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Negotiating wilder nature: developing a views-of-nature typology

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Abstract

Communication is an integral part of landscape management, and effective dialogue across views of nature and knowledge systems is needed for sustainable transformations. To allow for a plurality of biodiversity management practices, the ability to recognise and reflect on diverging management approaches and attitudes is needed to facilitate a dialogue between holders of conflicting visions. This article offers a typology that helps identify and understand competing discourses, or 'nature arguments', which actively shape what can (or cannot) be thought of as reasonable management strategies to accommodate biodiversity. We explore nature arguments anchored in fundamentally different assumptions about what is right, appreciated or true, and identify three different ideal types. In literature, web-pages, public debates and professional journals, we see a trend in views of nature towards 'a wilder paradigm', challenging existing approaches to biodiversity accommodation. Comprehension of the different nature views, including one's own, and a simultaneous awareness of 'persuasive powers', can help the facilitation of a difficult and sometimes heated negotiation.

1. Introduction

1.1. Wilder landscapes - the discourse that challenges the old paradigms

We live in the 'Anthropocene Epoch' (Crutzen 2002), an era in which every corner of the globe and its habitats has been impacted by human activities. The establishment of the Anthropocene Epoch mark a fundamental change in the relationship between humans and the Earth system (Lewis and Maslin 2015). As a response to address this change, i.e. to stop and reverse the human-induced biodiversity decline, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) recommend a transition towards a multitude of landscape expressions and functions, based on the inclusion of multiple knowledge systems. For this to happen, Pereira and Bina (2020:311) argue that we need to 'confront and resolve the fundamental epistemological and ontological divide (what is considered true or not and one's belief in what the world *is*) that stands in the way of transformative change'.

To allow for a plurality of biodiversity management practices that can accommodate different knowledge systems and priorities, decision-makers need a deeper understanding of diverging biodiversity management approaches and attitudes to facilitate a dialogue between holders of conflicting visions. Successful facilitation of such dialogue depends on the ability to recognise and reflect on the different views of nature that exist.

An upcoming view of nature may have taken its outset in the diagnosis of the Anthropocene. This notion provokes thought (Lorimer 2015, Haraway *et al* 2016) and has become a catalyst for biodiversity promoting experiments (Lorimer and Driessen 2016) and a corresponding discourse, promoting the wild and uncontrolledThis 'wilder landscape' refers to the pre-allocation of an area to nature's own processes. It is thus a management instrument that aims to shape a natural-processes prioritized landscape. It is also a specific landscape expression, a vision, perhaps even a longing or deep-seated need (Kahn and Hasbach 2013) for landscapes untouched by human activities. It implies the acceptance of non-utility and non-conservation, is unpredictable and has an aesthetic expression, unusual to many Europeans (Saltzman *et al* 2011, Randrup *et al* 2020). Room for

other species than the human is the essence of the new discourse. The trend goes towards multispecies commons and cultivation (Dooren and Rose 2012, Searle and Turnbull 2020), in which natural dynamics prevail as a principle, whether in large-scale rewilding experiments (Helmer *et al* 2015) or in smaller-scale urban landscapes (Knudsen *et al* 2019). Indeed, a simoultaneous trend is the awareness of existent and potential urban biodiversity (CBD 2012), shifting the focus away from urbanisation as merely a problem encroaching on natural sites (Bulkeley *et al* 2022), and blurring the rural-urban dichotomy where the 'natural nature' has been thoroughly established as a rural domain.

The emerging wilder landscape approach challenges two existing paradigms that aim to accommodate biodiversity. First 'nature conservation', which in the European tradition is reactive, aiming to preserve what remains of preexisting landscapes, habitat types and rare species, and restore nature to a predefined state (Lorimer 2015, Biermann and Anderson 2017). Second, 'sustainable development' that re-focusses biological conservation towards human wellbeing (Petriello and Wallen 2015), being concerned with the continued supply of natural resources and services for the benefit of man. They increasingly collide in competition over land-use (Haberl *et al* 2014).

The recent wilder trend is contested by both these paradigms, and so the landscape debate has intensified (Lorimer 2015, Deary and Warren 2017). Traditional nature conservationists are concerned with the lack of management plans with specific targets, and dispute the 'authenticity' of restored ecologies (Pellis and Jong 2016). Sustainable development proponents fear the exclusion of human-nature complementary strategies in biological conservation (Kareiva and Marvier 2012). They worry about setting aside land for uncontrolled natural processes, dreading phenomena that they seek to control (Dandy and Wynne-Jones 2019).

Another debate concern potential limited access for users, and year-round grazing animals has become a specific object of a heated public debate about fencing, animal welfare and the degree of human responsibility for the herbivore species that are generally perceived as domestic animals (Sandøe *et al* 2022). Concerns with urban wildness mainly regard aesthetics, including the sense of safety, the challenge being to balance human perceptions, needs and uses with ecological requirements for enhancing biodiversity (Aronson *et al* 2017).

In essence, the debate is about human intervention and presence in 'natural' landscapes. The wilder trend triggers strong emotions not usually observed in nature debates, and among people beyond those who usually express an opinion about landscape management (Lorimer 2015). Clearly, values and passions are attached to cultural landscapes, but also to the idea of wilder landscapes (Wynne-Jones 2022). The latter appears to collide with prevalent institutions as well as with cultural norms and aesthetics.

Different representations of landscapes, and corresponding answers to the biodiversity crisis, are expressed in competing discourses and knowledge practices (Lorimer 2020) underlying which are different views of nature (Gobster 2001, Mace 2014, Mansfield *et al* 2015). As a consequence, biodiversity management strategies are many and varied, and exist among other landscape management strategies that cover a wide range of social, economic and other goals, such as adaptation to climate change and human well-being. On top, the emerging wilder paradigm brings new actors into the field (Bulkeley *et al* 2022, Thomas 2022a), motivating new management practices and forms of cooperation (Bulkeley 2019), sometimes in opposition to the existing management regimes.

