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Citation:

HUBBARD, Ella (2026). Bioregioning Tayside: Lessons from a community-led bioregioning initiative in Scotland. *Contesti. Città, territori, progetti*. [Article]

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Bioregioning Tayside: lessons from a community-led bioregioning initiative in Scotland

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Received: December 2025 / Accepted: June 2026 | © 2026 Hubbard.

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DOI: 10.36253/contest-16993

Abstract

This paper explores practices of bioregioning through Bioregioning Tayside, Scotland. Bioregioning Tayside is a community-led initiative that reconnects human communities to the landscapes they inhabit. This paper explains how Bioregioning Tayside have applied bioregional thought as a verb, and how understanding bioregioning as a verb contributes to planning theory and practice. It argues that whilst bioregional practice is plural and place-specific, Bioregioning Tayside offers learnings for global bioregional initiatives: strategies for 1) building critical forms of connection to nature; 2) generating a sense of place that is progressive; 3) supporting transformative politics that makes space for contestation; and 4) identifying leverage points that are unique to the place in question.

Keywords: Bioregioning, Community environmentalism; Place-based transformation; Socio-ecological transformations

1. Introduction

Transforming the places that we inhabit to make them more liveable and sustainable has become an increasingly urgent challenge. It is also a profoundly spatial challenge. Such transformations require reimagining how we inhabit specific places and reconceptualising the relationship between place and space, including the rural and urban (Krähmer, 2022).

In recent years, there has been a re-invigoration of bioregionalism as a way of responding to this spatial challenge (Wearne *et al.*, 2023; Hubbard, 2024). Bioregionalism is an approach that aims to develop place-sensitive strategies for socioecological transformation. Networks of bioregional learning centres, such as that based in South Devon, UK, and *Earth Regenerators*, an international network of bioregionalists, began to spring up in the late 2010s. The first issue of the London Design Museum's magazine, *Future Observatories*, was dedicated entirely to bioregioning. In these examples, bioregioning is shifting from countercultural movement to practical frameworks for place-based socioecological transformation (Bollier and Hurst, 2025).

Yet Bollier (2025) asks, "have you noticed how the term "bioregional" is becoming a new eco-buzzword and greenwashing term?" The proliferation of bioregional thought, and its openness to reinterpretation (Wearne *et al.*, 2023), means that it can both be a strategy for place-based change, or used to evoke a sense of connection to place without any meaningful place-based engagement. This paper asks how bioregioning can contribute to urban planning, and shares lessons from one bioregional initiative: *Bioregioning Tayside*. In doing so, it responds to Cristiano *et al.*'s (2026) calls for urban planning to examine experimental frameworks that can respond to the complex crises that landscapes and cities are facing.

Bioregioning Tayside is a Scottish initiative founded in 2020. While bioregional initiatives are taking a number of forms in the UK and internationally (see Wearne *et al.*, 2023), *Bioregioning Tayside* can be understood as a community-led, experimental project that aims to build new forms of connection with place and new ecological relationships. In contrast to a top-down application of bioregional concepts in policy making, *Bioregioning Tayside* is engaged in an ongoing process, working with residents of Tayside to re-image their bioregion.

This paper explores how this community-led approach to bioregioning has been mobilised and explains two key practices that *Bioregioning Tayside* use: creating a ‘story of place’ and participating in ‘learning journeys’. It is based on qualitative research conducted between 2020 and 2022. The research took a feminist approach, mobilising my position outside of the group to work with participants to activate political subjectivities (Gibson-Graham and Dombroski, 2020) and theorise bioregioning together.

The paper has two key aims. The first is to connect and amplify bioregional projects. Here, I follow the research ethics of Gibson-Graham and the diverse economies research network (Gibson-Graham and Dombroski, 2020) that advocates for academics use research to “make [alternative projects] ... more viable as objects of policy and activism” (2008, p. 618). This takes seriously the role that scholarship plays in archiving (Zanoni *et al.*, 2017) and legitimising (Esper *et al.*, 2017) initiatives that would otherwise be considered ‘marginal’. By recording the practices of *Bioregioning Tayside*, I hope to add to the expanding archive of bioregional initiatives, positioning them as meaningful experiments in socio-ecological transformation.

