Agency and constraint in environmental policy coherence

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Abstract

Whether pursuing the breadth of the UN's Sustainable Development Goals or delivering joined-up approaches within a single environmental domain, policy objectives, policy design and policy implementation should cohere vertically and horizontally. However, policy coherence remains a challenge to implement. The limited empirical scholarship on policy coherence tends to focus on policy documentation and/or the outcomes, with little attention to individual agency or social processes involved. Furthermore, there is little discussion of the normative dimensions of policy coherence and the political aspects of individual agency, indicating the need for political ecology. We conducted an empirical study within four UK catchment (watershed) partnerships, using critical interpretive policy analysis to enrich the interface between political ecology and environmental policy. We explored who practices policy coherence and how; what motivates those investing their energy into these practices; their constraints and the contradictions arising. We found that the appetite and ability to support policy coherence depends on individual agency as much as partnership structures, which are themselves situated in technocratic regimes of policy implementation. Within these regimes, agents presented as apolitical and enabling, making it challenging to research the political and social processes of policy coherence. A political ecology lens highlights how power is involved in these voluntary initiatives, potentially shoring up existing privilege inscribed into riparian habitats and their resources. Our contribution therefore responds to and amplifies the critique of traditional presentations of integrated water resource management devoid of politics.

Key words: policy coherence, environment, integrated water resource management, power, partnerships, EU Water Framework Directive

Résumé

Qu'il s'agisse de poursuivre l'ensemble des objectifs de développement durable des Nations Unies ou de mettre en œuvre des approches décloisonnées dans un secteur de l'environnement, les objectifs, la conception et la mise en œuvre des politiques doivent être cohérentes verticalement et horizontalement. Cependant, la cohérence des politiques reste un défi à relever. Les quelques études empiriques traitant de la cohérence des politiques tendent à se concentrer sur la documentation et/ou les résultats des politiques, sans accorder d'attention aux agentivités individuelles ou aux processus sociaux impliqués. En outre, les dimensions normatives de la cohérence des politiques et les aspects politiques de l'agence individuelle sont peu abordés, ce qui indique la pertinence de la *political ecology*. Nous avons mené une étude empirique au sein de quatre partenariats de

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bassin versant au Royaume-Uni, en utilisant une analyse critique interprétative des politiques publiques pour enrichir l'interface entre *political ecology* et la politique environnementale. Nous avons exploré qui pratique la cohérence politique et comment, ce qui motive celles et ceux qui investissent leur énergie dans ces pratiques, leurs contraintes et les contradictions qui en découlent. Nous avons constaté que l'appétence et la capacité à soutenir la cohérence des politiques dépendent autant de l'agentivité individuelle que des structures de partenariat, qui sont elles-mêmes imbriquées dans des régimes technocratiques de mise en œuvre des politiques. Dans ces régimes, les agents se présentent comme apolitiques et facilitants, ce qui complique les recherches sur les processus politiques et sociaux de la cohérence des politiques. Une approche de *political ecology* met en évidence la manière dont le pouvoir est impliqué dans ces initiatives volontaires, renforçant potentiellement les privilèges existants inscrits dans les habitats riverains et leurs ressources. Notre contribution répond donc à la critique des présentations traditionnelles de la gestion intégrée des ressources en eau qui paient peu d'attention à leur dimension politique, tout en l'amplifiant.

Mots-clés: cohérence politique, environnement, gestion intégrée des ressources en eau, pouvoir, partenariats, Directive-cadre européenne sur l'eau

Resumen

Ya sea en la aplicación de los varios Objetivos de Desarrollo Sostenible de la ONU o en la aplicación de un enfoque común dentro de un sector ambiental, los objetivos de las políticas, así como el diseño e implementación de estas, deben ser coherentes tanto vertical como horizontalmente. Sin embargo, la coherencia de las políticas sigue siendo un desafío. Los pocos estudios empíricos que existen sobre la coherencia de las políticas tienden a centrarse en la documentación de las políticas y/o en los resultados de las políticas, sin prestar atención a la agencia individual o a los procesos sociales. Además, existe poca discusión sobre las dimensiones normativas de la coherencia de las políticas y sobre los aspectos políticos de la agencia individual, lo cual indica la necesidad de la ecología política. En este artículo, presentamos un estudio empírico de cuatro asociaciones de cuenca (cuencas fluviales) en el Reino Unido. Utilizamos un análisis crítico interpretativo de políticas para enriquecer la interfaz entre ecología política y política ambiental. Investigamos quién practica la coherencia de políticas y cómo, qué motiva a quienes invierten su energía en estas prácticas, así como las limitaciones y contradicciones resultantes. Encontramos que el apetito y la habilidad de apoyar la coherencia de políticas depende tanto de la agencia individual como de las estructuras de estas asociaciones, que en sí se sitúan en regímenes tecnocráticos de implementación de políticas. Dentro de estos regímenes, los agentes se presentan como siendo apolíticos y facilitadores, lo que dificulta la investigación de los procesos políticos y sociales de coherencia de políticas. El enfoque de la ecología política destaca el poder involucrado en estas iniciativas voluntarias, potencialmente reforzando los privilegios existentes en los hábitats ribereños y sus recursos. Por lo tanto, nuestra contribución amplifica y responde a las críticas a las presentaciones tradicionales de gestión integrada de recursos hídricos que no prestan atención a la dimensión política.

Palabras clave: coherencia política, medio ambiente, gestión integrada de los recursos hídricos, poder, asociaciones, Directiva Marco del Agua de la UE

1. Introduction

Taking a political ecology lens implies integration: the mutual coproduction of society and environment, the material and symbolic, and the politics of everyday practices alongside formal policies. Political ecology illustrates the need to explicitly recognize and work with complex nested socio-ecological systems that function through time and space in ways that prioritize social and environmental justice (Watts, 2000). These concerns, in principle, lie at the heart of the UN's Agenda 2030 and associated Sustainable Development Goals (SDGs), which indicate the need to address seventeen different objectives simultaneously to make progress towards a more sustainable and just world. Scholarship around the SDGs and the associated idea of policy coherence for development (Stafford-Smith *et al*., 2017) is extremely critical of the failure of national, supra-regional and global policy coherence efforts (Vasseur *et al*., 2017). These failures are attributed to the prevailing political and economic configurations that benefit from ongoing incoherence and to the sustained depoliticization of environmental policy technocracy (Carbone & Keijzer, 2016).

The article starts by summarizing why coherence is required, and what is meant by 'policy' in this context, before describing the complexity of structures involved in policy coherence. The introduction then

moves to a separate set of literatures, regarding the agency of policy actors in making policy implementation happen. These policy agency literatures have not, to the authors' knowledge, been considered within the context of policy coherence practices. The article's main contribution is to illustrate how theories of policy agency can illuminate the way that policy coherence, particularly as part of implementation of multiple policies for multiple environmental benefits, functions in practice. This lens resonates with political ecology through focusing on the importance of socially mediated processes for ecological outcomes, and the constant composition of ecological knowledge and politics in environmental policy implementation (Richard-Ferroudji, 2014).

