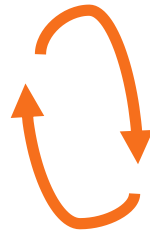




Eberswalde University
for Sustainable
Development

Governance, Administration and Management of Biosphere Reserves and Protected Areas

Prof. Dr. Erik Aschenbrand



Narratives and governance

Prospect theory (Kahneman & Tversky) can add to our understanding of narratives

Prospect theory: Cognitive ease

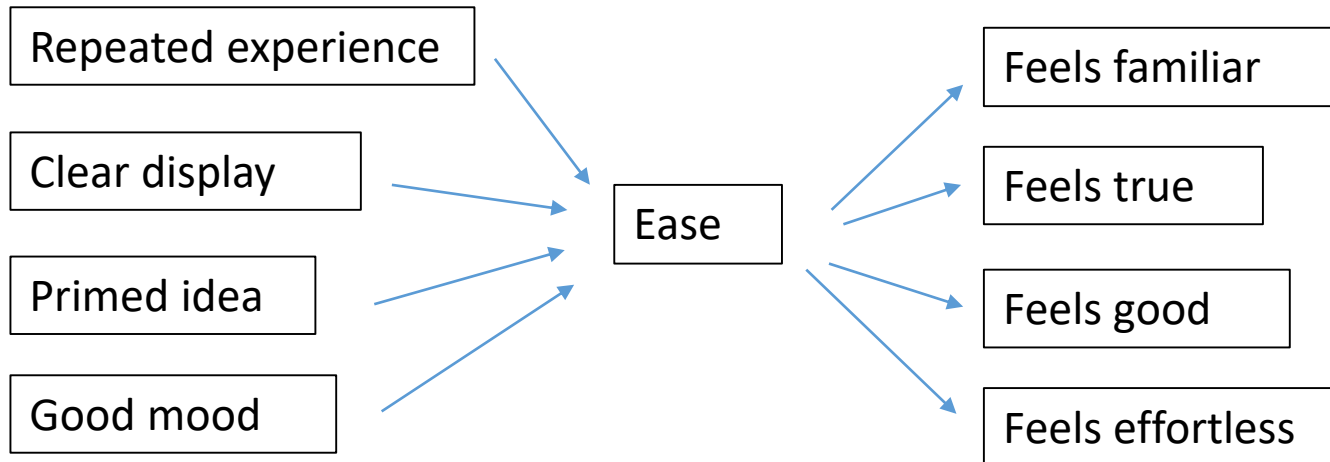
„Whenever you are conscious, and perhaps even when you are not, multiple computations are going on in your brain, which maintain and update current answers to some key questions:

Is anything new going on? Is there a threat? Are things going well? Should my attention be redirected? Is more effort needed for this task?

[...]

These assessments are carried out automatically by System 1, and one of their functions is to determine whether extra effort is required from System 2“ (Kahnemann 2011, p. 59)

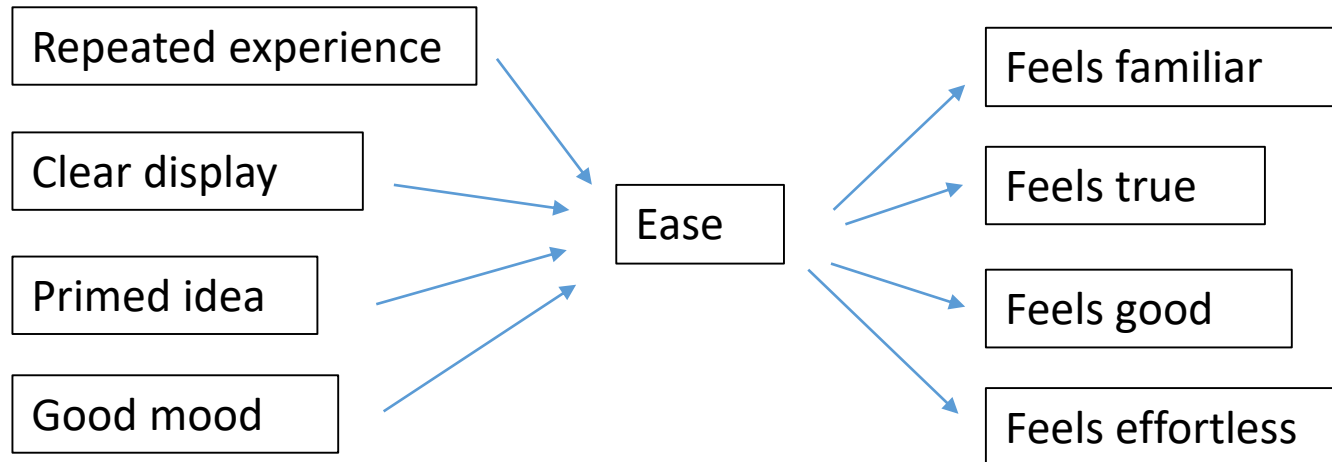
Prospect theory: Cognitive ease



Causes and consequences of Cognitive Ease (Kahnemann 2011, p. 60)