The second aim is to inform global bioregioning planning practices. Whilst recognising that bioregional practices are specific to place and are therefore inherently plural, I identify four learnings that *Bioregioning Tayside* can offer: building critical forms of connection to nature; generating a sense of place that is sensitive to scale and transcends urban-rural divides; contributing to a transformative politics that makes space for disagreement; and identifying the sites for action that are unique to the place in question. This paper adds to the theoretical grounding of bioregional practice, and evidence for its application within planning.

It is timely to bring bioregional initiatives into conversation with each other as attention is being paid to the role of place in sustainability transitions (Wearne and Riedy, 2024). Bioregioning is increasingly being proposed as a way of taking place seriously, including the interactions between humans and ecology (Fanfani and Matarán Ruiz, 2020), and for analysing the spatial politics that reproduce ecological and political inequalities, such as the Urban-Other divide (Waldenberger and Savini, 2025).

The paper begins by introducing the case study, *Bioregioning Tayside* by placing it first within the evolving thought of bioregionalism, and then within the context of Scotland’s ecological challenges and history. I then describe the practices that the group employed, including creating a ‘story of place’ and ‘learning journeys’. Drawing on these practices, I identify four lessons that *Bioregioning Tayside* can offer global bioregional initiatives and policies. The next section highlights some of the challenges and limitations that *Bioregioning Tayside* have faced. I conclude by reiterating the importance of connecting bioregional initiatives, sharing experiences, and acknowledging the nuance and specificity of working in place.

2. Bioregioning

While outlining a history of bioregional thought is beyond the scope of this paper, it is useful to place *Bioregioning Tayside* in the context of bioregional thinking. Bioregionalism was developed in the 1970s as an approach to sustainable living (Glotfelty and Quesnel, 2015). It is concerned with “reconnecting human socially-just culture with region scale ecosystems” (Aberley, 1999, p. 13), and proposes a strategy of re-inhabitation, or living-in-place. As the seminal essay *Reinhabiting California* states, “A society which practices living-in-place keeps a balance with its region of support through links between human lives, other living things, and the processes of the planet — seasons, weather, water cycles — as revealed by the place itself” (Berg and Dasmann, 1977). Bioregionalism attempts to counter a placeless form of living, characterised by globalised supply chains, with a care for the ecosystems we actually inhabit.

In the 2000s, bioregionalism was increasingly critiqued as being inherently inward looking and ill-equipped to deal with global challenges (Whatmore, 1997). Some argued that bioregionalism is overly focused on rural areas, calling for a return to a romanticised rural idyll (Cato, 2012) and negating the experience of urban environmental degradation and injustice (Menser, 2013). Plumwood (2008) makes compelling arguments about bioregionalism’s advocacy for self-sufficient communities that ignore the “complex network of places that support our lives” (2008, p. 139). Yet these critiques centre on a form of

bioregionalism that sees place as static and bounded, with an essentialist understanding of nature and identity.

However, bioregionalism is experiencing a re-emergence, and in doing so, is taking on new influences (Wearne *et al.*, 2023). Greater attention is being paid to bioregionalism as a way of connecting the urban and rural (Thackara, 2019; Fanfani, 2018), as a strategy for re-imagining the economy (Cato, 2012; James and Cato, 2017); through systems-thinking and design (Wahl, 2016; Rigobello and David Evans, 2024), and as a resource for planning policies (Fanfani and Duží, 2018). There is also a geography to the term. Newman and Cabanek (2020) note that bioregionalism has been applied differently in Italy's territorial movement and in land care in Australia.

In the UK and USA, bioregional thought is being mobilised in the verb form, *bioregioning*. This reframes bioregionalism as a process and draws attention to the practices that are involved in creating and sustaining a bioregion (Hubbard *et al.*, 2023; Wearne *et al.*, 2023). Such a focus makes a feminist analysis of bioregioning appropriate. that attends to the practices of care and reproductive labour involved in living-in-place, and a rejection of Global/local binaries that situate larger scales as the site of politics.