The inclusion of different views of nature in landscape management, and the simultaneous exclusion of others, shapes landscapes and related policies (Buijs *et al* 2012). The alignment of visions and interests is a dynamic negotiation, sometimes solidified in institutionalised references to different nature baselines anchored in different professions, experiences, research fields or management practices. This challenges and may threaten the sustainability of the efforts of enabling natural processes as an important contribution to reverse the trend of biodiversity loss (Godemann 2021, Schulte to Bühne *et al* 2022).

As a first step towards the creation of a space that allows for effective dialogue across views of nature and knowledge systems, this article offers a framework to identify and understand competing discourses, or 'nature arguments', which actively shape what can or cannot be thought of as reasonable management strategies to accommodate biodiversity. This includes identification and analysis of major controversies in contemporary debates, what we denote 'landscape negotiations'.

We explore the anchoring of nature arguments in fundamentally different assumptions about what is right, appreciated or true, and identify three different ideal types (Weber 1949/2017). Constructing such a typology allows for the illustration and comparison of different patterns of concerns, preferences and thinking about nature that different stakeholders exhibit or describe, and helps us make sense of certain key differences (Stapley *et al* 2022). Since the ideal type is never identical with a real person it appears generalised, perhaps even caricatured. This is intentional and serves a purpose. Disclosing positions and/or contradictory interpretations is a guiding principle of environmental communication (Godemann 2021), and as Brulle (2010) found, promoting division and drawing up distinctions can be appropriate means to expand dialog to move beyond limited frames, and expand the range of solutions considered, that otherwise may be obscured by consensus.

Figure 1. Landscape conceptualised as both a representation and an expression.
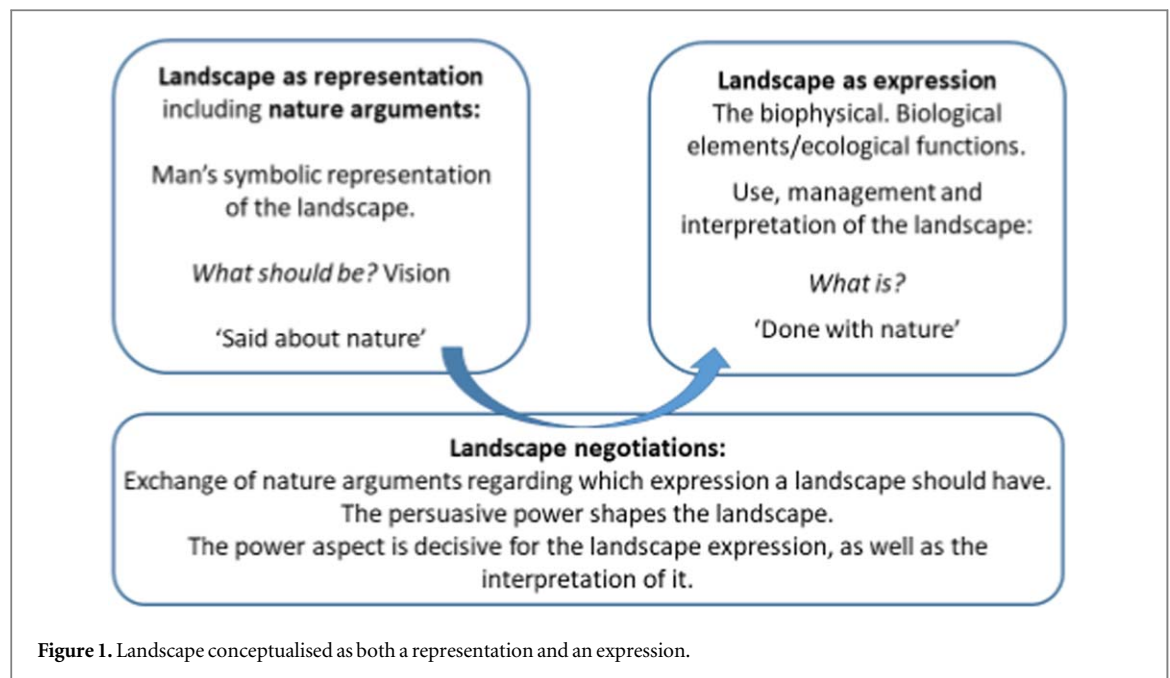
2. Conceptual framework: a performative approach

2.1. Views of nature

'Views of nature' refer to the implicit meanings that a group of people share, expressed through the shaping of nature into landscape, but which the individual may have difficulties in putting into words (Hansen-Møller 2004). Divergent views of nature show in environmental communication, pragmatic as well as constitutive (Pezzullo and Cox 2018), in disputes as well as in acts. The present study thus takes a performative approach to views of nature.

We can detect views of nature by paying attention to the aspects of landscape that different actors are giving importance, and to the concepts to which they attach meaning. We can identify them in both landscape expressions and representations, i.e. in the use and interpretations of existing landscapes, and in the nature arguments used regarding envisioned landscapes (figure 1).

2.2. Operationalising 'landscape'

Landscape management is the subject of negotiations between a network of administrative bodies, institutional arrangements, individuals and stakeholder groups at different governance scales (Hölting *et al* 2020). 'Landscape' in itself is a bridging concept between social, natural and human sciences, at once a 'perception category' as sensed or interpreted by man (Cronon 1995), and a manifest human-environment 'interaction category' (Balée 2002), as can be expressed by governance and management actions.

Landscape as representation includes symbolic representations of the landscape, as detected in art, maps, laws, plans, articles and speech in the form of nature arguments (Hansen-Møller 2004) about what the landscape expression *should be* (e.g. Van Dyke and Lamb 2020), and about 'what belongs' (e.g. Saltzman *et al* 2011).

