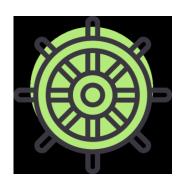


Governance, Administration and Management of Biosphere Reserves and Protected Areas

Dr. Ana Filipa Ferreira & Lena-Marie Mutschler March 2024















2 Intro: the definition of key terms
3 Organisation forms of Biosphere Reserves (BRs) and Protected Areas (PAs)
4 Weber's characteristics of bureaucracy
5 Good government and good governance
6 Landscape governance legal foundation
7 Landscape governance fragmentation

2 Intro: the definition of key terms

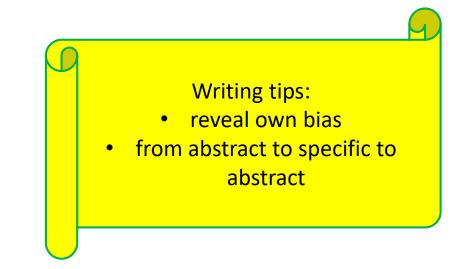
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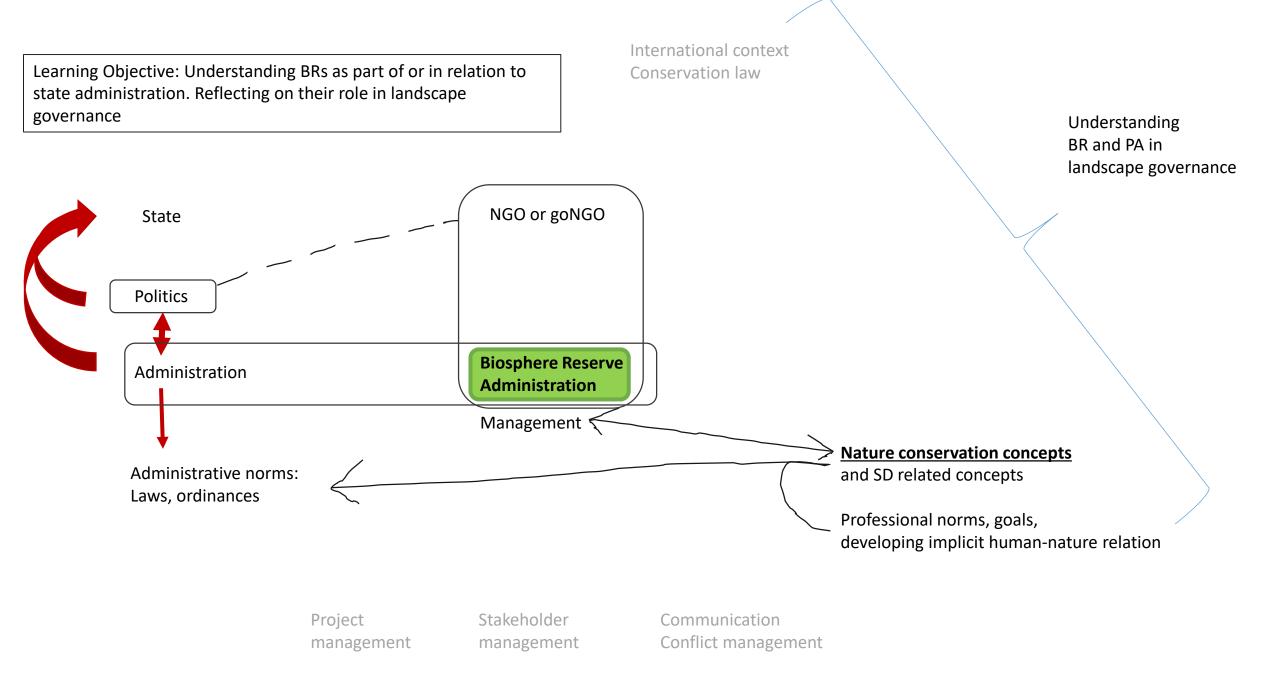
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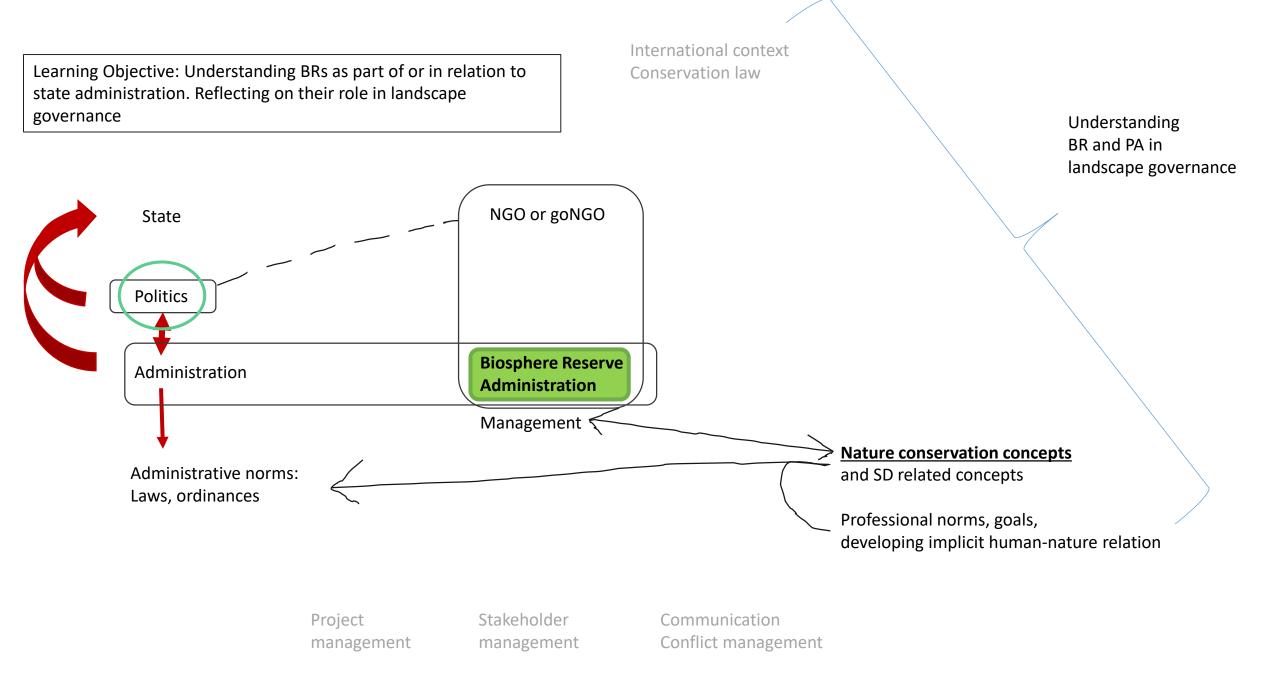
Questions of power, authority, and action within "multiscalar, multistakeholder aspects of environmental decision-making" — the "Who gets what?" & "Who gets to decide?" within multilevel systems of environmental governance

