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Grounding what matters: a pluriversal lens for social values as a way to practice ecological democracy in Flood Risk Management

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ABSTRACT

Ecological democracy has drawn upon relational approaches through Indigenous thinking and pluriversal politics to re-imagine democratic design and practice. This presents an alternative paradigm through which to consider social values as a conceptual tool that can enact the kinds of sustainability transformations needed in contexts such as Flood Risk Management. In this article, I explore the potential of a pluriversal lens for social values as a way to perform ecological democracy by following the implications of (1) an expanded understanding of the social, (2) what it means to work with processes of change and (3) widening understandings of how values are generated. To understand a pluriversal lens in practice, I draw on a case study of a local beck restoration project in the UK. Through key methodological choices that challenged political logics of representation, social values emerged by grounding what mattered to people in their everyday material relations. This case study demonstrates the potential for a pluriversal design of social values methods to perform ecological democracy in ways that generate more convivial human–nature relationships.

KEY POLICY HIGHLIGHTS

- A pluriversal lens can unsettle the dominance of technocratic governance approaches in contexts such as Flood Risk Management to create more socially just and ecologically sustainable decision-making processes.
- A relational approach to social values can help in policy and decision-making contexts, such as Flood Risk Management, with democratically facilitating sustainability transformations.
- Relational thinking challenges traditional social values concepts and methods and indicates towards alternative ways of working with values in decision-making.
- Implementing a 'pluriversal lens' for social values methods can open up the space for plural worldviews and knowledge systems to meaningfully guide decision-making.

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1. Introduction

How sustainability transformations can be facilitated through democratic decision-making processes remains one of the key challenges in politics and economics (Dryzek and Pickering 2018; Pickering et al. 2020). Not addressing this challenge risks leaving value-laden decision-making contexts to be guided by dominant value-articulating institutions such as the market alone (Vatn 2009; Pascual et al. 2023). One such context where sustainability transformations are needed is the question of how we live with the increasing likelihood of more frequent and severe flooding (Walker et al. 2011). However in such a context, Flood Risk Management (FRM) remains dominated by a technocratic approach, which sets narrow parameters on what and whose knowledge and values are considered, leaving little room for meaningful community engagement let alone

democratic decision-making processes (Mehring et al. 2018; Acharya and Prakash 2019).

Relational thinking challenges the underlying dualism that characterises both traditional democratic and economic thinking and practices that underpin such technocratic approaches (Pickering et al. 2020; West et al. 2020; Raymond et al. 2021; Ortiz-Przychodzka et al. 2023). Such challenges have been recognised by value-articulating institutions such as IPBES (2022) who have made clear the need to recognise plural worldviews, knowledge and value systems. This move signals a call for the development of new values methods and decision-making processes that can work amidst such plurality (Arias-Arévalo et al. 2018; Ortiz-Przychodzka et al. 2023; Raymond et al. 2023). In the context of FRM, however, it is unclear how the technocratic approach to decision-making might be unsettled in such a way,

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despite there being a recognition of the need for decisions to be made differently (Hikuroa et al. 2021; Lane et al. 2011; Wingfield et al., 2021). FRM decision-makers who have long been charged with evaluating hard-engineering solutions to keep people and water separate, have now been made responsible for their 'reconnection', characterised by the typically apolitical Nature-Based Solutions Paradigm (Cousins 2021; Kotsila et al. 2021; Wijsman and Berbés-Blázquez 2022). FRM governance now needs to facilitate transformations away from making decisions based on an extractive framing of human–nature relationships, how we live *from* water, to more convivial relationships of how we might live *with* water (Arias-Arévalo et al. 2018; O'Connor and Kenter 2019; Strang 2020, 2023; Kenter and O'Connor 2022; Raymond et al. 2023; Land, this issue). In this article, I focus on social values owing to the specific resonance of the concept both within democratic and economic theory and practice (Kenter et al. 2019; Massenberg 2019; Schlosberg 2019; Pickering et al. 2020). Crucially, I will explore how a relational approach, articulated through a pluriversal lens, to social values, conceptually and methodologically, can perform this role of democratically facilitating the kinds of transformations needed in contexts such as FRM.

2. Lessons from ecological democracy

Ensuring sustainability transformations are democratically enacted has long been conceptualised as a task that requires reconciling two normative ideals; facilitating open-ended processes while ensuring outcomes are sustainable (Eckersley 2020; Pickering et al. 2020). This need for respecting democratic norms while achieving environmental goals has often been viewed, and practiced, as though contradictory, as evidenced by FRM decision-makers often claiming that affected communities lack the required technical expertise to understand what the most sustainable outcomes ought to be (Mehring et al. 2018). On the other hand, environmental values researchers may claim that there is a 'values-action gap', e.g. a lack of awareness of the values of rivers; the logic being if only more people valued nature and then participated in decision-making then more sustainable decisions would follow (Everard and Moggridge 2012; Stålhammar 2021; Maller 2023).

Recent developments in ecological democracy theory and practice, however, have exposed this tension between democratic norms and environmental goals, which is based on a dualist worldview. Ecological democracy has drawn upon relational thinking through Indigenous scholarship and land-based social movements, as emphasised through the notion of pluriversal thinking, as well as new materialism, in order to

challenge dualistic thinking within environmentalism (De la Cadena 2010; Eckersley 2020; Pelenc et al. 2019; Pickering et al. 2020; Bresnihan and Millner 2023; West et al. [this issue](#) (0000)). Schlosberg (2019) highlights this point clearly arguing for a need to move beyond post-materialist thinking in environmental politics. Post-materialism claims that pro-environmental values only emerge once material needs are met and satisfied (Schlosberg 2019). However, as Schlosberg (2019) points out, environmental movements have never been disconnected from material needs but rather are grounded through them. Rejecting the distinction between 'subjective expression of value' and 'objective material' problems, Schlosberg (2019, p. 4) acknowledges that social values have always been socially constructed in ways that inform people's understandings of and responses to objective material problems; 'the connection between social values and the condition of everyday life, for example, has been central to the practice, theory, and demands of environmental and climate justice movements' – e.g. the Ogoni 9 a powerful demonstration of this (Obi 1997; Pelenc et al. 2019). It is this relational thinking from these developments within ecological democracy that I look to explore within ecological economics; specifically, the conceptualisation and practice of social values in decision-making.