Landscape as expression includes the ecological functions and biological elements of an area. *What is* tells about management practices. Changes in the composition of the elements necessitate a change in interpretations, which may cause conflict. Interpretations of *what is* tells about the observers' knowledge about the landscape (Oustrup 2004). It can also reveal the *meaning* or *values* that the observer attach to the landscape (Drenthen 2009).

2.3. Landscape negotiations

Landscape negotiations refer to the exchange of nature arguments regarding which expression a landscape should have, why and for whom. The ability of the interested parties to negotiate their visions affects the management and thus the expression and current interpretation of the landscape (figure 1). Landscape negotiation outcomes indicate who is authorized to take part in the biodiversity debate, and to make decisions about what life should be accommodated, and how (Biermann and Anderson 2017).

Table 1. Selection criteria to detect nature arguments.

	Inclusion	Exclusion
Population and Article type	Research community; mainly Europe	Practitioners, the general public, world outside of Europe, non-relevant research categories.
	Peer-reviewed articles, books, book chapters, dissertations	Popular articles, blogs, media, non-peer reviewed/ grey literature
Concept	Articles promoting either discourses or management approaches for biodiversity, illustrative of either ethical, aesthetic or knowledge-based values, or directly discussing these values	General non-biodiversity environmental questions.
		Targeting non-relevant SDGs.
		Water-systems.
Context	Land use and landscape management, both rural and urban	Topics outside the green sector at large, including: Non-terrestrial topics (marine/aquatic ecosystems related),
		Agricultural studies; Plastic pollution; Indoor environments

3. Material and methods: the process of review and constructions

In order to identify and map competing discourses in the ongoing landscape negotiations, we conducted reviews along two strings (Munn *et al* 2018); the first a scoping review to explore *nature arguments* and construct an analytical framework, the second to identify different *ideal types* and construct the views-of nature typology.

3.1. First search. Nature arguments: development of the analytical framework

The first search-string included the identification of topical literature, central concepts and their clarification. We compiled *population, concept,* and *context* criteria (Peters *et al* 2015) in table 1. to facilitate our search for nature arguments' categories.

3.2. Inclusion criteria

Population and Article type: We searched among academic literature, mainly from a European context. Biodiversity accommodation can look very different in e.g. the Americas, Africa or Australia, where a concept of 'pristine wilderness' referring to a pre-colonial state often exist, while in Europe, there is a very long history of agriculture (saltsman ss ss ssss).

Concept: The essence of what we were looking for and basic terms for our data-base search strings. Van der Windt *et al* (2007) categorise legitimising perspectives in their exploration of relevance of nature valuation in landscape planning. We found their division into 'ethics, aesthetics and science' almost fully covering our aim, and useful in the operationalisation of the nature argument. We use 'knowledge' as opposed to 'science' to include comprehensions that are not necessarily based on scientific research, such as experience-based arguments, when 'what is true or not' (epistemological approach) is proclaimed. One belief in how the world *is* (ontological assumption) cannot foreshadow that of others if we want to explore different 'worldviews', in this case relating to what nature is. In fact, as stated by Pereira and Bina (2020), the embracement of different knowledge-systems is decisive for halting the human-induced crisis of biodiversity loss, to diversify solutions.
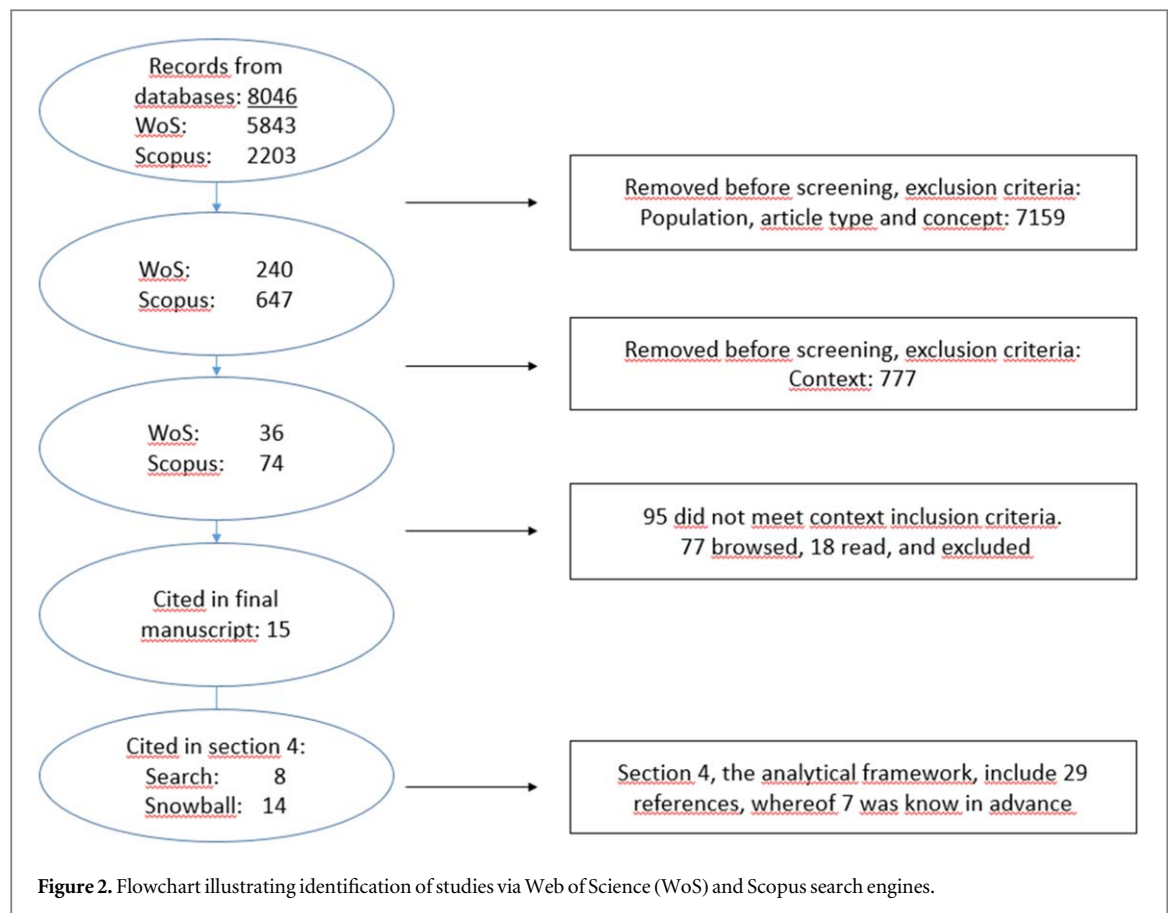
Context: The search covered terrestrial land-use and landscape management, including both rural and urban contexts.