While planning literature has drawn on bioregionalism more broadly, little attention has been paid to this conceptualisation of bioregioning as a verb. This new approach opens up useful avenues of thought that can inform global bioregional practice, and other place-based forms of policy innovation. It is therefore useful to examine how the group are applying this in practice and the lessons it generates for other initiatives and policymakers.

3. The case study: Bioregioning Tayside

Bioregioning Tayside is a community-led bioregional initiative in Scotland. It began as an informal community project, following catastrophic floods in the region in 2015 and 2019. For the founding members, the floods highlighted the urgent need to rethink the relationship between land, community and nature, and to act at a watershed scale. In 2022, *Bioregioning Tayside* registered as a community interest company (CIC), formalising a governance structure.

It is important to situate *Bioregioning Tayside* within the Scottish context, as it is the particular configuration of economic, political and environmental factors of Scotland that led the founding members of the group to bioregioning as an approach. Scotland has a highly romanticised landscape (Womack, 1989; Burnett and Danson, 2022). The open heather muirs and mountainous Highlands are perceived as 'wild land'; John Muir, considered the 'father' of national parks, emphasised the Highlands as a 'place apart' from human intervention (Ní Mhathúna, 2021).

However, Scottish land faces a high level of ecological degradation (Sharma *et al.*, 2023). This degradation is entangled with the highly concentrated pattern of land ownership (Glenn *et al.*, 2019), despite a history of land governance for the common good (Doyle, 2023). Ecological restoration in Scotland is therefore highly contested, with resistance to forms of conservation that risk further removing public access to land (Davidson, 2021; Fry, 2023).

Tayside is a region in the middle of Scotland, encompassing the watershed of the River Tay. Tayside is largely rural but includes the cities of Dundee and Perth which make up a large proportion of its 400,000 inhabitants. The region is bisected by the Highland Boundary fault line. The northern side is characterised by highland mountains, the southern by the rolling hills and arable landscapes. The Highland Boundary is also an important cultural boundary, marking a linguistic shift, from English to Gaelic, and a shift in historic land ownership structures from Highland clan structures to feudal systems. This physical landscape is therefore closely entangled with the governance and cultural landscapes of the region.

Despite its rural location, *Bioregioning Tayside* is therefore a pertinent case study for understanding how community-led bioregioning can inform planning theory, demonstrating how heritage and history are mobilised in bioregioning beyond simple protection of heritage sites, to being a foundational part of transformation and care (as called for by Poli and Luciani, 2024).

My engagement with *Bioregioning Tayside* took place between 2020-2023, the first few years of the project. I took on the role of 'critical friend', using my position as a researcher outside of the project (and often physically distant due to COVID-19 travel restrictions) to support and challenge. This can be understood as a form of critical performativity (Spicer *et al.*, 2009). As Esper *et al.* (2017) argue, researchers enact specific forms of critical performativity including bringing legitimacy to the movement and supporting them to bring

theory into action. I understood the research as an ongoing process of learning between practitioners and researchers, through which we co-theorised bioregioning, experimented with enacting on-the-ground. During the period of research, the group came together to build collective knowledge about their bioregion through a 'story of place'. They ran a series of events and workshops that engaged participants from across Tayside, which they called a 'Learning Journey'. I followed the group through these activities, participating in the learning journey and supporting the delivery of some events. I conducted open-ended interviews with members of the group, including questions about how they came to be involved in *Bioregioning Tayside*; their understanding of bioregioning; and their experiences of taking part in the initiative. I also engaged with the UK Bioregional Practice, where I shared early findings from my research. I drew on community economies approaches (Gibson-Graham and Dombroski, 2020) to analyse the data, taking a stance that sought diverse sites of political transformation.

3.1 Reframing through Story of Place

For Bioregioning Tayside, a key practice of bioregioning is storytelling. This was primarily enacted by coming together to collaboratively research the bioregion and write a 'story of place' to generate new understandings of Tayside. A 'story of place' is an extended regional profile that is co-created by participants to identify pathways for sustainable inhabitation of the bioregion.

