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Why Do UNESCO Biosphere Reserves Get Less Recognition than National Parks? A Landscape Research Perspective on Protected Area Narratives in Germany

Erik Aschenbrand ^{1,*} and Thomas Michler ²

¹ Faculty of Landscape Management and Nature Conservation, Eberswalde University for Sustainable Development, 16225 Eberswalde, Germany

² Bavarian Forest National Park, 94481 Grafenau, Germany; thomas.michler@npv-bw.bayern.de

* Correspondence: erik.aschenbrand@hnee.de

Abstract: This paper explores how landscape research can contribute to our understanding of why integrated protected area concepts like biosphere reserves get less recognition than national parks. In this regard, we analysed policy documents and online communication of biosphere reserves and national parks, conducted qualitative interviews with conservation professionals and volunteers as well as participant observation in order to identify and compare narratives that guide the communication and perception of both protected area categories. The results show how national parks offer a clear interpretation of space by building on landscape stereotypes and creating landscape legibility and experience-ability through touristification. National Parks also experience conflicts about proper management and combine a variety of goals, often including regional development. Nevertheless, their narrative is unambiguous and powerful. Biosphere reserves, on the other hand, have an image problem that is essentially due to the difficulty of communicating their objectives. They confront the difficult task of creating a vision that combines development and conservation while integrating contrarious landscape stereotypes. We argue for a fundamental engagement with protected area narratives, as this improves understanding of protected areas' transformative potential.

Keywords: protected areas; biosphere reserves; national parks; narrative; landscape



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1. Introduction: Protected Areas as a Way of Conceptualising Human-Nature Relationships

Protected areas are a way of conceptualising and organising the human-nature relationship [1,2]. West et al. have argued in a much-discussed essay that protected areas increasingly determine our social perspective on nature [2]. They consider protected areas “a way of seeing, understanding, and producing nature (environment) and culture (society) and as a way of attempting to manage and control the relationship between the two” [2]. The Convention on Biological Diversity is currently setting biodiversity targets for the decade up to 2030. Similar to the biodiversity strategy of the European Union, they provide for an expansion of the existing system of protected areas [3,4]. The expansion and hence the influence of protected areas has increased in the past [5,6] and will probably do so in the future. But not all protected areas are the same. Different historical and geographical contexts have produced a variety of protected area and nature conservation concepts [7–9]. The concept of biosphere reserves has for a long time been regarded as promising because it pursues the approach of combining nature conservation and development [10–15]. Recently there have been calls to recognise biosphere reserves in the global post-2020 biodiversity framework [16]. However, Biosphere reserves seem to be much less known than, for example, national parks [10]. The lack of public awareness is problematic because biosphere reserves, due to their integrative approach, are more dependent on broad participation than other protected areas. The situation can be well illustrated by the example of Germany:

despite 17 comparatively well-equipped biosphere reserves administrations and support from the national level, the general public is hardly aware of the objectives of biosphere reserves. The Ministry of the Environment of the Federal Republic of Germany conducts a study on 'nature awareness' at regular intervals. Among other things, this study surveys the awareness of protected area categories. According to this study, the term 'biosphere reserve' is significantly less known among the respondents than, for example, the terms 'national park', 'nature park' or 'nature reserve' [17].

Following the landscape research of authors such as Tuan [1], Cosgrove and Daniels [18], Duncan and Duncan [19], Kühne [20,21] and the anthropological perspective on protected areas by West et al. [2], the designation of a protected area (or biosphere reserve) can be understood as an attempt to establish an interpretation of space by organising the human-nature relationship according to a nature conservation concept. If we understand protected area concepts as interpretations of space or landscape, then we can ask how these interpretations are communicated and how they are embedded in a larger context—How their social meaning is created or justified. A promising approach for this purpose is the concept of narrative. The analysis of narratives and public perceptions is more common and more advanced in climate research [22–26] than in the field of biodiversity conservation, but the concept of narratives has already been used to analyse conservation concepts; for example, by Abelson [27] and by Hutton et al. [28], who contrast integrative and exclusionary conservation concepts and state that “changes in narratives have had profound impacts upon conservation and natural resource management, livelihood strategies and political processes” [28]. Shultis and Heffner also compare different protected area concepts, contrasting wilderness and cultural landscape narratives [9]. In this article, we compare how biosphere reserves and national parks are narrated in order to explain why biosphere reserves receive less recognition than national parks.

2. Theoretic Background on Landscape, Protected Areas, and Narratives

2.1. Difficulties in Comparing Biosphere Reserves and National Parks

National parks and biosphere reserves exist globally. Both are implemented at the national level, which is why generalising statements regarding their goals, conservation strategies, and narratives are potentially problematic. The spread of the national park idea can be understood as the spread of an innovation that was flexibly adapted to different national contexts [29]. Biosphere reserves, on the other hand, are the result of an international programme by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). The concept of national parks has also been standardised to a certain extent by the International Union for Conservation of Nature's (IUCN) protected area categories, which were initially understood in descriptive but increasingly normative terms [2], but there is still a wide variety of different international understandings of the concept of a national park [30,31]. Despite a variety of different national concepts, national parks usually focus clearly on nature conservation, whereas the concept of biosphere reserves aims at integrating nature conservation and sustainable development. According to IUCN criteria, biosphere reserves are not considered protected areas for this reason. The IUCN defines protected areas according to whether nature conservation is the primary management objective of at least 75% of the area [31,32]. In the case of biosphere reserves, therefore, only some areas (the core areas and, where applicable, the buffer zones) would meet the IUCN criterion. Notwithstanding this, German nature conservation law, for example, defines both biosphere reserves and national parks as large-scale protected areas.

2.2. Perspectives of Landscape Research on Protected Areas

Beyond the formalistic questions of comparability, a comparison of biosphere reserves and national parks seems fruitful for another reason. At this point, we would like to adopt the perspective on protected areas described by West et al. and understand protected areas as “a way of seeing, understanding, and producing nature (environment) and culture (society) and as a way of attempting to manage and control the relationship between the

two" [2]. With a focus on the different concepts of protected areas, the question then arises: What understanding of the relationship between societies and their environment respectively do national parks and biosphere reserves express? And how do they do this?

West et al.'s understanding of protected areas complements developments in landscape research since the 1970s. Tuan explored the role of symbolic meanings and narratives in our understanding of landscapes [1]. Cosgrove and Daniels conceptualised landscape as a "way of seeing" [33]. According to this, the landscape is not a neutral object whose true character can be revealed by applying the right research methods. Rather, social conventions and power relations, professional socialisations, and economic interests determine what is called landscape [20,34]. This social dimension of the landscape has been substantiated by linking landscape with literary and discourse research [19]. The European Landscape Convention also takes this development into account—It defines landscape as: "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors" [35]. Different cultural backgrounds and socialisations therefore also produce different understandings of landscape [36]. In the context of nature conservation and protected areas, this also applies to the question of what is considered a landscape worth protecting [37] and by what means it should be protected.

In the context of biodiversity conservation, the consideration of diverse cultural perspectives has recently been discussed in terms of "nature's contributions to people" [38–41] which is conceived as an extension of the concept of ecosystem services [38,42]. While this discussion is relevant to the evolution of protected areas, it does not focus on them or comparatively addresses how different categories of protected areas conceptualise and communicate the human-nature relationship.

Understanding protected area concepts as interpretations of landscape shifts the focus towards communication and allows asking how their social meaning is created and justified. A promising approach for this purpose is the concept of narrative, which we discuss in more detail in the next paragraph.

2.3. Protected Areas and Narratives

Narratives are stories that we construct in order to help interpret and understand facts as we perceive them [43]. Individual actors as well as organisations consciously or unconsciously make use of narratives and thereby lend coherence to their ideas, actions, and interpretations of the world [44]. Margaret Somers has demonstrated that narratives also play a role in the constitution of identity, as "all of us come to be who we are (however ephemeral, multiple, and changing) by being located or locating ourselves (usually unconsciously) in social narratives rarely of our own making" [45]. Narratives embed phenomena in a context of meaning. They create clarity and serve to make complex situations understandable. It is important to note that narratives can be based equally on science, myth, or religion. According to Flanagan [46] "evidence strongly suggests that humans in all cultures come to cast their own identity in some sort of narrative form", he concludes that "we are inveterate story tellers". Narratives structure political space, for example, in the construction of identities by emphasising commonalities and differences [47]. Metaphors, framing, and rhetorical figures are of particular importance for the connectivity and impact of political narratives [48,49]. Gadinger et al. focus on narratives in the process of executing political power, stating that "power is generated in political narratives mainly through the introduction and appropriation of enthralling figures—The people or the state, for instance, in whose name one claims to act or whose will one claims to follow [own translation]" [50]. Nature is also such a figure—but on what understanding of nature does national parks and biosphere reserves build their narratives? And how can the influence or success of a narrative be analysed or even enhanced?

