

The prefigurative politics of enactable sustainability transformations in the present

Siddharth Sareen, Sirkku Juhola, Adrianna Czarnecka, Aleksandra Kekkonen, Aleksandra Martinovska Stojcheska, Ana Slavec, Anita Uchanska-Bieniusiewicz, Chris Rønningstad, Claudiu Martin, Gintarė Tamašauskaitė-Janickė, Helena Belchior Rocha, Jan Kunnas, Maria Luísa Vasconcelos, Maraja Riechers, Martin H. G. Precht, Monika Piotrkowska, Nigar Alkan, Nimet Kalkan, Nurinisa Esenbuga, Rocío Pineda-Martos, Sandra Bernardo, Sarah Milliken, Şehnaz Okkiran, Sevinç Gelmez Burakgazi, Timo Von Wirth, Tuba Aydın Güngör & Veronika Kiss

To cite this article: Siddharth Sareen, Sirkku Juhola, Adrianna Czarnecka, Aleksandra Kekkonen, Aleksandra Martinovska Stojcheska, Ana Slavec, Anita Uchanska-Bieniusiewicz, Chris Rønningstad, Claudiu Martin, Gintarė Tamašauskaitė-Janickė, Helena Belchior Rocha, Jan Kunnas, Maria Luísa Vasconcelos, Maraja Riechers, Martin H. G. Precht, Monika Piotrkowska, Nigar Alkan, Nimet Kalkan, Nurinisa Esenbuga, Rocío Pineda-Martos, Sandra Bernardo, Sarah Milliken, Şehnaz Okkiran, Sevinç Gelmez Burakgazi, Timo Von Wirth, Tuba Aydın Güngör & Veronika Kiss (22 Apr 2026): The prefigurative politics of enactable sustainability transformations in the present, Norsk Geografisk Tidsskrift - Norwegian Journal of Geography, DOI: [10.1080/00291951.2026.2648496](https://doi.org/10.1080/00291951.2026.2648496)

To link to this article: <https://doi.org/10.1080/00291951.2026.2648496>



© 2026 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 22 Apr 2026.



Submit your article to this journal [↗](#)



Article views: 1059



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)

The prefigurative politics of enactable sustainability transformations in the present

Siddharth Sareen ^{a,b}, Sirkku Juhola^c, Adrianna Czarnecka^d, Aleksandra Kekkonen ^e, Aleksandra Martinovska Stojcheska^f, Ana Slavec^g, Anita Uchanska-Bieniusiewicz^h, Chris Rønningstadⁱ, Claudiu Martin^j, Gintarė Tamašauskaitė-Janickė^{aa}, Helena Belchior Rocha^{ab}, Jan Kunnas^{ac}, Maria Luísa Vasconcelos ⁿ, Maraja Riechers^o, Martin H. G. Precht^{p,q}, Monika Piotrkowska^r, Nigar Alkan^s, Nimet Kalkan^t, Nurinisa Esenbuga ^u, Rocío Pineda-Martos ^v, Sandra Bernardo ⁿ, Sarah Milliken^w, Şehnaz Okkiran ^x, Sevinç Gelmez Burakgazi^{y,z}, Timo Von Wirth^{aa,ab}, Tuba Aydın Güngör^{ac} & Veronika Kiss^{ad}

^aFridtjof Nansen Institute, Lysaker, Norway; ^bCentre for Climate and Energy Transformation, University of Bergen, Bergen, Norway; ^cEcosystems and Environment Research Programme, University of Helsinki, Helsinki, Finland; ^dDepartment of Spatial Planning and Environmental Sciences, Warsaw University of Technology, Warsaw, Poland; ^eDevelopment and Innovation Unit, Estonian Business School, Tallinn, Estonia; ^fFaculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University, Skopje, North Macedonia; ^gInnoRenew CoE, UP IAM & UP FAMNIT, University of Primorska, Koper, Slovenia; ^hDepartment of Strategy, Kozminski University, Warsaw, Poland; ⁱOslo Business School, Oslo Metropolitan University, Oslo, Norway; ^jDepartment of Political and Administration Sciences, Complutense University of Madrid, Madrid, Spain; ^kFaculty of Law, Vilnius University, Vilnius, Lithuania; ^lDepartment of Political Science and Public Policy, ISCTE University Institute of Lisbon, Lisbon, Portugal; ^mSchool of Forest Sciences, Faculty of Science, Forestry and Technology, University of Eastern Finland, Joensuu, Finland; ⁿCentro de Estudos Políticos, Económicos e Sociais, Universidade Fernando Pessoa, Porto, Portugal; ^oThünen Institute of Baltic Sea Fisheries, Rostock, Germany; ^pCentro de Química Estrutural, Instituto Superior Técnico da Universidade de Lisboa, Lisbon, Portugal; ^qAcademy for the Advancement of Physiochemical Sustainability, Vlotho, Germany; ^rWarsaw University of Technology, Warsaw, Poland; ^sDepartment of Fisheries Technology Engineering, Karadeniz Technical University, Trabzon, Türkiye; ^tDepartment of Business Administration, Karadeniz Technical University, Trabzon, Türkiye; ^uDepartment of Animal Science, Faculty of Agriculture, University of Ataturk, Ataturk, Türkiye; ^vDepartamento de Ingeniería Aeroespacial y Mecánica de Fluidos, Escuela Técnica Superior de Ingeniería Agronómica, Universidad de Sevilla, Seville, Spain; ^wCentre for Spatial and Digital Ecologies, University of Greenwich, London, UK; ^xRectorate, Gaziantep University, Gaziantep, Türkiye; ^yDepartment of Educational Sciences, Hacettepe University, Ankara, Türkiye; ^zCurriculum, Pedagogy & Assessment, University College London, London, UK; ^{aa}Planetary Future Studio, Frankfurt University of Applied Sciences, Frankfurt, Germany; ^{ab}Dutch Research Institute for Transitions, Erasmus University Rotterdam, Rotterdam, The Netherlands; ^{ac}Faculty of Education, Artvin Çoruh University, Artvin, Türkiye; ^{ad}Department of Decision Sciences, Corvinus University of Budapest, Budapest, Hungary

ABSTRACT

The concept of “prefigurative politics” invites geographers to envision transformative change through a shift in practices stemming from a micro level. This article examines and substantiates how this idea is mobilised in relation to current sustainability transformations. A large interdisciplinary group of geographers and transition scholars present topic clusters of prefigurative enablers that instigate and catalyse the enactment of transformative policymaking towards sustainable futures. Drawing on dozens of rich and diverse examples to illustrate cases of transformation, we provide a conceptual perspective to advance the theoretical discussion about triggers and processes of transformative change amongst geographers. We argue for three principles for examining the prefigurative politics of present transformation: (a) multi-scalarity, to consider prefigurative politics across personal-systemic spheres; (b) boundary transgression, to span interdisciplinary and transdisciplinary as well as inward- and outward-looking prefigurative politics; and (c) temporalities, to address institutionalisation and change processes that play out along short and long timelines. Approaching present transformations through a prefigurative politics lens helps identify scope for action that aligns with transformative change. We argue for wider deployment of these principles, to synthesise scholarship, channel micro-level prefigurative political efforts into systemic transformative change, and guide future research and policymaking towards sustainability transformations.