Prospect theory: Cognitive ease

„Anything that makes it easier for the associative machine to run smoothly will also bias beliefs“ (Kahnemann 2011, p. 60)



Causes and consequences of Cognitive Ease (Kahnemann 2011, p. 60)

[What are the consequences of Cognitive Ease?](#)

Narratives

embed phenomena in a context of meaning:

- create clarity + **serve to make complex situations understandable.**
- can be based equally on science, myths or religion.
- Individual actors as well as organisations consciously or unconsciously make use of narratives and thereby **lend coherence to their ideas, interpretations of the world and actions** (Viehöver 2001).
- stories that we construct in order to **help understand the facts as we perceive them. Help to handle data and absences of data.**
- enable cooperation of large groups of people that do not know each other personally

Narratives: part of human nature?

Somers (1994): the narrative constitution of identity



„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“ (Somers 1994, p. 606).

„Evidence strongly suggests that humans in all cultures come to cast their own identity in some sort of narrative form. We are inveterate story tellers“ (Flanagan 1995, p. 189)

Success factors for narratives

- **Actors**
- **Connectivity**
- **Openness and ambiguity**
- **Communicability**

Espinosa et al *in* Aschenbrand and Michler 2021. Why Do UNESCO Biosphere Reserves Get Less Recognition Than National Parks? A Landscape Research Perspective on Protected Area Narratives in Germany. Sustainability 13 (13647)

Success factors for narratives

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.**
- FFF movement gains weight by the fact that it is pupils and students that are fighting for their future and accusing the older generation of irresponsible behaviour.



Greta : https://de.wikipedia.org/wiki/Datei:Greta_Thunberg_4.jpg



Aschenbrand and Michler 2021. Why Do UNESCO Biosphere Reserves Get Less Recognition Than National Parks? A Landscape Research Perspective on Protected Area Narratives in Germany. Sustainability 13 (13647)

Success factors for narratives

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* (Lakoff 2010), or even uses disease metaphors that relate to everyday experiences such as: "The earth has a fever" because each of these formulations triggers different associations.

Success factors for narratives

Openness and ambiguity – narratives are more successful when they are open and ambiguous. An impressive example is the rise of „Biodiversity“. As Takacs (1996) was able to show, even among the originators of this term there are different ideas of what exactly biodiversity means and should mean. Ecologist David Ehrenfeld is quoted by Takacs (1996, S. 46) saying: „I think it’s one of those wonderful catchwords like *sustainable development*, that, because it’s vaguely defined, has a broad appeal“.

Success factors for narratives

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.

Human – nature relation

→ was and is **always structured through narratives**

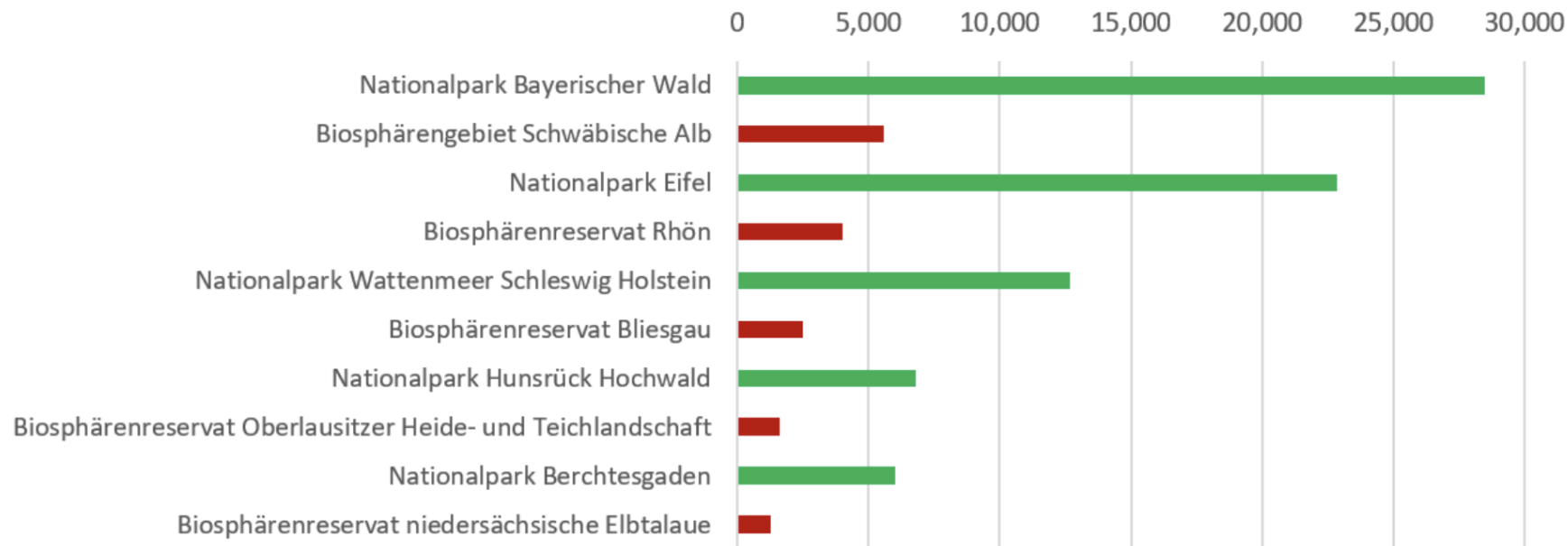
→ Narratives: analytical lens to analyse human-nature relations