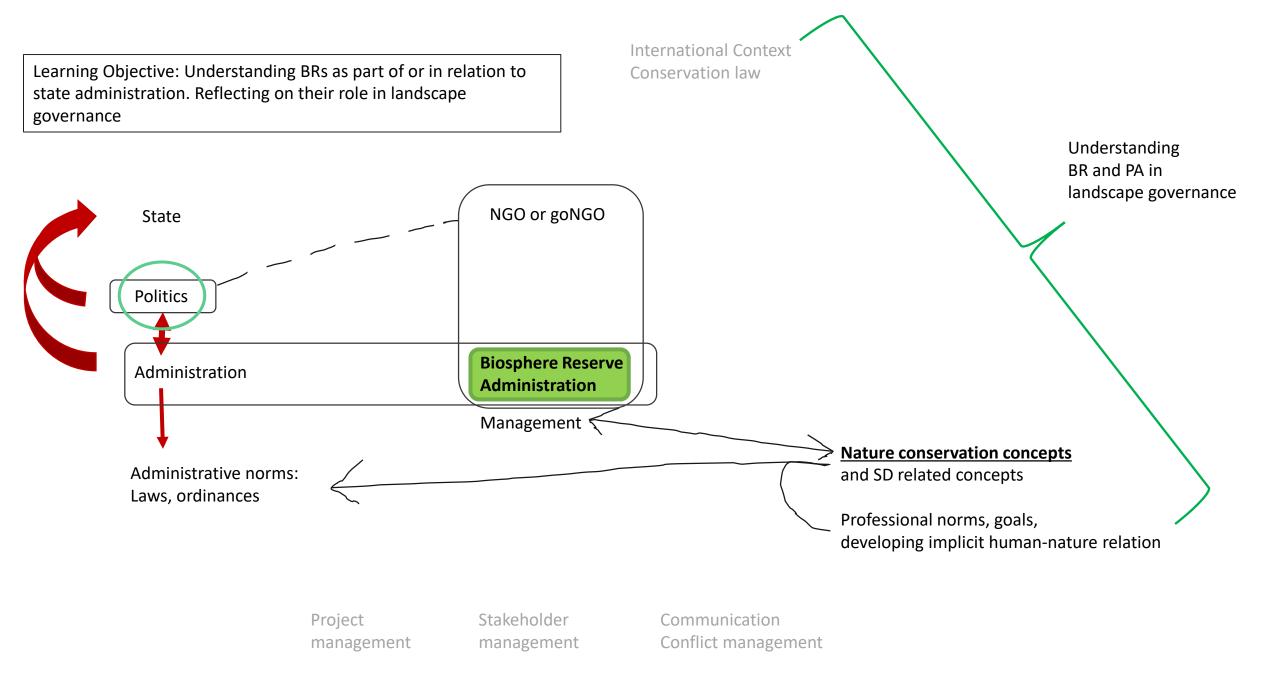




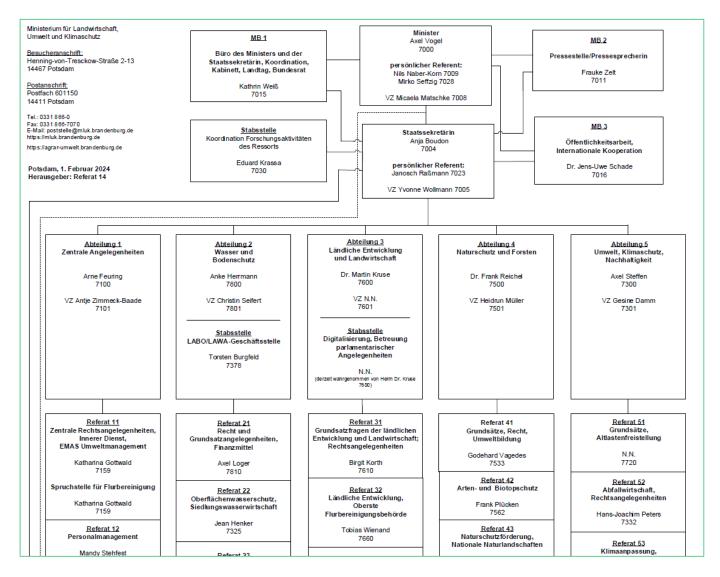
UNESCO Biosphere Reserves







- Modern Leviathan State (organisation): politics)+ bureaucracy (= public administration)
- Especially interesting: Interactions between political sphere and bureaucracy
- Most people (including scientists) are more interested in politics and less in bureaucracy



- Modern Leviathan (State organization): politics + bureaucracy (= public administration)
- Especially interesting: Interactions between politic sphere and bureaucracy
- Most people (including scientists) are more interested in politics and less in bureaucracy

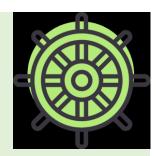
"It is the **object of administrative study** to discover,

- what government can properly and successfully do, and,
- 2. how it can do these proper things with the utmost possible efficiency and at the least possible cost either of money or of energy.