Therefore, this article highlights policy coherence as an important arena of research for the political ecology community, given the need for a more systemic and holistic policy response to the world's pressing problems (Clement, 2010; Roberts, 2020). Policy coherence is often presented as a managerial approach to complexity, with limited attention to the distribution of material and political consequences of coherence or incoherence. The article draws attention to the muted, implicit and/or hidden contradictions involved in coherence, practiced by individuals within an architecture of post-political policy implementation. These influences are used to analyze the data collected from four catchment partnerships described in Section 2 below. The literature review suggests four main entries to our research findings:

1. Who is doing the policy coherence work in these catchment partnerships? In other words, who are the policy actors involved?
2. What are these individuals' motivations and biographies that allow them to practice policy coherence?
3. What contextual factors enable them to practice policy coherence? What constrains their practice? And,
4. What are the contradictions and consequences involved in practicing policy coherence?

Contextual policy literature

Most state policy historically focused on a single domain and objective, designed for effective outcomes with efficient use of resources. This single focus generates what has been labelled a policy-silo approach (Scott & Gong, 2021), which can have negative direct and spill-over effects, in terms of potential duplication or gaps, and failure to anticipate emerging, particularly wicked, problems. Most policy silos persist due to institutional inertia, policy incrementalism and a variety of 'sticking points' (Waylen, Blackstock & Holstead, 2015). Therefore, there is increasing interest in understanding policy integration or policy coherence. Policy integration is often considered in terms of mainstreaming environmental policies into other sectoral policies (e.g. transport or industrial policy) to form a single policy objective (Jordan & Lenschow, 2010). Policy coherence, the focus of this article, is when multiple policies working towards the same or similar overall objectives are consistent (Nilsson *et al.*, 2012).

Policy, in general, can be conceptualized in terms of different levels (Tier 1 and Tier 2 objectives set out in legislation, steering strategies, and policy instruments) that are operationalized via a policy cycle moving from design in terms of objectives and instruments, through implementation, to monitoring and evaluation processes that may result in policy adaptation or change. The institutions involved in these levels and cycles include interacting actors, resources, interests and ideas. Even using these simplifications, single silo-policy analysis can be complex when exploring how levels, cycles and institutions interact over time and space, forming different regimes and coalitions (Cairney & Geyer, 2017).

This complexity increases when policy coherence is being analyzed, requiring a simultaneous understanding of **vertical** and **horizontal** coherence. Vertical coherence refers to coherence between the overall policy objectives and scope, the policy instruments by which such objectives can be achieved (rules, incentives, information, actions), and the policy implementation processes by which these instruments are animated by actors. **Horizontal** coherence is between parallel policy objectives, instruments, and implementation processes. This article focusses on the intersecting actions and actors that explain how vertical and horizontal alignments occur in practice. The agency of policy actors at these intersections, and how these actors navigate constraints in policy coherence, needs more attention (van Oosten, Uzamukunda, & Runhaar, 2018). We atend to the voices

of those involved in policy 'interplay' (Oberthür, 2009) who align instruments with their practices. We try to uncover the efforts for interplay and overcome implementation challenges that seem invisible or under-recognized in the existing literature (Blackstock *et al*., 2021).

We build on associated literatures on the agency of policy actors. These require an interpretivist approach recognizing the relational processes of continual meaning-making between individuals (Cleaver & Whaley, 2018). The concept of 'institutional work' (Beunen & Patterson, 2019; Beunen, Patterson, & Van Assche, 2017) highlights how decisions by individual actors explain how governance systems function. 'Institutional bricolage' (Cleaver & De Koning, 2015; Kairu *et al*., 2018) shows how actors assemble and (re)combine formal and informal mechanisms to overcome constraints and achieve overall objectives. These concepts usefully highlight how policy outcomes are not linear developments from policy objectives, but the emergent results of actors' choices and behaviors.

A more explicit focus on actors arises in the literature on 'policy entrepreneurs', those individuals involved in policy change who use a combination of charisma, privileged access to policy-design processes and advocating for, and influence, change (Huitema & Meijerink, 2010; Timmermans, van der Heiden, & Born, 2014). The concept is powerful in highlighting the degree of change which individuals can achieve within policy processes, and it is a useful antidote to the focus on structures critiqued above. It has been critiqued by Beunen and Patterson (2019) for being overly individualistic and not recognizing the role played by other actors and the wider context. The concept is also critiqued (Porto de Oliveira, 2020) for only considering self-interested motivations, without considering how some policy actors take risks and advocate for change for altruistic reasons. Porto therefore suggests the term 'policy ambassadors' for those seeking policy change for societal, rather than individual gain. Policy entrepreneurs/ambassadors tend to focus on policy formulation, not policy implementation.

There has been recent interest in applying Lipsky's (1969, 2010) ideas of 'street-level bureaucrats' to environmental governance (Holstead, Funder, & Upton, 2021; Sevä & Sandström, 2017). Street-level bureaucrats direct attention to public servants implementing policy at the interface with citizens, in particular their ability to interpret policies and act with some degree of autonomy. Policy is brought into being through the boundary-spanning activities between bureaucracy and the civil sphere; outcomes are achieved but can also be disrupted (cf Sager, Thomann & Hupe 2021 cited in Holstead *et al*. 2021). Similar themes are developed in literature on 'interface bureaucrats' that also explores how local state actors navigate and enforce the boundaries between state and citizen (Funder & Mweemba, 2019). The literature on interface bureaucrats highlights governance-in-action, negotiating between the aims of the state and what civil society will accept 'on the ground.' These roles echo those employed by new water professionals (Richard-Ferroudji, 2014). Policy entrepreneurs wish to (re)shape policy design, whilst the bureaucrats make many micro-choices about policy implementation processes (Sevä & Sandström, 2017). This article is focused on the often-hidden micro-choices made by an intermediate level of policy actors, who are involved in collaborative policy implementation processes at catchment scales but do not directly interact with members of the public in a 'street-level' role.

There is also a growing interest in understanding individual motivations, beliefs and ideals that may help explain the choices and practices of individual actors in environmental governance (Holstead *et al*., 2021; Lundmark, 2020). This mirrors wider interests in how values and motivations help understand how to improve collaborative efforts to transform environmental governance (Abson *et al*., 2017; Chan *et al*., 2020; Meadows, 1999). These literatures shift the focus of analysis away from what is done, to why and how actors make their choices, in this case policy coherence through partnership-working.

The approaches sit within literatures that accept that policy is part of wider governance processes. Therefore, actors extend beyond state actors (politicians, civil servants, bureaucrats) to those implementing policy objectives in a variety of organizations including the non-governmental third sector and businesses. These actors might be enrolled by the state but are not of it. This matters when considering the ideas of power and legitimacy at the heart of political ecology. As part of any analysis, attention should be paid to how these individuals navigate complex governance structures. In this regard, it is useful to think about how policy coherence requires 'power with' collective action, not necessarily 'power over' other individuals or organizations (Allen, 1998; Rowlands, 1997).