2.4. The Analysis of Narratives

In this paper, we synthesise the results from policy analyses, qualitative interviews, group interviews, and qualitative analysis of online communication that we have conducted

over a period of two years. The intention of this combination of methods is to create a comprehensive picture of the research subject [51] and to be able to reflect not just one but several different aspects of protected area communication against the backdrop of social science landscape theory. This approach should contribute to the goal of the paper, to create a theory-based comparative reflection of the two concepts (national parks and biosphere reserves).

In the analysis, we included the Lima Action Plan and previous UNESCO strategies for the Man and the Biosphere Programme (MAB), various relevant IUCN publications [31,52–56], and the ordinances (or where not applicable other legal founding documents) of the German biosphere reserves and national parks. We conducted a qualitative content analysis of the presentation of biosphere reserves and the MAB Programme on the UNESCO website and of numerous websites of individual biosphere reserves, methodically following Bryman [57], Nam [58], and Brooks and Waters [59], focusing on the “extent to which certain themes were mentioned and represented” [59]. We participated online in the UNESCO decision-making body meetings (MAB ICC) in 2020 and 2021 and documented the presentation of 44 new biosphere reserves in the designation process.

Conservation professionals in governmental bureaucracies do a major part of the discursive work of defining goals and courses of action for conservation. However, they belong to the least studied groups of stakeholders in environmental issues and debates [60,61]. We, therefore, conducted 34 qualitative interviews with 21 professionals in the field of the national park and biosphere reserve management. We used the responsive interviewing model of Rubin and Rubin [62] and the perspective of responsive interviewing as conceptualized by Girtler [63]. In some cases, several follow-up interviews at different intervals and lengths were conducted. In Bavarian Forest National Park we have conducted group interviews and surveys with 50 volunteers in two subsequent years (2020 and 2021) to evaluate the narratives they rely on when referring to the national park. To compare the reach of German national parks and biosphere reserves in social media, we have identified the social media channels on which the protected areas achieve the greatest reach. All protected areas with an active Facebook page have the highest number of followers there. Many also run Instagram accounts but usually with far fewer followers. Other social media channels are only operated by individual protected areas.

We analysed this material using a framework developed by Espinosa et al. [64]. Espinosa et al. looked at the possibilities and limitations of the strategic use of narratives in environmental policy. They examine what characterises successful narratives and define success as social dissemination and acceptance. Narratives are more effective the deeper they are embedded in everyday communication and the more they structure discourses. For example, when politicians feel compelled to take a stand on an issue in order to participate in a discourse, this can be understood as a sign of the power and success of a narrative [65]. Espinosa et al. develop hypotheses about possible success factors [64]. The success factors for narratives are adapted in the following:

- **Actors**—narratives are more successful when they are communicated by actors who are recognised by the public as legitimate spokespersons. These do not have to be people with authority in the traditional sense. Thus, the Fridays for Future movement has gained particular weight due to the fact that it is pupils and students that are fighting for their future and accusing the older generation of irresponsible behaviour.
- **Connectivity**—narratives are more successful when they fit into a dominant discourse and into the recipients existing set of attitudes. Connectivity is greatly influenced by metaphor. It makes a difference whether one speaks of global warming, climate change, or climate crisis [49], or uses disease metaphors that relate to everyday experiences such as: “The earth has a fever” [49] because each of these formulations triggers different associations.
- **Openness and ambiguity**—narratives are more successful when they are open and ambiguous. An impressive example is the rise of the term “biodiversity”. As Takacs was able to show, even among the originators of this term there are different ideas of

what exactly biodiversity means and should mean [66]. Ecologist David Ehrenfeld is quoted by Takacs saying: “I think it’s one of those wonderful catchwords like sustainable development, that, because it’s vaguely defined, has a broad appeal” [66].

- Communicability—narratives must be communicable. Narratives are easy to communicate if they have a comprehensible plot; for example, a clear definition of the problem that also makes a possible solution apparent, a comprehensible juxtaposition of good and evil as well as the acting personnel: hero, anti-hero, helper, gate-keeper.

In the following section, we compare national parks and biosphere reserves with regard to the question: To what extent do they create narratives or are embedded in or connected to successful narratives? In doing so, we examine how the concept of narrative can help to explain the differences in public perception. With our focus on the narrative aspect of protected area concepts, we address the broader question of how the social significance of different types of protected areas emerges.

3. Results

As a starting point, we want to illustrate the communication of the areas by looking at their reach on Facebook. Facebook is the social media platform on which the German national parks and biosphere reserves currently achieve the greatest overall reach. As an indicator of reach, we use the sum of subscriptions, i.e., the number of people who have subscribed to the channel of the national park or biosphere reserve (followers). All German biosphere reserves together had 18,870 followers on 29 June 2021, while all German national parks had 92,142 followers on the same day. Figure 1 shows the top 5 Facebook pages (national parks and biosphere reserves) sorted by the number of followers.

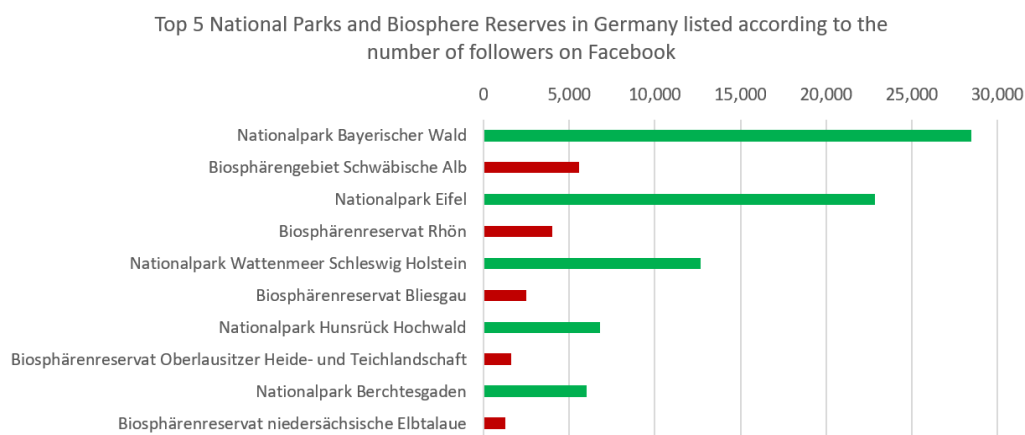


Figure 1. Top five national parks (green) and biosphere reserves (red) in Germany listed according to the number of followers on Facebook.

While the Facebook page with the highest reach of the German national parks (Bavarian Forest National Park) has over 25,000 followers, the biosphere reserve with the highest reach (Swabian Alb) only has around 5000 followers. This overview does not allow for detailed comparisons of the communicative success of individual protected areas, as it ignores indicators such as the interaction rate. The simple picture merely serves to illustrate a phenomenon that is well known among practitioners: Biosphere reserves reach a much smaller audience than national parks. But how can we explain this and is there anything that biosphere reserves can learn from the example of national parks? In the following, we compare the narratives that underlie national parks and biosphere reserves and which, in our view, explain the communicative success of the national parks. For this, a look at the history and the conceptual foundations of both categories of areas is necessary and useful.

3.1. National Parks: Leaving Space for Nature

The establishment of the first modern large-scale protected areas in the American West was preceded by charging nature with meaning, which first was expressed in art [67] and later in tourism [68–70]. Schama documents how the “Big Trees” (Redwoods and Giant Sequoias) were interpreted as a symbol of the young nation, conveyed through paintings and photographs, and how the establishment of protected areas was associated with great political symbolism [67]. Since the writings of John Muir (1912), protected areas have been “temples” and “cathedrals”—places of spirituality because “Everybody needs beauty as well as bread, places to play in and pray in, where Nature may heal and cheer and give strength to body and soul alike” [71]. From the beginning, the dichotomy of nature and culture was an integral part, if not the foundation, of the national park concept. Indigenous inhabitants were often displaced when protected areas were designated [72]. The fact that the supposedly untouched nature (“wilderness”) was partly shaped by centuries of indigenous land use was not noticed by the “founding fathers”, or they ignored it. William Cronon described the ambiguity of this idea of nature conservation in his classic essay “The Trouble with Wilderness”. He portrays the idea of wilderness and national parks as a project of urban elites [73], just as the concept of nature as such seems to have emerged independently in urban contexts in different parts of the world [74]. Cronon problematises the concept of wilderness because, in his opinion, it further solidifies the existing human-nature dichotomy and makes us forget that we are part of nature, which impedes responsible action. At the same time, he credits the concept for teaching us “otherness”: There is another measure than that of humans and not everything has to be subordinated to human goals. This can teach us humility, which in turn can positively affect responsible action.