“West et al. have argued in a much 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]” (Aschenbrand and Michler 2021)

Narratives and National Parks and Biosphere Reserves Recognition

Aschenbrand and Michler 2021.
Why Do UNESCO Biosphere
Reserves Get Less Recognition
Than National Parks? A
Landscape Research Perspective
on Protected Area Narratives in
Germany. Sustainability 13
(13647)

Top 5 National Parks and Biosphere Reserves in Germany listed according to the number of followers on Facebook



Summe Facebook
Abonnements NP: 92.142

Summe Facebook
Abonnements BR: 18.870

Daten vom
29.06.2021

Abbildung 3: Kenntnis über Schutzgebiete

Ich nenne Ihnen nun verschiedene Begriffe.

Bitte sagen Sie mir jeweils, ob Sie den Begriff schon einmal gehört haben.

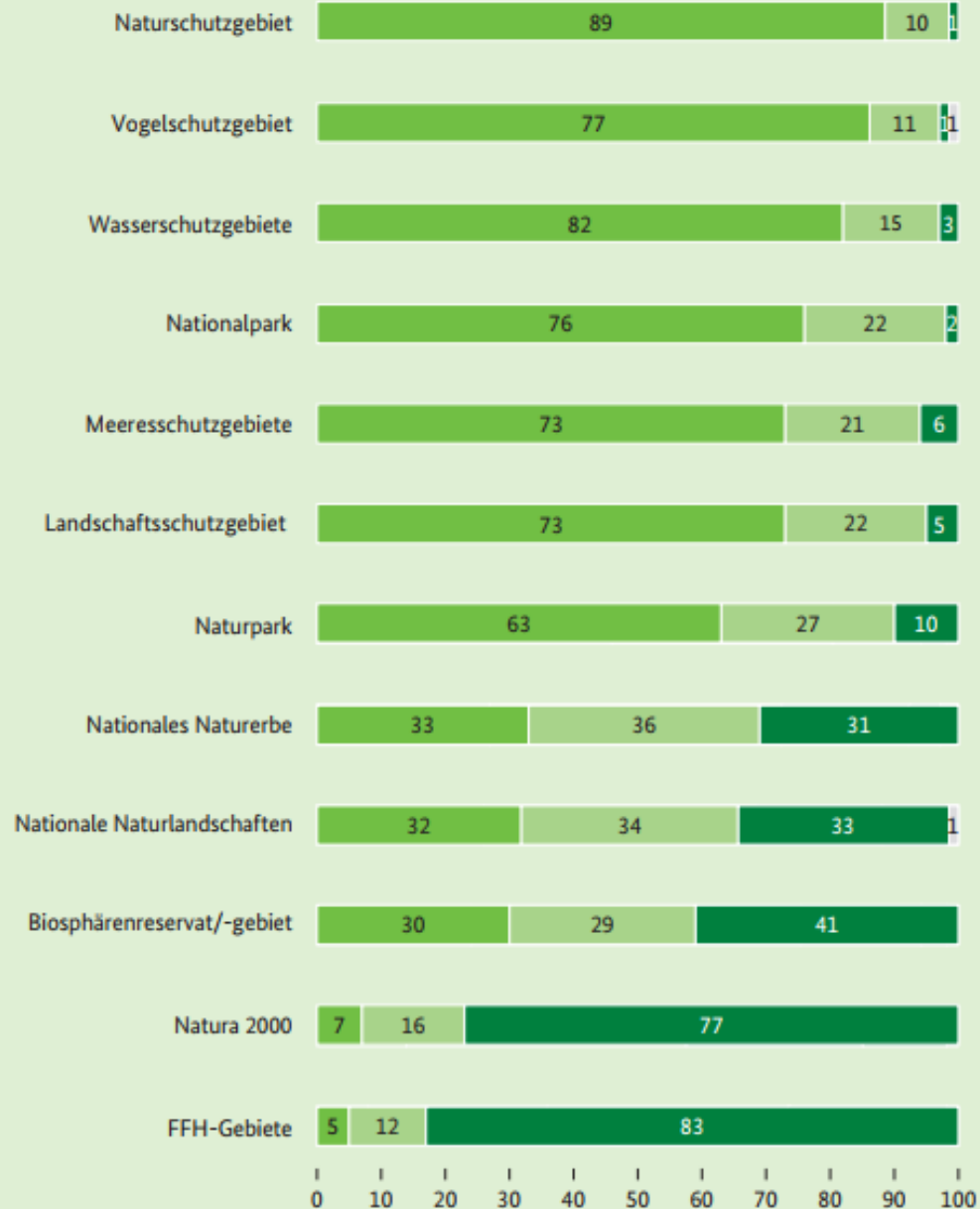


Figure from: Naturbewusstseinsstudie 2019, S. 25.
Herausgeber: Bundesministerium für Umwelt,
Naturschutz und nukleare Sicherheit (BMU)
<https://www.bfn.de/themen/gesellschaft/naturbewusstsein/studie-2019.html>

- Ich habe davon gehört, und ich weiß, was der Begriff bedeutet
- Ich habe davon gehört, aber ich weiß nicht, was der Begriff bedeutet
- Ich habe noch nie davon gehört
- weiß nicht/kann ich nicht beurteilen

Angaben in Prozent

Abbildung 3: Kenntnis über Schutzgebiete

Ich nenne Ihnen nun verschiedene Begriffe.

Bitte sagen Sie mir jeweils, ob Sie den Begriff schon einmal gehört haben.