ARTICLE HISTORY

Received 19 November 2025
Accepted 17 March 2026

KEYWORDS

prefigurative politics,
transformation, sustainability

1. Introduction

The need for deep societal transformations towards more sustainable futures has been long recognised (Westley

et al., 2011; Jeffrey and Dyson, 2021), resulting in advancement of theory (e.g. Feola et al., 2021) and practice of transformations (Sharpe et al., 2016). Current

forms of sociopolitical organisation perpetuate unsustainable production models and consumption systems, resulting in an increasing crisis of environmental pollution, resource scarcity, biodiversity loss and climate change impacts, as is well-established in geography (Bakker and Bridge, 2006; Middlemiss, 2018). Much more ambitious strategies are needed to address the inter-related environmental consequences of complex systems such as food, energy, and transport. This concerns geographers, often in collaboration with interdisciplinary social scientists in sustainability transformations research (Whitehead, 2014; Truffer et al., 2015).

The role of existing institutions and their path dependence in maintaining unsustainable practices has been recognised (Westley et al., 2011; Stirling, 2019). Future pathways shaped by the existing discourse risk limiting real transformation due to a lack of legitimacy, low epistemic diversity, or a business-as-usual approach (Stirling, 2019). According to Priebe et al. (2021), current attempts to guide and implement sustainability fail to challenge prevalent ways of thinking. The concept of prefigurative politics offers a way to envision and start enacting societal transformation. It acknowledges the role of existing institutions, but rather than challenging them, it focuses on the micro level to foster radical social change in practice (Törnberg, 2021). The concept refers to the practice of embodying desired changes in present actions. It has received very limited attention by geographers at their interface with sustainability transformations research, but we note growing interest (e.g. Jeffrey and Dyson, 2021; Sheng and Yang, 2024; Sareen and Juhola 2026). Beyond reviewing emergent literature, we discern a need to articulate this intersection as the prefigurative politics of present transformation towards sustainability. As 27 interdisciplinary social scientists including several geographers, we advance attention to this vital domain within geography.

Identifying specific present rupture areas that can guide geographical thinking about sustainability transformation requires empirical examples. If we can imagine transformations that are enactable towards desired futures, then we can build a strong, collective prefigurative politics of transformation. Moreover, we need a shared understanding of the dynamics of change that these examples show. This implies cultivating awareness of the limitations of our current dominant systems and of ways to create opportunities for effective alternatives (Jeffrey and Dyson, 2021).

We have collected and categorised diverse examples sourced across our competencies towards environmental prefigurative politics, to identify the building blocks of such dynamics. These examples pertain to the embodiment and enactment of societal practices

for sustainable transformations anchored in system configurations. We present the examples along three principles that emerge from our interdisciplinary collaboration in organic relation with a thematic literature review on prefigurative politics and present transformation. The principles are *multi-scalarity*, *boundary transgression*, and *temporalities*. Multi-scalarity helps us consider prefigurative politics across the personal-systemic spheres where transformative change takes place (Avelino et al., 2024). Boundary transgression enables us to span interdisciplinary and transdisciplinary, as well as inward- and outward-looking, prefigurative politics. Attention to multiple temporalities is essential to address institutionalisation and change processes that play out along short and long timelines in both synergistic and oppositional ways.

Approaching present transformations through prefigurative politics explicitly understood as working along multiple scales and temporalities while transgressing boundaries offers scope to identify affordances that align with transformative change. Hence we argue for wider deployment of these principles in geographical research, to synthesise scholarship and channel micro-level prefigurative political efforts into systemic transformative change. Following a brief overview of the methods used for developing our conceptual approach, we review a focused subset of relevant literature to provide pertinent theoretical grounding for the principles. Our core contribution is a tripartite set of examples to instantiate how these principles can be deployed. Finally, the conclusion reflects upon options and implications for future thematic research.

2. Methods

This article is the result of collaboration by a working group on present transformations (WG3), convened as part of a European TransformERS network (2023–2027). Twenty-seven researchers from over 300 TransformERS WG3 members engaged over time and space, using digital technologies in a structured adaptive process that began in mid-2024 (WG3 Workshop 1, 19 March 2024). Two convenors circulated a briefing about the prefigurative politics of present transformation, inviting engagement. Engagement took the form of individually composed written examples of such prefigurative politics in sectors and contexts based on participants' expertise and insights. A half-day online meeting (WG3 Workshop 2, 6 September 2024) presented the approach to participants, encouraging discussion and offering clarifications to standardise expectations. Participants drafted examples and finessed them over several weeks. Three thematic categories emerged from collective reflection

upon and across these shared examples and through an iterative process of collective writing to shape them for a primary audience of geographers.

During Workshop 2, after drafting individual examples and sharing in plenum, participants clustered within an online document to develop a structured outline over several weeks. Email correspondence and a commenting function in the shared document enabled logistical coordination across collective real-time editing. A smaller subgroup streamlined sections in an increasingly crystallised structure. Within a core of geography, we accommodated interdisciplinary cross-fertilisation, incorporating references from cognate disciplines. The document was moved offline for one author to undertake finer points of organisation, then circulated for further inputs before submission. This helped identify a mode of presenting the examples per principle to convey our collectively articulated points intuitively and effectively. We specify and begin to deploy these principles, a task that constitutes a research agenda entailing future narrower efforts. This was taken forward through an in-person workshop of the WG3 in April 2025, that convened 27 individual papers on the prefigurative politics of present transformation to enact such an agenda through an edited volume that features 29 chapters including a synthesis introduction and conclusion (Sareen and Juhola 2026). Another collective endeavour is a living compendium that compiles examples along these principles: <https://www.cost-transformers.eu/online-compendium-WG3/>. This manner of orchestrating our collective enquiry is itself a form of prefigurative politics.

3. Literature review: principles of prefigurative politics

Sustainability transformation is a multifaceted, multilevel process that entails questioning societal foundations – the capitalist imperatives of growth, commodification and individualisation that drive political economies (Feola et al., 2021). Prefigurative politics provides a powerful approach to enact and accelerate sustainability transformations by creating living examples of sustainable alternatives, fostering experimentation, challenging dominant systems, cultivating hope and agency, and integrating socioecological concerns (Schiller-Merkens, 2022). It is “an inherently spatial and performative genre of political activism in which people enact a vision of change – through organisation, planning and design, architecture, practices, bodies, or something as simple as a gesture or demeanour – and promote this as indicative of an imminent or more distant ‘future’” (Jeffrey and Dyson, 2021, p. 643). It is timely for geographers to engage at this fertile intersection.

Whilst prefiguration is gaining traction in discussions of sustainability transformations (Avelino et al., 2024), it also faces some criticisms and limitations. One major criticism is that prefigurative practices often remain small-scale and have limited impact on broader societal transformations (Schiller-Merkens, 2022). Initiatives like ecovillages or community-supported agriculture enact alternative futures locally, yet struggle to scale up and lack a coherent strategic vision for broader societal change (Schiller-Merkens, 2022). By emphasising localised experimentation, prefigurative approaches may not effectively engage with policy, governance, and the large-scale economic shifts needed to advance sustainability. Some geographers contend that prefiguration neglects larger structural barriers and underestimates entrenched power structures and economic systems that resist change, emphasising alternatives whilst downplaying the necessary deconstruction of unsustainable systems (Feola et al., 2021). Prefigurative initiatives can be co-opted or absorbed by existing capitalist structures, diluting their transformative potential. Without a more comprehensive political strategy, prefigurative projects may struggle to maintain their radical edge. The prefigurative focus on enacting future ideals in the present may also overlook the long-term, processual nature of sustainability transformations (Haugland, 2023). Thus, critics contend that this approach inadequately accounts for complex temporal dynamics in socio-technical transitions (Schiller-Merkens, 2022). Consequently, a more comprehensive approach must be spelled out on enabling sustainability transformation through micro- and macro-level change processes.