The term “national park” spread rapidly from the United States of America, with the concept being flexibly adapted to different national contexts [29]. Today, national parks worldwide have very different objectives [8,30]. However, Gißibl identifies some features that are important for understanding national parks in most national discourses, although they have different dominant roles [29]. These are:

1. Size: National parks are usually very large protected areas.
2. They are usually associated with wilderness and the absence of human impact on the landscape.
3. They are established at the highest political level, which gives weight and permanence to the endeavour.
4. They are associated with tourism from the beginning.
5. There are multiple justifications for protection: aesthetically monumental, species diversity, function as a learning and experience space for a society increasingly disconnected from nature.
6. The term national park itself: The protected area is regarded as being of national importance.

In Germany, the development of the American national parks was followed with admiration from the beginning [29], but the first German national park was not founded until 1970. Since then, Germany has developed its own specific understanding of national parks, which is publicly communicated today with the motto “Let nature be nature” [30,75]. Originally, conservationists did not consider the national park concept to be suitable for the German region, which no longer had any large-scale “wilderness” due to the centuries-long cultural imprint on the European landscape [29]. However, the establishment of the first German national park set a development in motion that led to the adaptation of the national park concept to the German context [30]. This process sparked the creation of today’s German national park concept, which has a strong focus on the absence of human influence and control. This approach is intended to lead to a recovery of nature by allowing “natural processes” to take place and is therefore referred to as “process conservation”. Born out of political conflicts over resource use and interference with ecological disturbances, the

German national park concept is still strongly influenced by the idea of a sublime nature that is superior to human planning.

3.1.1. Parkifying: Creating the National Park Experience

National parks were tourist icons from the beginning [67–69] and quickly became seals of quality for scenic beauty in tourism. An important part of the work of many protected area administrations is the visualisation of the protected area in space, the parkification. Entrance gates and welcome signs guide drivers to visitor centres where information is prepared for them to interpret what can be seen “outside”. Nature trails and ranger-guided tours offer interpretations of the landscape and make it readable as a national park. Sights are made accessible through boardwalks, treetop walks, or other infrastructure that puts visitors in relationship to the scenery. Information signs show special features and remind visitors of the vulnerability of the landscape. The clear spatial separation of nature and human use makes national parks extraordinary places. Human use is limited to the appreciation of nature and thus to tourism.

3.1.2. What Is Constituting the National Park Narrative and How Does It Fulfil the Above-Mentioned Success Factors for Narratives?

Three statements constitute the national park narrative:

- National parks are places with special value and places of national importance. → National parks are treasures.
- Nature has a (spiritual) value. → National parks stand for value in nature.
- National parks interpret nature through education, marked trails, visitor centres, etc., (parkification). → National parks stand for great experiences.

Now we want to take a closer look at how these statements are discursively embedded and to what extent they fulfil the success factors for narratives that we have introduced before. First, we have to acknowledge that national parks create a clear positioning. They achieve this through an easily understandable problem structure: Humans are destroying nature and therefore national parks present an equally easily understandable solution—a space where nature can recover and where nature conservation is the priority (communicability). Nevertheless, the narrative offers a great degree of openness. The question of which conservation concept should be applied in these protected spaces, for example, is being addressed in various national expert discourses—with quite different results [8,30]. The concept postulates the primacy of nature conservation over other uses but thus remains as open as the concept of “nature” itself (openness and ambiguity).

The national park concept reflects both the Christian dichotomy of man and nature [76] and the romantic idealisation and spiritualisation of sublime nature. Especially the latter usually comes in connection with a more or less far-reaching critique of civilisation [73]. National park administrations embed a rather limited part of the landscape into the larger narrative of a civilisation that is destroying the planet. A society that thoughtlessly destroys nature finds here the place where “nature takes back its rights”. National parks thus become sacred places where the negative influence of humans remains locked out and therefore, for once, does not unleash its destructive power. Numerous comments on social media show that this narrative is inspiring for many visitors: “Nature does not need humans, it regenerates itself if you let it,” reads the Facebook page of the Bavarian Forest National Park [77,78].

Through the experience of national parks and their importance in tourism, the concept appears as a kind of connection of the beautiful and the good (connectivity). In this context, the environmental impacts of national park tourism (mobility issues, travelling to the national park by car) are often ignored. Regarding the actors as a success factor for narratives, we find that the conservation value of sublime nature in all its variations is constantly reproduced in countless media. Especially documentaries inspire a large audience for wild nature and wildlife conservation. They are often told as a journey to one of the last and now endangered (nature) paradises. Thus, it is difficult to identify

individual actors whose credibility would have to be assessed here. The idea that there are spaces of special value (paradise) that need to be protected from human use is widespread and probably leads many people to wish they could experience such paradises themselves.

As a conclusion to the national park narrative, we find that the success factors for narratives are largely met.

3.2. Biosphere Reserves: Reconciliation of Nature and Humans

The much-praised concept of biosphere reserves looks simple, but on closer inspection, it is much more complex than that of national parks. National parks create clarity in many respects: The protection of nature has priority. Complicated questions such as the landscape impacts of renewable energies do not even arise in most national parks. Their goal is to protect what the respective society regards as nature. In this respect, national parks can connect to many widespread and positively connoted landscape stereotypes. Their supposedly undisturbed nature is constructed as a paradisiacal counterworld to the urban jungle [1].

Biosphere reserves on the other hand aspire to be model regions for sustainable development. In biosphere reserves, new solutions for global challenges are to be developed at the local level. The currently valid strategy paper of the UNESCO biosphere reserves is called the Lima Action Plan. It describes in detail that a model region for sustainable development cannot be imposed from above, but must be shaped through participatory processes in the region [79]. In Germany, biosphere reserves are legally anchored as protected areas in nature conservation law. Thus, they are in most cases part of the state nature conservation administration. However, biosphere reserves want to be more than protected areas [80–82]. This is easy to write down, but difficult to implement, and it is precisely here that one of the ‘sticking points’ of the concept can be located [82,83]. Conceptually, the most important distinguishing feature between biosphere reserves and most other protected area categories is the so-called ‘Transition Area’. It is the supposed conceptual strength of biosphere reserves. According to the UNESCO guidelines, biosphere reserves consist of three zones: Core Area, Buffer Zone, and Transition Area. The biosphere reserves the double task of conservation and development is conceptually structured by this zoning model (Figure 2).



Figure 2. Biosphere reserves zonation scheme [84].

In the Core Area, nature conservation is the primary goal. The Buffer Zone protects the Core Area. In addition, however, there is a Transition Area—an area “where communities foster socio-culturally and ecologically sustainable economic and human activities” [85]. The three zones correspond, at least in part, to three functions that biosphere reserves are supposed to fulfil: conservation, logistic support, and development [85]. Transition Areas with their focus on socio-cultural and sustainable economic development (development function) are a conceptual strength, as they expand the conventional protected area concept [10,12]. Nature conservation is not considered in isolation, but integratively. At the same time, the zoning model conceptually maintains spatial separation and makes

it easy for practitioners to lose sight of the Transition Area in implementation. It is thus not surprising that Transition Areas, together with the development function, are where concept and reality diverge the most and expectations of the concept are the most difficult to fulfil. The design of development in a Transition Area is much more complex than the design of a purely protected area. This is the case simply because governance systems are usually weak, especially outside the legally protected Core Areas and Buffer Zones [12,15]. This necessarily results from the broad objectives: Neither authority nor any other organisation could combine all the necessary competencies required for sustainable regional development. For a state-administered protected area, on the other hand, it is theoretically and practically possible to combine all or at least many competencies relevant to nature conservation and thus to control the development of the landscape itself—even if this is neither a sufficient nor a necessary condition for successful management. In contrast, economic development, especially if it is to meet ecological criteria of sustainability, cannot be prescribed. In realising the development goals in the transition area, biosphere reserves are therefore necessarily confronted with a higher level of governance fragmentation. The realisation of development goals requires the commitment of many actors from different sectors of society [86]. These actors must agree on goals that are then generally known. Biosphere reserves must therefore mobilise public engagement even more than national parks in order to achieve their objectives. At the same time, the conceptual circumstance of a more fragmented governance architecture makes it more difficult to speak with one voice and thus also affects the shaping of narratives [82].