The search in this first string was confined to English written texts. We put no time-limit to the search, it stopped in 2024. Figure 2 illustrates the process of our search, based on the criteria established in table 1.

As it appears, only 8 papers were cited to help characterise the three types of arguments, while the snowball-sample provided a more substantial amount of literature. Only the texts cited in the end are included in the final statement of results.

3.3. Search 2. Views-of-nature ideal types: development of the typology

The second search-string concentrated on the development of the *views-of-nature typology*. We searched for ethical, aesthetic and knowledge-based arguments within two types of publications: a) *Web-pages and professional journals* of supposedly opposite institutions in landscape practice, such as forestry associations, rewilding networks and nature conservationists, as well as of prominent controversies in the 'wilder landscapes' *public debates.* The criteria for selection were contemporary, clear representations or interpretations of landscapes. b) *Peer-reviewed literature* on nature/biological conservation, (re)wilding, wild(er) nature/

Figure 2. Flowchart illustrating identification of studies via Web of Science (WoS) and Scopus search engines.

landscapes and biodiversity. We selected articles that promoted specific landscape expressions, representations or management approaches through the provision of evidence-based conclusions, or ethical or aesthetical arguments. We searched English or Scandinavian language texts and comprised several, iterative searches, with an ongoing bolstering and refinement of the ideal types.

The typology thus crystallised on a research-based and empirical foundation, inspired by the ideal-type-analysis steps provided by Stapley *et al* (2022). After becoming familiarised with the dataset, we summarised the narrative including the main nature arguments of each text or web-page, including the landscape representations expressed through illustrations. The most oft-repeated arguments clustered around three main 'view-of-nature axes': nature as self-developing, as care-requiring and as an object of utility (table 2).

Through comparing and contrasting the nature arguments through representations and landscape negotiations, we explored the similarities and differences between the three clusters and established the ideal types: The paradigm promoting nature's own development requires the human *facilitator*. The nature conservation paradigm requires the *steward* to maintain the desired landscape composition. The sustainable development paradigm requires the *master* to control natural processes. After having explored their principal arguments in the next section, we carve out their characteristics.

4. Negotiations between different views of nature

Here we present and discuss some of the main controversies in the negotiations about wilder landscapes as a means to promote biodiversity. Rather than an exhaustive list of opposing views, we present illustrative examples of fundamentally different assumptions about the nature of nature, and the human relation to it.

4.1. Ethical landscape negotiations
Humans have the ability and strength to judge, categorise and treat other species according to self-chosen criteria. Whether they consequently hold a special ethical status is however not given. This is not just a simple division between Anthropocentrism and Ecocentrism (Groot *et al* 2011). Different religious and philosophic reflections on the special status of humans lead to positions ranging from human-chauvinism, over hierarchical approaches, to biospherical egalitarianism stating that no justifications exist for attributing more value to the

Table 2. Synthesised result of the review and analysis.

	Ideal type		
Argument	The master *Nature for people*	The steward *Nature by people*	The facilitator *Nature for and by nature*
Ethical (moral justifications of management choices)	**Nature/biodiversity are 'natural resources', with instrumental value.**	**Nature/biodiversity is cultural and natural heritage and has historical, naturel and recreational values.**	**Nature/biodiversity is self-willed, and has intrinsic value.**
	Nature must be **controlled**. Distinction between useful and harmful species. Cost-effectiveness.	Nature must be **cared for**. Species are carefully selected. Invasive species control.	Nature is self-sustaining. Focus on keystone/trophic cascades. Non-human agency.
	Human dominion to ensure sustainable use and future supply and employment in resource use and processes.	**Human stewardship** via continued intervention to protect and preserve species, habitats and expressions.	**Interspecies companionship** to enable natural dynamics to restore ecological processes and prepare for an unknown future.
	Biodiversity can be accommodated in production landscapes.	Biodiversity can be accommodated in cultural landscapes.	Reservation of land for natural processes (land sparing).
	Principle of action: Voluntary agreements, e.g. certification.	**Principle of action**: Institutionalised regulations and policies.	**Principle of action**: Agreements and policy revisions (allow for wildness).
Aesthetic (preference, related to senses or appreciation of landscape)	**The utilised landscape**.	**The idealised landscape**.	**The self-regulating landscape**.
	Economically valuable species and functions.	Maximum diversity of native species.	Trophic species diversity.
	Controlled populations.	Protected (selected) populations.	Free-roaming and self-sustaining populations.
	Uniform/rational experience	Recognisable, enjoyable and safe experience.	Awaken the wild within ourselves.
Knowledge-based (what nature is, how it works, approach to management)	**Science and technology (function)**.	**Science and education (profession)**.	**Science and experiments (creation)**.
	Experience/innovation-based. Nature is controllable, based on *outputs'* standards, norms. Indicators and clear effects.	**Experience/standard-based**. Nature is measurable, based on *components'* norms, standards. Indicators and clear effects.	**Theory/hypothesis-based**. Nature is self-adjusting and evolutionary, based on historical evidence.
	Eco-modernism. Humans can create the nature they need, whether for food, other goods or services.	**Traditional conservationism**. Humans can maintain valuable nature by nurturing species and habitats (reactive), through cultural-historical maintenance techniques.	**Engineering conservationism**.
	Managed for utilisation.	**Managed for semi-nature or iconicness**. Clear targets of **species composition or landscape expression**.	Humans/non-humans can accommodate natural ecological and biological processes that restore ecosystems and create new nature/future-pasts.
	Cleat targets of economic benefits or human/societal support functions.		**Minimum management**, appears untamed and unmanaged. Open-ended outcomes, **cyclical turnovers of vegetation**, the continuation of **evolutionary processes**.

unfolding of some organisms than to others (Arler 2009). Human-nature relations and treatments of non-human species are essential ethical concerns. So are concerns about the human race and its future generations (Vogel *et al* 2020).