The roots of this practice can be found in early bioregional thought. The bioregional quiz 'Where you at?' (Charles *et al.*, 1981) challenged readers to evaluate their knowledge of their place of residence, with questions such as "What primary ecological event/process shaped the land form where you live?" and "What is the land use history of where you live?". The purpose of this exercise is to demonstrate our lack of knowledge, and thus lack of skills, for living sustainably (Hubbard *et al.*, 2023).

In the 'story of place', participants began by researching the geological, ecological and social history of Tayside, and created a profile of the bioregion. This wide-ranging profile included, for example, the ways in which the whisky industry changed food systems by shifting agriculture from a focus on oats to barley; the role of Scottish landowners in the transatlantic slave trade; the historical communities, governance systems, and land ownership practices; and customary crafts and livelihoods.

As the name suggests, the aim of creating a 'story of place' is not only to create a simple description or profile of the bioregion. It was a process that aimed to challenge dominant representations of Tayside and reclaim the bioregion as a site of collective political engagement. Through their research, participants were enrolled in a process of re-narrating the story of Tayside, emphasizing the parts that helped them to make sense of the current challenges faced in the bioregion, and making visible sites of intervention.

Here, one of the founders of *Bioregioning Tayside* discussed how creating the 'story of place' enabled her to draw together her existing ecological and historical knowledge to reveal something new:

"I knew about the clearances, I knew about the industrial revolution, I knew about big estates, I knew about people bringing in sheep... but I hadn't really connected them all to understand the process or the political or cultural or societal changes that had happened" [Marie, Bioregioning Tayside].

Creating a 'Story of Place' enabled participants to make sense of Tayside as an outcome of socio-ecological processes. It uncovered the relationship between the urban and the rural parts of Tayside, helping participants to understand how both were part of shared production of place, including stories that demonstrated the processes driving disconnection from nature and accumulation by dispossession.

As well as making sense of the history of Tayside, the Story of Place included current examples of potential leverage points for transformative change. For example, the group identified the Community Right to Buy as a governance mechanism that could enable greater community control over land. They also recorded examples of existing commons, such as Alyth Common, that had never been legally enclosed. These examples opened up potential sites of political engagement and revealed pathways for building alternative ways of living together (Gibson-Graham and Dombroski, 2020).

Despite a focus on understanding history and place-specific culture and practices of Tayside, the narrative produced through Bioregioning Tayside's 'story of place' was not rooted in ideas of stasis and "introverted obsession with heritage" (Massey, 1991, p. 26). The 'story of place' sought to understand how Tayside was connected to other geographies and histories. For example, by researching the history of the Clearances in

Scotland, in which landowners evicted tenants from the land, displacing thousands of people from the Scottish Highlands, Bioregioning Tayside found connections to colonisation of America:

“It was interesting that... in the East Coast of the States where they were looking at similar environmental problems... how ridiculously connected they were... there were people moving from Scotland to those areas in North America, they were being thrown off land here, going to North America, colonising somebody else and throwing them off their land. So, the connections were, you know, slightly gobsmacking actually” [Marie, interview].

Such stories enabled participants to understand the sense of place and cultural identity of Tayside but simultaneously make sense of how the production of this was implicated in global struggles. It connected bioregion with the ‘shadow places’ (Plumwood, 2008) that have provided its material and ecological support, and that are often erased from accounts of Tayside. Uncovering these connections enabled participants to tell a new story of Tayside, in which there was a sense of identity and culture, yet one that was created in connection with other places, both shaping and being shaped by regional, national and global influences.

3.2 Sensitising to place and building collectives through Learning Journeys

The second key practice that Bioregioning Tayside employed involves spending time in the bioregion to learn about the land, ecology and communities. In 2021-2022, Bioregioning Tayside held a ‘learning journey’ to achieve this. The ‘learning journey’ was a series of curated events, workshops and experiences, open to anyone in Tayside but with specific stakeholders invited to participate. These varied from arts-based interventions to focused community workshops and tours of the bioregion. Table 1 describes some of the learning journey events. For example, to mark COP26, an event titled The Awakening took place in the Spittal of Glenshee. This wove together storytelling, poems, music and an art installation, calling for characters from Scottish folklore to awake in this time of crisis. Later, the group lead a tour of food producers in the bioregion, including conventional agriculture and small-scale organic growers, seeking to generate conversations about the challenges of future food production in Tayside.