Three principles emerge from our collective engagement at this intersection, towards understanding and enacting the prefigurative politics of present sustainability transformations in geographical scholarship:

- *Multi-scalarity.* Prefigurative politics for sustainability transformations can operate at various scales, from personal actions to systemic changes. O’Brien and Sygna (2013) relate broader system-level transformations to three interrelated spheres: (i) the practical sphere – behaviours and technical responses; (ii) the political sphere – institutions and laws; and (iii) the personal sphere – individual and collective beliefs, values and worldviews. The personal sphere ultimately shapes how structures and systems – the political sphere – are viewed, as well as what possible solutions are identified – the practical sphere. Changes in the personal sphere are seen as being critical for addressing the root causes of unsustainability and enacting deeper changes (Fischer and Riechers, 2019).

- Everyday practices that challenge the current unsustainable system can demonstrate that alternatives can be considered here and now (Forno and Wahlen, 2024). Successful local experiments and approaches can provide inspiring examples and locally developed grassroots practices are more likely to work than commercial alternatives (Kunnas, 2020). Mobilisation of personal agency (adopting a plant-based diet or engaging in political consumerism) can lead to individual transformations that can scale, and receive top-down support to boost bottom-up agency. Indeed, collective action requires the mobilisation of personal agency, whilst personal agency can be energised through interactions with others (Benessaiah and Eakin, 2021). Grassroots initiatives, such as community-owned renewable energy projects, or local currencies and time banks that foster alternative economic systems, constitute “geo-political terrains of resistance” (Kunze and Avelino, 2015, p. 112) in which global struggles are fought at micro-level, and act as vital local laboratories which pilot and demonstrate in real-world settings how citizens and communities can live more sustainably (Gernert et al., 2018), with potential to inspire and engender wider systemic change through bidirectional dynamics between bottom-up aspirations and top-down restructuring.
- *Boundary transgression.* Transgressing boundaries encourages envisioning and implementing transformative changes from a micro-level to influence broader societal shifts. Interdisciplinary practices break down silos, fostering holistic understanding and innovative solutions. Simultaneously, the inner/outer boundary transgression involves bridging personal, internal changes with external, societal transformations. We highlight clusters of practices that catalyse policymaking processes, illustrating how micro-level changes can trigger and sustain broader transformative movements (Zhu et al., 2022). This aims to enrich theoretical discussions on the dynamics of transformation, its triggers, and processes.
- *Temporalities.* Sustainability transformations are temporal processes where politics emerge, develop, grow, and terminate (Langley et al., 2013). As socio-cultural constructions that shape and enforce patterns of interest and privilege by prescribing appropriate behaviours, transformation of politics requires changes through disturbance and alteration of current institutional arrangements (Micelotta et al., 2017). Transformation of institutional arrangements is traditionally explained by processes of “institutional displacement” or “institutional

accretion” (Ibid.). Displacement positions transformations as the result of changes in institutional environments or entrepreneurial actors mobilising new institutional arrangements. Institutional reconfiguration is situated within institutional pluralism where potentially divergent structures of understanding (institutional logics) mediate or stall transformation (Micelotta et al., 2017). Institutional accretion treats transformations as a distributed and bottom-up perspective, where change is triggered by “mundane activities of practitioners” (Smets et al., 2012, p. 877), accumulated uncoordinated actions (Dorado, 2005) or the amplification of micro-level interactions (Gray et al., 2015) through acts of institutional bricolage.

4. Three principles of the prefigurative politics of present sustainability transformation

4.1. Principle 1: Multi-scalarity and personal-systemic spheres

We attend to how prefiguration takes place across multiple scales. We consider whether these scales are exclusively spatial, or include scales of organisations, responsibility, and ownership. Through examples, we examine what scale does to our understanding of prefiguration and how prefiguration acts on and along scales. If prefiguration has to move from standalone *ad hoc* examples to wider scaled examples that work across space and contexts, then it has to *scale*. Polletta and Hoban (2016) point out the disjuncture between “reaching out and reaching in”, to balance solidarity and engagement within a social movement with building momentum and attracting new members. Multi-scalarity as a principle unpacks this dynamic.

The first example foregrounds that achieving transformative change globally necessitates outreach activities that engender engagement through evocative means. Transcending the current concentrated media landscape largely driven by commercial considerations requires innovative and inspiring ways to spark deeper reflection and change mindsets. Art offers a means to spread inspiration across cultural and geographical spans:

I visited scholar-artist Josefine Klougart’s fantastic exhibition “After Nature” (<https://www.glyptoteket.com/exhibition/after-nature/>) at Ny Carlsberg Glyptotek, Copenhagen’s most famous art museum with half a million annual visitors. This exhibition centred on an essay capturing the outcome of year-long access to the museum’s archives, a selection of artefacts placed into

conversation within her thematic umbrella of choice. From Degas' bronze horses to other less famous, fabulous artefacts, she curated two floors of a wing into an experience of "After Nature".

Why is this relevant as an example of prefigurative politics towards enactable present transformation? The theme seems almost ironically counter to this. Surely we do not want to go into a post-nature world where we have lost access to our natural roots as humans? To me, the scholar-artist's juxtaposition of art related to this tragic focus with her reflective overview on a world in environmental crisis is what spoke most eloquently from the exhibition. Her willingness to take head-on the question of what these artefacts evoke on this theme of environmental loss and its human conceptualisation has stayed with me. That lingering effect is itself an example of present transformation. How can we focus people's attention on ongoing ecological catastrophe in aesthetically and conceptually powerful ways? How can we trace a line through the centuries using great works of art inspired by nature as the greatest art that humans can ever know?

Reaching many people in a prominent space over nearly a year during 2023–2024 constitutes an enactment of present transformation.

There is important existing geographical work on the evolving human-nature relationship (e.g. Castree et al., 2016), and an increased focus on "post-nature" can be a fertile area for future attention, given increasing commodification and diverse forms of resistance.

Three examples of prefigurative politics relate to food. All drawn from various participants' experience and expertise, they offer a complementary demonstration of multi-scalarity that works across the personal-systemic spheres, and suggest useful inroads for geographers. The first addresses radical food democracy:

Current patterns of food production, distribution, and consumption are unjust and destructive to natural resources and livelihoods. Food democracy has been mobilised as a theoretical lens for analysing contemporary food systems and as an organising principle for encouraging active citizen participation in transforming the dominant industrial agri-food system (Bornemann and Weiland, 2019). Practices range from individual actions to collective organisations such as Community Supported Agriculture (CSA) and Food Policy Councils. These living examples of alternative food production, distribution, and consumption models allow people to experience and participate in transformative change in the present. This tangible enactment of alternatives can build momentum for broader systemic change in food systems.

From a food democracy perspective, the rebuilding of the food system fundamentally depends on the adoption of democratic principles and practices in food

governance. It is the citizens affected by food issues who are supposed to shape agri-food systems in line with their ideas and interests in a democratically organised process of will formation and decision-making (Bornemann and Weiland, 2019). Radical food democracy requires the cultivation of alternative economic practices and simultaneous enactment of political imagination to engage with, re-politicise, reform, and transform the institutional frameworks in which those practices operate (Leitheiser and Vezzoni, 2024). It represents a more transformative and systemically oriented approach compared to mainstream conceptions of food democracy, aiming to fundamentally reshape food systems and their underlying political-economic structures.