2.1. Implications for social values

Social values lack a single universal definition but instead point to a plurality of conceptualisations and research methods that variously look to understand what matters in decision-making beyond self-interested utility value alone, focusing on the processes and decision-making contexts through which values emerge (Raymond et al. 2019). There have been multiple attempts to effectively operationalise social values as a concept and a tool that can facilitate environmental decision-making, offering promise to navigate conflicts and complexity in environmental decision-making (Kenter et al. 2015, 2019). Such interventions build upon a rich history of attempts to understand and use social values in economic theory and practice in a way that challenges conventional market-based approaches to understanding and calculating value to society through aggregating preferences to an individual alone (e.g. stated or revealed preference methods) (Kapp 1974; Graeber 2001; Tadaki et al. 2017; Massenberg 2019).

Instead, the social values discourse recognises that values are often *other-regarding* especially when it comes to valuing systems that affect people beyond the level of the individual (Vatn 2009). Importantly, social values research reflects a critical intervention of deliberative democratic theory into ecological economics in practice

(Zografos and Howarth 2010; Kenter et al. 2016). Criticising the instrumental rationality at the heart of the neoclassical economics approaches to environmental valuation, deliberative democracy instead proposes communicative rationality as a more suitable means to reach shared understanding in complex sustainability conflicts (Zografos and Howarth 2010). For example, through deliberation and storytelling, Kenter et al. (2016) demonstrated that the *social processes* through which we come to understand social values can affect the *outcomes* (Orchard-Webb et al. 2016). However, despite these developments in social values research, the concept has largely remained within the dualist paradigm alone; the focus has been the values ‘of nature’ ‘to people’, while the political logic has remained representative alone; there is a need to explore what lessons can be drawn from ecological democracy, where relational thinking has inspired practices that redraw political boundaries such as agency and time to practice democracy in different ways (De la Cadena 2010; Eckersley 2020).

3. A pluriversal lens for social values

Worldviews play a key role in shaping value systems (Gould et al. 2019; Raymond et al. 2023). However, more recent frameworks have generally left the question of underlying worldviews in values methods as implicit (Kenter et al. 2019). Not explicitly focusing on underlying worldviews at play (of researcher or participants) limits the use of social values methods when working in contexts where (i) non-dualist worldviews exist or (ii) people might look to contest dualist worldviews (Law 2015; Escobar 2020). Kenter et al. (2019) embrace the ‘messiness’ within social values research by outlining meta-lenses for researchers and practitioners to consider when designing values methods and facilitating values-led decision-making. The meta-lenses defined are *procedural* and *epistemic* as a way to highlight the conceptual and methodological choices that the researcher must make, informed by the specific context. In this section, I will make the case for a ‘*pluriversal lens*’ for social values research as a way to explore what a relational approach to social values would look like. While the implications of pluriversal thinking and design for social values methods are manifold, I will focus here on three key ways that such thinking would challenge social values in theory and in practice: (1) expanding our understandings of the ‘social’, (2) working with processes of change and (3) widening our understandings of *how* values might emerge.

3.1. Expanding understandings of the ‘social’

The social values discourse varies in understandings of what constitutes the ‘social’ ranging from an individually held value in relation to society to values of an aggregated group of people (at varying scales) in relation to nature; however, the ‘social’ is assumed to exclude the more-than-human (Raymond et al. 2019). A relational approach to social values would first expand our understanding of the ‘social’ of social values from a focus on humans alone to consider the more-than-human too. Through a relational approach, it makes no sense to speak of the ‘social’ without including an understanding of the more-than-human relations that constitute it (Latour 2005; Tsing 2013). As Muir et al. (2010) point out, for Aboriginal people living with the Darling River basin, when a river shows signs of poor health, it is indicative of the poor health of the community too; the authors reflect this saying ‘a river is like a mirror: it reflects the care given by people whose lives depend upon it. A scald on red ground or the slow death of a river reveals more than troubled ecological relationships – they are signs of broken social relationships’ (Muir et al. 2010). Elsewhere Whatmore (2013, p. 38) makes reference to the work of Serres (1995), who talks of the practice of listening as a means ‘through which we might allow the more-than-human to participate, to enter into our “exclusively social contracts” through which “we have abandoned the bonds that connect us to the world” and to rework the contractual polity towards an understanding of “the things of the world” in terms of the “forces, bonds and interactions” in which they “speak” to us’ (Serres 1995, p. 39). Expanding our understandings of the ‘social’ of social values then requires an elevation of the agency of the more-than-human in our methods and theories, no longer treating the more-than-human as a passive backdrop but as active participants in the web of life (Plumwood 2007; Bennett 2010).

3.2. Working with processes of change

A relational approach to social values must move beyond considering values as pre-fixed and stable as though held towards nature at a fixed point in time but instead move towards understanding human–nature relations as dynamic and emergent through relational processes, constantly in motion (Latour 2005; Batavia and Nelson 2017; Himes and Muraca 2018; Muraca 2016). While the social values discourse has focused on processes of change, that focus to date has been limited to processes of deliberation and learning amongst *people* with little attention to wider processes of change in socio-ecological systems let alone to the role that the more-than-human might play in these processes (Reed et al. 2010). Relational thinking recognises worlds are ‘without objects’ and

are always in motion in a state of constant becoming (Latour 2005; Ingold 2011; Escobar 2020). In following these relations between complex webs of human and more-than-human, we might come to understand values themselves to dynamically emerge, never resting or becoming fixed, but continually changing. This requires understanding values in their contexts. As Bennett (2010) points out, when we take things out of their context, as if objects, we *abstract* them from their own ecologies. This makes it difficult for individuals to express the meaning or significance of something; the idea of a river out of its socio-ecological and cultural landscapes loses its many meanings (Strang 2004). A pluriversal lens for social values would look to understand the values that are *generated* or come into being in place, through the material relations *with*, in the case of FRM, water (Krause and Strang 2016). This poses methodological questions then as to how we come to understand these values, or how we might in our processes redraw the boundaries of the social to understand what matters in place.

3.3. Expanding understandings of how social values are generated

A pluriversal lens for social values opens up values methods to an expanded understanding of how values come into being. The key to this point comes from challenging the distinction between 'is' and 'ought'. Sayer (2011, p. 4) states, 'the distinction between is and ought, that has dominated thinking about values in social science, allows us to overlook the missing middle, the centrality of evaluation. It obscures the nature of our condition as needy, vulnerable beings, suspended between things as they are and as they might become, for better or worse, and as we need or want them to become'. Sayer (2011) points out that the act of valuing is not a case of simply weighing up options on the table; rather, it is an attention to needs and desires concerning how things could be different. In attempting to collapse the supposed 'is-ought' fallacy, Sayer (2011) demonstrates the category error whereby the logic of relations between statements is mistakenly applied to matters of moral relations. Sayer (2011, p. 54) states that, in an example of facing someone who is in need of food, 'the force of the ought' is not a matter of the logical relations between statements, but of bodily needs or compulsions – states of *being or becoming*' (emphasis added).