Event title	Description
The Awakening	An event which coincided with COP26 (held in Glasgow) which included an art installation, folklore and storytelling.
Change The Frame, Change the Story - What Will Be on My Plate in 2042?	A tour of food-related projects (including conventional agriculture) within the bioregion, aimed at understanding the factors that prevented alternative food systems being developed.
Can Tourism Help Tayside #RaceToZero?	This event brought together speakers from different tourism organisations in Tayside in an online discussion about the role of tourism in Tayside.
What will I do when the waters rise?	An workshop focused on flooding. This was a participatory workshop that mapped out flooding risks, implications and community responses.
How Can Participatory Science Bring New Solutions to Ecosystem Restoration?	An event focusing on Issues relating to data sovereignty and access in community-led landscape monitoring.
Can Tayside Become a Climate Sweet Spot?	Dr Avit Bhowmik was invited to discuss the idea of ‘climate sweet spots’ (Bhowmik <i>et al.</i> , 2020). For Bioregioning Tayside, the notion of communities with 10,000 people as a social tipping point

Table 1: Learning Journey events held between 2021 and 2022.

The first aim of the 'learning journey' was to spend time embedded within the bioregion, observing and noting changes, as a strategy for becoming sensitised to the specificities of place. The emphasis was on understanding the landscape and recognising signs of degradation and flourishing. As Carol describes, historically inhabitants of Tayside had a sensitivity to the ecology that was built through long-term observation and connection to the landscape:

"They [historical inhabitants of Tayside] did not need deliverables and impact measurements to know that the seasons were changing, or which species would be abundant or sparse in the coming year, they could read the conditions of the environment, the nuances of the leaves, texture of the dirt, the timing of the flowers and birds" [Carol, Interview].

By investing time embedded in the bioregion, the aim was to provide the opportunity to develop these skills and ways of knowing the landscape, building deeper connection and care for the bioregion. It also enabled participants to recognise signs of degradation and the ways in which humans had shaped the ecology. The 'learning journey' provided an opportunity to 'see' the landscape differently:

"I was trying to think of how you could change the frame... And you had this kind of image for example of a squirrel crossing the road. This isn't a squirrel crossing the road, the roads cut through the squirrel's tree top highway, so you completely flip the way that somebody is looking at something... isn't a pleasant woodland walk. It's an access track through an industrial timber farm. This isn't a patchwork of beautiful Heather Moorland, it's carbon intensive muirburn to enable grouse shooting" [Carol, Interview].

As Carol describes, this deepened understanding of the landscape was oriented towards politically mobilising participants. Rather than encouraging individual care and stewardship, the 'learning journey' made links between the degradation and human transformation of the landscape with wider processes. For example, understanding that the landscape had been produced through overgrazing open up wider questions of land ownership and food production, rather than an individualised politics based on ecological footprints.

The second aim of the 'learning journey' was, then, to build collective knowledge and action that built upon both the 'story of place' and the experience of being in place. This was done by connecting existing initiatives and projects in the bioregion to create shared understanding and networks of solidarity.

Bioregioning Tayside identify a practice that complements bioregioning as one which:

- "Values natural assets as the building blocks of life;
- Works at the interface between the urban and the rural;
- Makes a region distinct and visible through a coherent narrative of geography, geology, land use, history, culture;
- Reinforces identity through a bounded sense of belonging to a place;
- Sources solutions from the place itself;
- Gets sectors out of silos and collaborating on a co-created resilience strategy;
- Prototypes and learns continuously;
- Addresses conflicts as an opportunity to take the work to the next level;
- Builds collective will to action and telling a 'can do' story of resilience and possibility" [Bioregioning Tayside website].

This definition includes projects with an attention to regional scale or place-based focus, those which recognise interdependence between humans and nature, and approaches to action which are iterative, experimental, emergent, and place-specific. For Bioregioning Tayside, these characteristics made projects implicitly bioregional.