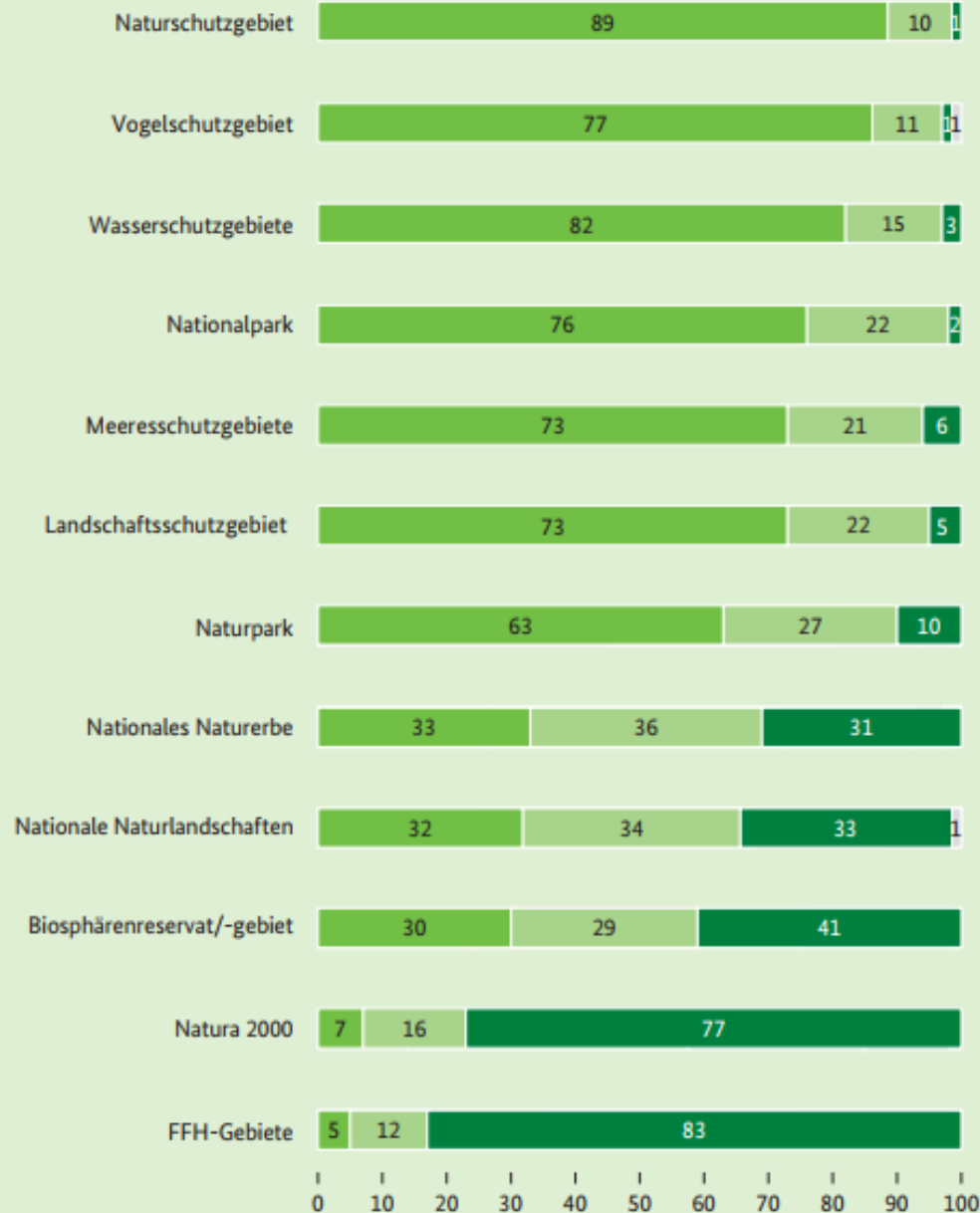


Figure from: Naturbewusstseinsstudie 2019, S. 25.
Herausgeber: Bundesministerium für Umwelt,
Naturschutz und nukleare Sicherheit (BMU)
<https://www.bfn.de/themen/gesellschaft/naturbewusstsein/studie-2019.html>

“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.”

(...)

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.” (Aschenbrand and Michler 2021)

■ Ich habe davon gehört, und ich weiß, was der Begriff bedeutet
■ Ich habe davon gehört, aber ich weiß nicht, was der Begriff bedeutet
■ Ich habe noch nie davon gehört
■ weiß nicht/kann ich nicht beurteilen

Angaben in Prozent

Abbildung 3: Kenntnis über Schutzgebiete

Ich nenne Ihnen nun verschiedene Begriffe.

Bitte sagen Sie mir jeweils, ob Sie den Begriff schon einmal gehört haben.