On both these points there is obviously much need of light among us; and only careful study can supply that light"

(Woodrow Wilson, 1886)

- gouvernance (French)
 - used in fourteenth century to refer to royal officers
 (Katsamunska 2016, 133)
- cybern (Latin) = "steering"
 - notion of the state as 'steering' society (Katsamunska 2016, 136)



two related issues:

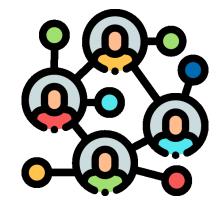
- 1. capability of the state to "steer" society
- 2. what objectives can be steered & who defines the objectives of governance, including the relationship between actors involved in governance

Governance perspective (Knill & Tosun 2015, 23):

- specific analytical perspective on the policy-process
- highlighting patterns and forms of cooperation between state and private actors
- within the development and implementation of policy

Aim (Knill & Tosun 2015, 181):

- to identify and analyse different forms of social selfregulation
- in the center of analysis: the control and coordination functions of institutional regulatory systems and their variable characteristics



(new) image of the "cooperative state" (Mayntz, 2010)

Mayntz, R. (2010). Governance im modernen Staat: In: Benz, Arthur; Dose, Nicolai (Hg.): Governance-Regieren in komplexen Regelsystemen. Eine Einführung. 2., aktualisierte Auflage. Icon: Designed by Freepik

Governance term, concept and perspective

- comet-like rise in political science research since the mid-1990s (Knill & Tosun 2015, 161)
- "a central part in contemporary debates in the area of social sciences and particularly in the field of public administration" (Katsamunska 2016, 133)
- increasing popularity in contrast to government



Why?

- "capacity to cover the whole range of institutions and relationships involved in the process of governing" (Katsamunska 2016, 133)
- covers different types of political steering (hierarchical and non-hierarchical) emphasising the various forms of cooperation between state and social actors
 - ✓ particularly qualified for the analysis of policy-making at national and international level
- synoptic view of policy-making across several policy phases
 - ✓ holistic approach compared to other political science perspectives (Knill & Tosun 2015, 161, 181)

Concept used without a common definition



"notoriously slippery"
(Pierre & Peters, 2020)



"As a confusing term governance has become an umbrella concept for a wide variety of phenomena such as (...)" (Katsamunska 2016, 134)



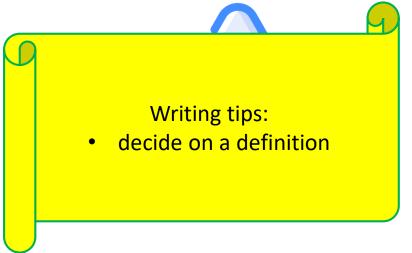
Katsamunska, P. (2016). The concept of governance and public governance theories. Economic alternatives, 2(2), 133-141. Pierre, J., & Peters, B. G. (2020). Governance, politics and the state. Bloomsbury Publishing. Icons: Designed by Freepik

Concept used without a common definition



"notoriously slippery"

(Pierre & Peters, 2020)



"As a confusing term governance has become an umbrella concept for a wide variety of phenomena such as (...)" (Katsamunska 2016, 134)

policy networks,
public management,
coordination of sector of economy,
public-private partnerships,
corporate governance and 'good governance'

Katsamunska, P. (2016). The concept of governance and public governance theories. Economic alternatives, 2(2), 133-141. Pierre, J., & Peters, B. G. (2020). Governance, politics and the state. Bloomsbury Publishing. Icons: Designed by Freepik



(2) Governance vs./& Management

(3) Governance vs./& Administration

• Government: "the formal, centralized and vertical exercise of power and authority, such as through regulation or market-based instruments" (Harrington et al. 2008: 200)

VS.

- Governance: "where power and authority are horizontally decentralized and devolved to broader members of society" (Harrington et al. 2008: 200)
 - "the involvement of a wide range of institutions and actors in the production of policy outcomes (...) involving coordination through networks and partnerships" (Johnston et al. 2000: 317)
 - refers to "all processes of governing, whether undertaken by a government, market, or network, whether over a family, tribe, formal or informal organization, or territory, and whether through laws, norms, power or language.

Governance differs from government in that it focuses less on the state and its institutions and more on social practices and activities" (Bevir, 2012).

Environmental governance involves

- "a range of formal and informal institutions,
- social groups,
- processes,
- interactions,
- and traditions,
- all of which influence how power is exercised, how public decisions are taken, how citizens become engaged or disaffected, and who gains legitimacy and influence" (Reed & Bruyneel 2010: 647).

"The governance of protected area networks can be framed

- within various arrangements including international environmental conventions at the global level,
- coordination between neighbouring countries at the regional level,
- government legislation at the national level,
- and community and NGO-driven governance at the local level" (Day et al. 2015: 622).



Day, J. C., Laffoley, D., Zischka, K., Gilliland, P., Gjerde, K., Jones, P., ... & Wilhelm, A. (2015). *Marine protected area management*. ANU Press. Reed, M. G., & Bruyneel, S. (2010). *Rescaling environmental governance, rethinking the state: A three-dimensional review*. Progress in human geography, 34(5), 646-653.

