshop.

The Case for Degrowth

Degrowth presents a scathing critique to the dominant paradigm of economic growth (Box 1). Within a capitalist-growth regime, the fundamental goal of decision-makers and the primary measure of success for both governments and private corporations is economic growth. This is despite the economy being bounded by ecological limits and resource use being inextricably linked to material throughput (Hickel & Kallis, 2020). Hence, degrowth advocates argue for a fundamental reorganization of society, beyond capitalism, centered around autonomy, care, equity and sufficiency, fostered by new institutions that promote localization, redistribution, decommodification, deconomization and democratization (Parrique, 2019). Practically, degrowth offers an empirically informed launchpad to start imagining and experimenting with alternative pathways to reduce material and energy throughput whilst simultaneously ensuring flourishing lives for all.

It is important to address two common misunderstandings around degrowth. First, degrowth should not be interpreted literally as negative growth (i.e. a recession). Recessions are not planned or aimed at reducing ecological impact, whilst they are often precipitated by increasing unemployment levels and broader inequality. In contrast, degrowth presents a planned, coherent set of policies to reduce ecological impact, inequality, and promote well-being (Parrique, 2019). Secondly, degrowth does not advocate for declining GDP (see Parrique 2019 for a summary of the limitations of GDP as a measure for societal wellbeing). It may be true that because of reducing throughput, the rate of GDP growth may slow or decline. However, one of degrowth's primary aims is to equitably reduce economic throughput (Hickel, 2020; Kallis et al., 2020). In summary, degrowth questions GDP and economic growth as appropriate indicators of socio-ecological progress in the 21st century.

A Theory of Change

Degrowth seed pathways towards transformative change

The path to a degrowth society can start in our homes, workplaces, or local communities (D'Alisa & Kallis, 2020). The primary objective of this workshop was to engage participants to envision degrowth futures using a pre-selected set of seeds and discuss transition pathways (Figure 1). As our main guiding tool, we used the graphical Seeds Pathways to Transformation framework, an adaptation of the Three Horizons Framework, to help us work with uncertain futures scenarios, while retaining key societal features from our present (Pereira et al., 2018b; Raudsepp-Hearne et al., 2019). We chose this framework because it allows participants to work with the complexity of transformation and facilitates the co-creation of diverse scenarios that break away from the trends of today (Sharpe et al., 2016). Further, change is conceptualized as a multi-phase, multi-scalar, and dynamic process (Geels, 2002; Moore et al., 2015). This novel mix allows one to explore macro (landscape) and/or meso (regime) level transformations, because of strategic organizing at the micro (niche) level by experimental initiatives (seeds). Initiatives that are well prepared, stabilized and/or networked with other initiatives can take advantage of systemic pressures occurring at the macro level (e.g. climate change, cultural shifts etc.) to transform the dominant regime (see Pereira et al., 2018a). Seeds can influence the dominant regime by replicating to different communities and spreading to more people ("scaling out"), changing institutions, laws, and policies ("scaling up"), and transforming values, cultural practices, and relationships ("scaling deep") as shown in Figure 2, with a combination of these needed to amplify their impact (Lam et al., 2020; Moore et al., 2015).

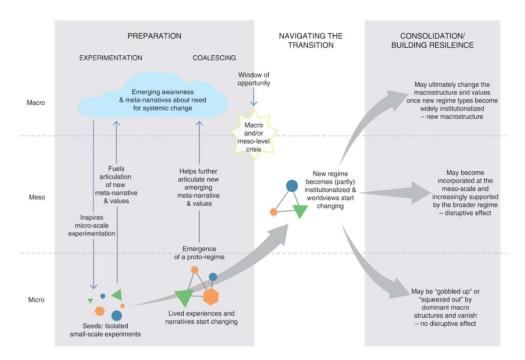


Fig 1: Exploring seed pathways for transformation. Source: Pereira et al. (2018a, p. 330).

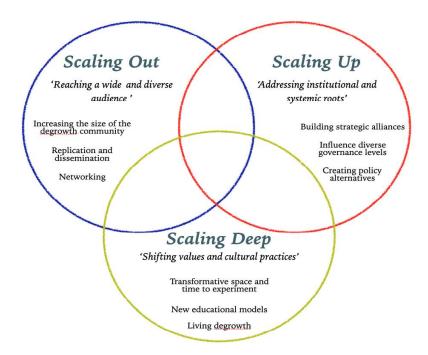


Fig 2: Conceptualization of scaling degrowth initiatives. Adapted from Moore et al. (2015).