3.2.1. Biosphere Reserves and the Cultural Landscape Narrative

The visual language of both UNESCO and numerous biosphere reserves emphasises the aspect of tradition in forms of land use, customs, and products. If a space is interpreted with reference to traditional forms of land use and landscape beauty, and if the impression of a symbiosis of humans and nature is to be conveyed, the term cultural landscape is often used. In the following, we will speak of the cultural landscape narrative. A cultural landscape narrative can be contrasted with the separation of nature and culture [20,87]. For example, Shultis and Heffner, using the example of Canadian protected areas, suggest that these should be understood as cultural landscapes, as this allows for the integration of indigenous perspectives [9]. Concepts such as Biocultural Diversity [88] also pursue this goal.

In former East Germany, several biosphere reserves and national parks were able to be designated at once in the course of reunification. The biosphere reserves here were designed to preserve cultural landscapes and were thus given a clear orientation. National parks were responsible for the natural landscape and biosphere reserves for the cultural landscape. The 'cultural landscape' narrative entails traditional agriculture, traditional handicrafts, and quality products; for example, healthy, naturally produced food [89]. This association of landscape, tradition, and enjoyment is one of the most common motifs in tourism advertising [68,89] and is therefore familiar and relatable for a large number of people. Like the wilderness narrative, the imagination of a cultural landscape as a rural idyll is an urban projection [89]. The idea of an idealised cultural landscape goes back further historically than the idealisation of wilderness. The idea of pastoral idylls dates back to Greek and Roman antiquity. Renaissance landscape painting took up these motifs and popularised them again [1,90]. The idyll and the decaying but still visible traces of an idealised past are among its central motifs. In the next paragraphs, we discuss why Biosphere reserves do not succeed in occupying the cultural landscape narrative.

3.2.2. Biosphere Reserves as Innovative Places

The conceptual development of biosphere reserves is centralised at the UNESCO level, with scientists and practitioners from member countries involved in these processes. In defining biosphere reserves as model regions for sustainable development UNESCO emphasises the aspect of innovation and change. UNESCO's vision statement reads:

“Our vision is a world where people are conscious of their common future and interaction with our planet, and act collectively and responsibly to build thriving societies in harmony within the biosphere” [79], while the mission statement clarifies how this should be achieved: „particularly through exploring and testing policies, technologies, and innovations for the sustainable management of biodiversity and natural resources and mitigation and adaptation to climate change“ [79].

The conceptual positioning of biosphere reserves on the part of UNESCO is incorporated at least to some degree into the communication and self-descriptions of the individual biosphere reserves and is reproduced by them. This opens up a field of narrative tension between conservation and innovation. In practice, particularly the connection of (traditional) cultural landscape to landscape changes in general and to the topic of climate change and new technologies (e.g., renewable energies) is difficult to reconcile. This also applies to the aforementioned East German biosphere reserves. To this day, they exclude the installation of wind turbines, for example.

3.2.3. The “Thing“ with the Reserve

While the term national park has simply been adopted worldwide, many stakeholders in biosphere reserves apparently feel the need to find other terms to concretise and describe what is meant. The term “reserve” is usually not associated with “development” in languages that use the same word root, and sometimes even has negative connotations. For this reason, the term has been partially or completely replaced by other terms such as “region” or “park” in some countries [91]. The word “biosphere” is also less familiar than the terms “national” or “natural”. Biosphere reserves are described as “Learning Sites for Sustainable Development” and “Learning Places for Sustainable Development” [85]. According to the mission statement, the primary goal is to “Develop and strengthen models of sustainable development” [92]. In Germany, the description as a “model region for sustainable development” is widespread. The German UNESCO Commission combines both and describes biosphere reserves as model regions and learning sites for sustainable development [93]. The terms ‘learning site for SD’ and ‘model (region) for SD’ may conceptually overlap or complement each other well, yet they can also be interpreted differently. In view of this linguistic struggle of the concept, it is at least questionable how the public is supposed to develop an intuitive positive perception and understanding of biosphere reserves similar to those of national parks.

3.2.4. How Can the Narrative of Biosphere Reserves Be Characterised and Does It Fulfil the Above-Mentioned Success Factors for Narratives?

A biosphere reserve narrative is more difficult to localise than is the case with national parks. This is due to the tension between innovation, which the concept emphasises, and the conservation of tradition and cultural landscape, which is of great importance for many biosphere reserves. At the UNESCO level, the idea of a biosphere reserve has been conceptually developed. According to this, the following statements constitute the biosphere reserves narrative:

- Biosphere reserves stand for sustainable development.
- Biosphere reserves stand for landscapes used by people.
- Biosphere reserves stand for participation and local solutions.
- Biosphere reserves stand for international cooperation.

In the visual language of both UNESCO and many biosphere reserves, the aspect of tradition is often emphasised. Biosphere reserves are then narrated as traditional cultural landscapes.

- From this perspective, biosphere reserves stand for tradition and cultural landscapes.

While the cultural landscape narrative can be connected to many positively connoted stereotypes [89], this is less the case with the narrative communication of the conceptual dimensions. The problem structure here is initially the same as in the national park concept,

but the proposed solution is more complex: As a reaction to man-made environmental problems not only are particularly valuable sections of nature to be placed under protection but also new sustainable forms of economic activity and social and cultural development are to be promoted. At the same time, the cultural landscape ideal demands the preservation of traditions and inherited landscape forms (Figure 3). Addressing these conflicts between tradition and change is much more difficult to communicate (communicability) than the cultural landscape narrative on its own.



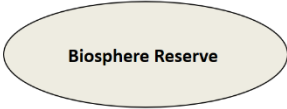

Influence of the international level	 UNESCO Development of concept, designation of biosphere reserves and implementation of periodic reviews (quality control)	 IUCN No interference with national definitions of protected area (PA) but softpower through subsequent norming of PA categories
Area category	 Biosphere Reserve	 National Park
Guiding ideal	Reconciling humans and nature Integrating conservation and development	Let nature recover from human influence and control Protecting nature from humans
Conceptualisation of human-nature relationship	Hybrid	Dualistic
Associated landscape stereotype	Cultural landscape (in conflict with development ideal)	Wilderness / Naturalness

Figure 3. Comparison of biosphere reserves and national parks.

The biosphere reserve concept also has a great openness, but this is arbitrarily large, as almost everything can be associated with sustainable development (openness and ambiguity). An unclear position between change (model region) and tradition (cultural landscape) makes it more difficult to grasp what constitutes biosphere reserves, in contrast to national parks, which stand for sublime nature. UNESCO's communication, for example, relies on best-practice examples to illustrate the work of biosphere reserves. Two unique selling points of biosphere reserves are (1) the objective of combining protection and development and (2) the cooperation in an international network. Both are not explicitly narrated. The international network, with more than 700 biosphere reserves, certainly contains a large number of culturally bound, different understandings of sustainability. However, these are not explicitly communicated and do not seem to engage in a dialogue with each other.

4. Discussion

4.1. Which Narrative for Protected Areas and Sustainable Development?

We argue that analysing narratives can broaden our understanding of protected areas. Designating a protected area always entails an interpretation of space. Such an interpretation needs to be embedded in a larger context of meaning in order to be relatable and understandable. We started with the observation that the national park's narrative seems to be more successful than one of biosphere reserves. National parks build on the human-nature dichotomy and present an easy-to-understand answer to current environmental problems: the demarcation of spaces where nature can recover. This narrative is obviously intelligible to many people.

Biosphere reserves tackle similar environmental problems but try to overcome the human-nature dichotomy with a participatory design of a model region for sustainable development. While national parks were often implemented in a top-down manner, this is not promising when trying to implement the development function of biosphere reserves. In order to foster sustainable social, cultural, and economic development, people must be

mobilised around a common vision and ideally develop this vision together. Biosphere reserves are characterised by a high degree of governance fragmentation, especially regarding their unique selling proposition, the Transition Area, and their development function. This conceptual circumstance makes it more difficult to speak with one voice and thus also affects the shaping of narratives. At the same time, biosphere reserves are more dependent on public perception than purely protected areas for two reasons:

1. They must mobilise communities.
2. They need to be visible politically in order to receive support and funding and be taken into account in the implementation of other relevant policies.