- Governance of protected areas: "the interactions among
 - structures, processes and traditions that determine
 - how power is exercised,
 - · how decisions are taken on issues of public concern,
 - and how citizens or other stakeholders have their say" (Graham et al. 2003: 2).
- Governance is about
 - power,
 - · relationships,
 - responsibility
 - and accountability (Borrini-Feyerabend et al., 2012).



Borrini-Feyerabend, G., Johnston, J., & Pansky, D. (2012). *Governance of protected areas*. In Managing protected areas (pp. 146-175). Routledge. Graham, J., Amos, B. and Plumptre, T. (2003). *Governance principles for protected areas in the 21st century*. Paper prepared for the Fifth World Parks Congress, Durban, South Africa, Institute of Governance, Ottawa.

- Of central interest: the relationship between government & governance
- Government as a variable in governance and not a constant (Pierre & Peters 2020, 29): state-centric and society-centred models of governance
 - State-centric: "fundamental point in understanding governance is its perspective focusing on the state, and specifically on its role and how the emergence and challenge of governance affect the state in different aspects" (Katsamunska 2016: 137) predominant belief: "that the role of the state is not decreasing but rather that its role is transforming, from a role based in constitutional powers towards a role based in coordination and fusion of public and private resources"
 - Dual meaning of the concept: 1) "it refers to the empirical manifestations of state adaptation to its external environment as it emerges in the late twentieth century" 2) "denotes a conceptual or theoretical representation of co-ordination of social systems and, for the most part, the role of the state in that process" (Pierre 2000, 3)
- "Governance (..) presents an idealized model of democratic government and public bureaucracy" (Katsamunska 2016: 135)

Governance approach	Details of the approach	Examples of MPAs in which the approach is adopted
Government-led	Managed primarily by the government under a clear legal framework	Great Barrier Reef Marine Park (Australia) Darwin Mounds candidate Special Area of Conservation (United Kingdom) North East Kent European Marine Site (United Kingdom) Wash and North Norfolk Coast European Marine Site (United Kingdom) California Marine Life Protection Act (USA) United States National Marine Sanctuary System (USA)
Decentralised	Managed in a shared approach by the government with significant decentralisation and/or influences from the private sector	Sanya Coral Reef National Marine Nature Reserve (China) Seaflower MPA (Colombia) Galápagos Marine Reserve (Ecuador) Karimunjawa Marine National Park (Indonesia) Wakatobi National Park (Indonesia) Tubbataha Reefs Natural Park (Philippines) Ha Long Bay Natural World Heritage Property (Vietnam)
Community-led	Managed primarily by local communities under collective management arrangements	Isla Natividad (Mexico) Os Miñarzos Marine Reserve of Fishing Interest (Spain)
Private-led	Managed primarily by the private sector and/or NGOs granted property/management rights	Chumbe Island Coral Park (Tanzania) Great South Bay Marine Conservation Area (USA)
No clear governance framework	No clear effective governance framework in place	Baleia Franca Environmental Protected Area (Brazil) Pirajubaé Marine Extractive Reserve (Brazil) Cres-Lošinj Special Marine Reserve (Croatia)



Day et al. 2015: 625 – table 20.2 Five marine protected area governance approaches with examples, "The analysis of MPA governance by Jones (2014) using the 'MPA Governance Framework' has identified five broad governance approaches, each containing varying degrees of government, community and private sector involvement (Table 20.2)."

Day, J. C., Laffoley, D., Zischka, K., Gilliland, P., Gjerde, K., Jones, P., ... & Wilhelm, A. (2015). Marine protected area management. ANU Press. Jones, P. J. S. (2014). *Governing Marine Protected Areas: Resilience through diversity*, Earthscan, London.

What is the role of the state in this reconfiguration of scale and environmental governance?

(Reed & Bruyneel 2010, 646)

reconceptualization of scale (hierarchies) and spatiality



"Rethinking the state":

redistribution of state functions

- upwards (to international and transnational institutions),
- downwards (to state/provincial/regional and local authorities),
- and outwards (to non-state actors)

Historical change

Changing governance patterns over time (Knill & Tosun 2015, 168f.):

- active-creative function of the administration (1960s & 1970s)
- new public management (1980s)
- increasing differentiation and complexity of social structures, inter alia because of globalisation / internationalisation (1990s)

necessity to interact with different stakeholders because of their resources, steering through negotiation: "modern governance" (Knill & Tosun 2015, 170) Decline of hierarchical structures in favour of competition and negotiation systems? Reality or analysis? (Knill & Tosun 2015, 167)

Governance of policynetworks "in the shadow of hierarchy"?, inter alia question of resources (Knill & Tosun 2015, 168f.)

Historical change: different governance types

Three types of institutionalised governance structures (Knill & Tosun 2015, 164):

- 1. hierarchies,
- 2. competitive systems (markets),
- 3. and negotiation systems (policy networks).

Shift in significance? Which is best out of a normative governance perspective? Democratic legitimacy of public decisions made in such arenas? (Knill & Tosun 2015, 167)

Four common governance arrangements (Katsamunska 2016, 134f.):

- 1. hierarchies,
- 2. markets
- 3. networks,
- and communities.

Dynamic perspective: process of steering and process of coordination, structural terms: "variety of political and economic institutions" (Katsamunska 2016, 134f.)