Methodology

Workshop

This report reflects on a 90-minute online workshop with 20 participants, which was held as part of the Degrowth Vienna 2020 conference. Participants were researchers, students and activists based in diverse countries across Europe, the Americas and Asia. The free online conference took place between the 29th of May and the 1st of June 2020 and attracted ~4000 participants. The aim of the conference was to co-create degrowth strategies for social-ecological transformations through facilitating a space for sharing, reflecting, and developing strategies among scholars, artists, and activists.

Case seeds

Prior to the workshop, we selected five case seeds for participants to engage with, of which four were selected from the Seeds of Good Anthropocenes database (https://goodanthropocenes.net/seedbank/) and one seed was added ourselves. This was based on a list of existing (non-exhaustive) degrowth values that were identified in the literature (Box 1). So, although these seeds do not explicitly align themselves with the degrowth movement, we identified them as embodying one or more of the degrowth values and characteristics to assist when imagining degrowth futures (degrowth values in Box 1 are numbered and reflected with square brackets [e.g.] at the end of each seed description). Seeds were also chosen with the intention to have a wide geographical spread as well as to include a variety of themes that is often discussed in degrowth circles (i.e. common land ownership, ecovillage, complementary currency, permaculture, and energy cooperatives). As each co-author acted as a facilitator for a group (which worked on one of the seeds), we also considered our own familiarity with the seed's themes. These are also the reasons why the fifth seed, energy cooperatives, was added from outside of the database as the expertise of one of the co-authors is renewable energy communities.

To qualify as a degrowth seed, the project must embody one or more of the following principles:

- 1. Experiment and practice with alternative forms or organization beyond (economic) growth and (capital) accumulation (Nesterova, 2020; Vandeventer et al., 2019)
- 2. Democratic ownership of business and surplus production or value (e.g., commons-based peer production, cooperatives, not-for-profits, etc.) (Gibson-Graham, 2006; Kostakis et al., 2018)
- 3. Monetary diversity (e.g., demonetization, decommodification, financialization, redistributing, sovereign banking, complementary currencies, ethical finance, shared wealth, etc.) (Parrique, 2019)
- 4. Stewardship of nature (e.g., limiting extraction, regenerating nature, indigenous principles, etc.) (Escobar, 2015; Otero et al., 2020)
- 5. Transformation of work (e.g., reductions of paid-work time, decent work, autonomy, work-life balance, etc.) (Cosme et al., 2017)
- 6. Emphasise a care-economy and valuing non-paid work and non-work time (e.g., reproduction, community building, etc.) (Parrique, 2019)
- 7. Shifting towards a more locally based economy (e.g., food, energy, jobs, etc.) (Escobar, 2015; Kunze & Becker, 2015)
- 8. Creation of sharing and solidarity economy (i.e., expanding the commons, income, wealth, time, resources, etc.) (Cosme et al., 2017)

Seed Descriptions

The degrowth values that the seed projects embody are linked with the numbers in Box 1 and are indicated by square brackets at the end of each description (e.g. [1, 2, 3]).

- 1. The Scottish Eigg Heritage Trust promotes local production and consumption systems following a 1997 land reclamation. Currently, 500 individuals own over 50% of the country's land. Since, residents have established a 100% community-owned renewable energy grid, placed voluntary restrictions on energy use and opened various businesses [1, 2, 4-8].
- 2. In eastern Colombia, <u>Gaviotas Ecovillage</u> is transforming savannah ecosystems to tropical forests. Residents rejuvenated depleted savannah soils through cultivating pines, provided free medical care, schooling and housing, renewable energy systems and meals, whilst fending off guerillas with a "no arms" policy [1, 4, 6-8].
- 3. In Kongowea, Kenya, residents developed their own complementary currency called the <u>Linda-Pesa</u>. It carries many co-benefits such as a strong local business network, gaining access to interest-free credit for social, health, environment, and education services [1-3, 6, 7].
- 4. In Cape Town, South Africa, low-income communities are occupying prime land that is scheduled to be redeveloped (<u>Tyisa Nabanye</u>). The group is practicing permaculture to challenge highly unequal land ownership whilst contributing to local food security [1, 2, 4, 6-8].
- 5. In Athens, Greece, locals have set up a decentralized solar energy community to practice local, collective self-consumption. Run by <u>Hyperion Energy Community</u>, the project aims to tackle economic instability, energy poverty and climate change [1, 2, 7, 8].