In collapsing the 'is-ought' dichotomy, a dualism that defines the tensions between descriptive and normative uses of values in social values discourse, our understanding of what valuing *is* radically shifts. Paying attention to such needs and desires, or

crucially, the states of *being* and *becoming*, means acknowledging different methods of knowing and valuing; for example, through *embodiment* and through *emotions* (Bechara and Damasio 2005; Raymond et al. 2018; Batavia et al. 2021; Staddon et al. 2023) or paying attention to the material through sensory experience (Abram 1997; Dunkley 2023). Escobar (2019) draws upon the Colombian notion of '*sentipensar*' which roughly translates as 'to *think-feel*' as a way to describe this different way of making decisions which 'implies the art of living based on thinking with both heart and mind' (Escobar 2019, p. 14). There are similarities with this idea of *sentipensar* existing in current values methods. For example, in outlining the method of arts-based dialogue to elicit values, Edwards et al. (2016) draw particularly upon the work of Kester (2004) to outline the transformational potential of an arts-led dialogue approach by juxtaposing the methodology to the more conventional dialogues-based methodologies that rest upon communicative rationality whereby the aim of dialogue is to reach mutually agreed outcomes or shared understanding. Instead, Kester (2004), acknowledging criticisms of such an account, indicates towards a 'form of knowledge based not on counterpoised arguments, but on a conversational mode in which each interlocutor works to identify with the perspective of the others', Kester refers to this as 'connected knowing'. At the heart of this account of connected knowing, lies *empathy*; 'It is through empathy that we can learn not simply to suppress self-interest through identification with some putatively universal perspective, or through the irresistible compulsion of logical argument, but to literally re-define self: to both know and feel our connectedness with others' (Kester 2004, p. 12). This 'think-feeling' perspective then radically alters the way we might think about *how* we come to understand what matters in ways that move beyond centring on self-interest alone and instead focuses on relations that come into being through interactions with others.

The conceptualisation of social values offered through a pluriversal lens can be summed by Batavia and Nelson's (2017, p. 370) account of an eco-feminist conception of value as a 'radical re-imagining through which "value" is *neither* an objective fact nor a subjective judgment, but a dynamic reality produced, interpreted, and enacted in the interplay of human and nonhuman agents [emphasis added]'. If this may seem far removed from policy and decision-making contexts such as FRM, Gibson-Graham (2008, p. 615) asks researchers interested in performing economic systems that are not destructive or oppressive of people and nature, 'how can our work open up possibilities?' 'What kind of world do we want to participate in

building?’ ‘What might be the effect of theorizing things this way rather than that?’ Though seemingly theoretical, this re-imagining of social values through a pluriversal lens is key to understanding how we might design democratic processes differently to facilitate sustainable transformations.

4. Methods

I attempted to implement a pluriversal lens through making key methodological choices in designing the social values research method, building upon previous values methods frameworks such as Tadaki et al. (2017) ‘technologies of participation’ (Vatn 2009; Kendal and Raymond 2019). Here, I draw particular attention to how a pluriversal lens affected the decisions made about (i) engaging participants and (ii) carrying out methods in place.

To *engage with participants* in this project, I drew on principles from participatory and systemic action research to challenge representative logics of participation, specifically appealing to the notion of resonance (Burns 2007; Meyer 2019). Resonance looks to build upon the political interest and involvement of those with whom issues resonate. By resonance, Burns (2007, p. 54) refers to how ‘people “see” and “feel” the connection between things’, that ‘they “know” that it is related to their experience’ and that ‘they are ‘energised’ and ‘mobilised’ by such connections. As Burns (2007, p. 54) indicates, ‘resonance may be a more useful concept than representativeness for both identifying issues of concern and possibilities for mobilisation’. This builds on work by Kendal and Raymond (2019), who challenge research in social values to think more carefully about meaningfully engaging people along the lines of communities of *place, interest, practice* or *identity*. In this case study, I explored what it would mean to enrol participants through finding the ways in which the project resonated with their ‘everyday’ (Meyer 2019). This aligns with the recent case made by Cohen et al. (2023), who outline the notion of ‘riverkinship’ as a more generative basis for mobilising political communities.

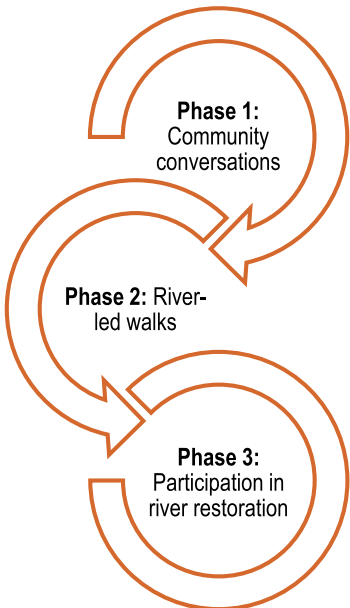
In terms of *place*, each phase was based in the place of concern. The methodological experiments of More-than-Human-Participatory research articulate the idea of creating ecological encounters in methods design. Noorani and Brigstocke (2018, p. 26) indicate that ‘through intentionally building stages and spaces for the intermingling of human and non-human agencies, and slowing practices

down, hybrid forums of knowledge and expertise can offer innovative practical and political responses’. Thinking about place and ecological encounters has been explored in contexts relevant to FRM. For example, the performance-based storytelling approach of Scott-Bottoms and Roe (2020) took place in rivers in Yorkshire engaging ‘mini publics’ in discussions around what it means to be a ‘hydro-citizen’. Similarly, this is what Strang (2020) makes the case for in re-imagining ‘the river’ as a site for ethical encounters. Dunkley (2023) also outlines the importance of place through the transformative potential of citizen science by demonstrating participants becoming attuned to the more-than-human in river monitoring projects.

To explore this pluriversal lens for social values in practice I outline here the ethnographic reflections that followed when implementing such methodological choices. These choices were in turn drawn from new materialist approaches and more-than-human thinking in geography and participatory research (Whatmore, 2006; Bastian 2016; Noorani and Brigstocke 2018). While ethnography is typically taken to mean the study of people, their relations with each other as well as their material realities, methodological approaches have developed that focus instead on elevating the agency of the more-than-human world. (Bennett 2004; Krause and Strang 2016; Laube 2021). These developments have been led by Indigenous worldviews and scholarship that challenges the inherent humanism of more traditional ethnography that assume a need to focus on humans alone (Todd 2016).