This articulation of the prefigurative politics intrinsic to food democracy endeavours is deepened in relation to the CSA movement by two participants in joint reflection:

Grassroots agricultural initiatives proactively implement visions of desirable futures in the food production sector. These initiatives aspire to achieve food sovereignty and foster alternative communities grounded in principles of partnership and solidarity, through collective actions aimed at sustainable living and mitigating the negative impacts of human activities on the environment.

The CSA movement has gained popularity in Poland. It promotes the local production of healthy food through agroecological practices, such as permaculture, and the direct sale of goods to network members, often via pre-paid shares for the entire growing season. CSA contributes to environmental conservation, climate resilience, and biodiversity through soil regeneration, reducing lengthy supply chains, and minimising packaging waste. It bolsters a reciprocity-based economy, wherein consumers share risks and responsibilities with farmers, thus sustaining small-scale organic family farms and ensuring fair remuneration for their labour. CSA farms and orchards also fulfil an important pedagogical function, disseminating knowledge and experience among participants through volunteer opportunities and educational workshops, reconnecting society with agriculture.

The emergence of communities of practice, dedicated to radical lifestyle transformations toward regenerative culture, reflects the human pursuit of rebuilding a relationship with nature. By establishing ecological settlements based on natural building methods, renewable energy sources, and creating biodiverse edible ecosystems, they focus on the creation of self-sufficient systems and land restoration. These examples signify a tangible step toward transforming agri-food production systems into being more resilient, equitable, and sustainable. Notably, such grassroots initiatives align with the European Union's Green Deal and National Strategic Plan for the Common Agricultural Policy 2023–2027 in Poland, which provide opportunities to implement alternative agri-food systems.

These place-based synergistic examples, alongside their policy linkages, show how prefiguration can work its way into broader political transformation, resonating with top-down systemic transformation visions. A geographical focus on prefigurative politics can address questions of (and illuminate tensions of) present transformation (see, e.g. Tornaghi and Dehaene (2020) on food and agriculture, Sheng and Yang (2024) on water and forests, and Asara and Kallis (2023) on urban space). These sectors link to others like manufacturing for food packaging and transport for food distribution. Localising production near consumption implies lower transport demands while requiring transformed economic structures that condition food supply and demand along complex value chains. A participant draws on thematic scholarship (Akçay et al., 2020) on alternatives to single-use food packaging:

Food packaging is crucial for both consumer health and product quality. Packaging protects food from external factors, ensuring safety. It extends shelf life, extending freshness and nutritional value. It facilitates easy transportation and storage, and provides essential information. Attractive packaging is vital for brand promotion and marketing.

Plastic food packaging is widely used because it is lightweight, durable, and cost-effective, but has serious environmental and health drawbacks related to waste streams. There are various solutions to prevent the harms of single-use plastics: using cloth bags and glass bottles, recycling plastic waste, and sustainable packaging made from recyclable and compostable materials. Raising consumer awareness is important, and more local production can reduce the need for packaging.

This systematic overview underscores the entrenched challenges to transformative change that the prefigurative political efforts embodied in movements like CSA must confront, as without engaging with the larger dynamics and political economy, prefiguration is stymied from achieving multi-scalar impact. Geographers can expand this insight along lines shown by Hammelman et al (2020). Many soils lack nutrients and require (bio-)fertilisers, both phosphate- and nitrogen-based, whose production is highly energy intensive and technologically sophisticated; many countries lack systems for food security and self-sufficiency given challenging geographical attributes, which create diverse political economic pressures. Crucially, what pathways can enable transformative dynamics remains contingent. Existing initiatives with strong anchoring offer conditions for transformative emergence that transcends personal and systemic spheres. This brings us to boundary transgression.

4.2. Principle 2: Transgressing boundaries, inner and outer

Prefiguration crosses boundaries because it embodies future visions of transformation in present-day practices. These boundaries are often created by established systems, institutions, and habits that limit the scope of what is considered possible or practical, yet these institutions have the capacity to evolve and transgress entrenched ways. Prefigurative politics challenge these boundaries by demonstrating that transformation can occur in the now. For transformation to happen, the boundaries of organisations, sectors, or societies must shift.

Transgression, therefore, must be an explicit focus in both theory and practice, an area where geographers can contribute conceptually (e.g. Carter and Palmer, 2017). Prefigurative politics embodies bottom-up change, where communities enact the sustainable, equitable worlds they want, rather than waiting for top-down policy shifts. This bottom-up nature interacts with both inner boundaries (community values and behaviours) and outer boundaries (structural and societal systems), creating a dynamic exchange. Specific clusters of practices serve as prefigurative enablers in various social movements, e.g. cooperative economies, sustainable communities, decentralised governance, where internal community values and external societal changes become co-constituted.

Table 1 presents three illustrative examples: (i) transformative environmental education for primary school; (ii) governance by trialling, learning and reflecting; and (iii) change of economic theory and practices – which show the ways in which prefiguration is taking place across different systems. For education, this means going beyond the current teaching ethos and methods towards fostering sustainable attitudes and behaviours in the classroom with the potential to change generational thinking. In the governance sphere, this means crossing the boundaries from formal institutional systems to incorporating spaces for experimentation as a way of governing towards sustainability transformations. Finally, we show examples of how changes in thinking and practice can transform the economic system. In each instance, we indicate contributions to be built upon.

- (i) *Prefigurative politics in education systems*: Transformative environmental education is a crucial approach to fostering sustainable behaviours from an early age (Healy et al., 2024). It emphasises experiential learning, critical thinking, and active participation. By integrating environmental

Table 1. Examples of boundary transgression.

Example	Act of transgressing a boundary	Type of boundary	How	Temporal aspect	Reference
Transformative environmental education for primary school	Reorienting comprehensive educational strategy to foster sustainable behaviours and attitudes	Institutional boundaries in the educational system	Incorporation of hands-on activities, outdoor experiences, and community projects that connect students with real-world environmental challenges; employment of a participatory egalitarian classroom model	Changes in everyday practices with potential to influence generational shifts in thinking and acting	Carlsson and Manning (2010); Graeber (2002); Healy et al. (2024); Maeckelbergh (2011)
Governance by trialling, learning and reflecting	Institutionalise the application of formats such as living labs	Institutional boundaries in the governance system	German Federal Government proposal for real-world laboratories as sites for conducting such flexible modes of locally experimenting; citizen budgeting as a method of citizen participation in which citizens are involved in the process of deciding how public money is spent	Establish flexible forms of transformative interventions. This set of regulations resonates with recent calls for creating spaces to engage in making experiences of radically different futures	Sinervo et al. (2024); von Wirth et al. (2018)
Change of economic theory and practices	Changes in attitudes, consumption and production in economic systems	Personal values, habits and material	Doughnut Economics, with its focus on balancing social foundations and ecological ceilings, provides a conceptual model for this boundary-crossing; e.g. training to diversify job profiles; shopping at zero-waste stores; purchasing second-hand clothing; and using product- and service-sharing platforms	Changes in everyday practices of production, consumption, and exchange	D'Adamo et al. (2022); de Graaf et al. (2024); Frenken and Schor (2019); Lehner et al. (2016); Raworth (2017)

education into the primary school curriculum, students are encouraged to engage with their natural surroundings, thereby developing a sense of responsibility and stewardship. This incorporates hands-on activities, outdoor experiences, and community projects that connect students with real-world environmental challenges. Involving parents can extend environmental education beyond the classroom through workshops, family projects, and school-community partnerships, creating a supportive framework.