This is particularly important in water management settings, where the particular choreographies of power and practice have been framed as the hydrosocial cycle (Linton & Budds, 2014). Policy coherence is at the heart of the 'hegemonic' global discourse of integrated water resource management (IWRM) (Orlove & Caton, 2010). The IWRM approach has been critiqued for becoming a 'nirvana' concept – something everyone can agree with as it obscures the political and contested nature of how the concept is implemented (Molle, 2008). Therefore, this article focusses on the social practices involved within and between organizations trying to cohere between policies affecting catchment management, and asks if focusing on achieving coherence may come at the expense of challenging the political dimensions of how water resources are managed.

We focus on the politics of water governance, and how it might develop in the future (Zwarteveen *et al*., 2017). Feminist political ecologists like Sultana (2018) and Hanson and Buechler (2015) have drawn our attention to the gender, class and race dynamics of how water is accessed, managed, commodified and used. These descriptions tend to focus on cases where water is precious, dangerous, and often inaccessible, making it a highly salient issue. However, in the (relatively) water-rich and benign climate of the UK, water politics and processes before it enters homes, businesses or cityscapes is less visible, despite scholarship around how privilege is inscribed in access to and use of freshwater resources (e.g. Budds and Sultana 2013; Mordue 2016). Similar issues emerge in the Antipodes, where sustainability is espoused while privileging economic development (Davidson & Stratford, 2007). Policy coherence practices need to be understood within the prevailing approach of ecological modernization and market conservation paradigms (Melo Zurita *et al*., 2015; Spash, 2022), whereby nature provides services to people, managed by an enabling state that encourages voluntary investment in the natural capital on which society depends.

2. Cases

This article is motivated by a range of empirical encounters regarding policy integration and coherence in a variety of recent projects (Blackstock *et al*., 2021; Matthews *et al*., 2020; Waylen *et al*., 2019). The research moved down the levels from water policy objectives to plans, then plans to partnerships and their implementation processes, with increasing attention on the role and intentions of individual actors. The article focuses on a specific UK phenomenon – the idea of 'catchment partnerships' as a form of implementing policy coherence. These catchment partnerships are enacted in a bureaucratized system of water management in the UK, where collaboration is focused on management without corresponding shifts in power (Watson, 2015).

Catchment partnerships can be considered a collective policy delivery mechanism. In the UK these partnerships exist to deliver 'multiple benefits' relevant to water management and are part-funded by the state to support policy delivery. As partnerships, they are focused on voluntary collective relationships between organizations that have common objectives (Benson *et al*., 2013). The governance mode is predominantly 'networked' or polycentric (Pahl-Wostl, 2019) with a focus on behavioral encouragement rather than statutory regulation, although the statutory policy objectives associated with the EU Water Framework Directive (WFD), the EU Floods Directive (FD) and the EU Natura 2000 Directive (N2K) have a strong influence on the focus of these partnerships (Waylen *et al*., 2020; Waylen, *et al*., 2021). Catchment partnerships, therefore, focus on the upstream characteristics of rivers before they enter the technologies associated with delivering water 'supplies' to populations.

There are a range of catchment partnerships across the UK, most of which involve environmental agencies, but also local authorities and non-governmental partners such as environmental NGOs and sometimes water companies (Waylen, Marshall, & Blackstock, 2019). These organizations have different roles and responsibilities for the delivery of WFD, FD and N2K. State environmental agencies and local authorities are statutory 'responsible authorities' for implementation, providing incentives, enforcing regulations and encouraging voluntary interventions. Environmental NGOs receive funding and participate in interventions as land and water managers, and they also support state bodies to identify, prioritize and support activities. Private sector companies, including those supplying water, are regulated by the agencies. They seek legitimacy through corporate social and environmental responsibility practices, and they also need to hedge against risks to their supply and value chains.

Since the 1960s, UK catchment management has been regarded as a 'success story' in terms of improved water quality (Weatherhead & Howden, 2009), although recent controversy over effluents polluting some English catchments is tarnishing this narrative (House of Commons Environmental Audit Committee, 2022). Furthermore, the trajectory towards fully ecologically functional rivers has recently stalled due to various pressures arising from the agricultural sector, as well as historical energy and drinking water uses. Rivers in the UK provide a public good (water quality and quantity) via riparian property rights that are mainly private. As water is a common pool resource that flows across space (and is often protected, for example on behalf of migratory species), catchment interventions must be integrated to allow for upstream-downstream interactions, and actions on opposite riverbanks must be coordinated. Integrated catchment management is challenging because those bodies that implement improvements might bear the cost of them, without seeing any benefit. The diffuse nature of catchment problems, and changes over time, make them difficult to regulate (Cocklin, Mautner, & Dibden, 2007).

To build an in-depth understanding of how catchment partnerships may contribute to the delivery of multiple benefits, we compared four catchment partnerships, exploring multiple perspectives within each partnership. These were the Poole Harbour Catchment Initiative (PHCI) and Hampshire-Avon Catchment Partnership (HACP), in southern England; and the Dee Catchment Partnership (DCP) and Spey Catchment Initiative (SCI), both in Scotland. The catchments have similar mixes of rural and urban land uses and pressures but varied in their histories and local context. Nonetheless, comparison was possible, and indeed they share similar policy drivers (WFD, FD, and N2K obligations). All have multiple organizations involved across the public, private and third (NGO) sectors. We excluded single-issue consortia, or initiatives led by single organizations without significant input from other actors.

The Dee Catchment Partnership (DCP) comprises the entire River Dee catchment, in Scotland, from its source in the mountainous Cairngorms National Park, to its outlet at Aberdeen harbor in the west of Scotland. It was formed in 2003 to respond to the WFD and the designation of the River Dee as a Special Area of Conservation. It is supported by a part-time partnership manager.[2] Its overall aim is to "protect and improve the catchment's waters, creating a catchment that can adapt and so continue to thrive under climate and land use change" (Dee Catchment Partnership, 2017, p. 5). Its objectives include managing acceptable water quality, quantity and biodiversity. These are delivered through projects, as laid out in the partnership's delivery plans.

Poole Harbour Catchment Initiative (PHCI) includes all rivers and streams that drain into Poole Harbour on the English south coast (Wessex Water, 2020). The partnership's aims are to achieve:

> Sustainable farming, development, water use and sewage treatment that supports healthy rivers and groundwater in the Poole Harbour catchment; recognition of the ecosystem services that the catchment can provide and an adequate payment to those that manage the land to provide these services; improvement to biodiversity habitats both in the form of naturally functioning rivers, floodplains and wetlands and appropriately located woodland and low-input grassland; and national environmental standards for the benefit of wildlife, users of these waters, and Poole Harbour. (Wessex Water, 2020)

The formal partnership was established under DEFRA's (the UK's Department for Environment, Food and Rural Affairs) Catchment Based Approach in 2012, although there were older partnership projects before that. The initiative is supported by a full-time catchment coordinator.

The Hampshire Avon Catchment rises in the Vale of Pewsey to the north of Salisbury and flows into Christchurch Bay on the English south coast. The vision of the partnership is of:

[2] The term 'coordinator' will be used to cover partnership manager and project officer as well.