I approached the design of the project, outlined in Table 1 as a reflexive and iterative process whereby each stage was designed according to the identified needs from the community. Throughout the design, however, rather than close down or settle contested issues at any point as though fixed as ‘matters of fact’, I drew on de La Bellacasa’s (2017, p. 66) notion of ‘matters of care’ as a way to ‘generate more caring relationalities ... not so much a notion that explains the construction of things than it addresses how we participate in their possible becoming’. In this way, care becomes integral to the method as a ‘speculative affective mode that encourages intervention in what things could be’ (de La Bellacasa 2017, p. 66). As such the methodological design was not of a formal valuation process, whereby social values may be elicited as though fixed at any one point in time but rather it was a speculative exploration on the potential for social values to guide the democratic process of a project that looks to sustainably transform a socio-ecological system.

Table 1. Demonstration of mixed methods of social values research design.

Phases	Methods	Participants	Process
 <p>Phase 1: Community conversations</p> <p>Phase 2: River-led walks</p> <p>Phase 3: Participation in river restoration</p>	<ul style="list-style-type: none"> • Semi-structured interviews • Informal conversations through stalls • Participant observation 	<ul style="list-style-type: none"> • Local environmental group (St. Nicks) • Local councillors • Environment Agency representatives • Over 100 community residents 	Over the course of 4 months in the build-up where restoration works were already in motion
	<ul style="list-style-type: none"> • 'River-led walks' to elicit dialogue on people-river relationships 	<ul style="list-style-type: none"> • Local environmental group (St. Nicks) • River • More-than-human participants • 40 Community residents 	4 walks lasting one hour over the space of two weeks
	<ul style="list-style-type: none"> • Community-led restoration activities • Focus group meetings to reflect on restoration project 	<ul style="list-style-type: none"> • Local environmental group (St. Nicks) • River • More-than-human participants • Mixed set of 24 participants from phase 2 	12 sessions across 3 months

4.1. Case study; Hull Road Park beck restoration, York, UK

The case study looks at a small river, a beck, restoration in Hull Road Park, the largest green-space in the city centre of York, UK. The need for the project taking place at Hull Road Park was largely identified by the ecologist for the local environment centre, St. Nicks. In the 1950s, Osbaldwick Beck was blocked by a series of weirs which effectively turned the beck in to a series of ponds. As a result, silt was no longer easily washed away or carried downstream and so deposits would build up. This process required the beck to be dredged at regular intervals; a management approach that is now considered unsustainable. Further to this, giving the beck 'more space' was initially understood to reduce the severity of flooding in the local area. The proposal for this project then was to partially remove the weirs to restore the flow of the beck. This case study was presented to me by one of the Environment Agency project managers I interviewed as a 'win-win for people and nature' (P3).

Though the EA was taking responsibility for the engineering works, i.e. the partial removal of the weirs, St. Nicks was leading the restoration works afterward. While the overall goal was to 'restore the beck', the remit was open-ended as to how that design might look and what form the management of the beck would take afterwards – this was the starting point to explore the potential for social values to help guide this process.

5. Findings

I will outline the findings over the three phases outlined in Table 1 alongside my own reflections on the process. The beck runs through Tang Hall, a socio-economically deprived urban area within York most recently suffering from the UK government's economic measures of austerity with little public investment in recent years. This posed a specific challenge as a starting point for community engagement on my own part entering as a perceived outsider but also in terms of the wider political context. While I have familial connections to the Yorkshire moors, I was participating in these conversations as a middle-class researcher associated with the University of Leeds and not living in the local area; I was wary that this could entail a lack of trust that I might not properly care or listen to the needs of this community, or that I might only be involved for a short period of time as a form of data extraction of little reciprocal benefit to the community. I was aware that there could also be frustration that I lacked the formal power to affect the political and economic arrangements that shaped some of the concerns of the community (Gani and Khan 2024). Further to this, by the time the initial conversations took place, key changes had already happened to the river and to the people in the community with little space for meaningful involvement provoking a range of emotions and conflicts about the project. The two weirs had been partially removed which had already drained the stagnant water revealing decades of silt and litter ranging from shopping trolleys to scooters amidst the wildlife (Figure 1). For a project that was advertised as being 'for nature', one community resident referred to it as 'ecological vandalism (P13)'.



Figure 1. The first photo taken of Osbaldwick beck from a bridge at the lower reach of the beck in Hull Road park before the river restoration works had begun, demonstrating how the beck had been transformed into a series of ponds. The second photo was taken in the same place shortly after the Environment Agency had carried out the engineering works to partially remove the lower weir which drained the beck revealing the build-up of silt. The third photo was taken in the middle reach of the beck in Hull Road Park demonstrating the litter and debris revealed in the silt left behind once the water levels had continued to decrease.

5.1. Phase 1 – community conversations

These early changes in part gave rise to a lot of anger in the community. Information about the project had been delivered through local council newsletters as though ‘matters of fact’ that people simply needed to understand (Latour 2004). However, many of the individuals who were angry had an intimate knowledge of the local park through a familiarity with the species and habitats there from foxes and ducks to mooring hens and herons. It was not a lack of understanding that was the issue, rather, this project clashed with local worldviews, albeit a dualist worldview as to how the river should be managed. This was likely the result of the dualism that underpinned the management of the beck for most of these residents’ lifetime; for many they had not *encountered* the beck in another way. One resident told me ‘*I get what you’re trying to do, but this is a park, you’ve got nature up there [pointing to the rural suburbs of York and to the Dales beyond] and you’ve got nature down there [pointing to St. Nicks Environment Centre], but this is a park for people*’. This resonated with others’ feelings that emerged in an air of ‘suspicion’ towards St. Nicks activities in restoring nature in urban areas as though it was encroaching on ‘people’s’ spaces. The management of the beck till this point had been reflective of a technocratic approach, dredging with high material and energy costs, was based on very specific worldview that looked to maintain the beck as a pond for purely instrumental, amenity value; on account of how people lived *from* the beck; a management approach that was itself part of a longer history of river management, where water is channelled and drained off the land for agricultural use (Tunstall et al. 2004; Raymond et al. 2023).

Such a worldview differed with the worldview of the local ecologist, who would use such encounters with the community as a testament to the frustration of having to do community engagement. However, a pluriversal

approach allowed for these contested worldviews to co-exist while I tried to understand the ethical stakes in this context. In response to these moments outlined above, simply the act of listening would take the heat out of these exchanges. At times, I felt at an advantage to hold these conversations in that I was distanced from the Environment Agency and the council with whom the feelings of distrust and even anger seemed to be particularly targeted. It was clear the democratic deficit in such FRM schemes had in turn instilled a lack of institutional trust. Conversations would then start from a point of understanding what mattered in this context, ‘*what does the beck mean to you*’, ‘*how do you interact with it*’ and ‘*what would you like to see?*’ The conversations then shifted away from one of needing to ‘obtain support’ or get buy-in but one of starting with the community’s concerns. From here, there was a noticeable desire for change; people picked up on the unpleasant smells of the stagnant water, the amount of litter people throw in to the water (out-of-sight-out-of-mind speculated as the reason), or the risk perceptions of the water as dangerous (both unclean but also the silt had caused some people to get stuck when trying to retrieve items that had fallen in the water) – the fence separating the water off had become emblematic of this relationship. There was a potential desire for the beck being different but there had been no space for these possibilities to be explored in the decision-making process to date.