- (ii) *Prefigurative politics in governance systems:* Existing policy mixes and governance attempts have repeatedly failed to appropriately address complex, grand societal challenges such as biodiversity loss and climate change adaptation and mitigation. Transformation scholars have argued for alternative forms of governance to embrace uncertainties, system interactions, non-linearity and the multiplicity of involved actors. One proposal concerns experimental governance towards more flexible, provisional, and temporary modes by trialling, learning and reflecting (von Wirth et al., 2018). The German Federal Government is consulting with societal actors about regulations to institutionalise formats such as living labs, real-world

laboratories as sites of such flexibility for alternative practices, sustainable socio-technical innovations, or new actor coalitions. Formulated well, federal regulations can provide an enabling legal context for transformative interventions beyond incremental optimisation of existing system characteristics, and constitute arenas for prefiguration in public institutions. Geographers can help instigate the replication and propagation of such practices in other places, regulations and policies.

- (iii) *Prefigurative politics in economic systems:* Prefigurative politics, when aligned with the framework of Doughnut Economics, offers a powerful model for enacting sustainable social transformation by integrating future-oriented visions into present-day practices (Raworth, 2017; Yates, 2021). By embodying the principles of ecological sustainability and social equity, communities and movements can operationalise this dual framework into living examples of a just and regenerative society. Amsterdam's Doughnut City initiative exemplifies this, where grassroots efforts challenge traditional urban planning boundaries, while public institutional policies on housing and emissions align with this transformative vision.

This synergy illustrates how boundary-spanning practices enact present-day transformations. Examples in diverse spheres of economic activity and livelihood practices exemplify the broad field of play for geographers:

- *Transforming unsustainable traditional professions:* Excessive fishing pressure and the consequences of climate change have decimated the stocks of cod and herring in the western Baltic Sea, making fishing economically unviable (de Graaf et al., 2024). Yet, coastal fishing is a traditional livelihood, and its disappearance would alter coastal communities and decrease biocultural diversity. Hardly any new fishers start each year in Germany. For the remaining fishing businesses, alternative sources of income could lie in the areas of nature and environmental protection, education, tourism, or research (e.g. monitoring). To diversify fishers' job profile, the fishing co-operative Wismarbucht eG runs a pilot training programme called SeaRanger. Regional and national governments fund this approach to improving place-based sustainability transformation.
- *Participatory budgeting for transformative change:* Participatory budgeting is a method of citizen participation in which citizens are involved in deciding public spending (Sinervo et al., 2024). This has taken different forms in cities worldwide, to increase citizen engagement and empowerment. The emerging questions include whether transformative proposals have emerged from these initiatives and whether the practice of participatory budgeting may itself transform decision-making structures of urban governance by allocating resources to previously marginalised stakeholder groups. The prospects of this strategy and how existing institutional structures and politics accommodate these emerging structures and processes merit attention for ways to espouse wider change in established systems.
- *Consumer disruption of linear frameworks:* The redefinition of consumer behaviours can transform the consumer–producer relationship, shifting it to value longevity and resource efficiency and support businesses that adopt circular principles. Such behaviours transgress boundaries by reducing reliance on single-use products, rejecting marketing strategies that promote consumerism, and instead encouraging a focus on sustainability. This fosters an economy that prioritises ecological balance and responsible resource management rather than unchecked growth. For instance, shopping at zero-waste stores, where goods are sold without packaging, challenges the conventional linear production model based on

disposable products (Lehner et al., 2016). Choosing to repair and refurbish electronics extends product life cycles and reduces e-waste (Moradi et al., 2024). Purchasing second-hand clothing or participating in clothing swaps minimises textile waste and decreases the demand for new, resource-intensive production (D'Adamo et al., 2022). Engaging with product-sharing platforms, such as car-sharing services, tool libraries, or community gardens, challenges conventional notions of ownership and promotes collaborative consumption (Frenken and Schor, 2019).

4.3. Principle 3: Temporalities, institutionalisation and change processes

The third principle has a processual orientation and highlights the multiple temporalities in efforts to institutionalise transformative change. Institutionalisation is a way of making things stick, to bring about durability and adoption into societies. Institutionalising transformation in the present shapes the future. Who manages to institutionalise things? And what things are institutionalisable? Figuring out these dynamics offers a handle on in-building durability (Grandin and Sareen, 2020).

Legislative anchoring is a key element. An interdisciplinary approach and cross-sectoral cooperation are essential in legal design and legislation, particularly in areas like climate change, digitalisation, and urban and rural development. These areas often require the integration of diverse expertise and interests to craft comprehensive and effective legal frameworks. The role of key stakeholders is critical to ensure that laws are well-designed, adaptable, comprehensive, inclusive, and future-oriented. Kotzé et al. (2022) highlight that the development of an integrated legal framework for earth system law requires embracing systems thinking, aligning legal fields, and involving diverse stakeholders, including marginalised groups, future generations, and non-human entities, through interdisciplinary collaboration.

Noting the slippery nature of interdisciplinary and transdisciplinary transformation efforts, Yaffa Epstein (accessed 12 November 2025 here: <https://interdisciplinaryenvironmentallaw.com>) argues that (1) terms and concepts from the natural sciences frequently influence the legal field, where differences in how these scientific terms and concepts are understood across various disciplines can impact legal decisions and make it challenging to determine if laws are being followed; and (2) when scientific principles are integrated into legal

frameworks, consulting natural science is often necessary to interpret or apply the law accurately: if judges or other legal authorities misinterpret or improperly apply scientific knowledge, it can undermine the law's effectiveness in achieving its intended goals.

Thus, it does not suffice to plan for long-term change in the present. Once prefigurative politics set particular changes in motion, institutionalisation is tortuous and unpredictable, co-constituted with political, technical, and socioeconomic forces as endeavours to change systems engage with existing structures and logics that characterise those systems and render transformation unpredictable, uneven, and protracted. This phenomenological property of transformative change processes makes multiple temporalities a vital principle of prefigurative politics. It is vital for geographers to attend to struggles over legalisation and institutionalisation in relation to transformative endeavours underway (Lund, 2021).

Taking energy cooperatives in Spain as an example, a participant reflects upon the temporalities of institutionalisation through prefiguration:

Brisbois (2023) argues that the energy sector is undergoing rapid transformation due to the need for decarbonisation and fast technological innovations. Historically, this has been a highly centralised sector, with a few large companies holding significant influence. Affordable renewable energy makes energy decentralisation more feasible, allowing new groups to influence decision-making. Bottlenecks for integrating renewables into electricity grids remain (Precht, 2023). Institutionalisation can either facilitate or hinder the shift towards more democratic and decentralised energy systems. Brisbois highlights that decentralised actors can gain greater political influence by integrating into evolving institutional structures, while institutions can block or co-opt these new actors. Energy cooperatives allow local communities to produce renewable energy for self-consumption or local distribution. These models democratise energy access and address transformation justice by enabling marginalised communities to participate in the energy transition, with significant scalability.

The Spanish cooperative Ecooo demonstrates how prefigurative politics can shift power dynamics. It follows an energy self-management model that avoids centralisation and dependence on fossil fuels, thereby creating a niche for social transformation (Törnberg, 2021). Ecooo promotes solar energy through citizen participation, reflecting a means-ends coherence central to prefigurative politics, which helps expand this model to other areas of everyday life, such as food systems. Som Energia is an energy cooperative that provides renewable electricity to its members nationwide. Unlike Ecooo, which focuses on community self-consumption and socially responsible investment in social projects, Som focuses on the production and

commercialisation of renewable energy, allowing its members to actively participate in management and decision-making. Over the past decade, Som Energia has grown considerably, with 80,000 members across Spain making it an example of how a prefigurative model can scale through a process of empowerment (Pellicer-Sifres et al., 2018).