One ethical negotiation between the Facilitator and the Steward concerns restoration versus preservation (Meerbeek *et al* 2019).

> valuing the past when the past is not an accurate indicator for the future may fulfil a nostalgic need but may ultimately be counterproductive in achieving realistic and lasting restoration outcomes (Harris *et al* 2006: 175).

The quote captures the essence in the debate: A shift towards a new paradigm in nature protection away from the preserved landscape, towards a landscape that itself can restore ecological functions (Lorimer and Driessen 2016). A moral justification of assisting such a natural process relates to unknown future environmental conditions, against which nature's own ability to adapt is vital.

Opposite this, the Steward argues that man has a moral obligation to care for cultural and natural heritage. They fear the loss or displacement of rare species and habitats when natural succession takes over (Drenthen 2018). This ethical argument reflects a hierarchical view, with rare species and landscapes occupying the upper part.

A related debate focus on human dominion or stewardship versus non-human agency. The Facilitator prefers man involved only to manage key species with responsibility for specific functions (Biermann and Anderson 2017), shifting focus from rare to keystone species and ecological connections to create something new (Lorimer 2020). This ideal thus acknowledges a 'natural order', but not a hierarchical one. A central ethical argument is that every single species is self-willed and hold intrinsic value (Murray 2017).

The Master values use-species, whether animals or plants, and protects them from species considered harmful. In the view of the Facilitator, this is a stigmatisation of certain wildlife as vermin (Murray 2017). Instrumental versus intrinsic value of non-human species is exemplary of the ethical landscape negotiation between these two ideal types.

> We are concerned [with the proposal] where the forest is left untouched and large grazers are introduced … it is particularly problematic that the areas … must be kept free from forestry and agricultural production (Danish Forest Association, public consultation response, 2021).

Rewilding is deemed a romantic idea by the Master, to whom the value of landscapes increase with the intensity of human control. Areas left to nature is a resource waste (Arler 2009), whereas man's ability to produce valuable landscapes is so highly rated, that the untouched nature literally is worthless. The Facilitator believes that humans need wilder landscapes to mend this technical relationship with their natural surroundings (De Cózar-Escalante 2019).

4.2. Aesthetic landscape negotiations

Deriving from Greek, the word 'aesthetics' means 'to perceive', and thus relates directly to sensation. Arguments often refer to notions of visual beauty (or ugliness), but any of our senses may be involved. 'It is a live-in, rather than a look-at, experience' (Porteous 1996:25) and may include 'sense of place', i.e. place attachment and place meaning (Masterson *et al* 2017), or childhood experience (Bauer and Atzigen 2019). Such relational factors are difficult to verbalise and share, yet they may affect visions of a landscape's potential and attitudes towards a wilder landscape.

Aesthetic satisfaction is of vital importance to human well-being, yet often considered a mere luxury in comparison with pressing ecological or economic concerns. Its attention to surface appearance rather than meaning reflects a surface-depth binary, with a bias against 'surface' developed in 20th century Western thought (Porteous 1996). The dichotomy is false. People attach meanings to landscape surfaces that express appreciated cultures, lifestyles and values. Appreciation of meanings of landscapes can give people pleasure; landscapes can have aesthetic significance, even when little visited. Both aesthetic satisfaction and appreciation of nature has importance for the desire to support nature restoration altogether (Hartig and Kahn 2016).

The appreciation of well-kept, symbolic landscapes is dominating among Stewards. The wise landscape interpretation and management of professionals will have positive aesthetic effects (Porteous 1996) that the layperson can then enjoy. 'Originality' of the landscape is central. Leading reference points are 18th and 19th century European rural landscapes, like grazed pastures and heathland.

Opposite this, the symbolic rigor of the conserved landscape may generate 'ecological boredom' (Monbiot in Gammon 2018:336) among Facilitators. The landscape should arouse sensations and provide opportunity for people to rejoice in the natural world (Lev *et al* 2020), awakening their wild side (De Cózar-Escalante 2019). When birds and hoverflies thrive, the world simply becomes a happier place. This is a prevailing argument of the adherents to nature's own development.

> But domestic nature is only part of what we need. The other part is wild nature. For as a species
> we came of age in a natural world, far wilder than today, and much of the need for wildness still
> exists within us, body and mind (Kahn and Hasbach 2013: xi)

Landscape meaning is however also important to the Facilitator, who appreciates the mere imagination of the existence of untamed nature, without purpose for man. Biologist E.O. Wilson was a prominent proponent of 'people-free nature', which may resonate with a dichotomous view of nature as separate from humans. He argues, however, that humans are genetically provided with a tendency to focus on life and life-like processes (Kellert and Wilson 1993).

To the Master, meaning prevail over senses and relates to the functional (Van der Windt *et al* 2007). The preferred landscape expressions reflect modern utilisations of land based on contemporary technologies. Aesthetically, this places the Master in opposition to both the Steward and the Facilitator. In a negotiation, however, the Facilitator and the Master might agree on a land-use 'zoning' that sharply separates exploitation and non-use (MacLean *et al* 2012), the reasoning being that efficient production on one side provides more space for nature on the other.