> …healthy water bodies within the Hampshire Avon catchment which are valued and nurtured by residents, businesses and the wider community and which exhibit: naturally functioning flows, high water quality, sustainable and abundant wildlife, fully functioning ecosystems linking rivers with their valleys, and resilience to climate change and future socio-economic pressures. (Hampshire Avon Catchment Partnership, 2018).

The HACP was established in its current form in 2013, although like PHCI, there were already some examples of collaborative work. The partnership is supported by a full-time manager.

The Spey Catchment Initiative (SCI) concerns the emergence of the river in the Monadhliath Mountains and flows between these and the Cairngorms, through to the Moray Firth and the Spey Bay. The SCI's website refers to four priority themes: "Delivering national and local government objectives for 2017-2022; Sustainable flood management, focusing on NFM opportunities and demonstrating NFM techniques; Improving riparian, riverine and wetland environments for multiple benefits; Education, awareness raising & getting people involved in the catchment" (Spey Catchment Initiative, 2020) The partnership has existed since 1999 and has a full-time Project Officer.

To meet their objectives, these partnerships must bring together a raft of single policy-specific initiatives and funding regimes to build a coherent approach within their catchment socio-ecological systems. The processes and practices by which individuals negotiate intra- and inter- organizational complexity are what generate coherent policy outcomes. There are multiple processes, often with different terminologies, criteria and reporting procedures to understand and negotiate, with multiple, sometimes contradictory, narratives and logics about the nature of water and its social relationships; including the conflicting logics of ecological restoration and the marketisation of water resources (Melo Zurita *et al*., 2015).

Individuals who make the partnerships deliver their objectives are not only negotiating the managerialism inherent in any policy implementation process (Brodkin, 2011), particularly positioning water as a technical challenge to be solved (Giakoumis & Voulvoulis, 2018), but also developing strategies to navigate across multiple policy regimes. We now explain how we collected and analyzed data from our four cases.

3. Methodology

We adopted a critical interpretivist policy analysis lens (Yanow, 2007), which draws attention to the normative practices that have material and discursive effects on nature, people and their livelihoods. We used a mix of secondary and primary data. Firstly, deductive desk-based document analysis provided an understanding of the characteristics and goals of each of these partnerships following a template of research questions. Each team member took a catchment case. Analysis of these templates, using the framework process (Ritchie & Lewis, 2003) within NVivo 12 software, was distributed across team members, ensuring we were each looking across all four cases. The authors workshopped the document analytical results to identify areas to consider in more detail during interviews. These predominantly focused on aspects that appear in public-facing official documentation, such as specific practices and choices employed to obtain policy coherence, and we explored conflicts and how different priorities were established.

The interview sampling process focused on talking to partnership coordinators and chairpersons, and representatives of the main types of partners (state agencies, NGOs and private sector) who were active agents of coherence. We used a maximum variability approach to sampling to understand the full range of perspectives on policy coherence practices. As the partnerships were dominated by state agencies, so too was our sample. We focused on those actively engaged in the partnership and therefore do not present the views of those who were being governed through these partnership coherence practices, but not actively involved in discussions or decision-making, such as those experiencing flooding, making a living from water or enjoying a river.

The individuals involved with the organizations identified during the desktop review were found through online searches and snowball sampling. Telephone interviews in the autumn of 2019 used a topic guide and focused on the individual views of how partnerships worked in terms of their processes, motivations and ambitions. They typically lasted one hour, and were audio-recorded and transcribed with the informed consent of the participants. In total we carried out 21 interviews with 22 individuals (in one case we jointly interviewed

two people representing the same partner). NVivo 12 was used to thematically code the content of these transcripts and each researcher coded transcripts of interviews that they had not conducted themselves.

The combined desktop and interview data were reanalyzed abductively, using a combination of deductive queries developed from the literature and inductive insights arising from the data, resulting in a series of analytical memos. This allowed the analysis to move up the qualitative analysis ladder and to explore relationships between different lenses of analyses such as the partnerships, individuals, coordinators, and types of organizations. For this article, the team authored analytical memos on: description of partner organization roles; how partnerships are governed; how partnerships are experienced; representation within partnerships; partnership constraints; alignment of partnership and partner objectives; and polycentric learning. Taking a political ecology lens prompted further analysis around politics of policy coherence. Throughout the analysis phase, the team met to discuss our different interpretations of the data.

We were influenced by feminist methodology and team-based research (Zanotti & Marion Suiseeya, 2020). Each member of the team acknowledged their positionality, including personal relationships with some of the catchments, and their views on restoration. The research was designed to reduce interview fatigue for busy individuals by focusing on information not available in public documents and to provide a safe space for reflection on their personal practices, following an ethic of care and respect. We sought, within the sampling frame described above, to ensure we engaged with the voices and biographies of women and focused on the everyday emotional practices of partnership and coherence (Sultana, 2011). We probed about conflict, challenges and contradictions in these practices to allow participants to vent frustrations and share strategies to a sympathetic outsider, as well as allowing individuals to recognize, make visible and celebrate the outcomes of the multiple, minor and often unnoticed actions they enact in doing partnership for coherence. Asking about emotions, conflict and contradictions within processes framed as apolitical and technical proved challenging, as we describe in the discussion.

Before each interview, we sent interviewees a summary of our findings from the document analysis, to verify our findings and to help steer the interviews towards the gaps in our knowledge. An interim report (Waylen *et al*., 2020) was returned to interviewees to give them the opportunity to correct any misunderstandings or expand on any of the findings and add more information where needed. A workshop with other actors involved in environmental partnerships was held in January 2021 to receive comments on the generalizability of findings. We acknowledge the limits to generalizability such as the data are UK-centric and that not all participants in the research would label their work as policy coherence.

4. Findings

As stated in the introduction, regardless of the structure and rhetoric of high-level policies, it is the **processes** of policy implementation that matter, and therefore more attention needs to be paid to the agency of policy actors. Furthermore, in our catchment partnership cases, we are interested in how these actors attempt to combine multiple policy objectives relating to water quality, water quantity, aquatic biodiversity and flood risk management in specific sites of (in)coherence. The actors we studied enabled policy coherence through identifying opportunities – constellations of available funding for voluntary interventions, willing riparian owners, and a narrative about the activity that would fit the logic of the relevant funding application processes. The practice of policy coherence required these individuals to spot such opportunities, but also to understand how these opportunities could be combined to achieve multiple objectives and benefits, beyond those originally anticipated by each policy. For example, Environment Agency's WFD funding, aimed at mediating diffuse pollution from agriculture, used with Local Authority flood risk management funding, aimed at mitigating risk to downstream property and people, to fund upstream riparian tree-planting that improves fishery habitat (an N2K outcome required by Natural England). The partnership individuals had to identify these funding mechanisms, combine them and oversee the various agreements, permissions and contractual steps involved in achieving the establishment of more trees to shade the water, provide improved habitat and outcomes for riparian and aquatic species. Shade can help safeguard a major economic sector – sport fishing – as low flows and high water-temperatures have been associated with the rapid decline in salmon populations (Pohle *et al*., 2019), helping gain the support of riparian owners and anglers. This example is relatively typical of our cases;

the coherence process was managed to ensure ecosystem function and protect property to stabilize the status quo, rather than to democratize nature. It was coherent because all policy instruments shared the same ecological modernization framing of voluntary working for mutual benefit, eschewing confrontational topics like addressing the underlying causes of low flows, removal of prior riparian woodland or other historical impacts on habitats.