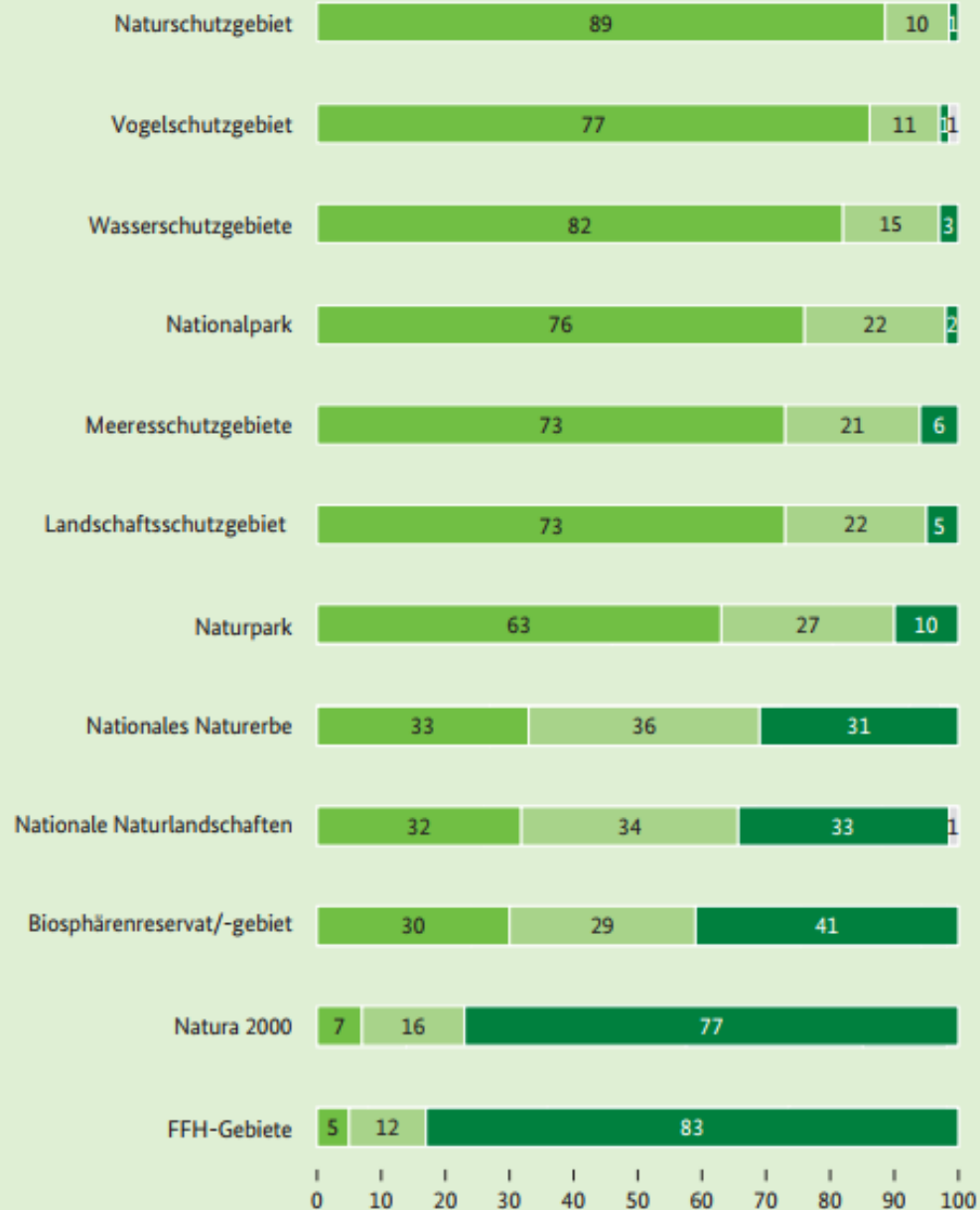


Figure from: Naturbewusstseinsstudie 2019, S. 25.
Herausgeber: Bundesministerium für Umwelt,
Naturschutz und nukleare Sicherheit (BMU)
<https://www.bfn.de/themen/gesellschaft/naturbewusstsein/studie-2019.html>

BRs need publicity:

- Sustainable social, cultural and economic development not achievable by one authority/organization
- Highly fragmented governance, especially in BRs' development zones
- Participatory design of sustainable development
- Visibility → Political weight → Consideration and promotion

■ Ich habe davon gehört, und ich weiß, was der Begriff bedeutet
■ Ich habe davon gehört, aber ich weiß nicht, was der Begriff bedeutet
■ Ich habe noch nie davon gehört
■ weiß nicht/kann ich nicht beurteilen

Angaben in Prozent

Donau Auen National Park (Austria)



our mission

The Donau-Auen National Park preserves the last large floodplain landscape in Central Europe on more than 9,600 hectares. When it was founded in 1996, this jewel was permanently placed under international protection. Since then, nature has been able to develop here free of economic constraints.

Through innovative revitalization projects, backwaters are being reconnected to the river and natural banks of the Danube are being promoted. The riparian forests are developing into species-rich forest wilderness. According to the motto "Free Flow. Wild forest." The original natural character returns to the floodplain landscape. Rare animal and plant species have returned home or have improved their populations.

With a wide range of visitor facilities, excursions and events, guests can experience the Donau-Auen National Park, a regional center for environmental education and a popular excursion destination.



Spreewald Biosphere Reserve