Workshop Process

The workshop started with introducing the research aims, background and pre-selected seeds. Due to restrictions in the online workshop technology, we were not able to invite participants to add other seeds, and we restricted the engagement to one seed per group due to the short time frame. Participants were divided into five groups of four participants, each with one facilitator. The groups had different discussion dynamics due to several factors including participants having varying degrees of familiarity to the seed and to degrowth in general, technological disruptions of the virtual conference platform and different levels of English language proficiency. The group discussion followed the instructions below (Figure 3).

- 1. Seeds: The participants had time to read a brief description of the pre-selected seed.
- 2. Mature Seeds: Imagine, describe, and explain a world in year 2063 which these seeds have grown from the margins and interacted to be a dominant feature of society.
- 3. What Declines? Refine this vision by imagining what dimensions of our present world would have to become less important and what role these may play in the future.
- 4. Conflicts: Consider pathways to get from present to future and identify conflicts between the growth of the seeds and the tensions this creates with parts of the existing world, which are declining.
- 5. Enabling Conditions: Identify the necessary enabling conditions that could help resolve the conflicts and crises identified in step four, and thereby create the right conditions for the seeds to increase their impact.

Each facilitator (co-authors of this paper) documented the group discussions, using a guiding questions sheet (Appendix 1). After the group discussions, the whole workshop convened and participants were invited to share their reflections, while notes were taken.

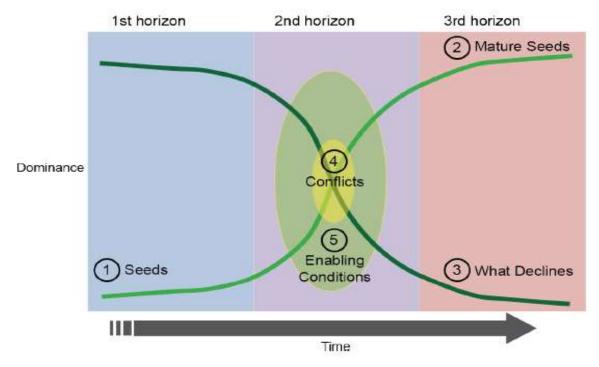


Fig 3: Seeds pathways for transformation framework. Source: Pereira et al. (2019)

Results

Workshop results are split into four sections - mature seeds, what declines, conflicts and enabling conditions. Each section builds on the descriptions of the types of futures participants were able to imagine (summarized in Appendix 1). Results reflect commonalities when attempting to explore holistic (degrowth) futures and trajectories.

i) Imagining mature degrowth seeds

The main characteristics of mature seeds included:

- Confederations of cooperatives (energy, food, transportation)
- A commons system of governance with direct democratic practices
- Localized economies and self-sufficiency
- · Complementary currencies
- A cultural shift that will help form new relationships (urban-rural, human-nature, human-human)
- Institutions that will help catalyze this cultural shift

ii) Envisioning what declines

The key points of what needs to decline included:

- · Centralized/state energy agencies and infrastructure
- The continuous pursuit of economic growth (GDP increase)

- Fossil fuel subsidies
- Globalized supply chains (e.g., food, textiles, etc.)
- The human-nature divide
- Hierarchical and power relations (man over woman, human over nature, discrimination towards minority groups)
- · Individualistic mindsets
- Lobbying power
- Mass production
- Multinational and large (private and publicly listed) companies
- Passive consumers and consumerism
- · Private, for-profit banks
- The dominance of profit motives and private property.

iii) Conflicts and pathways

Key areas of identified conflicts were:

- Existing and interlinked power holders: governments of the global north, multinational companies, the "global elite" (identified by income, wealth, and political power)
- Existing power structures (capitalism, colonialism, patriarchy, individualism) and excessive international trade.