While the project resonated with many who came past, there were key participants who emerged from these early conversations. One such example was a local resident who was also a hydro-geomorphologist. While this felt fortuitous, the participant pointed out that he lived in this area because his family house backed on to the beck, he had always been *drawn* to water and so was eager to get involved. From these conversations, I felt the next phase ought to focus on how the beck itself could become more active in the design and decision-making processes.

5.2. Phase 2 – river-led walks

The walks were co-designed with the ecologist from St. Nicks Environment Centre as well in response to the needs identified by the community around how the beck could be different (e.g. smells, sounds, improved biodiversity). We planned to follow the upstream stretch of the beck that flowed beyond Hull Road Park and took us through different residential areas that had been indicated by various members of the community as places that mattered to them or indicated different management approaches. Finally, the walk was designed around a series of stopping points where I would encourage ‘ecological encounters’ of the kind Noorani and Brigstocke (2018) outline which would form the basis for our dialogue (see Appendix Table A1) which outlines this basic structure that I used along the four walks).

At an early stage near Osbaldwick village, we would talk about managing becks according to a larger catchment basis that exceeded thinking about management in Hull Road Park alone. At times, unexpected encounters took place that challenged participants’ thinking and where the relationality of water ‘forced thought’ with the participants (Whatmore 2013) (Figure 2). For instance, during one of the walks, we were interrupted and dispersed by intense rainfall. The heavy rainfall then quickly transformed the colour of the beck from clear to murky brown coming from the various drainage pipes that collected water from the road, emptying into the beck. This served as a powerful prompt that

demonstrated the way in which silt and pollutants from the road find their way into the beck and then become washed downstream. Participants then began to consider this ‘dirtier’ water not being able to escape the previously stagnant water at Hull Road Park that was blocked by the weirs. This experience led to discussions about dredging as a technical engineering management approach that requires heavy machinery to dig out and excavate all of this silt build up at regular intervals and how this was an energy intensive approach, that would not address the material reality that the beck would always pick up more and more silt. These conversations led one participant to ask the group if there are ‘ways that we can help the beck to become more self-sustaining’ (P18). The participants, in considering the beck as an agential being, were not thinking about management on the beck as though simply a question of manipulating it to suit our needs, but rather they had begun thinking about working *with* the beck and *with* water, considering ways of helping the beck along the way.

At the next stop, the beck had more space and meandered through the greenspace beside the recent housing developments there. As a result, we could hear the *sounds* of the beck flowing and there were noticeably different *smells* coming from the beck that contrasted with the complaints of the smell of the beck coming from earlier conversations. One participant reminisced about growing up near a free-flowing river and how they could hear those sounds of the water as a child. Now that they had a baby on



Figure 2. Two photos taken at different stopping points during the river-led walks. The first photo was taken in Derwenthorpe (see Appendix, Table 1 for outline of the structure of the river-led walks), showing participants reflecting on the different management approaches of the beck at this area as well as the different sounds and smells of the beck. The second photo was taken at Osbaldwick village where the local ecologist is pointing out the water vole rafts surfacing discussions around the more-than-human life that also live with the beck.

the way, they hoped that their child could have a similar experience of the beck in their local Hull Road Park. Here, we could also see the different types of habitats offered by different features on the banks of the beck, such as shading and sheltering for small fish, acting as ‘nurseries’, which in turn might attract a greater variety of bird species; at one stage a participant noticed a kingfisher and at another stage, someone excitedly pointed out a heron. These moments created a sense of community whereby values were being generated beyond self-interest and the political and ethical stakes were being identified through these relations with the water and with other beings. Whether or not these more-than-human beings could be seen to be participating in these processes, these encounters undoubtedly affected people to think with and through these beings, encouraging the kinds of empathy that Kester (2004) acknowledges.

Another ‘ecological encounter’ centred around the water vole population living in the Osbaldwick Beck, pointing out the water vole ‘rafts’ that St. Nicks had set up there (Figure 3). At other stages, these encounters concerned certain plant species, including ones that dominated and were considered invasive, such as the Himalayan Balsam that disperses its seeds by using the beck to take seeds downstream. We used these encounters to open up matters of concern; focusing on issues of governance scales, how ecosystems (such as the beck) pose transboundary issues; how the movement of water is used by other species, animals and plants, as a means for habitat and travel. These considerations, as well as the walk itself which followed the beck, challenged the logics of political representation that might typically have been considered the norm in such a context. Participants no longer saw the issues at Hull Road Park as abstracted from its surroundings, simply a park separate from nature ‘up there’ and ‘down there’ but as connected.

Thinking and valuing with and through the beck in this way encouraged participants to think about the politics of living with the beck differently. For example, one participant, reflected on the walks and dialogue saying “*It’s been eye opening I hadn’t thought of the beck in this way*’ (P14). Another participant who initially was keen that there was a form of ‘Friends of Hull Road Park group’ that might look after the beck, decided that a better idea might be some kind of ‘Friends of Osbaldwick Beck’ group that spanned across the different council and parish wards that marked the usual boundaries for local coordinated political actions. The walk itself then seemed to be challenging the perspectives of the participants in potentially emancipatory and politically generative ways (Edwards et al. 2016). While not all those who attended the walks felt they could commit to the next stages of the restoration project, they were mobilised and interested to talk about it in their respective households, community and interest groups; the sites of ‘informal talk’ that Mansbridge et al. (2012) point out as key boundaries of the deliberative system.