Bringing together these initiatives with loosely shared practices or values created a network that did not require complete agreement over aims and strategies. As their list of practices aligned with bioregioning states, conflict and disagreement is valued rather than avoided. Rather than focusing solely on self-proclaimed bioregionalists, the group identified existing alignments and created an inventory of diverse

strategies for building a sense of place and transforming the ecological and social landscape of the region, transforming them into a network of solidarity:

“Focusing on a series of topics that came up during the start of our mapping exercise in 2021, the aim of the Learning Journey was to find out what was going on on the ground in our Bioregion and tap in to new energies that could help contextualise the actions we might take now to create a more liveable future” [Bioregioning Tayside newsletter, 7th November 2022].

As stated in this excerpt, the learning journey created an opportunity to sustain the storytelling and reframing device of the ‘story of place’ by making visible the ways in which inhabitants of Tayside are creatively responding to social and ecological pressures, and the plurality of more sustainable livelihood practices that already exist.

As in feminist economic approaches, inventorying practices like these are powerful tools in generating more-than-human and non-capitalist regional development, using the assets that are already available in place.

4. Lessons from Bioregioning Tayside

The approach to bioregioning taken by Bioregioning Tayside is exploratory and experimental. Rather than setting out with a pre-determined theory of change, the group focused on destabilising understandings of place and building new forms of attachment which open up possibilities for collective action. From this, there are four key lessons that can inform global bioregional initiatives, and planning theory more broadly.

- 1) Bioregioning can produce a critical form of connection to nature and ecological systems.

Bioregioning Tayside’s approach destabilises the distinction between human communities, ecology and the economy (Hubbard, 2024). Spending time in place through learning journeys and creating a ‘story of place’ reframes the bioregion as a product of multi-species world-building and enables more-than-human agency to become active participants in shaping bioregional futures. Bioregioning Tayside’s ‘learning journey’ helped participants to become attuned to nature, such as becoming able to identify signs of ecological degradation and flourishing.

However, the connection to nature that Bioregioning Tayside advocates for and facilitates is not naïve or uncritical. As Fletcher (2017) warns, connection to nature discourse in policy can performatively distance us from nature further, reinforcing nature/culture binaries. Bioregioning Tayside’s practices enable a critique of the processes that create and sustain a disconnection from nature (Beery *et al.*, 2023), including, as Bioregioning Tayside discovered in their ‘story of place’, processes of dispossession and marginalisation. While planning literature has drawn on bioregionalism in its interest in approaches such as biomimicry (Trincas, 2022) and biophilic urbanism (Newman and Cabanek, 2020), mobilising bioregioning as a verb signals a subtle change in focus. Rather than attempts to incorporate nature into cities to solve problems or replicate ecological functions, bioregioning renders nature, and human connection with it, political. *Bioregioning Tayside* unsettles nature/culture binaries, and positions ecology at the heart of placemaking. Innovative policies can draw on bioregioning’s conceptualisations of place as more-than-human and include more-than-human others in planning.

- 2) The sense of place generated through bioregioning does not necessarily have to be inward-looking or restricted to the rural.

Bioregioning Tayside demonstrate that the sense of place built and sustained through bioregional practices can emphasise connection across scale. Their ‘story of place’ identified how Tayside was shaped by local, regional and global dynamics, and how, in turn, Tayside shaped other bioregions. This creates a progressive sense of place (Massey, 1991), in which the bioregion is not understood as static or as having an essential characters but as constantly evolving, and in which bioregional place is created through its relation to the ‘outside’, rather than through boundaries and difference. This progressive sense of place is sustained by using bioregioning as a verb, rendering place as a constantly evolving, more-than-human project. Understanding how the place has been made and is always being remade is a key task for any planning process (Gisotti, 2022). Bioregioning therefore has the potential to create a progressive sense of place to underpin innovative policies, which is shaped from the bottom up (Magnaghi, 2020).

While Tayside is largely a rural bioregion, Bioregioning Tayside is not solely concerned with rural landscapes, or romanticised countryside idylls. The practices employed by Bioregioning Tayside examine the bioregion

as a whole, including the urban centres of Perth and Dundee. Their story of place unpicks the relationship between the countryside and cities, for example the connection between the Clearances and the Industrial Revolution, and their map of regenerative projects includes both rural and urban examples, valuing both as examples of rethinking livelihoods in Tayside.