Prominent obstacles for seeds explicitly challenging these power holders include the seeds' inability to garner public support, by inducing a cultural mind shift, and the inability to guarantee long-term funding, thus ensuring long-term operational sustainability.

The pathways to resolve the identified conflicts and transition towards degrowth futures, included:

- To reform and co-create new financial mechanisms that support the creation and long-term viability of seeds
- · Apply direct democracy principles with multi-stakeholder inputs, tailored to local needs and specificities
- Significant increase in awareness, education, and training programs as well as political advocacy for ownership and management to return to the community level
- Proposing limiting or equitably rationing aspects of globalisation to stay within planetary boundaries (e.g., international trade, travel, energy use, etc.)
- The gradual splitting of multinational companies to national, regional and/or local means of production making it easier to have transparent and shorter supply chains
- Expanding and protecting the commons to fulfil basic human needs

iv) Exploring enabling conditions

Finally, participants identified the enabling conditions needed to assist degrowth seeds to mature and influence transitions to an equitable post-growth economy. The non-exhaustive list included:

- New educational models that challenge the cultural hegemony of growth, based on social, racial, gender and environmental justice
- Reskilling and retraining of workers in polluting industries (e.g., fossil fuels, chemicals, transportation, travel, etc.) to zero-carbon alternatives
- Promotion of networking, especially amongst small/medium business owners to create and instill postgrowth visions at local and regional scales
- Building of long-term social trust and ongoing iterative feedback mechanisms with local communities
- Transitioning from individualist to collectivist mindsets, and fostering plural positive livelihood visions outside of urban, consumerist contexts
- The provision of an Unconditional Basic Income, used by all people to reduce work and increase time for social and political participation

- Policymaking (reform of existing and creation of new policy institutions, and tools to facilitate a degrowth transition)
- Shift existing investments (e.g., from cities to rural areas)

Discussion

This discussion focuses on the key themes that emerged from the participants' discussions including: i) the obstacles hindering the maturation of degrowth seeds ii) the enabling conditions that could foster degrowth futures and iii) a call to build a 'degrowth seed vault' to address the lack of current practical examples for communities to draw inspiration from.

Obstacles preventing degrowth seeds from maturing

Many attempts at regime reform fail to question underlying power structures and the dominant discourse that guide and reinforce them (Göpel, 2016). By challenging systemic inequalities and questioning the cultural hegemony of growth, (degrowth) seeds may face severe backlash from incumbent system actors. This was often emphasised by participants who pointed towards powerful, multinational actors in agriculture, private finance, fossil fuels, mining, and large private landowners. Groups highlighted the ability of these powerful actors to influence policymaking explicitly or implicitly through their wide networks of lobbyists, think tanks, philanthropy, and private foundations. In this way, these actors shape the institutional setting (legal, financial and policy framework) to protect their vested interests, which in turn affects the "rules of the game" under which degrowth seeds must compete.

Workshop participants exhibited difficulty in describing a world where their seeds matured and where degrowth had displaced growth-based economic systems. Although this could be partly attributed to their unfamiliarity with seeds or degrowth in general, we believe these warrants closer examination. Current power structures and wealth inequality, institutional settings, and cultural elements such as individualism and consumerism, appear to be natural and teleological, thus restricting collective abilities to envision futures outside the capitalist rationality (Burke, 2011). Linking back to our first point, these powerful incumbent capitalist-growth system actors are therefore highly likely to restrict the public's ability to imagine futures beyond growth (i.e., through education or advertisement).

Enabling conditions and pathways for degrowth futures

Social innovations (i.e., seeds) are only transformative to the extent which they challenge, alter and replace dominant structures and institutions that underlie societal challenges (Avelino et al. 2019). To achieve this, the degrowth movement must speak to and address the underlying values, beliefs, and cultures of the public - a key reflection amongst workshop participants. This is what Moore et al. (2015) calls 'scaling deep', the notion that durable change has been achieved only when people's hearts and minds, their values and cultural practices, and the quality of relationships they have, are transformed. In the context of degrowth, D'Alisa & Kallis (2020) refer to the process of creating "new common senses" that challenge the cultural hegemony of growth. To achieve such changes, we need new vocabularies and transformative spaces (such as this workshop) to experiment with degrowth experiences, ideas, interactions, and values that seek a new economic paradigm beyond growth. Thus, it is evident that (degrowth) seeds must focus on 'scaling deep' through emphasizing the collective joy that we can gain by actively participating in the commons and in community-building activities.