Old governance understanding:

- the capacity of government to make and implement policy, to "steer" society —
- definition refers to steering capacities of the state,
- inherent/connected to: top-down approach (Kjar, 2004)

New/contemporary governance understanding:

- interactions of the centre with society & self-steering in networks;
- reflection of negative/positive impacts on steering capacity (Katsamunska 2016, 134);
- policy networks coordinating public and private interests and resources and enhancing effectiveness in the implementation of public policy (Katsamunska 2016, 135)
- inherent/connected to: bottom-up approach





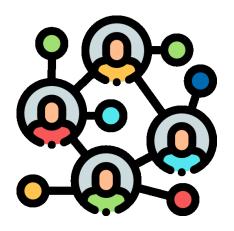
Process perspective: Governance = dynamic outcome of social and political actors

- focuses more on process and outcomes than on formal institutional arrangements
- "governance is not so much about structures but more about interactions among structures" (Katsamunska 2016: 136)

Model of **communitarian governance**:

- Idea = communities can and should resolve their common problems with a minimum of state involvement
- consensual image of the community, positive involvement of its members in collective matters
- "organise governance without government" (Katsamunska 2016: 136)





What exactly does cooperation in networks refer to?

To what extent is the relationship of exchange actually symmetrical or not?



Ideal(ised) governance models by Knill & Lenschow (2003) Knill (2004)

Specification in response to analytical difficulties: governance models according to two analytical dimensions:

- 1. Extent of cooperation between public and private actors in the policy-making process
- 2. Differentiation between hierarchical and non-hierarchical relationships of exchange

a) interventionist regulation

b) regulated self-regulation

c) co-regulation

d) private self-regulation

a) interventionist regulation

- ✓ responsibility and decision on the contents of policies: state actors
- ✓ other stakeholders might be consulted, but responsibility for the provision of public goods lies within the state
- ✓ clear hierarchies, rules and regulations
- ✓ cooperation only to optimise the implementation of policies

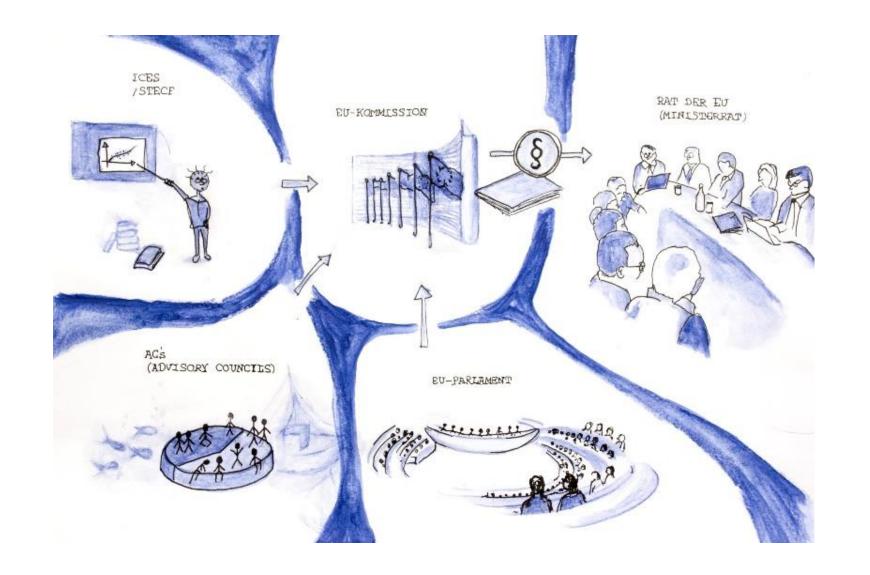
b) regulated self-regulation

- ✓ also legally binding decisions and a dominant role of public actors
- ✓ but more cooperative collaboration between public and private stakeholders during the formulation and implementation of policies
- ✓ delegation of certain competences to private actors but within a clear regulatory framework
- ✓ "in the shadow of hierarchy"

c) co-regulation



- ✓ definition and application of instruments by means of negotiations and agreements between state and private actors
- ✓ legally defined, but not legally binding decisions
- ✓ private stakeholders are equally involved in the decision-making process "tandem" intended to integrate a diverse circle of public and private stakeholders
- ✓ intended for example by the European Commission since the 1990s: the targeted form of government and administrative action by integrating dialogue groups and consultation bodies with national and sub-national authorities, industry associations, consumer and environmental organisations, NGOs and trade unions
- ✓ another example: "joint environmental policy-making" by voluntary agreements between state actors and individual industry associations)



d) private self-regulation

- ✓ creation and implementation of policy instruments only on a voluntary basis by private actors
- ✓ state actors only involved by complementary steering functions, e.g. by intensifying and influencing the communication between private actors or certifying measures
- ✓ Example: "Corporate Social Responsibility"



Ideal(ised) governance models by Knill & Lenschow (2003) Knill (2004)

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?

(1) Governance vs./& Government

(2) Governance vs./& Management

(3) Governance vs./& Administration

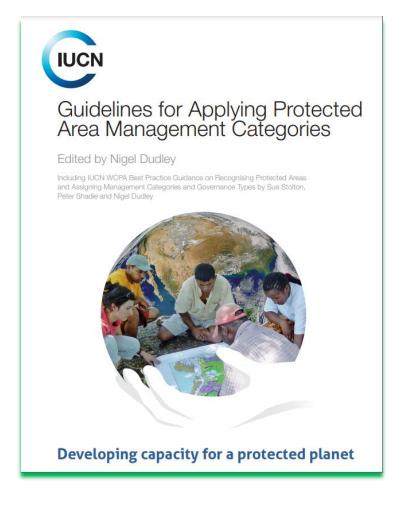
Governance – Administration – Management

Management:

'the process
 of assembling and using
 sets of resources
 in a goal-directed manner
 to accomplish tasks in an organisation'
 (Hitt et al. 2011: 4)



IUCN Categories: classification according to "primary management objective"



Dudley, N. (Ed.). (2008). Guidelines for applying protected area management categories. IUCN. Hitt, M. A., Black, S. and Porter, L. W. (2011). *Management*. 3rd edn, Pearson Education, Upper Saddle River, NJ.