4.3. Knowledge-based landscape negotiations

Understandings of nature depend on societal, cultural and linguistic community membership, as well as on educational background. Knowledge is always located within complex cultural contexts (Mertens 2007). It institutionalises in landscape practices and in nature representations (Hansen-Møller 2004).

Knowledge does not change in a way that earlier knowledge disappear; new understandings emerge with references to the past. Understandings of nature constantly shift and evolve (Oustrup 2004), and science continuously changes, adapts and specialises (Kuhn 1962). A multiplicity of forms of knowledge overlap and compete, yet knowledge-based arguments, and related management approaches, are often stated with great weight, 'based on evidence'.

The Steward argues that species, populations and habitats need continuation of appropriate and professional human management to prevent their extinction (Nilon *et al* 2017). Measurable targets for priority species and species composition are reached by use of cultural-historical maintenance techniques (Halada *et al* 2011).

The Facilitator believes it makes more sense to understand species from their evolutionary origin, than from their much later cultural-historical interaction with human beings. There is a commitment to trophic cascades as regulating ecology (Soulé and Noss 1998, Vera 2000). Large mammals, missing in our self-regulating ecosystems, drive landscape changes through the ecological and hydrological processes they perform, generating surprising ecological events and new knowledge (Lorimer and Driessen 2016). Fossils indicate their association with high structural diversity of vegetation (Sandom *et al* 2014). By pointing to historical evidence, the Facilitator proposes future management solutions.

The Steward is concerned about the unpredictability and open-endedness of the 'wild' experiments (Lorimer *et al* 2015). New combinations of species, that may even have been absent in the landscape for millennia, have unknown functional characteristics, an uncertainty that is considered a problem (Nogués-Bravo *et al* 2016, Prior and Brady 2017). Instead, low-intensity management can increase the overall biodiversity of a habitat or urban green space to a level much higher than the original climax woodland (Halada *et al* 2011).

The Facilitator's counter-argument would be that the climax woodland does not exist: The classical ecological theory tend to ignore spatial dynamics, disturbances and heterogeneity (Perry 2002), and the forest became dense because of the decimation of large mammals (Vera 2000). Wilder landscapes produce richer ecosystems than those altered by humans, who typically care for a smaller number of selected species (De Cózar-Escalante 2019).

In smaller urban contexts, both Facilitators and Stewards point to the use of native floral species (Prior and Brady 2017), downscaling maintenance, and the creation of step-stones and corridors for non-human species. Green infrastructure planning (European Commission 2013) and urban ecology (Verma *et al* 2020) express such approaches.

Master knowledge-disciplines relate to production or ecosystem services. The introduction and expansion of wilder landscapes into humanised spaces might hinder the ecosystem management approach to securing ecological goods and services for man, and cause economic losses (Mansfield *et al* 2015, De Cózar-Escalante 2019).

Table 2 presents a synthesis of the framework resulting from the review and analysis. It helps identify prevailing views of nature concerning wilder landscapes among interested stakeholders. When not directly articulated, we can consider which values a certain practice produce, on what knowledge base, and with what resultant expression.

5. The views-of-nature typology

Here we elaborate on the ideal types' characteristics. Each covers a broad range of practices and discourses, yet being ideal types, they are intentionally generalised. We provide examples to illustrate the breadth of each type.

5.1. The facilitator

Facilitators stress nature's need for space and argue that human utilisation of land is biodiversity's biggest problem. The ideal builds upon a biological understanding of ecosystems; nature is conceived of as self-regulating, with flows and exchange of energy, matter and genetic material (Vejre 2004, Van der Windt *et al* 2007). Natural processes are the main criteria for nature's own development, but species diversity and state of the ecosystem are important for the choice of area to 'wild', even though natural succession can result in loss or relocation of biodiversity (Lorimer *et al* 2015).

Management practices can be passive, like post-abandonment succession of agricultural land (Wang *et al* 2023) and urban brownfields until formally developed. A growing ambition is to consider pioneering nature in management (Bonthoux *et al* 2014, Kowarik 2018). Active management may be creation of ecological cores and corridors, or introduction of key-species or taxon substitution (Soulé and Noss 1998). Non-human species play an important role in landscape engineering and management in partnership with humans (Lorimer 2015, Lorimer and Driessen 2016). More than just management tools, these non-human agents, e.g. large grazers, become an integrated part of the ecosystem (Baerselman and Vera 1995). Natural processes like succession and hydrology are essential, and area size matters—also in cities (Beninde *et al* 2015). In smaller urban green spaces, lowering the maintenance frequency of natural elements is a frequently used 'wilder' management practice (Chollet *et al* 2018). Also 'micro-forests' exemplify the trend of natural dynamics in smaller, urban settings (Miyawaki 1992).

While attempting to learn from the pre-agricultural landscapes (Gammon 2018), rewilding is future oriented, about 'nature development' rather than the reassemblage of past floras or faunas (Choi *et al* 2008).

This ideal type covers intentional practices, i.e. discourses and management that implies making landscapes wilder. This enables investigations at a range of scales and intensities, and of cases where there is reluctance to use the sometimes-contentious term 'rewilding' (Thomas 2022b).

5.2. The steward

Stewards have a structural perception of the ecosystem. Emphasis is on measurable components, such as species, soil, water or dead organic matter (Vejre 2004). Indicators like red list species, native species diversity or state of the ecosystem assess these. Idealised semi-natural or iconic landscapes kept at specific succession stages are the typical landscape expressions resulting from this view of nature.