Rather than starting with attempts to gather a representative sample, beginning with these people with whom these issues resonated had built a politically motivated group who were eager to engage with others as well as many who were willing to volunteer in the restoration activities. Allowing participants to articulate concerns for themselves developed the perspectives of others through building connections of solidarity while respecting difference between participants. For example, at one stage a local resident expressed concern at the prospect of the paths in the park being lit-up at night for nocturnal animals, to which women in the group expressed how important this lighting would be for them to feel safe. Sharing this perspective led the local resident to re-evaluate their concern around lighting. At another stage, while I attempted to make the route



Figure 3. The first photo was taken from the upper reach of the beck in Hull Road park demonstrating the newly co-created banks as a form of negotiation between the beck and the volunteers. The second and third photo were taken from the same location as the first photo in the upper reach of the beck 5 months later. These two images show how the banks held their shape during a period of heavy rainfall.

accessible for all bodies, one participant joined on a mobility scooter which required at one point, a minor diversion. This prompted participants to consider the accessibility of different footpaths along the beck for different bodies. As a non-disabled male, it was important to maintain a critical and reflexive stance to spot these moments of difference and create space for these interdependencies to be recognised. Further still I found my own starting points and assumptions may indeed have mirrored the assumptions of the post-materialist account of values. On some level, I felt having an ecologist co-lead these walks may indeed bring about an element of social learning akin to a form of environmental education (Reed et al. 2010). It was clear, however, that this was not the case; this was not a community who were simply in need of being informed or educated about the ecological benefits of such schemes instead this was a community that had been politically neglected. Rather, through these river-led walks, we were able to engage participants on issues that mattered to them whilst encouraging, through such ecological and ethical encounters, an expanded understanding of the social.

5.3. Phase 3 – participation in river restoration activities

The local resident hydrogeomorphologist was especially keen to be involved with the design of the beck restoration process. This participant was keen to think *with* the water and proposed that in this project we learn from the mistakes of typical restoration schemes which look to impose new meanders for the water to follow. Instead, the key phrase that he used and that other participants began to adopt was ‘to let the water decide where it wants to go’ (P8). To enable the water ‘to make such decisions’, took the form of creating ‘deflectors’ out of bits of wood, branches and logs, as well as even bits of human-made debris collected from the beck, from metal rods and small poles to bricks. The slower speed of working by hand, allowed the water time to respond, like a form of negotiation between the volunteers and the water; the new channels were seen as being co-created by both the volunteers and the beck (see Figure 3) (Higgs 2003). Wider changes began to follow for human and more-than-human communities alike. As the flow returned, the water quality began to improve too with the slow meandering flow beginning to channel a way through the build-up of silt re-oxygenating the water and the substrate of the beck. Larger sediments began to settle in place of the silt being shifted on to the banks and downstream. This led to further changes in the biotic community; no longer was life in the beck largely made up of pollution-tolerant species such as water lice (*Asellus aquaticus*) and

freshwater leeches (*Erpobdella octoculata*) but a range of more pollution-vulnerable species such as Caddis fly larvae (Leptoceridae) began to establish, indicating the improved water quality. Changes were noticed on the banks of the beck too; the growth of plants on the previously desert-like silt affected those who were most critical of the project, e.g. the smell of the stagnant silt began to be replaced by the plants that emerged such as Watermint (*Mentha aquatica*) and Watercress (*Nasturtium aquaticum*) plants. This was reflected in the language of participants, one citing how it’s ‘*amazing what happens when you give things a chance*’ (P6). Volunteers over the course of the sessions would start to observe and monitor such material and sensory changes, through water sampling (children particularly enjoyed counting invertebrates). Such biophysical indicators, or perhaps *socio*-indicators (Lorenz 2021), in effect came to stand in as value indicators for the social values that were emerging in the interplay between human and more-than-human (Kenter et al. 2015; Dunkley 2023; Raymond et al. 2023). These processes were generating social values; ethical stakes were emerging, grounded through the material relations between plant species, invertebrates, fish, birds and people.

Over the course of these stages, my earlier concerns of being seen as an outsider subsided as my own participation in the project over 8 months entailed a level of familiarity and regular encounters with many of the people affected by the project. This both established trust yet also these interactions provided indicators of the project’s progress. For example, one local resident who was particularly angry in the earlier stages at the seeming displacement of the mooring hens began to provide me with regular updates on sightings on their daily walks when we were knee-deep in excavating the silt on to the banks of the beck. These material changes were shifting the ethical stakes of the decision-making; this was no longer a stagnant body of water for amenity value alone rather it was being valued as a living ecosystem, surfacing ethical questions of how we live *with* the beck (O’Connor and Kenter 2019; Kenter and O’Connor 2022; Raymond et al. 2023).

While my own involvement with the project came to an end, the project took on a life of its own and continues at the time of writing. Local residents expressed interest to St. Nicks in being able to get closer to the water now that the beck was further away from the fence that kept people away from the previously risky stagnant water. St. Nicks, through new funding proposals, is now beginning to build a boardwalk that will allow people to walk over the new ‘wetlands’ and see the species that have settled in (see Figure 4). There have been discussions to remove the fence entirely as the water is no longer perceived as a risky or dangerous space.



Figure 4. All three photos are taken from the same location showing the middle reach of the Osbaldwick beck in Hull Road park. The first photo shows the desert-like silt with litter revealed after the initial drainage of the beck. The second photo, taken 2 months later shows new channels starting to form as well as plant growth establishing. Third photo taken 1 month after the second photo shows the continuation of new plants colonising the banks between the new channels of the beck.

6. Discussion

This case study, though a speculative exploration of the potential of a pluriversal lens for social values, demonstrated key departures from traditions in the social values discourse. These departures, as I discuss here, open up social values research to consider (i) the role of the researcher in methods as well as (ii) how a pluriversal lens can unsettle technocratic governance and as such enact democratic transitions that have implications for a wider range of sustainability contexts.

6.1. Performativity of social values

Based on a pluriversal lens, I approached these networks and the issues they presented through the notion of ‘matters of care’ that de La Bellacasa (2017) outlines. de La Bellacasa (2017, p. 66) does not propose that ‘matters of care’ implies a method that might ‘unveil’ what matters of fact are but as a ‘proposition to think with’ as a way to encourage that we ‘engage with them so that they generate more caring relationalities’. While the social values discourse is predominantly concerned with developing methods to ‘unveil’ the values in a given context, in this case study I became more interested in ways in which I could participate in the ‘possible becomings’ of social values as though they were *in the making*. The supposed tensions between focusing on democratic processes alongside achieving sustainable outcomes can be seen in the social values discourse as a tension between those who variously understand values in a *descriptive* sense, i.e. values methods

aiming to describe people’s values as they *are* in order to include them in decision-making processes, as opposed to those who conceptualise values in a *normative* sense, i.e. focused on shifting people’s values towards more sustainable outcomes (Horcea-Milcu et al. 2019; Stålhammar 2021).