Therefore, biosphere reserves need a clear, understandable, and unifying narrative. In contrast to national parks, biosphere reserves cannot be positioned as extraordinary spaces. The concept aims at the local design of concrete solutions for current challenges. While national parks represent extraordinary (tourist) experiences and symbolise a counter-world to civilisation, biosphere reserves, at least conceptually to a certain extent, represent everyday life that needs to be changed.

Is the narrative problem that sustainable development as a guiding principle is less clearly defined and hence communicable than nature? Should biosphere reserves as learning sites for sustainable development start with a common vision of sustainable development? In many discussions, this is where any unambiguity ends [94]. For example, technology-oriented understandings of sustainability often have little in common with sufficiency-oriented ideas of sustainability [95]: While nuclear power represents all that is bad for some, for others it is a key technology in the fight against global warming. The national park narrative shows that the question of what is to be understood as “nature” cannot be definitively clarified here either. In national parks, too, there are conflicts about the “right” management, which arise from the openness of the concept of “nature” and mostly revolve around the evaluation of human intervention in nature. These debates are complicated, for example, by anthropogenic climate change and the emergence of invasive species [8]. Despite the unambiguous slogan, there are numerous indications that the management of national parks takes all these ambiguities into account and, for example, is more differentiated with regard to the protection of rare species than a catchy and simple slogan might suggest [8,30]. A successful narrative will not be made the maxim of every single decision of an operational process. Compared to biosphere reserves, these conceptual struggles remarkably do not seem to have a negative influence on the narrative of national parks. They retain the narrative advantage of unambiguity and stand for the protection of nature from humans. The combination of several goals is always more difficult to communicate than the focus on a single task, no matter how complicated this task may be in practice.

4.2. How to Innovate and Preserve Tradition at the Same Time?

Biosphere reserves often position themselves as cultural landscapes. Here, traditions are emphasised and the image of symbiosis between humans and nature is drawn. This idea of a symbiosis of humans and nature, or alternatively of harmony between humans and nature, is a powerful narrative. It is questionable why it has not led to greater awareness of biosphere reserves. Possibly the less pronounced tangibility of biosphere reserves is an important factor. The national park narrative is arguably gaining popularity due to the media representation of national parks as experiential spaces and the legibility of the landscape through parkification, which every visitor experiences on site. In addition, biosphere reserves are permanently confronted with the difficult task of clarifying what development and conservation should mean for their respective areas. Apparently, this makes creating a coherent narrative difficult. We will illustrate this aspect with the example of renewable energies. A core issue in any current debate on sustainable development is energy supply, as the use of fossil fuels has been identified as the first cause of anthropogenic climate change. Renewable energies are therefore a central aspect of sustainable development. But how do biosphere reserves position themselves on renewable energies? On the

UNESCO homepage, a strategy paper of the Austrian MAB Committees is presented as “good practice” on the topic [96]. However, the content of this paper focuses less on the possibilities of actively promoting renewable energies in biosphere reserves than on setting guard rails for their expansion [97]. The fact that such an evasive thematising of a core issue for sustainable development is considered a good practice example, illustrates the difficulty of integrating the issue into a catchy narrative for biosphere reserves. The integration of new structures into landscapes is a great challenge that leads to conflicts [98–100] and has to be shaped [101]. Transformation processes bring conflicts with them [102]. The trade-offs between the individual Sustainable Development Goals have been described in detail [103,104]. On the one hand, the fact that the SDGs are not based on a coherent vision of sustainability does not make things any easier for biosphere reserves. On the other hand, conflicting goals are part of every development process; their existence is therefore not surprising.

As model regions and learning sites for sustainable development, ignoring the most difficult issues is not a viable option. Shouldn't it be precisely in biosphere reserves where conflicts over land use are addressed and where innovative forms of renewable energy are promoted, and the energy transition is shaped in a participatory way? However, we do not accuse biosphere reserves of inaction. In order to function as a platform for such fundamental social negotiation processes, protected areas would have to be integrated into other policies. Büscher and Fletcher in this sense propose an evolution from protected areas to “promoted areas” [105]. The idea of Büscher and Fletcher is far-reaching, as they think of nature conservation in protected areas to be in close connection with consumerism and general power relations in society. It follows from their considerations that “promoted areas”, in order to fulfil their functions sustainably, must not only be respected by all relevant policies but must also encourage genuine participation through democratic processes as well as equitable participation in the values generated by the promoted areas are essential.

If biosphere reserves are narrated as cultural landscapes and as a symbiosis of humans and nature, they also stand for the rural. This could explain why the topic of urbanisation plays such a small role in the world network of biosphere reserves even though many of the European biosphere reserves comprise urban areas [106]. Urban spaces are traditionally associated with innovation, change, and diversity. Did the cultural landscape motif prevent UNESCO's MAB programme from addressing the issue of urbanisation? The concept of extended urbanisation [107] has also not yet been taken up in the narrative of biosphere reserves. Extended urbanisation refers to the fact that urban metabolisms (material flows), infrastructures, value chains, and ideas (protected areas) are also increasingly shaping rural areas [107,108]. As urbanisation continues, so will its influence on rural areas. No world network of model regions for sustainable development can be complete without integrating the aspect of urbanisation. For protected areas, the “ecosystem approach” is often a central conceptual starting point. Especially with regard to the development function of biosphere reserves, a “social system approach” would also be necessary under the impression of extended urbanisation, which includes factors such as value chains, commuter traffic, and infrastructures. But how can the political weight of integrative protected area concepts be increased if they (along with their goals) are not embedded in a larger context of meaning in a generally comprehensible way? From our perspective, narratives provide this embedding. Therefore, we argue for the need for a fundamental engagement with protected area narratives, as this enables us to understand how protected area concepts are embedded in a larger context of meaning. It is from such an embedding that the meaning attached to protected areas emerges and from this, their transformative power. Hence, if we want to foster integrative protected area concepts, we need to understand and create intriguing narratives for protected areas that provide visions of what a responsible human position in nature can look like.

5. Conclusions

Following West et al., protected areas are understood as a conceptualisation of the human-nature relationship [2]. When designating a protected area, a space is always delimited and goals for the development or conservation of this space are defined. We use the term “narrative” to describe the communicative embedding of the protected area and its concept in a larger context of meaning. In addition to the protected area administration, other actors are constantly involved in such narratives—such as scientists, artists, journalists, or even visitors who publish their experiences and photos on social media channels and thus achieve a social resonance. Narratives that have a broad impact cannot, therefore, be completely controlled by one or a few actors. A look at the historical development of the national park concept illustrates this aspect. Spiritual quest, artistic representation, tourist interest, and political symbolism are closely interwoven here, and it is in these interactions that the meaning of national parks emerged as a result of social processes. From the perspective of social science landscape research [1,19,20,33], the interpretation of protected areas with narratives can be understood as a social construction of landscape. There has been little research on the narratives of protected areas and their effectiveness, but a social science perspective on landscape suggests that protected areas are also, and perhaps primarily, narratives for a space. As such, they can have the greatest impact if they are easily understandable and relatable.

National parks offer an easily understandable solution to ecological crisis: a space where nature has priority and can recover. This unambiguity is largely communicative because, firstly, conflicts about the proper management of nature also play out in national parks. Trade-offs are common here and well documented. The development of protected area objectives is a mirror of social and scientific developments, and realignments of objectives are not uncommon in national park history. In addition, many national parks are also involved in tourism and regional development, i.e., they do not only fulfil nature conservation tasks. However, they do interpret space unambiguously in terms of communication; they demarcate a space in which nature has priority.

Biosphere reserves pursue an integrative approach—they aim to combine nature conservation with sustainable social, cultural, and economic development. In practice, biosphere reserves are caught between two narratives that are not always easy to connect. Conceptually, as model and learning sites they stand for change and transformation. At the same time, the preservation of cultural landscapes with their traditions and traditional forms of land use and production, and not least their biodiversity, is of great importance. So, what could be the contribution of a study of narratives to the understanding of the problem and to the further development of integrative protected area concepts? Managers of biosphere reserves are confronted with a high degree of governance fragmentation in their Transition Areas and on the issue of development, and the concerns of biosphere reserves are often given too little consideration in the design of other relevant policies. Since regional social, cultural, and economic development cannot be decreed but emerges through the interaction of different actors, the high degree of governance fragmentation will not disappear, but will remain a constituent feature of biosphere reserves, especially in Transition Areas. Biosphere reserves need a common narrative that creates identity. Without public and political attention, biosphere reserves cannot become “promoted areas” [105], i.e., areas whose objectives are not only taken into account by other policies, but are actively promoted. A common narrative becomes easier if it can connect to regional identities, traditions, and feelings of belonging. Regional identities can be a starting point, but they should also be critically questioned. Identities can emphasise inclusion or exclusion [47]. Questions of urbanisation, migration, integration, and living together are key challenges for a just coexistence and hence should be addressed in a network of model regions for sustainable development. The world network of UNESCO biosphere reserves would also be the right place for an active debate on the diversity of different understandings of sustainability that certainly exists, conducted, and narrated on the basis of historical and innovative examples.