The urban bioregion has become an alternative way of approaching planning which seeks to rebalance the urban and rural (Colavitti and Serra, 2022). Through Bioregioning Tayside, we can see the potential of bioregioning for connecting the urban and rural by drawing attention to the dynamics that produce, and disconnect, them both (Waldenberger and Savini, 2025). The spatial politics of bioregioning, when understood as a verb, does not centre on re-embedding cities within their bioregion (Fanfani, 2019; Newman and Cabanek, 2020). Rather, it destabilises the urban as the site of political, economic and social activity, and instead makes the bioregion as a whole a site of possible intervention.

- 3) Bioregioning can create space for contestation and disagreement, and therefore the potential for transformative politics.

Bioregioning Tayside demonstrates that by focusing on the process rather than the outcomes of transformation (Wearne *et al.*, 2023), bioregioning makes space for difference rather than attempting to represent the bioregion as homogenous or offering a prescriptive theory of change. Their approach begins by destabilising any essentialist sense of place through understanding how it has changed through time through more-than-human place-making but stops short of identifying a singular vision of the future. Questions of who and what belong in the bioregion, and what livelihood practices should and should not be enacted are left open to be constantly re-negotiated. This makes it the community-led bioregioning of *Bioregioning Tayside* distinct from the forms of bioregionalism that have been criticised by Olsen (2000) and Benoist (2024) as invoking right-wing ecological politics that is exclusionary and nationalist.

This is a valuable lesson and challenge for those mobilising bioregional approaches in policymaking. Although the role of civic engagement in a bottom up movement has been recognised as pivotal for the success of bioregional planning (Fanfani, 2018), practicing bioregioning as a verb requires the rejection of an agreed-upon vision for the future in favour of an ongoing and meaningful process of co-creation. Such an approach does not produce a singular vision of transformation that is easily assimilated into planning policy. Instead, it becomes a methodology that centres on continual attention to tension and ethical negotiation. It is therefore a feminist political project that seeks diversity and pays attention to the ethical questions of how we sustain ourselves and live together.

- 4) Bioregioning can make visible the place-specific leverage points for transformative action.

Bioregioning Tayside's approach to socioecological transformation makes use of the practices, initiatives, resources, tools and capacities that already exist in place. They examine both community needs and existing governance, and questions how they can be remade for bioregional flourishing; it takes seriously cultural identity seriously, without essentialising it, by examining how such an identity is dynamic; and it repositions and re-values ecological systems as actively producing the bioregion. Through this, Bioregioning Tayside render the bioregion as a site of political possibility and make visible the leverage points for transformation that are specific to Tayside. They then actively build networks of solidarity with other initiatives in the bioregion that share regenerative and place-sensitive approaches.

The key implication of this approach for those attempting to mobilise bioregional approaches in planning and policymaking is that bioregioning is not a framework for replacing what already exists, but one that draws together existing energies and reconfigures them for meaningful change. This includes making visible existing diverse economic practices, materials and resources, ontologies and more-than-human assemblages to enable a collective process of more-than-human regional development (Gibson-Graham, 2011). This goes beyond 'place-awareness' as the basis for conviviality (Magnaghi, 2020). The use of bioregioning as a verb re-focuses planning theory on the situated process of transformation, opening up diverse sites of an ontological, ecological and material intervention. Yet this can only be achieved with deep and meaningful engagement with place, and an ongoing practice of negotiation between more-than-human inhabitants of a bioregion and the responsibilities that this relationship produces.

5. Challenges and limitations of bioregioning

Despite the success of Bioregioning Tayside and the possibilities that their approach offers bioregional planning and policymaking, there remain important limitations that may be shared across initiatives. By

highlighting these challenges, it is not to argue that bioregional thought and practice is irredeemably flawed. Rather, that it is not a silver bullet for socioecological transformation.