Management practices therefore often include protected habitats with a cultural history, subject to historical agricultural uses (Halada *et al* 2011, Saltzman *et al* 2011). These can be moors, marshes, meadows and pastures. The distinguishing feature is that the given area is prevented from developing freely in order to preserve a specific expression and certain habitats and species. Such semi-natural landscapes have long been iconized in historical gardens that do not necessarily have high nature values. In the biodiversity context, an urban steward could instead be the advocate of insect hotels and urban meadows, reluctant, however, to accept the natural transformation of the pictorial, colourful annual flora into the monotonous bright colours of the perennial meadow, which changes the aesthetic expression completely.

This ideal type considers human intervention and systematic maintenance as essential to preserve nature qualities and a certain expression of rural as well as urban landscapes (Barthel *et al* 2005).

5.3. The master

By integrating environment and development policies, the master apply multi-purpose, economically viable management regimes to accommodate biodiversity (e.g. Kraus and Krumm 2013). The resultant landscape expression is characterised by species and ecological functions, efficiently adapted to contemporary human uses (Van der Windt *et al* 2007).

Typically, we would think of marketization practices of nature conservation. Forest certification, for example, may consider biodiversity while the products gain market advantages. Otherwise, the value of biodiversity relates to its use-value. Economic valuation and payment of ecosystem services represent a more recent way of commodifying nature (Büscher *et al* 2014) that perhaps less obviously exemplify the master's view of nature. The concept of ecosystem services is highly antropecentric, but could potentially allow for convergence of visions with the other ideal types, as discussed later. The urban master considers biodiversity an inherent benefit resulting from nature-based solutions that most often primarily targets other issues, such as

storm-water or urban heat island management, or human recreation and health (Sowińska-Świerkosz and García 2022).

To the master, nature is an object of utility which must be controlled to ensure its benefits to man and the human society. Biodiversity has a function or represents an added value.

5.4. Negotiations across argument types

Sometimes different types of arguments collide, which further complicates landscape negotiations. Recent efforts to promote biodiversity in urban landscapes by establishing semi-natural habitats, e.g. meadows instead of mowed lawns, has prompted heated public debates. Likewise, people concerned with animal welfare, as understood from a husbandry or even pets angle, are getting increasingly vocal in anti-rewilding campaigns (Lorimer 2015).

Both cases exemplify arguments of respectively aesthetic and ethical character colliding with knowledge-based arguments of the landscape-managers. In the first case, landscape users react to the change of expression. Their arguments relate to visual and functional preferences, nature being a frame for human enjoyment and unfoldment. In the second, arguments against natural grazing relate to moral extensionism to individual non-human creatures (Van Dyke and Lamb 2020). The conviction that large mammals cannot thrive without daily human care is far from the Facilitators' ideas about human-animal companionship and non-human agency.

6. Discussion

Clearly, the ideal types are not clean in reality. They are inherently theoretical; there could have been fewer or more, and subtypes exist. Nevertheless, the ideal types provide a basic hermeneutic framework for concrete investigations of how views of nature of influential landscape actors affect the landscape expression and shape what is considered reasonable management strategies to accommodate biodiversity. This happens through the exchange of nature arguments wherein the persuasive power gets to interpret the landscape and decide on its expression (figure 1). The discussion revolves around power; in landscape negotiations as well as in deep-rooted views of nature.

6.1. Persuasive power in landscape negotiations

Nature conservation acts, economic incentives and forest laws are among the legislative documents that reveal official nature interpretations and arguments related to landscape management. Shifts in these often derive from international conventions, strategies and agreements, such as the UN Convention on Biological Diversity and the EU 2030 biodiversity strategy. The negotiations about how to interpret and implement agreements and policies locally reveal different views of nature, and the outcome indicate the power relations between the social institutions in which the different nature arguments are embedded (Hongslo *et al* 2016).

Hansen-Møller (2004) argues that the persuasive power rests with an avant-garde in political and professional fora, where arguments rest on science or experience, and a particular rhetoric is used to achieve the desired landscape expression. New trends or concepts then become 'conventional truths' communicated to the public. An example is the stewards' landscape modelling and counting and hierarchizing of species, which consolidate the power of the professional (Biermann and Anderson 2017). In the attempt to maintain the existing system, they adopt a managerial rhetoric that embraces the value of the established order (Brulle 2010).

However, new ideas and concepts deriving from the ecomodern mind-set gain ground. 'Ecosystem services' and 'nature-based solutions' emphasise the instrumental value of nature and natural processes, ethically excluding the idea that nature has intrinsic value. The idea of a 'good Anthropocene', where humankind by engineering and transforming the planet adapt to changes, thrive and expand human societies (Ellis 2011) appears in professional fora of landscape management, with arguments for adjusting landscapes to benefit humans. The concept of multifunctionality exemplify this thinking; a powerful discourse wherein lies promises of convergence between the three ideal types. However, the multifunctional place reflects an outcome of the larger battle between views of nature and their negotiation. Even when biodiversity is an objective, service to humans from the ecosystem is central. While intriguing, the concept might replace biodiversity accommodation as a goal and promote an exploitative human-nature relationship. . So rather than convergence, we may see co-optation of arguments in the process of further commodification of nature (Büscher 2008). Counter-arguments exist. Schröter *et al* (2014) provide a good overview of the debate.

An explanation of the master's upper-hand in negotiations is provided by Van der Windt *et al* (2007) who argue that financial transactions related to land-uses dominate landscape negotiations. They indicate that stakeholders that are powerful in terms of money, ownership or rights hold the persuasive power. The largest part of our landscapes are rarely up for management discussions because their use has been determined by these resourceful stakeholders. Their land-use often relate to food and wood production, but also commercialised

ecosystem-services related to e.g. renewable energy or carbon sequestration (Büscher *et al* 2014). Whether biodiversity-accommodation can be incorporated is sometimes discussed, yet often taken for granted.