Today the Spreewald is a floodplain landscape shaped by humans, yet largely close to nature, and therefore a rich habitat > **Flora and fauna**. Species that are threatened or already extinct elsewhere still live here. In order to protect and preserve this landscape, the Spreewald was declared a biosphere reserve in 1990 and received UNESCO status in 1991.

It is part of a global network of 748 biosphere reserves, which, in accordance with the UNESCO program "Man and biosphere" (MAB), aim to protect and sustainably develop historically grown cultural landscapes in an exemplary manner .

In the biosphere reserve, sustainable development is implemented as a model in concrete projects. This begins with the production and marketing of certified regional products under the > **Spreewald umbrella brand** and goes from the use of renewable energies to the preservation and revitalization of valuable habitats, such as moors or natural bodies of water. > **Educational projects** for sustainable development are aimed not only at children and young people but also at residents and guests of the biosphere reserve of all ages. This is of great importance > **tourism**- the special charm of the Spreewald attracts up to three million tourists a year. Preserving the unique nature and at the same time making it possible to experience it is a constant task > **Task**, for which many actors in the biosphere reserve bear responsibility. In the > **Information centers**, the House for People and Nature in Lübbenau, the Schlossberghof in Burg and the Old Mill in Schlepzig, visitors not only receive tips, leaflets and tour suggestions, but here they can also learn a lot of interesting facts about the Spreewald. The > **Nature watch** has interesting offers for guided tours.