3. Governance

Categories are independent of who owns, controls, or has responsibility for management. However, governance is also very important. IUCN has identified diverse governance types in order to help in understanding, planning for and recording protected areas. This section outlines the IUCN governance types, explains how they link to the categories and looks at how governance by indigenous peoples, communities and private bodies can contribute to protected area systems.



Governance of protected areas

IUCN recognises four broad types of governance of protected areas, any of which can be associated with any management objective:

- A. Governance by government
- B. Shared governance
- C. Private governance
- D. Governance by indigenous peoples and local communities

(Dudley 2008, 26)

Water governance:

- the decision-making process we follow
- how we make decisions and who gets to decide
- "often overlooked" (Bakker 2007: 16)

VS.

Water management:

- operational approaches we adopt
- models, principles, and information we use to make those decisions
- "often the focus of debate" (Bakker 2007: 16)
- "Management is usually considered to be a continuous, interactive, adaptive and participatory process, comprising a set of related tasks that all need to be undertaken to achieve a desired set of goals and objectives." (Day et al. 2015, 629)





Environmental governance refers to

- actors, actor constellations or networks (Pahl-Wostl 2009),
- and power and authority relations (Lockwood 2010) that help formulate and implement environmental policies.

VS.

referring to

- Environmental management
 - involves "...resources, plans, and actions..." (Lockwood 2010, p. 755)
 - geared towards "... analyzing and monitoring, developing and implementing measures to keep the state of a resource [environment] within desirable bounds" (Pahl-Wostl 2009, p. 355)

Ayambire, R. A., & Pittman, J. (2022). Opening the black box between governance and management: A mechanism-based explanation of how governance affects the management of endangered species. Ambio, 51(10), 2091-2106.

Lockwood, M. (2010). Good governance for terrestrial protected areas: A framework, principles and performance outcomes. Journal of Environmental Management, 91, 754–766.

Pahl-Wostl, C. (2009). A conceptual framework for analysing adaptive capacity and multi-level learning processes in resource governance regimes. Global environmental change, 19(3), 354-365.

"Governance is generally defined as

• the institutions, structures, and processes that determine who makes decisions, how and for whom decisions are made, whether, how and what actions are taken and by whom and to what effect (Graham et al., 2003; Lockwood et al., 2010)" (Bennett & Satterfield 2018: 2).

&

Management "refers to

- the resources, plans, and actions that result from the functioning of governance (Lockwood, 2010).
- The aim of environmental governance, in particular, is to manage individual behaviors or collective actions in pursuance of public environmental goods and related societal outcomes (Armitage et al., 2012; Termeer, Dewulf, & Van Lieshout, 2010)" (Bennett & Satterfield 2018: 6).

Bennett, N. J., & Satterfield, T. (2018). *Environmental governance: A practical framework to guide design, evaluation, and analysis.* Conservation Letters, 11(6), e12600. referring to

Graham, J., Amos, B., & Plumtree, T. (2003). *Governance principles for protected areas in the 21st century*. Ottawa, ON: Institute on Governance, Parks Canada, and CIDA. Lockwood, M. (2010). *Good governance for terrestrial protected areas: A framework, principles and performance outcomes*. Journal of Environmental Management, 91, 754–766. Lockwood, M., Davidson, J., Curtis, A., Stratford, E., & Griffith, R. (2010). *Governance principles for natural resource management*. Society and Natural Resources, 23, 986–1001.



"the link between (environmental) governance and (environmental) management has largely remained conceptually blurred (Pahl-Wostl 2009; Lockwood 2010) and empirically untested."

(Ayambire & Pittman 2022: 2091)

Ayambire, R. A., & Pittman, J. (2022).

Opening the black box between governance and management:

A mechanism-based explanation of how governance affects the management of endangered species.

Ambio, 51(10), 2091-2106.

"Despite their differences, governance and management are sometimes used synonymously (Pahl-Wostl 2009), perhaps due to their **practical similarities** (Armitage et al. 2012) and the conflation of governance and management functions by some actors—i.e., **actors who engage in both governance and management activities**." — "misguided application of both concepts in scholarly and policy spheres"

(Ayambire & Pittman 2022: 2091f.)

Lockwood (2010):

management is

"a product of applied governance"

(Ayambire & Pittman 2022: 2092)

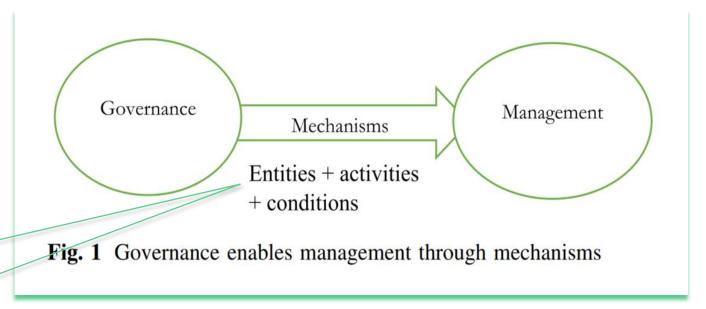
Ayambire, R. A., & Pittman, J. (2022). Opening the black box between governance and management: A mechanism-based explanation of how governance affects the management of endangered species. Ambio, 51(10), 2091-2106.

referring to

Lockwood, M. (2010). Good governance for terrestrial protected areas: A framework, principles and performance outcomes. Journal of Environmental Management, 91, 754–766.

WHAT LINKS GOVERNANCE TO THE MANAGEMENT OF THE ENVIRONMENT?