Other participants return to Doughnut Economics in relation to temporalities of change. By visualising a model that balances planetary boundaries with societal foundations, Doughnut Economics offers a clear guide for sustainable living while ensuring human needs are met. When aligned with prefigurative politics, Doughnut Economics allows communities to conceptualise and enact transformation. Social movements and indeed governmental bodies can embody these principles in their governance structures, resource-sharing methods, and ecological stewardship. For example, the model encourages the reduction of carbon emissions and equal distribution of resources today. This coupling of theory and action cultivates living examples of sustainable economies that merit attention by geographers (Amiel, 2024).

Such approaches can support decision-making at and across multiple governance levels by establishing appropriate, community-defined priorities, resolving moral dilemmas, and integrating numerous aspects into evolving institutional structures that enable transformative change. Within the Hungarian Degrowth Doughnut development, Budapest's Degrowth Doughnut is being developed in a participatory way. Through workshops, diverse experts of Budapest discussed, determined, and validated the indicators of the Budapest Degrowth Doughnut. The co-creative analysis revealed gaps, strengths, unexploited opportunities, and correlations between individual indicators, based on which relevant policy proposals were formulated. This participatory development provides directions for municipal institutionalisation of envisioned transformative change.

Examples help articulate the temporalities of institutionalisation of prefigurative politics:

- Portugal offers a notable example of the integration of sustainability into the education system, particularly through multi-scalar initiatives that empower students. A student movement empowered by digital learning and a strong sense of community organised campaigns and projects advocating for sustainable practices and policies. Such grassroots activism highlights prefigurative politics at work, towards egalitarian and democratic educational processes (Carlsson and Manning, 2010; Maeckelbergh, 2011), where participants experience the foundations of a future

democratic education system in the present (Graeber, 2002).

- Prefigurative politics can institutionalise land consolidation and sustainability by creating educational programs and initiatives that promote sustainable land management practices and foster environmental stewardship. Land consolidation can benefit agricultural productivity, environmental sustainability, and urban and rural development, by optimising agricultural holdings, enhancing their economic and social viability, and widening benefits (Veršinskas et al., 2020). North Macedonia's southwestern Pelagonia region was characterised by small, fragmented landholdings that hindered efficient agricultural practices. A government-initiated land consolidation programme that involved parcel mapping, land valuation, and infrastructure development increased the agricultural productivity potential, improved land management, and made farms more resilient to extreme weather conditions, such as floods and droughts (Hartvigsen et al., 2023).
- In Lithuania, the Environmental Protection Agency facilitates data-driven environmental solutions using a policy impact assessment system mandated for all new and amended legislation, including investment measures (Lithuanian Environmental Protection Agency, 2024). The effectiveness of environmental strategies is to be evaluated regularly, and legislative amendments are institutionalising robust measures.
- The organic food movement has grown from consumers' concern with the environmental and health impacts of conventional and intensive agriculture (Katt and Meixner, 2020). Organic food products have gained popularity through demand for transparency and sustainability, with suppliers expanding organic offerings (Hwang and Chung, 2019), and governments introducing certification systems to ensure compliance with organic standards (Kononets et al., 2023). This shift has institutionalised organic farming practices, making them more accessible. The movement has influenced the broader agricultural and food industry by encouraging a focus on sustainability and traceability, from farm-to-table practices to fair trade certification. This gradual, major institutionalisation shows how consumers' demands can drive systemic change in agri-food production and supply chains.

5. Conclusion

We have explained how geographical research on prefigurative politics can contribute to sustainability

transformations through three key principles: multi-scalarity, boundary transgression, and temporalities. The principle of multi-scalarity emphasises the importance of addressing sustainability transformations at various scales, from personal actions to systemic changes. Examples such as grassroots agricultural initiatives and community-supported agriculture demonstrate how local actions can contribute to broader systemic change. By fostering personal agency and collective action, these initiatives create living examples of sustainable practices that can be scaled up to influence larger systems.

Boundary transgression involves crossing institutional, social, and material boundaries to enact transformative change. Prefigurative politics challenge established systems and habits by demonstrating that transformation can occur in the present. Examples such as participatory budgeting and consumer disruption of linear frameworks illustrate how crossing boundaries can lead to new forms of governance and economic systems. By integrating interdisciplinary practices and bridging personal and societal changes, boundary transgression fosters a dynamic exchange between internal and external transformations, creating a holistic approach to sustainability.

The principle of multiple temporalities reveals that sustainability transformations demand institutional structures that enable emergence and development. We have illustrated that current institutions can entail time-consuming multi-step processes of cross-disciplinary collaboration, protracting change endeavours. Other examples show that legislation from current institutional actors can lead to sustainability transformations. In contrast, accumulated bottom-up actions from disruptive actors play an important role in developing sustainability transformations, where new institutional actors emerge as prefigurative models to reconfigure energy systems.

Taken together, we can visualise the three principles as encompassing space (multi-scalarity), interrogating and enlarging the material terrain (boundary transgression), and multiplying temporal horizons (temporalities), for a pluralistic yet grounded approach to the space-time of prefigurative politics. This tripartite rendering affords requisite conceptual flexibility and range, as illustrated through numerous examples. For each principle, we have identified fertile areas of engagement where geographers should prioritise inroads. The study's methodological structure aims to transcend conventional boundaries and plant the seeds of different prefigurative transformation across sectors. Simultaneously, we ensure sufficient anchoring in geographical research to seed this thematic focus in future disciplinary research.

Future geographical research on the prefigurative politics of present sustainability transformations should focus on the interplay between multi-scalarity, boundary transgression, and temporalities. Understanding how these principles interact with and influence each other can help develop more effective strategies for achieving transformational change and conceptual reflections to inform orientation. Future research should explore how new institutional actors and disruptive actions can drive sustainability transformations and how interdisciplinary co-production can foster holistic and innovative solutions. Addressing the limitations and challenges of these approaches can contribute to and be constitutive of the development of an actionable approach for building sustainable and resilient societies, and shape engaged geographical research in the twenty-first century.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by Research Council of Norway: [Grant Number 349994 ENERGY4ALL]; Norwegian Agency for Development Cooperation: [NORHED-II Capacity-building for SJSET]; COST Association: [Grant Number CA22156 TransformERS supported by COST (European Cooperation in Science and Technology), see www.cost.eu]; and the University of Bergen for open access publication.