Finally, local landscape users, often considered to hold limited powers (Van der Windt *et al* 2007) increasingly manage to assert their views on wilder landscapes in public debates, as vocal activists setting an agenda through media, as well as through active engagement. Wilding initiatives are increasingly launched by private landowners and foundations in cooperation with researchers and local governments or agencies. Management decisions regarding policy-implementation may thus also derive from private and local stakeholders (Lorimer 2015, Bulkeley 2019, Bulkeley *et al* 2022) that increasingly insist to partake in the public dialog. They insist on active implementation, frustrated with the perceived inertia and reluctance in public landscape management to respond to the biodiversity crisis. Being the challengers of the existing management practices, they often employ dramatic and confrontational arguments to stress the urgency for new solutions (Brulle 2010).

6.2. The power of views of nature

As discussed above, persuasive powers may cause inertia in transformative landscape changes to accommodate biodiversity. However, inertia can also be a result of deep-rooted views of nature. Categorising arguments into *ethical, aesthetic or knowledge-based* helped explain why and how landscape negotiations complicate. It is also useful to help understand the inertia.

Landscape interpretation may be the aspect most open for shifts (Hansen-Møller 2004). Acquiring new knowledge is easier than altering rather stable, perhaps unconscious relational factors. An example is the ongoing shift in conservation narratives. Insights in the naturalness of 'disturbances' and 'dynamics' challenge the understanding of 'balance' and 'climax' in natural landscapes (Perry 2002). While acknowledged scientifically, the unpredictability of new qualities still raise doubts about management changes, because it challenges ethics and senses. The 'sense of place' (Masterson *et al* 2017, Prior and Brady 2017), developed through longer periods of human stewardship or use, delays transformation.

Regarding aesthetics, the importance of personal nature experiences has gained attention (Kondo *et al* 2015). Aesthetics experience a revival, and the wilder landscape is increasingly appreciated (Randrup *et al* 2020). However, wilder landscapes seem only gradually to gain traction in urban places. Their expansion can depend on the landscape managers' aesthetic preferences as well as their anticipation of those of the citizens (Hoyle *et al* 2017). 'Safety' is often put forward as an impeding factor (DUH 2014). A 'disordered' landscape expression may cause a sense of insecurity among human users, the argument goes. There may be other explanations as well, such as the abandonment of standardised operations that inevitably challenge daily procedures embedded in training and equipment (Burton *et al* 2014). 'Visible maintenance', like mowing grass along paths to establish the sense of both security and orderliness, seem to be a helpful concept to facilitate a shift.

The Facilitator sometimes uses human benefits as an argument for rewilding by referring to ecosystem services (Schweiger and Svenning 2019), which illustrates the pervasiveness of nature commodification in ethic-based discussions. Biodiversity is denoted a 'supporting' ecosystem service, and as such viewed as proxy for other services, being it provisioning (e.g. pollination), regulating (e.g. cooling temperatures), or cultural (e.g. recreational activities). Mansfield and Doyle (2017:24) express their concern: '[restoring ecosystems] out of human-centred thinking is not necessarily restoration; we are instead incrementally cobbling together a function-specific, poorly understood nature'.

6.3. Acknowledging powers and nature views

Being aware of how nature arguments are used to frame a specific view of nature, and acknowledging that the dominant landscape interpretation is not politically neutral but relies on persuasive powers (Hutchen *et al* 2024), can help the landscape manager in the attempt to democratise landscape governance. Moreover, exploring own assumptions about nature may prevent one-way elite communication and moralisation, and instead enable dialogue and reflection concerning values and attitudes, another guiding principle of environmental communication (Godemann 2021).

There is an increasing demand of decentralisation and citizen-oriented governance approaches (Jansson *et al* 2020), and a wave of participation and engagement efforts have been launched to include the visions of various stakeholders (Bussu *et al* 2022). However, the promotion of 'participation' has proven challenging. Participation practices can lead to unjust exercises of power that may not be intentional, but still happen to reinforce existing inequalities rather than diminishing them (Remme and Haarstad 2022). Power relations do not disappear just by placing different stakeholders around the same table to reach an agreement. On the contrary, as Brulle (2010) found, striving for consensus can obscure the multitude of solutions that often exist within a diverse group of stakeholders. Inherently, the compromise does not promote diversity.

7. Conclusion

To help create a space that allows for effective dialogue beyond limited frames and across views of nature and knowledge systems, we investigated controversies in the sometimes heated debates concerning 'wilder nature'. To make sense of key differences in the debate, we constructed a views-of-nature typology. From diverging arguments for how to accommodate biodiversity, three fundamental ideal types crystalised: The well-known *master* and *steward*, and the *facilitator* challenging the existing paradigms to release control and let natural dynamics and non-human species help solve the biodiversity-crisis.

Via the study's 'intentional practices criteria', a trend towards a wilder paradigm was detectable. The recognition that no areas today are unaffected by human activities appears to have instigated this. The trend goes beyond mere management; it includes an appreciation of the untamed and unpredictable, and thus a premonition of a more profound views-of-nature shift. Such shift evolve and build on top of existing assumptions, values and practices that constitute a way of viewing, but also contrasts and challenges the 'taken for granted'.

'Intentional wilding' is still moulded by the day-to-day management that most often adhere to the steward's standardised operations, while the focus on use-value and multifunctionality, inherent in the concepts of ecosystem services and nature-based solutions, pulls towards the masters more engineerial management approach. Especially urban landscape managers must balance numerous purposes and requirements in a limited area, and thus perhaps compromise their own basic nature views.

The development of the typology helped recognize arguments that relate to different basic assumptions about what is right, appreciated or true about nature. The awareness of power relations and the comprehension of the different nature views, including one's own, can help facilitate a difficult negotiation. Arguing with facts, figures and professional knowledge alone may not always result in the acceptance of a proposed approach to accommodate biodiversity. Disclosing interpretations of landscapes that relate to aesthetics or ethical concerns, as well as listening for such arguments among other stakeholders, may not only facilitate understanding and acceptance, but could possibly provide improved or alternative management solutions.

Data availability statement

All data that support the findings of this study are included within the article (and any supplementary files).

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