The ability to combine policy instruments and steer implementation to particular sites, forms of nature or types of stakeholders depended on establishing and managing relationships between individual organizational representatives in the partnerships. The relational work in traditional partnership coordination therefore becomes enrolled in delivering policy coherence under certain conditions. The findings section is set out to answer the research questions posed at the end of section 1 above (who practices policy coherence; what motivates them; what enables or constrains this work; and what contradictions and consequences arise). Unless stated, there were no notable differences between the four cases regarding the research questions discussed in this article.

Who is doing the policy coherence work?

Our analysis focusses on the active individuals involved at the multi-directional interfaces within the catchment partnerships, rather than all partners named as part of each catchment partnership. One of our early findings was that it was quite difficult to demarcate who was a 'partner' in these partnerships (Waylen *et al*., 2021). The partnerships, as presented in public documents, name many organizations (and by implication individual representatives) but our interviews established that only some were actively practicing coherence. These wider actors (e.g., agricultural representatives) are often instrumental in helping partnerships implement integrated measures tackling a range of policy objectives (water quality, flooding, recreation) by recommending such approaches to individual riparian managers. However, as they do not manage coherence within the partnership, these types of partners are not considered further in this article.

Our focus is on those individuals doing the institutional work from their individual organizations, to mesh organizational and policy objectives together to achieve the partnership objectives. They were performing bricolage through hybrid combinations of state, NGO and private-sector advice and funding, and translating international and national policy into locally-relevant opportunities – such as the riparian planting example responding to WFD, FD, N2K polices and sport fisheries above. We describe this as policy coherence, not policy integration, as the practice was not trying to insert environmental objectives into other policy delivery (e.g., transport or economic strategies). Rather, policies were identified as having coherent objectives and their policy instruments could be used to extend the funding available to restore the damaged ecosystem. Policy coherence is more than the coordination of actors and measures across space, but the search for a unified perspective that tries to overcome the fragmented or piecemeal policy implementation. These relationships are horizontal between organizations and individuals within the catchment and region, and vertical between national governments and agencies to individual riparian owners. These actors were either the Catchment Partnership coordinators or organizational representatives involved in the management groups of the partnership.

Policy coherence work was not typically implemented by government bureaucrats. The four coordinators were employed by not-for-profit organizations (Fishery or River Trusts, Research organization) or a water utility; and the chairpersons steering the partnerships were variously employed by non-state organizations (utility, River or Fishery Trusts, conservation NGO). Other active partners came from a mix of NGOs, local authorities, and state agencies. In the case of the coordinators, they had often moved through a variety of posts, often coming from prior employment in state agencies (National Park Authorities, Environment Agency) so they were familiar with the processes and logics of state organizations. Furthermore, the funding for the coordinator posts and the wider partnership activities came primarily from state bodies (with some additional funding from private-sector utilities and manufacturing companies) and these funding streams helped to focus and direct the efforts of the partnerships on policy priorities. These policy priorities were the mitigation of diffuse pollution pressures, river restoration interventions, and flow management (to tackle both flooding and

droughts), to enable catchments to meet their obligations under EU and national environmental policies (e.g., N2K, WFD, Sites of Special Scientific Interest).

The abilities and inclination of individuals to participate in policy coherence work can't be easily 'read off' from their host organization. Even within the public sector there are differences in influence and role, for example national environmental government agencies, where one agency funds a partnership, and one does not. Some state agency representatives were committed individuals whose contributions were foundational to a partnership's ability to implement projects, but different representatives from the same organization were silent partners in other catchment partnerships. Local Authority representatives varied across departments (flooding and infrastructure, planning or conservation for example) with corresponding differences in interests and roles in the partnership. The private-sector actors varied from being extremely active, through being more of an observer than participant, to leaving the partnership altogether. In general, the NGO actors were active partners, although there was a degree of staff turnover that reduced support to the partnership whilst new staff were settling into their role. What binds these individuals together is their knowledge of both the local catchment and the institutional context, generating a unique human resource.

What is clear is that many active individuals doing coherence have evolved through multiple similar roles across different sectors, retaining a common thread in working collaboratively and across organizational silos. For example, one of the current private-sector representatives had been a long-term environment agency regulatory staff member, whilst a local authority engineer had a career working for an NGO before their current role. So again, it is problematic to try to read off motivations from organizational status, and these individuals should be considered carefully in terms of their unique combinations of aptitudes, motivations, and biographies.

A clear message from the data was the need to have at least one individual whose role was to do the policy coherence and relational work – namely a coordinator. This observation is commonplace in partnership-working literature. Coordinators combine relationship management, information provision, administration, and business planning – which is often very different from the individual's original background in ecology and their passion for working with nature. Often, the role requires holding organizations to account to deliver the funding or in-kind contributions needed to deliver coherent benefits (restoration of river functions with outcomes for drinking water and flood risk). Achieving policy coherence has even more need of these individuals than a partnership focused on a single policy objective.

To summarize, there can be enthusiastic individuals making policy coherence function, and non-participants from the same organization or type of organization. The size of organization doesn't seem to explain the level of interest and support for policy coherence. Keeping the partnership delivering projects that provide multiple coherent policy outcomes requires dedicated time and effort via coordinators; and these are often individuals with a very broad range of business skills, engagement experience and environmental knowledge.

What motivates these individuals to practice policy coherence?

The specific practices and outcomes of partnership-working are being discussed in a sister publication (Waylen, Marshall, Juarez-Bourke, & Blackstock, in development). Here we reflect on the motivations of actors involved in policy coherence practices. Overall, our participants were motivated to negotiate policy coherence to achieve 'multiple benefits' and to demonstrate that working with nature brings social and economic returns. Policy coherence was therefore believed to increase the scale, speed and effectiveness of the partnerships' planned interventions and to increase their ability to achieve partnerships objectives. This was a fundamentally social process, by which these individuals articulated the coherence between policies and the benefits of such an approach to others in the partnership.

Interviewees stressed the informality and voluntary and friendly nature of their interactions. An attempt by one hosting organization to formalize the partnership created bad feelings between partners, as it distracted them from focusing on joint decision-making and delivery of catchment objectives. When asked about conflict, most partners insisted that catchment partnerships are about persuasion and that individuals cannot make any partner do anything they do not want to: 'power with' rather than 'power over' each other. The catchment partnerships are primarily about information-sharing and making relationships work, with the real decision-making power residing in funding and statutory actions (or inaction). Therefore, individuals focus on translating

opportunities provided by other institutions (funding programs, regulatory reviews, planning impact assessments) to practice policy coherence through trading knowledge and ideas through their partnership networks. This relational work requires these individuals to have skills in learning from others, in building networks, and in understanding how to adapt and blend the multiple policy opportunities available to them. Having these skills and experiences allowed individuals to recognize potential policy coherence opportunities and to frame interventions in ways that seem to cohere without conflict, and to use their emotional intelligence and credibility in partnership-working to implement policy coherence processes using the support of other organizations.