ORCID

Siddharth Sareen  <http://orcid.org/0000-0002-0826-7311>
 Aleksandra Kekkonen  <http://orcid.org/0000-0001-7583-0728>
 Maria Luísa Vasconcelos  <http://orcid.org/0000-0002-9045-1256>
 Nurinisa Esenbuga  <http://orcid.org/0000-0002-2036-8369>
 Rocío Pineda-Martos  <http://orcid.org/0000-0002-7176-1531>
 Sandra Bernardo  <http://orcid.org/0000-0002-3599-8187>
 Şehnaz Okkiran  <http://orcid.org/0000-0002-3026-7836>

References

- Akçay, S., Törnük, F., Yetim, H. 2020 Mikroplastikler: Gıdalarda Bulunuşu ve Sağlık Üzerine Etkileri (Microplastics: Effects on health and occurrence in foods). *Avrupa Bilim ve Teknoloji Dergisi* 20, 530–538. doi:10.31590/ejosat.725259
- Amiel, L. 2024 Thriving in Balance: Navigating Doughnut Economics, Circular Economies, and the Green Transition. *The Geography Teacher*, 22 (1), 19–23. doi:10.1080/19338341.2024.2432274
- Asara, V., Kallis, G. 2023 The prefigurative politics of social movements and their processual production of space: The case of the indignados movement. *Environment and Planning C: Politics and Space*, 41(1), 56–76. doi:10.1177/23996544221115279
- Avelino, F., Wijsman, K., van Steenberg, F., Jhagroe, S., Wittmayer, J., Akerboom, S., Bogner, K., Jansen, E.F., Frantzeskaki, N., Kalfagiannis, A. 2024 Just sustainability transitions: politics, power, and prefiguration in transformative change toward justice and sustainability. *Annual Review of Environment and Resources* 49, 519–547. doi:10.1146/annurev-environ-112321-081722
- Bakker, K., Bridge, G. 2006 Material worlds? Resource geographies and the matter of nature'. *Progress in Human Geography*, 30(1), 5–27. doi:10.1191/0309132506ph588oa
- Benessaiah, K. and Eakin, H. 2021 Crisis, transformation, and agency: Why are people going back-to-the-land in Greece? *Sustainability Science* 16, 1841–1858. doi:10.1007/s11625-021-01043-5
- Bornemann, B., and Weiland, S. 2019 Empowering people – democratising the food system? Exploring the democratic potential of food-related empowerment forms. *Politics and Governance* 7 (4), 105–118. doi:10.17645/pag.v7i4.2190
- Brisbois, M.C. 2023. Decentralizing energy systems: Political power and shifting power relations in energy ownership. In Nadesan, M., Pasqualetti, M.J., Keahey, J. (eds.) *Energy Democracies for Sustainable Futures*, pp. 83–92. London: Academic Press.
- Carlsson, C. and Manning, F. 2010 Nowtopia: strategic exemplarism and prefigurative politics. *Affinities: A Journal of Radical Theory, Culture, and Action* 4 (1), 90–108.
- Carter, J., Palmer, J. 2017 Dilemmas of transgression: Ethical responses in a more-than-human world. *Cultural Geographies*, 24(2), 213–229. doi:10.1177/1474474016667428
- Castree, N., Demeritt, D., Liverman, D., Rhoads, B. eds. 2016 *A companion to environmental geography*. Hoboken, NJ: John Wiley & Sons.
- D'Adamo, I., Lupi, G., Morone, P., Settembre-Blundo, D. 2022 Towards the circular economy in the fashion industry: The second-hand market as a best practice of sustainable responsibility for businesses and consumers. *Environmental Science and Pollution Research* 29, 46620–46633. doi:10.1007/s11356-022-19255-2
- de Graaf, K., Schwermer, H., Wagner-Ahlf, C., Greve, O., Hunklinger, C., Reikhs, M.-C. 2024 Förster des Meeres: Idee zur Diversifizierung des Berufsbildes Küstenfischerei.
- Dorado, S. 2005 Institutional entrepreneurship, partaking, and convening. *Organization Studies* 26 (3), 385–414. doi:10.1177/0170840605050873
- Feola, G., Vincent, O., Moore, D. 2021 (Un)making in sustainability transformation beyond capitalism. *Global Environmental Change* 69, 102290. doi:10.1016/j.gloenvcha.2021.102290
- Fischer, J. and Riechers, M. 2019 A leverage points perspective on sustainability. *People and Nature* 1 (1), 115–120. doi:10.1002/pan3.13
- Forno, F. and Wahlen, S. 2024 Prefiguration in everyday practices: When the mundane becomes political. In Monticelli, L. (ed.) *The Future is Now: An Introduction to Prefigurative Politics*, pp. 119–129. Bristol: Bristol University Press.

- Frenken, K. and Schor, J. 2019 Putting the sharing economy into perspective. In Mont, O. (ed.) *A Research Agenda for Sustainable Consumption Governance*, pp. 121–135. Cheltenham: Edward Elgar Publishing.
- Gernert, M., El Bilali, H., Strassner, C. 2018 Grassroots initiatives as sustainability transition pioneers: Implications and lessons for urban food systems. *Urban Science* 2 (1), 23. doi:10.3390/urbansci2010023
- Graeber, D. 2002 The new anarchists. *New Left Review* 13, 61–73.
- Grandin, J., Sareen, S. 2020 What sticks? Ephemerality, permanence and local transition pathways. *Environmental Innovation and Societal Transitions*, 36, 72–82. doi:10.1016/j.eist.2020.04.008
- Gray, B., Purdy, J.M., Ansari, S. 2015 From interactions to institutions: Microprocesses of framing and mechanisms for the structuring of institutional fields. *Academy of Management Review* 40 (1), 115–143. <https://www.jstor.org/stable/43700545>
- Hammelman, C., Reynolds, K., Levkoe, C.Z. 2020 Toward a radical food geography praxis: integrating theory, action, and geographic analysis in pursuit of more equitable and sustainable food systems. *Human Geography*, 13(3), 211–227. doi:10.1177/1942778620962034
- Hartvigsen, M., Mitic-Arsova, K., Gorgan, M., Georgievski, K. 2023 *Lessons learned from the introduction of land consolidation in North Macedonia during 2014–2023*. Budapest: FAO.
- Haugland, B.T. 2023 The future is present: Prefiguration in policy and technology experimentation. *Environmental Innovation and Societal Transitions* 48, 100750. doi:10.1016/j.eist.2023.100750
- Healy, G., Mitchell, D., Walshe, N. 2024 Climate change, sustainability, and education: Conceptions of teachers of geography in England. *Sustainability* 16 (16), 7213. doi:10.3390/su16167213
- Hwang, J. and Chung, J-E. 2019 What drives consumers to certain retailers for organic food purchase: The role of fit for consumers' retail store preference. *Journal of Retailing and Consumer Services* 47, 293–306. doi:10.1016/j.jretconser.2018.12.005
- Jeffrey, C. and Dyson, J. 2021 Geographies of the future: prefigurative politics. *Progress in Human Geography* 45 (4), 641–658. doi:10.1177/0309132520926569
- Katt, F. and Meixner, O. 2020 A systematic review of drivers influencing consumer willingness to pay for organic food. *Trends in Food Science and Technology* 100, 374–388. doi:10.1016/j.tifs.2020.04.029
- Kononets, Y., Konvalina, P., Bartos, P., Smetana, P. 2023 The evolution of organic food certification. *Frontiers in Sustainable Food Systems* 7, 1167017. doi:10.3389/fsufs.2023.1167017
- Kotzé, L.J., Kim, R.E., Blanchard, C., Gellers, J.C., Holley, C., Petersmann, M., van Asselt, H., Biermann, F., Hurlbert, M. 2022. Earth system law: Exploring new frontiers in legal science. *Earth System Governance* 11, 100126. doi:10.1016/j.esg.2021.100126
- Kunnas, J. 2020 Trail-blazer dependency – a roadmap for the sustainability revolution. *Global Environment* 13 (2), 317–337. doi:10.3197/ge.2020.130204
- Kunze, I. and Avelino, F. 2015 Social Innovation and the Global Ecovillage Network. TRANSIT Research Report. TRANSIT: EU SSH.2013.3.2-1. Rotterdam: Dutch Research Institute For Transitions (DRIFT). http://www.transitsocialinnovation.eu/content/original/Book%20covers/Local%20PDFs/192%20Case_study_report_GEN_FINAL.pdf
- Langley, A., Smallman, C., Tsoukas, H., Van de Ven, A.H. 2013 Process studies of change in organization and management: Unveiling temporality, activity, and flow. *The Academy of Management Journal* 56 (1), 1–13. <http://www.jstor.org/stable/23414342>
- Lehner, M., Mont, O., Heiskanen, E. 2016 Nudging: A promising tool for sustainable consumption behaviour? *Journal of Cleaner Production* 134 (Part A), 166–177. doi:10.1016/j.jclepro.2015.11.086
- Leitheiser, S. and Vezzoni, R. 2024 Joining the ideational and the material: Transforming food systems toward radical food democracy. *Frontiers in Sustainable Food Systems* 8, 1307759. doi:10.3389/fsufs.2024.1307759
- Lithuanian Environmental Protection Agency 2024 Assessment of the impact of legislative proposals on the environment and climate change in Lithuania. <https://aaa.lrv.lt/lt/veiklos-sritys/teisekuros-poveikio-vertinimas/teisinio-reguliavimo-poveikio-aplinkai-ir-klimato-kaitai-vertinimas/>
- Lund, C. 2021 *Nine-tenths of the law: Enduring dispossession in Indonesia*. New Haven, CT: Yale University Press.
- Maackelbergh, M. 2011 Doing is believing: prefiguration as strategic practice in the alterglobalization movement. *Social Movement Studies* 10 (1), 1–20. doi:10.1080/14742837.2011.545223
- Micelotta, E., Lounsbury, M., Greenwood, R. 2017 Pathways of institutional change: An integrative review and research agenda. *Journal of Management* 43 (6), 1885–1910. doi:10.1177/0149206317699522
- Middlemiss, L. 2018 *Sustainable consumption: Key issues*. Abingdon: Routledge.
- Moradi, R., Yazdi, M., Haghighi, A., Nedjati, A. 2024 Sustainable resilient e-waste management in London: A circular economy perspective. *Heliyon* 10 (13), e34071. doi:10.1016/j.heliyon.2024.e34071
- O'Brien, K. and Sygna, L. 2013 Responding to climate change: The three spheres of transformation. University of Oslo (eds.) *Proceedings of Transformation in a Changing Climate*, 19–21 June 2013, pp. 16–23. Oslo: University of Oslo. https://www.europarc.org/wp-content/uploads/2020/05/O'Brien-and-Sygna_2013_Responding-to-climate-change-Three-spheres-of-transformation.pdf
- Pellicer-Sifres, V., Belda-Miquel, S., Cuesta-Fernández, I., Boni, A. 2018 Learning, transformative action, and grassroots innovation: Insights from the Spanish energy cooperative Som Energia. *Energy Research & Social Science* 42, 100–111. doi:10.1016/j.erss.2018.03.001
- Polletta, F. and Hoban, K., 2016 Why consensus? Prefiguration in three activist eras. *Journal of Social and Political Psychology* 4 (1), 286–301. doi:10.5964/jpspp.v4i1.524
- Precht, M.H.G. 2023. UN Sustainable Development Goal 7: Clean energy – a holistic approach towards a sustainable future through hydrogen storage. *RSC Sustainability* 1, 1580–1583. doi:10.1039/D3SU90036C