Further, workshop participants recognised the need to create new policy institutions, tools, and mechanisms to facilitate degrowth transitions. This refers to 'scaling up' (or 'radical reformism' by Parrique 2019) through which a seed addresses the systemic roots of a problem by influencing institutions and policies (Moore et al., 2015). This would entail a reconfiguration at every level of governance (national and international), to replace or reform institutions that perpetuate growth and create policies that deliver a good life for all (humans, non-humans) within planetary boundaries (O'Neill et al. 2018). This is exemplified in recent viable (beyond growth) alternatives for the Green New Deal, biodiversity, and national economic policies (Mastini, Kallis & Hickel, 2021; Otero et al., 2020). This would not only allow seeds that embody degrowth values to establish (some) support from powerful actors

(e.g., through research or community grants) but would also create the right socio-economic conditions for degrowth seeds to flourish and compete with pro-growth initiatives. The most prominent example that would facilitate scaling up, which came up during the workshop, is the establishment of new policy frameworks that legally recognise seeds like local complementary currencies, and food and energy cooperatives, while supporting their expansion. Additionally, this was seen as extremely important for seeds with high levels of upfront capital investment (e.g., energy communities).

Moreover, workshop participants identified networking and replicating as key enabling conditions for the success of degrowth seeds. This speaks to 'scaling out', the attempt to involve more people and cover a larger geographic area through replication and diffusion (Moore et al., 2015). In our case seeds, proposals included the establishment of confederations of food or energy cooperatives, or general cross-regional and cross-sectoral collaborations. Participants stressed that the authority and decision-making power inherent in seed replication needs to come from autonomous citizens, who depending on the context and circumstances, may receive support from the state and/or powerful actors (D'Alisa & Kallis, 2020). Bottom-up led, direct democracy practices, like public assemblies and community forums can enable individual communities to carve out their own preferred futures. So, whilst a conducive political and legal framework might be an important prerequisite to degrowth futures (Buch-Hansen, 2018), communities must be given the space, time, and resources to experiment with degrowth seeds in ways that respond to their immediate, contextual needs.

Nurturing degrowth knowledge and seeds

Despite "countless degrowth-compatible local initiatives and the increasing interest in degrowth, the prospects of a degrowth paradigm shift currently look bleak" (Buch-Hansen, 2018, p. 162). This workshop has demonstrated the pressing need for degrowth to focus its efforts on different scales of transformation to bring about a paradigm shift. Whilst degrowth has been most popular in micro-level autonomous radical action, the question remains: How do we trace, connect, amplify, and multiply these local activities to achieve the goals of the degrowth movement at national and global scales?

In the interest of being proactive and to build upon the scaling deep, up, and out elements discussed in our brief workshop report, we propose the idea (and proactive willingness to be involved) in the creation of a decentralized degrowth database containing all literature (academic articles, books, chapters, theses, fictional stories, popular science, art, etc) and seeds (i.e., activities that are compatible with degrowth values). This platform would serve as a common repository for newcomers or those wishing to engage within the degrowth discourse critically and constructively, whilst being able to draw inspiration from initiatives around the world.

About building a network of degrowth seeds, we tentatively propose the name 'Degrowth Seed Vault', based on the Svalbard Global Seed Vault, which offers the long-term protection and nurturing of some of the most vulnerable and important natural resources on earth (i.e., seeds). The Degrowth Seed Vault would seek to build on current degrowth resources (e.g., https://map.degrowth.net/) and adapt it to similar initiatives (e.g., Seeds of Good Anthropocenes). It would serve three primary functions: i) to collate and analyze existing degrowth-compatible initiatives regarding elements, obstacles and enabling conditions, ii) to create a forum for networking and discussion amongst seed stakeholders, academics, decision-makers, and civil society and iii) to provide practical information and inspiration for those wishing to support or replicate existing seeds in their given contexts.