"... actors or organizations whom each have their specific characteristics such as values, belief systems, and experiences"



(Ayambire & Pittman 2022: 2093)

Ayambire, R. A., & Pittman, J. (2022). Opening the black box between governance and management: A mechanism-based explanation of how governance affects the management of endangered species. Ambio, 51(10), 2091-2106.

Mechanism-based explanation – integration / clarification of causal processes to "better understanding the governance conditions and underlying processes that generate particular management outcomes."

(Ayambire & Pittman 2022: 2101f.)

"the case study illustrated that multiple governance conditions

—facilitative leadership, trust, local autonomy, and incentives— interacting through five underlying mechanisms produced management"

(Ayambire & Pittman 2022: 2103)

Ayambire, R. A., & Pittman, J. (2022).

Opening the black box between governance and management:

A mechanism-based explanation of how governance affects the management of endangered species.

Ambio, 51(10), 2091-2106.

... in practice:



"Positive governance outcomes can be promoted through **the use of incentives** that 'provide for certain strategic policy outcomes, particularly biodiversity conservation objectives' (Jones et al. 2011:13)" (Day et al. 2015, 625).

"A global analysis of 20 MPA case studies by Jones (2014) identified **five categories of incentives** (Table 20.3)" (Day et al. 2015, 626).

Day, J. C., Laffoley, D., Zischka, K., Gilliland, P., Gjerde, K., Jones, P., ... & Wilhelm, A. (2015). *Marine protected area management*. ANU Press. referring to

Jones, P. J. S., Qiu, W. and de Santo, E. M. (2011). Governing marine protected areas: getting the balance right, Technical Report, United Nations Environment Programme, Nairobi.

Table 20.3 Five categories of incentives

Incentive category	Definition (number of incentives in this category employed in MPA Governance Framework)
Economic	Using economic and property rights approaches to promote the fulfilment of MPA objectives (10)
Interpretative	Promoting awareness of the conservation features of the MPA, the related objectives for conserving them and the approaches for achieving these objectives, and promoting support for related measures (3)
Knowledge	Respecting and promoting the use of different sources of knowledge (local-traditional and expert-scientific) to better inform MPA decisions (3)
Legal	Establishment and enforcement of relevant laws, regulations, and so on, as a source of 'state steering' to promote compliance with decisions and thereby the achievement of MPA obligations (10)
Participative	Providing for users, communities and other interest groups to participate in and influence MPA decision-making that could potentially affect them, in order to promote their 'ownership' of the MPA and thereby their potential to cooperate in the implementation of decisions (10)

Source: Jones (2014)

(Day et al. 2015, 626)

Day, J. C., Laffoley, D., Zischka, K., Gilliland, P., Gjerde, K., Jones, P., ... & Wilhelm, A. (2015). *Marine protected area management*. ANU Press. referring to

Jones, P. J. S. (2014). Governing Marine Protected Areas: Resilience through diversity, Earthscan, London.

... in practice:



to "manage the human impacts within or on their MPA

(...) using a combination of management tools (including spatial tools like zoning plans or plans of management; temporal tools like seasonal closures for nesting birds or key spawning periods; legislative tools like regulations; and/ or permits),

along with various management approaches (such as education, impact assessment, monitoring, partnerships and enforcement) (Day et al. 2015, 629).

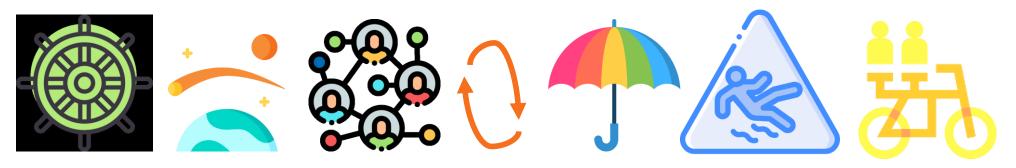
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Jones, P. J. S., Qiu, W. and de Santo, E. M. (2011). Governing marine protected areas: getting the balance right, Technical Report, United Nations Environment Programme, Nairobi.