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References

1. Tuan, Y.-F. *Topophilia: A Study of Environmental Perceptions, Attitudes, and Values*; Columbia University Press: New York, NY, USA, 1974.
2. West, P.; Igoe, J.; Brockington, D. Parks and Peoples: The Social Impact of Protected Areas. *Annu. Rev. Anthropol.* **2006**, *35*, 251–277. [CrossRef]
3. Convention on Biological Diversity. First Detailed Draft of the New Post-2020 Global Biodiversity Framework. Available online: <https://www.cbd.int/article/draft-1-global-biodiversity-framework> (accessed on 28 July 2021).
4. European Commission. Biodiversity Strategy for 2030. Available online: https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_en (accessed on 28 July 2021).
5. Maxwell, S.L.; Cazalis, V.; Dudley, N.; Hoffmann, M.; Rodrigues, A.S.L.; Stolton, S.; Visconti, P.; Woodley, S.; Kingston, N.; Lewis, E.; et al. Area-based conservation in the twenty-first century. *Nature* **2020**, *586*, 217–227. [CrossRef]
6. Watson, J.E.M.; Dudley, N.; Segan, D.B.; Hockings, M. The performance and potential of protected areas. *Nature* **2014**, *515*, 67–73. [CrossRef]
7. Mace, G.M. Whose conservation? *Science* **2014**, *345*, 1558–1560. [CrossRef]
8. Cole, D.N.; Yung, L. *Beyond Naturalness. Rethinking Park and Wilderness Stewardship in an Era of Rapid Change*; Island Press: Washington, DC, USA, 2010.
9. Shultis, J.; Heffner, S. Hegemonic and emerging concepts of conservation: A critical examination of barriers to incorporating Indigenous perspectives in protected area conservation policies and practice. *J. Sustain. Tour.* **2016**, *24*, 1227–1242. [CrossRef]
10. Coetzer, K.L.; Witkowski, E.T.F.; Erasmus, B.F.N. Reviewing Biosphere Reserves globally: Effective conservation action or bureaucratic label? *Biol. Rev. Camb. Philos. Soc.* **2014**, *89*, 82–104. [CrossRef]
11. Reed, M.G.; Price, M. (Eds.) Editors Introductory. In *UNESCO Biosphere Reserves: Supporting Biocultural Diversity, Sustainability and Society*; Routledge: New York, NY, USA, 2020.
12. Stoll-Kleemann, S.; de La Vega-Leinert, A.C.; Schultz, L. The role of community participation in the effectiveness of UNESCO Biosphere Reserve management: Evidence and reflections from two parallel global surveys. *Envir. Conserv.* **2010**, *37*, 227–238. [CrossRef]
13. Bridgewater, P.B. Biosphere reserves: Special places for people and nature. *Environ. Sci. Policy* **2002**, *5*, 9–12. [CrossRef]
14. Reed, M.G. The contributions of UNESCO Man and Biosphere Programme and biosphere reserves to the practice of sustainability science. *Sustain. Sci.* **2019**, *14*, 809–821. [CrossRef]
15. Ishwaran, N.; Persic, A.; Tri, N.H. Concept and practice: The case of UNESCO biosphere reserves. *IJESD* **2008**, *7*, 118. [CrossRef]
16. Barraclough, A.D.; Reed, M.G.; Måren, I.E.; Price, M.F.; Moreira-Muñoz, A.; Coetzer, K. Recognize 727 UNESCO Biosphere Reserves for biodiversity COP15. *Nature* **2021**, *598*, 257. [CrossRef]
17. Bundesministerium für Umwelt, Naturschutz und nukleare Sicherheit (BMU). *Naturbewusstsein 2019: Bevölkerungsumfrage zu Natur und biologischer Vielfalt*; Bundesministerium für Umwelt, Naturschutz und nukleare Sicherheit: Berlin, Germany, 2020.
18. Cosgrove, D.E.; Daniels, S. (Eds.) Editors Introductory. In *The Iconography of Landscape: Essays on the Symbolic Representation, Design and Use of Past Environments*; Cambridge University Press: Cambridge, MA, USA, 1988.
19. Duncan, J.; Duncan, N. (Re)Reading the Landscape. *Env. Plan D* **1988**, *6*, 117–126. [CrossRef]
20. Kühne, O. *Landscape Theories: A Brief Introduction*; Springer VS: Wiesbaden, Germany, 2019.
21. Kühne, O. *Landscape and Power in Geographical Space as a Social-Aesthetic Construct*; Springer: Cham, Germany, 2018.
22. Böhm, G.; Pfister, H.-R.; Salway, A.; Fløttum, K. Remembering and Communicating Climate Change Narratives—The Influence of World Views on Selective Recollection. *Front. Psychol.* **2019**, *10*, 1026. [CrossRef]
23. Jones, M.D. Cultural Characters and Climate Change: How Heroes Shape Our Perception of Climate Science. *Soc. Sci. Q.* **2014**, *95*, 1–39. [CrossRef]
24. Jones, M.D.; Song, G. Making Sense of Climate Change: How Story Frames Shape Cognition. *Political Psychol.* **2014**, *35*, 447–476. [CrossRef]
25. Lowe, T.; Brown, K.; Dessai, S.; de França, D.M.; Haynes, K.; Vincent, K. Does tomorrow ever come? Disaster narrative and public perceptions of climate change. *Public Underst. Sci.* **2006**, *15*, 435–457.
26. Bushell, S.; Colley, T.; Workman, M. A unified narrative for climate change. *Nat. Clim. Chang.* **2015**, *5*, 971–973. [CrossRef]