<https://www.spreewald-biosphaerenreservat.de/>

(DeepL translation)

What are the differences?

Donau-Auen National Park

- “preserves”
 - “this jewel”
 - “nature able to develop free of economic constraints”
 - “revitalization projects”
 - “wild forest”
 - “original natural character returns”
 - “guests” - people as strangers
- Also:
 - “wide range of visitor facilities, excursions and events”
 - “environmental education”
 - “popular excursion destination”

Spreewald Biosphere Reserve

- “shaped by humans, yet largely close to nature”
 - “rich habitat” - but not a jewel
 - “sustainably develop historically grown cultural landscapes” - not wild
 - “sustainable development is implemented”
 - “production and marketing of certified regional products”
 - “renewable energies”
 - “Educational projects for sustainable development are aimed not only at children and young people but also residents and guests of the BR of all ages”
 - “many actors in the BR bear responsibility”
- But also:
 - “protect and preserve this landscape”
 - “preservation and revitalization of valuable habitats”
 - Tourism, visitors

National park
„Let nature be nature“



our mission

The Donau-Auen National Park preserves the last large floodplain landscape in Central Europe on more than 9,600 hectares. When it was founded in 1996, this jewel was permanently placed under international protection. Since then, nature has been able to develop here free of economic constraints.

Through innovative revitalization projects, backwaters are being reconnected to the river and natural banks of the Danube are being promoted. The riparian forests are developing into species-rich forest wilderness. According to the motto "Free Flow. Wild forest." The original natural character returns to the floodplain landscape. Rare animal and plant species have returned home or have improved their populations.

With a wide range of visitor facilities, excursions and events, guests can experience the Donau-Auen National Park, a regional center for environmental education and a popular excursion destination.



UNESCO biosphere reserve:
Model region for sustainable
development
Learning site for SD

Today the Spreewald is a floodplain landscape shaped by humans, yet largely close to nature, and therefore a rich habitat > **Flora and fauna**. Species that are threatened or already extinct elsewhere still live here. In order to protect and preserve this landscape, the Spreewald was declared a biosphere reserve in 1990 and received UNESCO status in 1991.

It is part of a global network of 748 biosphere reserves, which, in accordance with the UNESCO program "Man and biosphere" (MAB), aim to protect and sustainably develop historically grown cultural landscapes in an exemplary manner .

In the biosphere reserve, sustainable development is implemented as a model in concrete projects. This begins with the production and marketing of certified regional products under the > **Spreewald umbrella brand** and goes from the use of renewable energies to the preservation and revitalization of valuable habitats, such as moors or natural bodies of water. > **Educational projects** for sustainable development are aimed not only at children and young people but also at residents and guests of the biosphere reserve of all ages. This is of great importance > **tourism**- the special charm of the Spreewald attracts up to three million tourists a year. Preserving the unique nature and at the same time making it possible to experience it is a constant task > **Task**, for which many actors in the biosphere reserve bear responsibility. In the > **Information centers**, the House for People and Nature in Lübbenau, the Schlossberghof in Burg and the Old Mill in Schlepzig, visitors not only receive tips, leaflets and tour suggestions, but here they can also learn a lot of interesting facts about the Spreewald. The > **Nature watch** has interesting offers for guided tours.

<https://www.spreewald-biosphaerenreservat.de/>

(DeepL translation)

Why is the national park concept so successful?

“To gain such remarkable influence, the concept of wilderness had to become loaded with some of the deepest core values of the culture that created and idealized it: **it had to become sacred**” (Cronon 1995).



David Iliff (2013): Yosemite Valley. Tunnel View.

https://commons.wikimedia.org/wiki/File:Tunnel_View,_Yosemite_Valley,_Yosemite_NP_-_Diliff.jpg

Why is the national park concept so successful?

“To gain such remarkable influence, the concept of wilderness had to become loaded with some of the deepest core values of the culture that created and idealized it: it had to become sacred” (Cronon 1995).

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**" (Muir 1912).



David Iliff (2013): Yosemite Valley. Tunnel View.

https://commons.wikimedia.org/wiki/File:Tunnel_View,_Yosemite_Valley,_Yosemite_NP_-_Diliff.jpg

Why is the national park concept so successful?

“To gain such remarkable influence, the concept of wilderness had to become loaded with some of the deepest core values of the culture that created and idealized it: it had to become sacred” (Cronon 1995).

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" (Muir 1912).