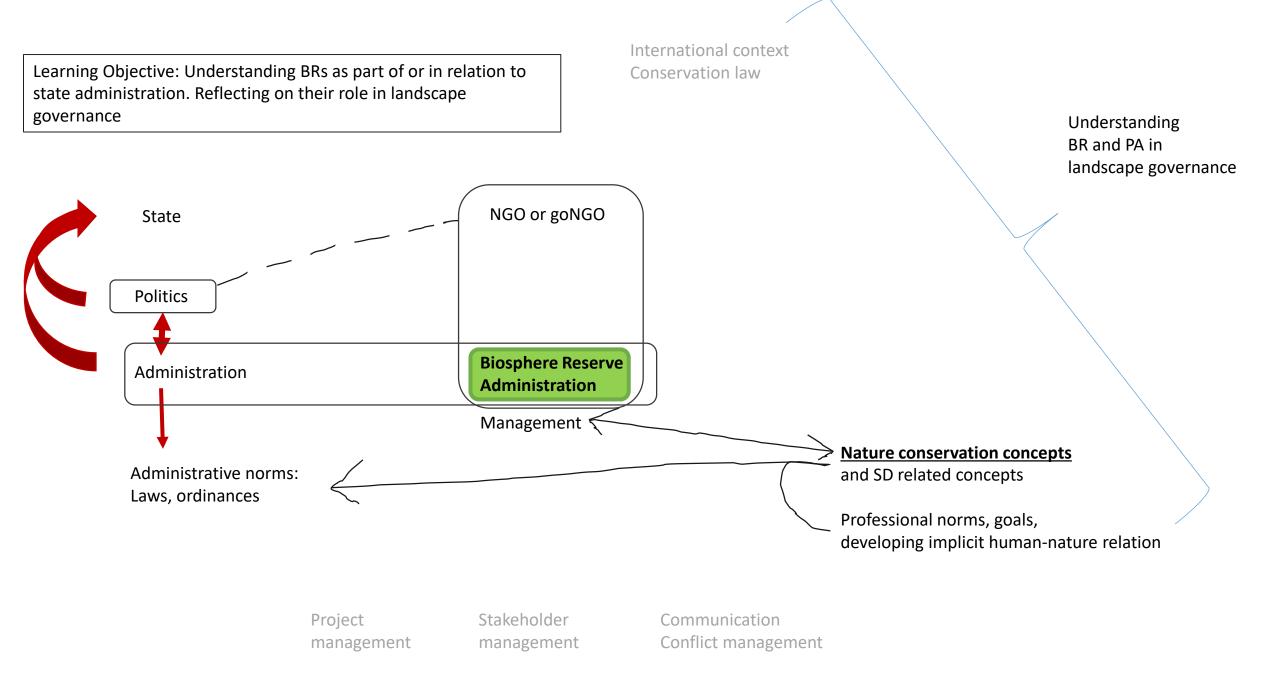
Governance: summary



Governance: summary



- Modern governance understanding: government as a variable in governance and governance as an idealized model of democratic government and public bureaucracy
- Management is a product of applied governance governance enables management through a process / mechanisms
- Governance in terms of both structure and process: dynamic perspective about governance as a process of steering and coordination and identified "with a search for control, steering, accountability, democracy and efficiency" (Katsamunska 2016, 141)
- Governance not synonymous with government but = synonymous with politics? (Katsamunska 2016, 140)



Governance of Biosphere Reserves

- 116. The governance of biosphere reserves will vary from region to region and even within individual countries. This diversity of management approaches is a consequence of the peculiarity of each region and national approaches to biosphere reserves, and represents an asset of the MAB Programme. Biosphere reserves also vary in terms of biodiversity from landscape to landscape, as well as from ecosystem to ecosystem. As a consequence, differences are also found in natural resources, the constitution of stakeholder groups, the governance of the reserves and the institutions concerned.
- 117. The term 'governance' refers to the structures and processes that determine how decisions about a biosphere reserve are taken and how stakeholders are included. Effective governance is key to implementing and coordinating all activities in a biosphere reserve.

 Differences in attitudes, governments and culture all influence the necessary actions taken in each area.

3.1 Governance structure

118. The MAB Programme emphasizes the importance of exploring and maintaining such diversity, including in management approaches. The entire governance of biosphere reserves varies substantially at the national, regional (sub-national) and biosphere reserve level.

UNESCO (2021).
Technical Guidelines
for Biosphere
Reserves.

(UNESCO 2021: 51)

... in practice:

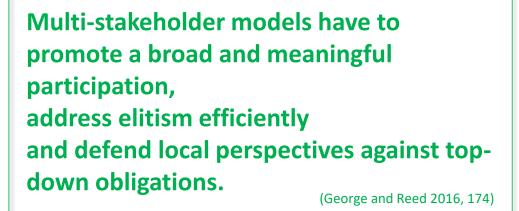


"It is the combination of legal and economic incentives with other interpretative, knowledge and participatory incentives that are important for **effective governance**. (...)

Just as diversity is the key to resilience for species and ecosystems, a diverse governance approach with multiple incentives combining the role of people, markets and the state is the key to **best-practice governance**" (Day et al. 2015, 626).

Day, J. C., Laffoley, D., Zischka, K., Gilliland, P., Gjerde, K., Jones, P., ... & Wilhelm, A. (2015). *Marine protected area management*. ANU Press. referring to

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Procedural justice investigated in Canadian Biosphere Regions



Good governance?

Literature reviews / overviews on governance of Biosphere Reserves

- Kratzer, A. (2018). Biosphere Reserves research: a bibliometric analysis. Eco. mont, 10, 36-49.
- Ferreira, A. F., Zimmermann, H., Santos, R., & Von Wehrden, H. (2018). A social–ecological systems framework as a tool for understanding the effectiveness of biosphere reserve management. Sustainability, 10(10), 3608.
- Ferreira, A. F., Zimmermann, H., Santos, R., & von Wehrden, H. (2020). **Biosphere reserves'** management effectiveness—a systematic literature review and a research agenda. Sustainability, 12(14), 5497.
- Barraclough, A. D., Reed, M. G., Coetzer, K., Price, M. F., Schultz, L., Moreira-Muñoz, A., & Måren, I. (2023). Global knowledge—action networks at the frontlines of sustainability: Insights from five decades of science for action in UNESCO's World Network of biosphere reserves. People and Nature, 00, 1-15.

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- Kratzer, A. (2018). Biosphere Reserves research: a bibliometric analysis. Eco. mont, 10, 36-49.
- Ferreira, A. F., Zimmermann, H., Santos, R., & Von Wehrden, H. (2018). A social-ecological systems framework as a tool for understanding the effective management. Sustainability, 10(10), 3608.
- Ferreira, A. F., Zimmermann, H., Santos, R., & von Wehrden, Sustainability, 12(14), 5497.
- management effectiveness—a systematic literature review

- Writing tips:
- start with the "state of research"
- look for literature reviews /overviews on your topic

• Barraclough, A. D., Reed, M. G., Coetzer, K., Price, M. F., Schultz, L., Moreira-Muñoz, A., & Måren, I. (2023). Global knowledge—action networks at the frontlines of sustainability: **Insights from five** decades of science for action in UNESCO's World Network of biosphere reserves. People and Nature, 00, 1-15.



Thank you for your attention!