27. Abelson, A. Are we sacrificing the future of coral reefs on the altar of the “climate change” narrative? *ICES J. Mar. Sci.* **2020**, *77*, 40–45. [CrossRef]
28. Hutton, J.; Adams, W.M.; Murombedzi, J.C. Back to the Barriers? Changing Narratives in Biodiversity Conservation. *Forum Dev. Stud.* **2005**, *32*, 341–370. [CrossRef]
29. Gißibl, B. Der erste Transnationalpark Deutschlands. In *Urwald der Bayern: Geschichte, Politik und Natur im Nationalpark Bayerischer Wald*; Heurich, M., Mauch, C., Eds.; Vandenhoeck & Ruprecht: Göttingen, Germany, 2020; pp. 47–65.
30. Michler, T.; Aschenbrand, E. “Natur Natur sein lassen”. In *Urwald der Bayern: Geschichte, Politik und Natur im Nationalpark Bayerischer Wald*; Heurich, M., Mauch, C., Eds.; Vandenhoeck & Ruprecht: Göttingen, Germany, 2020; pp. 165–182.
31. Dudley, N. Guidelines for Applying Protected Area Management Categories. Available online: <https://portals.iucn.org/library/sites/library/files/documents/PAG-021.pdf> (accessed on 6 December 2019).
32. Dudley, N.; Stolton, S. *Leaving Space for Nature: The Critical Role of Area Based Conservation*; Routledge: New York, NY, USA, 2020.
33. Cosgrove, D.E.; Daniels, S. Iconography and Landscape. In *The Iconography of Landscape: Essays on the Symbolic Representation, Design and Use of Past Environments*; Cosgrove, D.E., Daniels, S., Eds.; Cambridge University Press: Cambridge, MA, USA, 1988; pp. 1–10.
34. Kühne, O. *Distinktion—Macht—Landschaft: Zur sozialen Definition von Landschaft*, 1st ed.; VS Verlag für Sozialwissenschaften/GWV Fachverlage GmbH, Wiesbaden: Wiesbaden, Germany, 2008.
35. Council of Europe. Landscape Convention. Available online: <https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=09000016807b6bc7> (accessed on 26 July 2021).
36. Thompson, C.W. Landscape perception and environmental psychology. In *The Routledge Companion to Landscape Studies*; Howard, P., Thompson, I.H., Waterton, E., Atha, M., Eds.; Routledge: London, UK; New York, NY, USA, 2019; pp. 19–38.
37. Duncan, J.S.; Duncan, N.G. The Aestheticization of the Politics of Landscape Preservation. *Ann. Assoc. Am. Geogr.* **2001**, *91*, 387–409. [CrossRef]
38. Díaz, S.; Pascual, U.; Stenseke, M.; Martín-López, B.; Watson, R.T.; Molnár, Z.; Hill, R.; Chan, K.M.A.; Baste, I.A.; Brauman, K.A.; et al. Assessing nature’s contributions to people. *Science* **2018**, *359*, 270–272. [CrossRef]
39. De Groot, R.; Costanza, R.; Braat, L.; Benjamin, B.L.; Carrasco, L.; Crossman, N.; Egoh, B.; Geneletti, D.; Hansjuergens, B.; Hein, L.; et al. RE: Ecosystem Services are Nature’s Contributions to People: Highwire Comment Response to: Assessing nature’s contributions to people. Available online: <https://science.sciencemag.org/content/re-ecosystem-services-are-nature%E2%80%99s-contributions-people> (accessed on 9 December 2021).
40. Díaz, S.; Pascual, U.; Stenseke, M.; Martín-López, B.; Watson, R.T.; Molnár, Z.; Hill, R.; Chan, K.M.A.; Baste, I.A.; Brauman, K.A.; et al. RE: There is more to Nature’s Contributions to People than Ecosystem Services—A response to de Groot et al.: Highwire Comment Response to: Assessing Nature’s Contributions to People. Available online: <https://science.sciencemag.org/content/re-there-more-nature%E2%80%99s-contributions-people-ecosystem-services-%E2%80%99s-response-de-groot-et-al> (accessed on 26 July 2021).
41. Kadykalo, A.N.; López-Rodríguez, M.D.; Ainscough, J.; Droste, N.; Ryu, H.; Ávila-Flores, G.; Le Clec’h, S.; Muñoz, M.C.; Nilsson, L.; Rana, S.; et al. Disentangling ‘ecosystem services’ and ‘nature’s contributions to people’. *Ecosyst. People* **2019**, *15*, 269–287. [CrossRef]
42. Pascual, U.; Balvanera, P.; Díaz, S.; Pataki, G.; Roth, E.; Stenseke, M.; Watson, R.T.; Başak Dessane, E.; Islar, M.; Kelemen, E.; et al. Valuing nature’s contributions to people: The IPBES approach. *Curr. Opin. Environ. Sustain.* **2017**, *26–27*, 7–16. [CrossRef]
43. Brockington, D. Data, Myths and Narratives: The Challenges of the Sustainable Development Agenda. Available online: <http://siid.group.shf.ac.uk/data-myths-narratives-challenges-sustainable-development-agenda/> (accessed on 7 December 2021).
44. Viehöver, W. Diskurse als Narrationen. In *Handbuch Sozialwissenschaftliche Diskursanalyse*; Keller, R., Hirsland, A., Schneider, W., Viehöver, W., Eds.; VS Verlag für Sozialwissenschaften: Wiesbaden, Germany, 2001; pp. 177–206.
45. Somers, M.R. The narrative constitution of identity: A relational and network approach. *Theory Soc.* **1994**, *23*, 605–649. [CrossRef]
46. Flanagan, O.J. *Consciousness Reconsidered*, 3rd ed.; MIT Press: Cambridge, MA, USA, 1995.
47. Fukuyama, F. *Identity: Contemporary Identity Politics and the Struggle for Recognition*; Profile Books: London, UK, 2018.
48. Lakoff, G.; Johnson, M. *Metaphors We Live by: With a New Afterword*, 6th ed.; University of Chicago Press: Chicago, IL, USA, 2011.
49. Lakoff, G. Why it Matters How We Frame the Environment. *Environ. Commun.* **2010**, *4*, 70–81. [CrossRef]
50. Gadinger, F.; Jarzebski, S.; Yildiz, T. Politische Narrative. Konturen einer politikwissenschaftlichen Erzähltheorie. In *Politische Narrative: Konzepte—Analysen—Forschungspraxis*; Gadinger, F., Jarzebski, S., Yildiz, T., Eds.; Springer Fachmedien Wiesbaden: Wiesbaden, Germany, 2014; pp. 3–38.
51. Kelle, U. Mixed methods. In *Handbuch Methoden der empirischen Sozialforschung*, 2nd ed.; Baur, N., Blasius, J., Eds.; Springer: Wiesbaden, Germany, 2019; pp. 159–172.
52. IUCN. IUCN Category II: National Park. Available online: <https://www.iucn.org/theme/protected-areas/about/protected-areas-categories/category-ii-national-park> (accessed on 30 September 2019).
53. Keenleyside, K.; Dudley, N.; Cairns, S.; Hall, C.; Stolton, S. *Ecological Restoration for Protected Areas. Principles, Guidelines and Best Practices*; IUCN: Gland, Switzerland, 2012.
54. Lewis, C. *Managing Conflicts in Protected Areas*; IUCN: Gland, Switzerland, 1996.
55. Vasilijević, M.; Zunckel, K.; McKinney, M.; Erg, B.; Schoon, M.; Rosen Michel, T. Transboundary Conservation: A Systematic and Integrated Approach. IUCN: Gland, Switzerland, 2015.