„National parks are more than nature reserves, they are **sanctuaries of our homeland, they are sanctuaries of the soul, they are memories of paradise, they are the landscapes from which our hopes and dreams grow.**“ (Weinzierl 2010, S. 11).

Plus ecological crisis:

Embedding the region in the narrative of a civilization ruining nature.

→ **Solution: Here nature can recover**



Touristification/Environmental education:

National parks create legibility of landscape

→ Stand for experiences



National parks and Biosphere Reserves

Should we compare



and



?

National parks and Biosphere Reserves

Should we compare



and



?

What is a protected area?

A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values. (IUCN Definition 2008)

≠ Biosphärenreservat

CBD: Expansion of existing protected area networks, more inclusive protected areas.
BR = reconciling nature conservation with development

Nationalpark

Unambiguity

Stands for the protection of nature

Which nature conservation?
This question does not
jeopardize the fundamental
positioning as a space in which
nature has priority

Unambiguity mainly communicative, because there are, after all, many other goals that are weighed against each other: Regional development, tourism, recreation, environmental education

Construction/interpretation of landscape through easily understandable, unambiguous protected area concept.

Biosphere Reserve

Multifunctionality

Stands for the combination of protection and development.

What is development? What is sustainability?
Why does a space need to be defined to connect the goals?



Embedding of PA
concept in
broader narratives

Christian human-
nature dichotomy

Romantic
idealization of
sublime nature

Ecological crisis



Nationalpark

Place where sublime nature untouched by humans
can be appreciated.

Place where nature can
recover

Embedding of PA concept in broader narratives	Christian human-nature dichotomy	Romantic idealization of sublime nature	Ecological crisis
Nationalpark	Place where sublime nature untouched by humans can be appreciated.		Place where nature can recover
Biosphere Reserve	Place where humans and nature form a symbiosis and achieve harmony (traditional cultural landscape)		Place where we develop new solutions (sustainability transformation)
Embedding of PA concept in broader narratives	Harmony with nature „wise use“	Romantic idealization of pastoralism and the simple life	Ecological crisis

Aschenbrand and Michler 2021. Why Do UNESCO Biosphere Reserves Get Less Recognition Than National Parks? A Landscape Research Perspective on Protected Area Narratives in Germany. Sustainability 13 (13647)

Embedding of PA concept in broader narratives	Christian human-nature dichotomy	Romantic idealization of sublime nature	Ecological crisis
Nationalpark	Place where sublime nature untouched by humans can be appreciated.		Place where nature can recover
Biosphere Reserve	Place where humans and nature form a symbiosis and achieve harmony (traditional cultural landscape)		Place where we develop new solutions (sustainability transformation)
		conservation	change
Embedding of PA concept in broader narratives	Harmony with nature „wise use“	Romantic idealization of pastoralism and the simple life	Ecological crisis

Aschenbrand and Michler 2021. Why Do UNESCO Biosphere Reserves Get Less Recognition Than National Parks? A Landscape Research Perspective on Protected Area Narratives in Germany. Sustainability 13 (13647)

<https://www.biosphaerenreservat-rhoen.de/natur/landwirtschaft-und-fischerei/alte-haustierrassen/rhoenschaf/>



Traditional cultural landscape



Sustainability transformation



<https://www.schwaebischealb.de/touren/streuobst-radroute-herrenberg-tuebingen#/article/060e37bd-8177-4759-a83a-1cfe68bd69b1>

<https://www.biosphaerenreservat-rhoen.de/natur/landwirtschaft-und-fischerei/alte-haustierrassen/rhoenschaf/>



<https://www.schwaebischealb.de/touren/streuobst-radroute-herrenberg-tuebingen#/article/060e37bd-8177-4759-a83a-1cfe68bd69b1>

Traditional
cultural
landscape



©: Hochschwarzwald Tourismus

Sustainability
transformation



WNBR: Explicitly discuss
understandings of
sustainability

Questions:

Do BRs need as much communicative reach/visibility as NPs?

- Concept calls for participation in the design of model projects for sustainable development
- Visibility → political weight → Consideration in other policies?
- Are BRs too little controversial and too little political?

Tension between Conservation and Development: How do biosphere reserves deal with tensions?

- Should BRs as model regions be places where conflicts regarding the development of landscapes are addressed?
- Is it necessary to develop and communicate an own understanding of sustainability?
- International comparison of sustainability understandings?

Joint construction/interpretation of space: which concept is suitable for biosphere reserves?

- Cultural landscape?
- Sufficiency- or technology-oriented sustainability visions?
- How can the BR concept be communicated in a way that is easy to understand and connect?