However, a pluriversal lens acknowledges the *performativity* of our methods recognising that the researcher is never outside of the ‘sticky web of relations’ or the context in which they are researching (Bennett 2004, p. 365); or as Law (2004) puts it we are never simply describing realities in social sciences but we’re actively involved in the process of *making* realities. That doesn’t mean that we can simply determine what *ought* to be the outcomes in each context but rather this calls attention to the power of our methodological choices and the ethical responsibilities, or our ‘frameworks of care’ (Jacobs et al. 2020; Tomateo and Grabowski [this issue](#)). A relational approach to social values then tends towards participating in the possible becomings of relationships, neither describing values as they are (as though fixed) nor presupposing what values *should* be (as though an objective outsider). de La Bellacasa (2017, p. 143) addresses this point: ‘Interventions in co-shaping do not necessarily need to be a normative move by which an “enlightened” social scientist or humanities scholar would put on the ethicist hat and adopt the role of an arbiter pointing out the right and wrong ways to go in the technoscientific moral maze – but as an immersed participant in the field. More than following the actors, less than showing “the” way’. While this open-endedness may seem counter to the urgent need for ‘sustainable outcomes’, it is worth contesting the

specific moments where decisions are understood to have been 'made' but instead recognise the ongoing processes through which ethical and political stakes emerge. The open-ended character of the project not only allowed but actually *required* people to participate in the project to reflect and re-articulate the ethical and political stakes of the project as it continued. As Hammond (2020, p. 68) has argued, sustainability is not an end state but rather a perpetual process of adaptation to socio-ecological change; 'cultural transformation is a meta-condition of sustainability that implies a *necessity* of democracy'.

In this way, social values through a pluriversal lens can be a tool for the democratic organising of community economies that Miller (2013) outlines through the work of Gibson-Graham (1997) via the interplay of three 'moments' of community economy; ontology, ethics and politics. Through the moment of ontology, social values through a pluriversal lens contested our understandings of how the beck had come into being challenging ideas of the beck as a fixed, static entity; through the moment of ethics, social values created a space where ethical negotiations could take place, not in the pursuit of some assumed 'common good' but through exposing our 'interdependence' for negotiation or contestation (Miller 2013, p. 523); and lastly through the moment of politics, social values were 'enacted' through collectively beginning to work with the river, making certain 'exclusions' (e.g. of straightened edges to the beck, and of certain species such as Himalayan Balsam) while allowing for expanded social relations to emerge and flourish. Through a pluriversal lens, social values can trace different dynamics and not just describe but perform relations that may form the basis of more generative and non-extractive relationships.

6.2. Pluriversal lens as a tool to challenge technocratic governance

Technocratic governance systems typically make appeals to engagement processes in the form of consultations and community surveys which lack openness from the outset; the room for different possibilities emerging is constrained through the pre-defined terms of engagement (Lane et al. 2011; Mehring et al. 2018, 2022). The centring of one worldview, one knowledge system and one value system prevents the meaningful participation of people who may hold different worldviews, different knowledge systems and different languages of valuation, typically leading to conflicts (Martinez-Alier 2009). Conducting community engagement in FRM in this way, limits both our understandings as well as the possibilities of how we might live with water differently; an example of what Fry (2010) would refer to as 'defuturing practices'. Decision-making processes

are always involved in 'ontological politics' (Whatmore 2013); whose worldviews and knowledges are included or excluded and what languages of valuation are accepted as legitimate (Martinez-Alier et al. 1998; Acharya and Prakash 2019; Hikuroa et al. 2021; Rickard and Ludwig *this issue*). A pluriversal lens therefore offers explicit attention as to how the underlying understandings of realities, of how things *came to be*, can shape how things might become *otherwise* (Escobar 2018). This bears resemblance to what Hammond (2020) refers to as 'glass ceilings' in democratic practice, as cultural perceptions of reality that may obstruct possibilities for sustainability transformations. A pluriversal lens for social values then works to reveal such glass ceilings, identifying the politics of the real and the possible in democratic processes (Escobar 2020). This was evident in the afterlife of the project, whereby new funding proposals followed the social values that emerged from the project. This reversed the technocratic logic typical to FRM of needing to demonstrate *value for money* as a perceived constraint in decision-making, whereas here was an example of *money for values*. This finding is particularly relevant in the context of recent work exploring the possibilities of democratic control of the monetary system in degrowth futures (Olk et al. 2023).

More broadly, a pluriversal lens, grounded in what matters to people in their everyday lives, has political implications for wider sustainability transformations where an emphasis on technical knowledge of ecological limits may be felt as *imposed on* communities (Pelenc et al. 2019). For instance, Romano (2012, p. 568), in discussing the tension between degrowth goals and democratic processes, claims 'the degrowth project risks being critical but not rooted. It condemns itself to dwell in a moralistic sphere, without connecting to the flesh and soul of real social actors'. Similarly, Pelenc et al. (2019) make the case for grounding calls for sustainability transformations in place-based social movements, illustrating how sustainability becomes too readily de-politicised without explicit attention to the role of power relations in determining what worlds are sustained. A pluriversal lens can work in this vein to help facilitate transformations in such contexts through surfacing the political, remaining critical whilst being rooted in the flesh and soul of real social actors.

The examples in the case study above, though not tying into formal routes of political power, did serve as a demonstration of an alternative form of democratic practice that challenged the political logics associated with the post-materialist account of values that remain evident in value pluralism methods. As Schlosberg (2019, p. 5) illustrates, 'the [post-materialist] argument is that people get materially comfortable, develop post-materialist values, participate in representative

democracies to insist that public policy be reflective of these new values, and the state responds with new and improved policies'. However, owing to the domination of capital and market logics at the core of representative liberal democracies, this evidently does not happen in practice. This is not least demonstrated by the strong correlation between policy preferences and policy outcomes of the wealthiest minority in the USA as opposed to there being no such correlation amongst the poorer majority (Gilens 2015). In this case study then the political logics of building upon resonance, identifying those who could 'see' and 'feel' the connections between systems, or demonstrate 'sentipensar', enabled a very different kind of political process to emerge. It wasn't that this community didn't care for the ecological networks in this park, nor that they didn't understand the ecological values of the beck and simply needed to 're-discover' them (Everard and Moggridge 2012). Instead, community members would readily talk of the species they shared the beck with, as well as the broader concerns that they inextricably linked to the health and state of the beck (i.e. concerns around the safety of being near the water, and the lack of funding going into the maintenance of these greenspaces). Instead, creating such space in the values methods that allowed for these values to emerge, moved beyond the political logics of representation that would not have captured the emergence of these social values as though in a snapshot moment. For instance, the local political councillor who had earlier been the one to advocate and publicise the project in the local newsletter took a backseat, perhaps partly owing to the initial backlash it caused in the community with local residents initially feeling that this project was 'not in their name' (Tormey 2006). However, now that there was momentum behind the restoration project, the councillor became much more actively interested and looked to familiarise himself with the work we were doing. This again seemed to indicate towards the potential of social values to become politically powerful, not simply through attempting to passively 'feed into' the traditional routes of the formal political systems of representative democracy, but instead, a more radical community centred approach was providing the *basis* for political action (De la Cadena 2010).