56. Woodley, S.; Bertzky, B.; Crawhall, N.; Dudley, N.; Miranda Lonono, J.; MacKinnon, K.; Redford, K.; Sandwith, T. Meeting Aichi Target 11: What does success look like for protected area systems? *PARKS* **2012**, *18*, 23–36.
57. Bryman, A. *Social Research Methods*; Oxford University Press: Oxford, UK, 2016.
58. Nam, S.H. Qualitative Analyse von Chats und anderer User-generierter Kommunikation. In *Handbuch Methoden der Empirischen Sozialforschung*, 2nd ed.; Baur, N., Blasius, J., Eds.; Springer: Wiesbaden, Germany, 2019; pp. 1041–1051.
59. Brooks, R.; Waters, J. The Hidden Internationalism of Elite English Schools. *Sociology* **2015**, *49*, 212–228. [[CrossRef](#)]
60. Steinwall, A. Naturalness or Biodiversity: Negotiating the Dilemma of Intervention in Swedish Protected Area Management. *Environ. Values* **2015**, *14*, 31–54. [[CrossRef](#)]
61. Head, L.; Regnéll, J. Nature, culture and time: Contested landscapes among environmental managers in Skåne, southern Sweden. In *Peopled Landscapes: Archaeological and Biogeographic Approaches to Landscapes*; Haberle, S.G., David, B., Eds.; ANU Press: Canberra, Germany, 2012.
62. Rubin, H.; Rubin, I. *Qualitative Interviewing: The Art of Hearing Data*, 3rd ed.; Sage: Thousand Oaks, CA, USA; London, UK, 2012.
63. Girtler, R. *10 Gebote der Feldforschung*; LIT Verlag: Wien, Austria, 2004.
64. Espinosa, C.; Pregernig, M.; Fischer, C. *Narrative und Diskurse in der Umweltpolitik: Möglichkeiten und Grenzen Ihrer Strategischen Nutzung*; Umweltbundesamt: Dessau-Roßlau, Germany, 2017.
65. Hajer, M. Doing Discourse Analysis: Coalitions, Practices, Meaning. In *Words Matter in Policy and Planning*; van den Brink, M., Metzke, T., Eds.; Koninklijk Nederlands Aardrijkskundig Genootschap: Utrecht, The Netherlands, 2006; pp. 65–74.
66. Takacs, D. *The Idea of Biodiversity: Philosophies of Paradise*; Johns Hopkins University Press: Baltimore, MD, USA, 1996.
67. Schama, S. *Landscape and Memory*, 1st ed.; Vintage Books: New York, NY, USA, 1996.
68. Aschenbrand, E. *Die Landschaft des Tourismus: Wie Landschaft von Reiseveranstaltern Inszeniert und von Touristen Konsumiert Wird*, 1st ed.; Springer Fachmedien Wiesbaden GmbH: Wiesbaden, Germany, 2017.
69. Löfgren, O. *On Holiday: A History of Vacationing*, 1st ed.; University of California Press: Berkeley, CA, USA, 2002.
70. Burckhardt, L. Warum ist Landschaft schön? In *Warum ist Landschaft Schön?: Die Spaziergangswissenschaft*, 4th ed.; Burckhardt, L., Ritter, M., Schmitz, M., Eds.; Schmitz: Berlin, Germany, 2015; pp. 19–32.
71. Muir, J. The Yosemite: Chapter 16—Hetch Hetchy Valley. Available online: https://vault.sierraclub.org/john_muir_exhibit/writings/the_yosemite/chapter_16.aspx (accessed on 20 July 2021).
72. Spence, M.D. *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks*; Oxford University Press: New York, NY, USA, 2000.
73. Cronon, W. The Trouble with Wilderness: Or, Getting Back to the Wrong Nature. *Environ. Hist.* **1996**, *1*, 7–28. [[CrossRef](#)]
74. Ducarme, F.; Flipo, F.; Couvet, D. How the diversity of human concepts of nature affects conservation of biodiversity. *Conserv. Biol. J. Soc. Conserv. Biol.* **2021**, *35*, 1019–1028. [[CrossRef](#)]
75. Bibelriether, H. Fachtagung anlässlich des 11. In *Ungestörte Natur—Was haben wir davon? Internationalen Wattenmeertages 1991 in Husum*; Peter, P., Ed.; Umweltstiftung WWF Deutschland: Berlin, Germany, 1992; pp. 85–104.
76. White, L. The Historical Roots of our Ecologic Crisis. *Science* **1967**, *155*, 1203–1207. [[CrossRef](#)]
77. Aschenbrand, E.; Michler, T. Linking Socio-Scientific Landscape Research with the Ecosystem Services Approach to Analyze Conflicts About Protected Area Management—The Case of the Bavarian Forest National Park. In *Modern Approaches to the Visualization of Landscapes*; Edler, D., Kühne, O., Jenal, C., Eds.; Springer Fachmedien Wiesbaden: Wiesbaden, Germany, 2020; pp. 403–425.
78. Michler, T.; Aschenbrand, E.; Leibl, F. Gestört, aber grün. 30 Jahre Forschung zu Landschaftskonflikten im Nationalpark Bayerischer Wald. In *Landschaftskonflikte*, 1st ed.; Berr, K., Jenal, C., Eds.; Springer VS: Wiesbaden, Germany, 2019; pp. 291–311.
79. UNESCO. Lima Action Plan for UNESCO’s Man and the Biosphere (MAB) Programme and its World Network of Biosphere Reserves (2016–2025). Available online: http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/Lima_Action_Plan_en_final.pdf (accessed on 20 July 2021).
80. Batisse, M. Biosphere Reserves: A Challenge for Biodiversity Conservation & Regional Development. *Environ. Sci. Policy Sustain. Dev.* **1997**, *39*, 6–33.
81. Batisse, M. The Biosphere Reserve: A Tool for Environmental Conservation and Management. *Environ. Conserv.* **1982**, *9*, 101–111. [[CrossRef](#)]
82. Bridgewater, P. The Man and Biosphere programme of UNESCO: Rambunctious child of the sixties, but was the promise fulfilled? *Curr. Opin. Environ. Sustain.* **2016**, *19*, 1–6. [[CrossRef](#)]
83. Price, M.F. People in biosphere reserves: An evolving concept. *Soc. Nat. Resour.* **1996**, *9*, 645–654. [[CrossRef](#)]
84. UNESCO. What are Biosphere Reserves? Available online: <https://en.unesco.org/node/314143> (accessed on 6 May 2021).
85. UNESCO. Biosphere Reserves. Available online: <https://en.unesco.org/biosphere> (accessed on 6 May 2021).
86. Stoll-Kleemann, S.; Welp, M. Participatory and Integrated Management of Biosphere Reserves: Lessons from Case Studies and a Global Survey. *GAIA—Ecol. Perspect. Sci. Soc.* **2008**, *17*, 161–168. [[CrossRef](#)]
87. Brook, I. Aesthetic appreciation of landscape. In *The Routledge Companion to Landscape Studies*; Howard, P., Thompson, I.H., Waterton, E., Atha, M., Eds.; Routledge: London, UK; New York, NY, USA, 2019; pp. 39–50.
88. Bridgewater, P.; Rotherham, I.D. A critical perspective on the concept of biocultural diversity and its emerging role in nature and heritage conservation. *People Nat.* **2019**, *1*, 291–304. [[CrossRef](#)]

89. Bell, D. Variations on the rural idyll. In *Handbook of Rural Studies*; Cloke, P., Mooney, P.H., Marsden, T., Eds.; Sage: London, UK, 2006; pp. 149–160.
90. Büttner, N. *Geschichte der Landschaftsmalerei*; Hirmer: München, Germany, 2006.
91. Reed, M.G.; Price, M. Introducing UNESCO Biosphere Reserves. In *UNESCO Biosphere Reserves: Supporting Biocultural Diversity, Sustainability and Society*; Reed, M.G., Price, M., Eds.; Routledge: New York, NY, USA, 2020; pp. 1–10.
92. UNESCO. Man and the Biosphere (MaB) Programme. Available online: <https://en.unesco.org/mab/about> (accessed on 19 May 2021).
93. Deutsche UNESCO-Kommission. Biosphärenreservate. Available online: <https://www.unesco.de/kultur-und-natur/biosphaerenreservate> (accessed on 21 July 2021).
94. Frank, A.K. What is the story with sustainability? A narrative analysis of diverse and contested understandings. *J. Environ. Stud. Sci.* **2017**, *7*, 310–323. [[CrossRef](#)]
95. Lamberton, G. Sustainable sufficiency—An internally consistent version of sustainability. *Sust. Dev.* **2005**, *13*, 53–68. [[CrossRef](#)]
96. UNESCO. MAB Good Practices: Austria | austrian biosphere reserves | guidelines on the sustainable production of renewable energy in austrian biosphere reserves. Available online: <https://en.unesco.org/mab/strategy/goodpractices> (accessed on 21 July 2021).
97. Österreichisches Nationalkomitee MAB. Position Paper of the Austrian National Committee for the UNESCO Programme ‘Man and the Biosphere (MAB)’ for Using Renewable Energies in Austrian Biosphere Reserves. Available online: http://www.biosphaerenparks.at/images/pdf/Position-paper_Energy_english.pdf (accessed on 21 July 2021).
98. Weber, F.; Roßmeier, A.; Jenal, C.; Kühne, O. Landschaftswandel als Konflikt. In *Landschaftsästhetik und Landschaftswandel*; Kühne, O., Megerle, H., Weber, F., Eds.; Springer: Wiesbaden, Germany, 2017; pp. 215–244.
99. Colvin, R.M.; Witt, G.; Lacey, J. How wind became a four-letter word: Lessons for community engagement from a wind energy conflict in King Island, Australia. *Energy Policy* **2016**, *98*, 483–494. [[CrossRef](#)]
100. Jessup, B. Plural and hybrid environmental values: A discourse analysis of the wind energy conflict in Australia and the United Kingdom. *Environ. Politics* **2010**, *19*, 21–44. [[CrossRef](#)]
101. Colafranceschi, D.; Sala, P.; Manfredi, F. Nature of the Wind, the Culture of the Landscape: Toward an Energy Sustainability Project in Catalonia. *Sustainability* **2021**, *13*, 7110. [[CrossRef](#)]
102. Weber, F.; Kühne, O.; Jenal, C.; Aschenbrand, E.; Artuković, A. *Sand Im Getriebe: Aushandlungsprozesse Um Die Gewinnung Mineralischer Rohstoffe Aus Konflikttheoretischer Perspektive Nach Ralf Dahrendorf*; Vieweg: Wiesbaden, Germany, 2018.
103. Nilsson, M.; Griggs, D.; Visbeck, M. Policy: Map the interactions between Sustainable Development Goals. *Nature* **2016**, *534*, 320–322. [[CrossRef](#)]
104. Pradhan, P.; Costa, L.; Rybski, D.; Lucht, W.; Kropp, J.P. A Systematic Study of Sustainable Development Goal (SDG) Interactions. *Earth's Future* **2017**, *5*, 1169–1179. [[CrossRef](#)]
105. Büscher, B.; Fletcher, R. Towards Convivial Conservation. *Conserv. Soc.* **2019**, *17*, 283–296. [[CrossRef](#)]
106. Harris, M.; Cave, C.; Foley, K.; Bolger, T.; Hochstrasser, T. Urbanisation of Protected Areas within the European Union—An Analysis of UNESCO Biospheres and the Need for New Strategies. *Sustainability* **2019**, *11*, 5899. [[CrossRef](#)]
107. Brenner, N.; Schmid, C. Towards a new epistemology of the urban? *City* **2015**, *19*, 151–182. [[CrossRef](#)]
108. Brenner, N.; Schmid, C. The ‘Urban Age’ in Question. *Int. J. Urban Reg. Res.* **2014**, *38*, 731–755. [[CrossRef](#)]