Many respondents had previously been involved in other partnerships with the same individuals or the same organizations. They are attracted to such roles, and have developed their skills whilst being a partner, or have the personalities or skills that make them capable of practicing 'policy cohesion.' They use partnerships to overcome policy silos and to identify the potential for objectives and interventions to be coherent. They see this boundary-spanning as a more effective way to achieve objectives and deliver multiple benefits. In a few cases, respondents were *expected* to cross policy boundaries and consider catchments from a spatial planning perspective. In several other cases, they go beyond their strict day-to-day responsibilities and are willing to act as policy entrepreneurs investing their personal resources (time, energy, reputation, knowledge) in these collaborative enterprises. Policy cohesion practitioners are interested in stretching their organizational roles and learning about wider issues to help them do their jobs as well as possible.

Most of these individuals who are willing to invest time in stretching their roles and prioritizing knowledge gained through these partnerships stated they are motivated by the environmental improvements that partnerships aim to achieve. Some individuals moved from regulatory or business roles, as they were attracted by the more voluntary 'power with' nature of partnership-working, focused on multiple and joined-up environmental and community outcomes. The irony is that whilst they are motivated by environmental outcomes, most of their time is spent on navigating institutional structures, processes and timelines involved in coherence, rather than working directly with nature.

Ensuring policy cohesion works in practice requires individuals to manage multi-dimensional relationships across and within organizations, requiring specific skills and personalities. Policy cohesion in these cases appears to be based on voluntary consensual choices, where there is mutual benefit to be gained from collective action. There are however, some hints of conflicts, despite the general insistence that partnership meetings are cooperative and conducted in a pleasant atmosphere. There are occasions when having the 'wrong type' of people makes coherence difficult, and when individuals dislike each other. These conflicts are handled through using individual skills, recognizing personality traits. Respondents said they addressed behaviours in others, rather than their values or politics, and searched for solutions. Conflict can be reframed as an opportunity to learn more about different perspectives and strive for harmony. For example, conflict between anglers and water companies was reframed as a learning opportunity, implicitly shifting focus away from struggles over accountability to a more benign, apolitical procedural focus. Overall, policy coherence through partnerships involves a great deal of relationship maintenance, which is helped by ongoing networks and being part of the same 'small world', whereby disagreements and problems are resolved through prioritizing consensual relationships and using interpersonal skills.

What enables and what constrains?

The preceding section illustrates the way that policy cohesion work is enabled through the personal choices and the motivations of the individuals involved. These active partners, dedicated to combining and steering various policy-related funding processes in coherent ways to generate multiple benefits, hold 'process knowledge.' The partnerships enable individuals to expand and improve their knowledge about not only the catchments and their issues, but the main actors involved and their perspectives. This can be instrumental for the partner organizations and individuals' professional development.

Therefore, individuals with an interest and aptitude for learning, sharing, and networking, thrive in these partnerships and enable coherence; coherence is constrained if individuals lack these aptitudes, biographies, and interests. For example, these characteristics in Local Authority actors explained whether and how they

supported natural flood management (e.g., leaky instream barriers) with benefits for water quality (WFD), biodiversity (N2K) and flooding, rather than more traditional flood risk management that meets FD objectives but can negatively impact on water quality and biodiversity.

There are constraints due to the scope of different organizations, and the geographic and temporal scales at which they work. Some, like Local Authorities or whisky companies (important because they source signature water from Scottish rivers) have a much wider remit than a fishery or a rivers trust. Others, such as environmental regulatory bodies, are necessarily aligned with certain partnership goals while having wider geographical scope. Local stakeholders, particularly Fishery Boards, may work towards objectives almost entirely within the catchment. It really matters how organizations enable individuals to manage the multi-dimensional relationships between and within organizations. Many of these individual actions to manage and sustain relationships are invisible and therefore often un(der)rewarded.

Although financial support enables and underpins these partnerships, funding is itself constrained, particularly given most policy-derived funding comes via the public sector that has, in the UK, being hit by economic austerity since the global financial crisis of the late 2000s. Austerity impacts staff capacity: where organizational staff numbers have been reduced, individuals keen on stretching their roles find themselves having to cover the 'bare statutory minimum' due to downsized teams, such as within Local Authorities. Furthermore, funding is often only available for capital works but not to pay coordinators, despite their importance for making policy coherence work (see sub-section *Who carries out the policy coherence work*?).

Constraints on individuals include the short-term (annual) nature of partnership funding, leading to short-term contracts for the coordinators and a decreased ability to offer job security and a career path. Furthermore, some participants pointed to increasing workload for state agency staff associated with the contraction in funding within the UK public sector, with commitments to core (single policy) statutory duties squeezing out these voluntary partnerships seeking to connect multiple policy objectives. Private-sector actors are also increasingly expected to show financial or risk-reduction returns to their organization in return for the investment of staff time and top-up funding for the partnerships – demonstrating corporate social responsibility is no longer sufficient. Given that all partner organizations face these same constraints, the variation in support for the partnerships to mesh policy objectives together coherently appears to be sustained by the inclination and enthusiasm of the individuals involved.

What are the contradictions and consequences involved in practicing policy coherence?

As shown above, our participants, occupying different locations in the policy hierarchy and within their partnerships, work within constraints. In principle, the state and local government organizations set regional policy priorities; but in reality, these actors respond to available funding, conform to existing criteria, and report against indicators selected by others. Actors from membership organizations are conditioned by the views and preferences of their members, mediated by their boards and steering committees. Private-sector actors must deliver their organizational objectives, set by boards and shareholders.

This means there are negotiations and accommodations required to practice policy coherence through partnership, as respondents also respond to the needs of their own organizations. This means that voluntary actions carried out to achieve policy coherence reflect those choices that sustain the partnership, without conflicting with the needs of the constituent organizations. Actions such as encouraging a reduction in soil erosion or managing nutrient flows generally achieve the outcomes sought by all partnerships and respond to the policy objectives of WFD and N2K (improving ecosystems through reducing the siltation of habitats). These actions also help to retain farmers' most valuable natural asset (soil health), improving outcomes for riparian owners profiting from fishery rights, and reducing processing costs for water utilities. But the approach used is incremental, extending individual interventions, rather than responding to transformational challenges posed by degraded rivers. There is considerable effort required to resource and implement interventions that cohere between two or more policies. They may have synergistic outcomes in line with the interests of state, private and not-for-profit interests but trade-offs between organizational objectives will be needed. Wicked problems, such as how to allocate water as a scarce resource, which are likely to occur more frequently under climate change, did not appear much in our study but could emerge.