In this way, a pluriversal lens for social values poses a 'way out' for those who could be seen as caught up in the defuturing practices of a dualist worldview such as FRM decision-makers or other contexts e.g. forest managers (Himes and Dues [this issue](#)). Yet, it can also signal a call of attention towards the political projects around the world that look to disrupt the dominant order of the neoliberal system (Hikuroa et al. 2021; Loh and Shear 2022). Escobar (2020, p. 75), when describing the motivations for using the 'pluriverse' as a design concept as well as a political project states that the pluriverse is

a 'tool, first, for making alternatives to the one world plausible to one worlders; and second, for providing resonance to those other worlds that interrupt the one world story'. This was particularly evident in the context of FRM as explored through this case study in York in the UK, a place which has historically benefitted from the dualist logics of river management that were exported and imposed through colonialism and the expansion of the 'one world world' (Da Cunha 2019; Hikuroa et al. 2021). A pluriversal lens centres the plural ways of knowing and being offering pathways that can open up to alternative worldviews, knowledge and value systems in such contexts where technocentric governance dominates.

7. Conclusion and future directions

A pluriversal lens for social values methods may be implemented in future methods that look to democratically facilitate sustainability transformations. The theoretical need to avoid dualisms is now well recognised within ecological economics, yet relational methods in practice in areas such as social values research have been slow to follow suit (Kolinjivadi 2019; Ortiz-Przychodzka et al. 2023). As demonstrated in this study, a pluriversal lens for social values centres methods that move beyond dualist methodological choices that dominate social sciences (Law 2004), platforming instead methods that focus on dialogue, listening (or attuning), social (in the expanded sense) learning and meaningful reflexive practice that looks to work *with* communities in a just and reparative way as opposed to working *on* or *for* communities (Gani and Khan 2024). If values practitioners are looking to work with diverse communities to explore alternative value framings of socio-ecological relationships, then engaging with a wider range of methods like these may better cohere with these theoretical approaches (Jacobs et al. 2020). Connecting with such a range of methods and practices will require greater collaboration across disciplines, for example through trainings and workshops for researchers that can share decolonial and pluriversal methodological insights from across the arts and sciences (Burke and Heynen 2014; Akama 2015; Rock and Taylor 2019; Gayá 2021; von der Haide et al. 2021; Ujuaje 2023).

The commitment to value pluralism within Ecological Economics and value articulating institutions such as IPBES (2022) seeks to move beyond dualistic and pre-dominantly instrumental ways of valuing humans' relationships with the more-than-human world. Embedding plural values in decision making requires thinking about values and economic practices in radically different ways (Kallis and Swyngedouw 2018). This is largely due to the

dominance of neoliberal economic systems that are designed to centre on the market as the value-articulating institution that relegates other forms of values to the pursuit of profit maximisation and capital accumulations (Moore 2015; Kallis and Swyngedouw 2018; Ortiz-Przychodzka et al. 2023). A pluriversal lens can open up social values methods to innovations in the designs of democratic processes to create space for relational thinking, facilitating transformations away from decision-making centred on extractive, living from, framings of human–nature relationships and towards more convivial, living with, framings of (expanded) social relationships.

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Appendix. A

Table A1. Outline of the structure for the River-led walks along Osbaldwick Beck plus the stopping points.

Stage	Context building; what are the stakes	Possibilities	Social values prompts
Start point: Osbaldwick Village	Discuss where the beck comes from and upstream issues. Point out water vole population here.	River wide joined up management. Land owner engagement – ‘catchment-based’ management. Check water vole rafts. Discuss water vole field signs and their conservation Identifying riparian plants and talk about management and cutting regimes.	Life value framework; What kinds of relationships with the water at each of the various stages along this walk. What do people notice that’s different about the beck here and for each of the following stages? What potential activities might each of the different stages of the beck afford us as citizens/as part of the community.
Derwenthorpe	Look at connected river habitat including wet grassland, swales, balancing ponds. Walk along beck to show natural meanders, implications for dredging.	Improved management of connected habitats. Improved mowing regimes of riparian buffer? Why dredge? Implications of this management option. Thinking about the invertebrates that live in the water, hard to see but important indicators.	Different sounds of water flowing? Different smells, alongside beck? Who else is living with the beck, or relies on being connected to the beck? e.g. values of shading for fish, but sunny spots for others. Potential to create similar habitats in Hull Road Park?
Tuke Avenue greenspace	Discuss bank management – different mowing regimes Discuss plants naturally colonising downstream – some dominating, implications of this.	Potential for water voles establishing. Creating less shaded areas along beck. Creating connected grassland habitat.	These spaces aren’t necessarily nature versus urban, they have all developed over time based on choices made by people in the past; choices to channelise, to allow the beck space, to block it up (as in Hull road). As well as the beck itself trying to create its own paths.
Hull Road Park	Issues caused by modifications. Stagnant water, silt build up. Concrete channels. What is river wildlife vs pond wildlife? History of park creation and formation. Was it like in the past? Litter, access and care for the beck.	Allowing nature space to restore itself, helped along by human hands (See restoration in action) Identify colonising and sown seeds and plants. Potential for community resource – education, ponds, etc. Digging meanders and seed sowing. Litter clean ups?	As we’ve followed the beck along the way now, we’ve begun to see ways in which it has been restricted and places where it has been allowed more freedom to move. Now in Hull Road Park there’s a lot more space and room for the beck to find its way and to make its own course/channels. What possibilities might this now open up in terms of what we’ve looked at over the course of the beck walk. Think back to the sounds and smells we experience earlier. What would you like to see based on some of the previous stops but also according to your own stories/histories of living with the beck?
End point: St Nicks	Management habitat for wildlife. Silt from upstream Himalayan balsam from upstream. Water vole populations hanging on – American mink threatening. Culvert under Melrosegate and St Nicks Why does it flood? Size of culvert etc Idea that this project, gives more room for the water to spill its edges., a bit like a mini ‘wetlands’.	Fewer upstream issues. Buffering around key wildlife site by improving connected habitats. Recap some of the key features of the walk: Identifying certain species, looking closely for indicator species in the water. Encourage participants to keep an eye on these over time to see how the water quality might be changing, whilst also checking to see how the beck is carving its way through the new space at Hull Road Park, follow where it is wanting to go.	Thinking of this project as a process that will evolve and change. How might we negotiate the design and use of this space alongside the beck and the other species that live with it?