The first challenge is discursive. In their conversations with policymakers and other community initiatives, *Bioregioning Tayside* encountered confusion about what the term bioregioning meant. At some points, this verged on suspicion when the concept of bioregioning was perceived as too closely associated with alternative movements. Equally, bioregioning can encompass a myriad of practices and political imaginaries (Wearne *et al.*, 2023). This capaciousness allows space for collective action without consensus yet masks important political and ontological differences.

Secondly, *Bioregioning Tayside* faces similar challenges to many other movements in that it relies on volunteer labour, and participation in its activities is therefore shaped by gender, class, race and other forms of privilege (Pickerill, 2025). *Bioregioning's* focus on place-based identity has the potential to be exclusionary, as has been well-documented (Olsen, 2000; Plumwood, 2008). Such projects need facilitation to sustain themselves, and to remain progressive.

Finally, while bioregioning has the capacity to link local, regional and global challenges, community-led projects like *Bioregioning Tayside* still tend to focus action on the singular places that we inhabit. While this does not have to be inherently problematic, it could still be understood as a form of 'small is beautiful' politics that, or that returns to simplified ecological footprint approaches that focus on individual consumption (Huber, 2022). It is therefore important to be wary of the claims that are being made. As with any movement or framework for transformation, the impacts of bioregional approaches depend on the specific implementation in the context they are applied within.

Bioregioning is experimental in nature. For policymaking, bioregioning requires moves towards a stabilising definition to make it operational, however, there is the risk that such a move would undermine the place-specificity of bioregioning. Equally, it is difficult to directly translate bioregional initiatives into new contexts without the careful and time-consuming work of understanding each bioregion and co-creating a response to the specific needs of the community and ecologies in question.

However, as *Bioregioning Tayside* has demonstrated, experiences of applying bioregioning in practice has a lot to offer both planning literature and innovative policymaking. Accounts of the challenges and realities of enacting alternatives enable others to develop their own analysis of place and livelihoods and create their own tools for building more sustainable bioregions.

6. Concluding remarks

This paper has contributed to the literature on contemporary bioregionalism by examining one example, *Bioregioning Tayside*. It aimed to offer new ways of thinking about bioregioning as a verb by examining the initiative's community-led approach and bring it to new audiences. Efforts to record and systemise bioregional initiatives in this way performatively strengthens and connects them, making them credible objects of policymaking in a range of contexts. 'Archiving' the diversity of practices that exist (Zanoni *et al.*, 2017) pluralises bioregional thought, demonstrating how it can be mobilised in sensitive and appropriate ways.

The paper has identified the practices that the group have developed to apply bioregioning in Tayside. Even though Tayside is a predominantly rural, the approach that *Bioregioning Tayside* has taken eschews urban-rural divides, and many of its principles are relevant to other bioregions globally.

Yet, *Bioregioning Tayside* is just one community-led bioregional initiative, and this paper does not claim that it is representative of all bioregional practice in the UK. *Bioregioning* is inherently place-specific (Wearne *et al.*, 2023), and it is therefore inappropriate to use *Bioregioning Tayside* to specify how bioregioning should be applied elsewhere. Other notable examples, such as the *UK Bioregional Learning Centre*, have made valuable contributions to the development of bioregioning.

However, in this paper I have attempted to demonstrate how the experiences of *Bioregioning Tayside* can provide useful lessons for bioregional practice and planning theory. I have argued that *Bioregioning Tayside* can inform global bioregional practice and policy-making by demonstrating ways in which it can build critical forms of connection to nature; generate a sense of place that is not inward-looking, but builds solidarity across geographies; contribute to a transformative politics that makes space for difference; and identify the specific leverage points that are unique to the place in question. In particular, the use of bioregioning as a verb provides new approaches to the application of bioregionalism in urban planning. While the essence of bioregional planning, which is rooted in understanding landscapes and human communities as co-

evolutionary relationship (Colavitti and Serra, 2022) remains unchanged, thinking of bioregioning as an ongoing practice shifts the emphasis to the process and politics of transformation.

Bioregioning Tayside (like all projects that aim to challenge our ways of thinking and being in the world) has its limitations. Yet following a feminist research ethics, it is possible to understand these as a useful resource for others negotiating place-based responses to crises, rather than pre-emptively disregarding them.

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