The work of active partners seeking positive outcomes for nature actually produce benefits unequally, as felt across society and space. Reducing soil erosion will result in clearer water, gravel and weed riverbeds, and a different riverbank profile. These things should benefit aquatic species as well as creating a more pleasant environment for aquatic recreation. But to benefit from these habitats, as political ecologists would point out, visitors will be those who can access these rural settings and who enjoy pursuits such as birdwatching, fishing, swimming and canoeing. In the UK, these are predominantly people in middle-class occupations that rely on cultural capital and access to a car and other technologies.

Participation and engagement are mantras for catchment management, but there was little evidence of these being used to identify or address environmental injustices in the partnerships we studied. Engagement was didactic – by encouraging greater awareness of the importance of ecology, rather than addressing access issues and other social injustices head on. Restoration of ecological function *could* have positive justice outcomes in terms of reducing the costs of drinking water and wastewater treatment for the consumer, and improving the quality of waterscapes for local people. But the political economy of water pricing is more complex than this in the UK. Furthermore, improvements to river catchments rarely occur in deprived areas because of complex riparian property rights and the problem of prioritizing measures that landowners will be able to put into practice.

Some of our interviewees were keen to explore more interventions to improve water quality and habitat in urban areas like Salisbury or Poole, but cities are more difficult to work in because they require coordination between multiple partners. Enrolling more private-sector partners in catchment management partnerships could result in a frank debate. Should the polluters among them pay? Corporate social and environmental responsibility is generally tackled through supportive, non-conflictual sharing of information.

The partnership objectives among those we studied have a consistent theme of managing, protecting and restoring biodiversity, water quality and water quantity, with an implied narrative of stewardship for mutual benefit. We found some coherence around these objectives. We did not find much tension about why stewardship is undertaken, and who benefits from it, because as noted, partnership members tended to focus on areas of mutual agreement. Discussions of justice might threaten the partnership configurations and reduce their ability to achieve any environmental gains. Aquatic ecologies in the UK are threatened by potential climate change, but they are not as critically endangered as others across the globe. Nonetheless fecal matter and chemical compounds still build up, and flooding and droughts generate economic and psychological suffering. Some non-human actors remain endangered, with their habitats threatened. We found respondents were doing their best to improve water quality, habitat restoration and environmental flows using policy coherence to extend their ability to intervene, thematically, spatially and financially. They were not able to confront the sorts of issues that political ecologists address: the unintended consequences of working with the willing, and with complying with the prevailing policy logics.

These findings (who is doing the policy coherence work; what motivates them; how are their actions enabled or constrained; and the contradictions and consequences involved) are now discussed in terms of their contribution to political ecology and implications for further research.

5. Discussion

We have directed attention to the middle layer of policy implementation actors involved in partnerships, and how they practiced managing water quality and water quantity. The article contributes to the literature on the political ecology of river restoration in Western contexts (Linton, 2021), complementing existing authors that integrate political ecology into territorial governance (Boelens, *et al*., 2016; Linton & Budds, 2014). Our focus has been on meso-level territorial analyses, making policy practices more explicit. The complex and often convoluted pathways from policy design to site-specific actions may involve citizens or individual land managers as natural resource users, but engaging various environmental, economic and social policy actors makes policy coherence more challenging. The findings illustrate that some, but not all, middle-layer policy actors display considerable agency in their partnerships, making coherence work even when constrained by unsupportive organizational processes, a lack of funding, or job insecurity. Research needs to pay attention to the motivations, values and biographies of individuals and to consider the entrepreneurial strategies they employ

when implementing policy, as well as designing it (Marshall, Blackstock, & Dunglinson, 2010; Cohen & Aviram, 2021).

Political ecology explicitly recognizes the role of policy and politics but there is very little (if any) published research on policy cohesion that is explicitly labelled as political ecology. Roberts (2020) advises political ecologists to draw on policy theories to enrich studies involving the politics of policy, and Bixler *et al*. (2015) draw attention to the complex and sometimes conflictual interactions between national policy and place-based implementation, mediated by intermediate institutions (norms and rules) associated with programs and partnerships. This article suggests concepts like 'institutional work' and 'street-level bureaucrats' used in policy research could inform a 'meso-level' analysis of human-nature co-evolution within formal policy projects and programs. We answer, to some extent, McKinnon and Hiner (2016), who call for regional political ecology focused on a meso-spatial scale that links local processes (in our case, partnership meetings about specific projects in sub-catchments) to exogenous driving forces (policy objectives, national organizational objectives constraining or enabling individuals practicing policy coherence). Although our findings focus on the work of individuals, what is done, and where and how, is strongly conditioned by the technocratic logics of the WFD, FD and N2K. Policy coherence is more than technical integrated water or catchment management, because it has a strategic and normative aspect – a shared framing of a unified and consistent approach across different policies. Our analysis also suggests that 'relational work' to build and maintain such a framing in policy implementation may mitigate against radical water management ideals being implemented and shore up the status quo.

Implicit in the methodology and findings is a tension about the unit of analysis. We argue that attention to individuals matters, but it is the partnership institutions that receive funding and that influence how catchment actions are taken on the ground. It has proved challenging to convey the multi-faceted intersections between individuals, their host organizations, and partnership(s); particularly over time and space, given the biographies of actors. These partnerships can be considered as palimpsests, as their current configurations and objectives reflect their historical evolution and influences of past partner organizations and individuals. Whilst the biophysical catchment boundary binds the partnership, there are a variety of governance levels and spatial scales associated with different partners and individual actors.

Carrier's (2001) foci on agency and constraint within a political ecology framing was useful to help with our understanding of human-nature dynamics. It illustrates the dialectical relationship between individual motivations and the activities that individuals participate in to manage the environment, whilst recognizing the ways in which they are constrained by existing institutions. Our article, and the Special Section[3], urge political ecologists to pay attention to the individual within governance processes, suggesting that more empirical and contextual analyses of agency is required. However, we have not been able to fully explore the role of the 'partners' that did not actively participate in policy coherence practices. For example, representatives from the agricultural sector may have passively resisted policy coherence, potentially to avoid prioritization of ecological goals over their economic interests.

Ahlborg and Nightingale (2018) suggest we pay attention to the 'where' of power in resource governance. We have addressed the intentional choices made by mid-level policy coherence practitioners that affect everyday resource governance practices, focused on actors' relationships and their hope that such relationships will lead to better outcomes (improved aquatic ecology etc.) (Svarstad, Benjaminsen, & Overå, 2018). Catchments are managed not governed, and this frames policy coherence as a technical approach to enable efficacy (more restoration with a greater spatial extent) rather than questioning the logic of policies and resolving the sources of their incoherence (Buizer, Arts, & Westerink, 2016). Individualized accounts of how conflicts occur and how they are resolved, support this. These choices have a political consequence, however unintended, in valorizing certain outcomes for nature and society and rendering invisible other alternative visions of policy coherence. By focusing on the practices of 'doing coherence', we did not adequately address those who benefit or lose out from the consequences of implementing policy coherence interventions.

[3] Sam Staddon, Floriane Clement & Bimbika Sijapati Basnett (eds.). 2023. "Political ecology of professional practice: plurality and possibilities in environmental governance", Special Section of the *Journal of Political Ecology* 30.