- Priebe, J., Mårald, E., Nordin, A. 2021 Narrow pasts and futures: How frames of sustainability transformation limit societal change. *Journal of Environmental Studies and Sciences* 11, 76–84. doi:10.1007/s13412-020-00636-3
- Raworth, K. 2017 *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. London: Random House.
- Sareen, S., and Juhola, S. (eds.) 2026 *Societal transitions to sustainability: The prefigurative politics of present transformation*. Cham: Palgrave Macmillan.
- Schiller-Merkens, S. 2022 Social transformation through prefiguration? A multi-political approach of prefiguring alternative infrastructures. *Historical Social Research* 47 (4), 66–90. doi:10.12759/hsr.47.2022.39
- Sharpe, B., Hodgson, A., Leicester, G., Lyon, A., Fazey, I. 2016 Three horizons: A pathways practice for transformation. *Ecology & Society* 21 (2), 47. doi:10.5751/ES-08388-210247
- Sheng, J. and Yang, H. 2024 From water source protection to future village: Environmental prefigurative politics and technologies of the self in China's Qingshan village. *Eurasian Geography and Economics*, 1–33. doi:10.1080/15387216.2024.2383625
- Sinervo, L.-M., Bartocci, L., Lehtonen, P., Ebdon, C. 2024 Toward sustainable governance with participatory budgeting. *Journal of Public Budgeting, Accounting & Financial Management* 36 (1), 1–19. doi:10.1108/JPBAFM-11-2023-0205
- Smets, M., Morris, T.I.M., Greenwood, R. 2012 From practice to field: A multilevel model of practice-driven institutional change. *Academy of Management Journal* 55 (4), 877–904. <https://www.jstor.org/stable/pdf/23317618>
- Stirling, A. 2019 How deep is incumbency? A 'configuring fields' approach to redistributing and reorienting power in socio-material change. *Energy Research & Social Science*, 58, 101239. doi:10.1016/j.erss.2019.101239
- Tornaghi, C., Dehaene, M. 2020 The prefigurative power of urban political agroecology: Rethinking the urbanisms of agroecological transitions for food system transformation. *Agroecology and Sustainable Food Systems*, 44(5), 594–610. doi:10.1080/21683565.2019.1680593
- Törnberg, A. 2021 Prefigurative politics and social change: A typology drawing on transition studies. *Distinktion: Journal of Social Theory* 22 (1), 83–107. doi:10.1080/1600910X.2020.1856161
- Truffer, B., Murphy, J.T., Raven, R. 2015 The geography of sustainability transitions: Contours of an emerging theme. *Environmental Innovation and Societal Transitions*, 17, 63–72. doi:10.1016/j.eist.2015.07.004
- Veršinskas, T., Vidar, M., Hartvigsen, M., Mitic Arsova, K., van Holst, F., Gorgan, M. 2020 *Legal guide on land consolidation: Based on regulatory practices in Europe*. FAO Legal Guide, No. 3. Rome: FAO.
- von Wirth, T., Fuenfschilling, L., Frantzeskaki, N., Coenen, L. 2018 Impacts of urban living labs on sustainability transitions: Mechanisms and strategies for systemic change through experimentation. *European Planning Studies* 27 (2), 229–257. doi:10.1080/09654313.2018.1504895
- Westley, F., Olsson, P., Folke, C., Homer-Dixon, T., Vredenburg, H., Loorbach, D., Thompson, J., Nilsson, M., Lambin, E., Sendzimir, J., Banerjee, B., Galaz, V., van der Leeuw, S. 2011 Tipping toward sustainability: Emerging pathways of transformation. *Ambio* 40, 762–780. doi:10.1007/s13280-011-0186-9
- Whitehead, M. 2014 *Environmental transformations: A geography of the Anthropocene*. Abingdon: Routledge.
- Yates, L. 2021 Prefigurative politics and social movement strategy: The roles of prefiguration in the reproduction, mobilisation and coordination of movements. *Political Studies* 69 (4), 1033–1052. doi:10.1177/0032321720936046
- Zhu, B., Nguyen, M., Siri, N.S., Malik, A. 2022 Towards a transformative model of circular economy for SMEs. *Journal of Business Research* 144, 545–555. <https://doi.org/10.1016/j.jbusres.2022.01.093>