Conclusions

In a world of growing societal inequality and ongoing ecological breakdown, one must question the dominant paradigms and assumptions behind the socio-economic system. This article does so by confronting the limits of (economic) growth before presenting exemplary (degrowth) seed pathways towards transformation in a participatory workshop format. This method identified obstacles to transformation (powerful actors, inadequate policy and legal frameworks, financial restrictions, and a growth-oriented culture). However, it also highlighted enabling conditions (new education models, transformative places to experiment, strategic alliances, creation of inspiring policy alternatives, networking) needed to empower communities to imagine, and experiment with

degrowth futures. To trace, connect, amplify, and multiply these different activities to achieve the goals of the degrowth movement, we conclude by proposing to build a network of degrowth literature and seeds, termed the Degrowth Seed Vault.

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Appendix 1: Summary table of workshop results

Seeds\Steps	Mature Seeds	What Declines	Conflicts	Enabling Conditions
Reshaping Land Ownership (Scotland)	>Cooperative movement and models (with food, energy, money, transportation) >Localised economies >Autonomous council body with shared land (commons property governance)	>National governments >Large-scale landholders >Fewer hierarchies	Profit and expansionary motif of the capitalist class (government or corporations) Individualistic, consumerist mindset Current power structures (economic and political)	Deliberative democratic principles (e.g regular community dialogues, citizen assemblies, etc) >Active citizen participation (to build common understandings) >Radical transparency >Awareness and education, including new models
Ecovillage (Colombia)	>New rural-urban relationships >Self-sufficient towns/cities	>Importance of economic growth >Clobal supply chains (eg: food) >Luxury industries (eg: fashion, flying, etc) >Mass production (i.e. demand side as opposed to supply side changes) >Centralised economies	>Profit and expansionary motif of the capitalist class (government or corporations) >Individualistic, consumerist mindset >Current power structures (economic and political)	>Behavioral and values change >Investing in local infrastructure >Need bottom-up and top-down >Opportunities of Covid-19 to bring about a socio-ecological transformation (despite currently looking the opposite around the world)
Complementary Currencies (Kenya)	>Complementary currencies that serve local or regional interests	>Private banks (current dominance of money creation through debt) >Large and multinational companies (very little ability for workers to organise) >National government (promoting economic democracy)	>Globalisation needs to be limited within ecological limits (eg: trade, travel, energy use, etc), which is a hard sell to people (especially the rich) >Current growth-based social imaginaries	>Explicitly bottom-up (difficult but necessary) >Community trust >Networking (especially among small and medium businesses) >Decolonising social imaginaries (enabling more than 2 [utopian/dystopian] futures to be envisioned) >Shifting to a glocal mindset (think globally, act locally) >Space and time for experimentation
Permaculture Challenging Land Ownership South Africa)	Self-sufficient cities in regard to food and energy >Focus on social relations (eg: institutions and interrelations)	>Private property >Profit motives >Human-beings separation (and subsequent dominance) over nature, women and minorities	>Profit and expansionary motif of the capitalist class (government or corporations) >Individualistic, consumerist mindset >Current power structures (economic and political) >Cultural aspects (capitalism, colonialism, patriarchy)	>Unconditional basic income (UBI) >New (decentralised) educational models (based on social, racial, environmental justice and anti-patriarchy) >Training and reskilling programs >Reimagine the policy process and policymaking
Decentralised Energy Grids (Greece)	>Decentralised and direct democracy, local, renewable energy communities in the form of a federation that provides support between its members >Focus on social relations (eg: direct democracy, strong sense of community, no energy poverty, removing energy middlemen)	>Centralised/State energy agencies >Centralised energy infrastructure >Fossil fuel subsidies (coal, oil, gas, large-scale biomass) and nuclear >Lobbying power	>Profit and expansionary motif of the capitalist class (government or corporations) >Individualistic, consumerist mindset >Current power structures (economic and political) >Cultural aspects (individualism and lack of trust towards community, capitalism, colonialism, patriarchy)	>Active participation and management of local-owned and operated renewable energy (retraining, education and awareness) / just transition >Part of a broader socio-cultural mindset shift >Long -term project > Favourable institutional setting (e.g. support from government, laws, financial institutions etc.)

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