Analysis of relationships between actors might usefully consider 'personality politics' (Florczak, *et al*., 2020). For example, there could be a danger of 'group think' arising in catchment management partnerships when there is strong bonding, social capital, and shared histories. As we have shown, achieving coherence is more difficult than traditional piecemeal policy implementation and relies on relationships. Molle's (2008) warned that policy coherence can mean that difficult trade-offs have been silenced, and power asymmetries ignored. A lack of critical opposition and conflict can be problematic if it allows that status quo to persist. A safe partnership minimizes 'creative disruption.

Political ecology examines the politics of how society and nature are mutually co-produced. Catchment partnership objectives are predominantly ecological, with less emphasis on the social justice implications of local people's access to water and land (e.g. Hohenthal, Räsänen, & Minoia, 2018). Ecological interventions have positive and negative effects on land and water users and associated livelihoods, reinforcing the need to reconnect politics to ecology (Acheampong, 2020). Although much of the traditional water governance literature is yet to be adequately politicized (Roth, Zwarteveen, Joy, & Kulkarni, 2018), our analysis contributes to political ecology water scholarship addressing power and politics (e.g. Roth *et al*. 2018; Molle 2008; Boelens *et al*. 2016). Our suggestion to pay more attention to the agency and practices of these policy coherence implementers could be described as 'post-ecology' (Blühdorn, 2011), but these social processes have real and material impacts on ecological outcomes. Policy coherence in our cases sustains, not transforms, the managerialist approach to nature typical within the UK.

The 'power with' approach to negotiating and blending multiple policy institutions within partnerships means that some individuals are unable or unwilling to question the socio-political context in which they work. A feminist political ecology lens argues there should be more consideration of power and legitimacy in these relational practices. There is an ethics of care, as well as issues of identity, perceptions and performance (Bauhardt & Harcourt, 2019; Elmhirst, 2015, 2018; Rocheleau, Thomas-Slayter & Wangari, 1996).

The methodological approach described in Section 3 explains how our own ethics of care operated. We used the interviews to provide a space of reflection and co-production of new readings of the individuals' everyday practices and choices. In some cases, this generated an emotional response – for example, one person cried when reflecting on a difficult period for them, and another became philosophical reflecting on their choices. We did not pursue an emotional political ecology (see Egge & Ajibade, 2021, for a review), and we felt an acute tension trying to analyze how individuals worked with, rather than challenging, the existing structures that govern nature. Indeed, eliciting emotional responses made us back away from probing further about political consequences of their actions. On reflection, we did not push interviewees to openly confront the politics of their practice and had to rely on inference from our data to apply a political ecological lens.

Further research could locate individual agency more fully within the diverse institutional framings of nature to extend the analysis of constraints to the insidious effects of discursive elision or foregrounding.[4] It would be useful to incorporate emotions and affect into a specific methodology design (Staddon *et al*., 2021). Centering emotional political ecology in analytical practice would provide guidance to authors such as ourselves for combining an ethics of care with the need to confront and make visible the power effects of practices done with the best of intentions.

Indeed, one implication of our fieldwork was the need to pursue ideas about forms of power more explicitly, such as how 'power with' links to 'power within' and 'power to' (Allen, 1998 p. 13; Rowlands, 1997 p. 13). Here, we would look more deeply at harder-to-research traits around individual emotional intelligence, affability and social agility, as well as more conventional analyses of quality and quantity of social networks. Further research could consider the ideas of performativity of partnerships and how individual choices generate constitutive discourses around catchment management and policy coherence (Ahlborg & Nightingale, 2018). Intersectionality can offer analytical power here, and similar research could be conducted internationally to allow these practices to be considered through differences in age, gender, ethnicity, experience, scientific background, job tenure etc. It would be particularly interesting to explore our concerns around job insecurity

[4] Originally, the analysis was going to use the concept of emotional labor (Guy, Newman, & Mastracci, 2008; Hochschild, 2012) but it proved difficult to use this when reanalyzing data that had been collected for a wider purpose.

and the mismatch between training and day-to-day demands on these policy coherence actors. The analysis is UK-centric and there is much that could be learnt from others, particularly in the Global South.

Lastly, returning to the SDGs mentioned in the Introduction, our focus on how coherence is practiced and by whom has neglected the question of most interest to political ecology – coherence for what end, and for whom? To reiterate, the currency of coherence was 'multiple benefits', suggesting an implicit cascade effect from improved environmental condition to improved human wellbeing, ignoring the politics of distributional effects. A final recommendation for further research would be to reframe the study of UK policy coherence in terms of water as a human right – an explicitly hydro-social framing – rather than as a resource to be managed.

6. Conclusion

We live in a world of challenges, the Anthropocene (Perring, Erickson, & Brancalion, 2018). This article has stressed the importance of addressing policy coherence as part of the overall aim of improving, if not transforming, the way that humans perceive and interact with the rest of nature. We have drawn on concepts regarding institutional work and the agency of meso-level policy implementation actors to draw attention to the motivations and practices of individuals in governance processes. The focus was on state, NGO and private-sector individuals who voluntarily create catchment partnerships and work collectively to achieve common objectives, improving the aquatic ecology for the wider benefits of society. Policy coherence is challenging as it requires ongoing collective (re)framing of what the partnerships are trying to do, as well as assembling the instruments to enable this through voluntary and fluid relationships.

Coherence depends on the actors as much as, or more than, the design of policy structures, but institutional constraints shape and limit their agency. These policy actors operate in a range of organizations at different scales. Individual motivations, personalities, and experiences, rather than structural characteristics, explain how they practice their agency and navigate these constraints. Although the endpoint of these partnerships is to generate positive environmental, social and economic outcomes in a catchment, much of the policy coherence work revolves around maintaining relationships and sharing knowledge about how to manage bureaucracy. Individuals are enabled and constrained by their organizational roles and the visibility, or lack thereof, of the relational work required for policy coherence. Funding also enables policy coherence, through bricolage of organizational and policy funding streams, but the type, frequency and conditions of funding frame the social processes that are so important to building coherence, and mediating the outcomes generated.

To understand policy (non)coherence, we need to attend to the detailed work practices and everyday labor of these individual 'policy coherence actors', This needs more investigation, particularly across different contexts and including studies in the Global South. A critical approach will avoid silver bullets and the psychologization of such processes. Having the 'right person' will depend on the overall outcomes sought, and the material and political implications involved. A political ecology lens lifts the analysis beyond the 'procedural' and 'processes' to think about what partnerships do, for whom, and why. Political ecology, to us, also invokes an ethics of care for partnership actors. We seek to understand their motivations, and illuminate why and how their ability to practice coherence and deliver sustainability outcomes is limited. It is important that we do not collude in blame shifting, treating those implementing policy as 'instruments of the state', bearing the burden of inequities baked into policy design and the wider neo-liberal context in which these catchment partnerships function. The implications for policy design and partnership funders are to resource the actors appropriately, enabling their agency to interlink social and ecological objectives within a partnership. This would involve moving coherence from incrementalism to a more radical view of partnerships as instruments for resolving environmental justice concerns: representation, procedure, and outcomes.

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