

# The Normative Dimension of Biodiversity Science

- From Lisbon to Leipzig through Research?  
Leipzig 10.5.2007
- Session E7: Biodiversity Science for Policy
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# Overview

- (1) Biodiversity and Science
- (2) Biodiversity and Politics
- (3) Biodiversity and Sustainability
- (4) Biodiversity and Europe

# 1 Biodiversity Science

- **Thesis 1:**  
**Biodiversity Science challenges the classical philosophy of science.**
- 1.1 It has a political mission
- 1.2 It crosses the boundaries between fact and value
- 1.3 It bridges the gap between ‚Is‘ and ‚Ought‘
- 1.4 It integrates reason and morality

## “Classical” Philosophy of Science

- The traditional philosophy of science regards science as
  - independent from any commitments (“sine ira et studio”)
  - interested in description and explanation solely
  - value-free
  - objective and rational
- The scientists who proposed and propagated the concept of biodiversity explicitly wanted to break with these restrictions

## 1.1 Science with a political mission

- Dan Janzen  
on the *Forum on Biodiversity*, Washington, D.C., 1986:
- »The Washington Conference? That was an explicit political event, explicitly designed to make Congress aware of this complexity of species that we're loosing. [...]  
A lot of us went to that talk with a political mission«.

## 1.2 Biodiversity: Fact *and* Value



Biodiversity

... exists.

... is good.

... shall exist / has to be saved!

- The janus-faced character of biodiversity leads to confusion about the value-neutrality of science:  
»If you ask me, I'll tell you that it's *not a scientific* argument. One of the silly things is the idea that science is somehow separate from society. *There is no value-neutral science*« .
- (Paul Ehrlich, emphasis added)

## 1.3 From Is to Ought

- »In my view, it's preposterous for people who have spent their entire life immersed in a problem to present only a value-neutral thing. And politicians don't want you, ordinarily - they want not only to know what you think the situation *is*, they want at least suggestions on what society *ought* to do about it. [...]

If you're standing in a building that's burning down you don't just stand up and give measurements of the temperature and so on. You say, 'Let's get the fuck out of here' in addition.«  
(Paul Ehrlich, my emphasis)

## 1.4 Logics, emotion and spirit

- Walter Rosen about the new term 'biodiversity'
- »It was easy to do: all you do is take the 'logical' out of 'biological'«. (...) »To take the logical out of something that's supposed to be science is a bit of a contradiction in terms, right? And yet, of course, that's why I get impatient with the Academy, because they're always so logical that there seems to be no room for emotion in there, no room for spirit«.



# Boundary crossing prohibited?



# Biodiversity Science for Policy (1)

If biodiversity scientists want to cross the boundaries they have to

- take the Janus-face of biodiversity (fact/ value) serious
- explore normative as well as empirical aspects
- disclose their own value foundations and ethical preferences
- communicate them as such (i.e.as preferences) in the scientific as well as in the public debate

## 2 Biodiversity Politics

- **Thesis 2:**  
**Biodiversity politics is a politics of difference.**
- »Biodiversity is the property of living systems of being distinct, that is different, unlike. (...) Diversity is the fundamental property of every living system.«  
(UNESCO Program 'Man and Biosphere')

## 2.1 The CBD reshaped Biodiversity

- 'Biodiversity' functioned as boundary object in the negotiations. It enabled the co-operation of different actors with different agendas and value-systems by translating their interests into each other without binding them to a consensus.
- As a result, the hybrid character of 'biodiversity' became even more complex.
- The moral imperative that was connected to biodiversity by conservationists was replaced by the triple imperative of sustainability .

## 2.2 “Save it, use it, share it!”

- » The objectives of this convention [...] are
  - the **conservation** of biological diversity,
  - the sustainable **use** of its components and
  - the fair and equitable **sharing** of the benefits arising out of the utilization of genetic resources«.

CBD 1992, Artikel 1
- The moral imperative related to biodiversity is not only “Save it!” but also “Use it!” and “Share it!”

## 2.3 The moral of the CBD

- The ethics of biodiversity has to take CBD's acceptance of differences serious:
- Conflicts about biodiversity aren't conflicts between 'Man' and 'Nature' but between different humans with different value systems, needs and interests – who often live within an hierarchy of economic and political power.
- 'Man' and 'Nature' are generalisations that conceal a multitude of diverse ways of living and relating to nature.

## Biodiversity Science for Policy (2)

If biodiversity scientists take the lesson of the CBD serious they have to

- acknowledge differences in life-styles
- address power relations
- integrate different perspectives
- respect knowledge and needs of local communities
- encourage and contribute to a broad debate about how we want to live and how we want to relate to nature
- broaden the too narrow concept of 'use'

## 3. Biodiversity and Sustainability

- “Save it, use it, share it!” represents the “trinity” of sustainability: ecology, economy and society
- Participation is an essential part of social sustainability
- If we take serious the different ways in which people relate to nature we prefer bottom-up to top-down policies.
- We have to communicate that biodiversity is a valuable part of the good lives of humans.



## 4. Biodiversity and Europe

- If 'biodiversity' essentially means (the value of) difference, there might be a tension to European policies, that often are perceived as producing sameness, where people value distinctness. In order to take people along
- Biodiversity science has to acknowledge the need for identity and identification and address local, regional and national particularities
- Biodiversity policy should reflect these particularities.

# Thank you for your attention!

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## **Exkursion: Biodiversity as Boundary object**

- As a scientific concept 'biodiversity' is vague and ill-defined.
- This “weakness” of the concept allows for different meanings in different social world and thus enables co-operation of different social groups with different agendas and value systems.
- A science of biodiversity as well as biodiversity policies have to recognize those different meanings and the interests and values they're related to.

## Definiton of boundary object

- »This is an *analytic concept* of those scientific objects which both inhabit several intersecting social worlds (...) and satisfy the informational requirements of each of them. (...) These objects (...) have different meanings in different social worlds but their structure is common enough to more than one world to make them recognizable, a means of *translation*.« (Star & Griesemer 1989: 393)
- »When participants in the intersecting worlds create representations together, their different commitments and perceptions are resolved into representations (...). This resolution *does not mean consensus*. Rather, representations, or inscriptions, contain at every stage the traces of multiple viewpoints, translations and *incomplete battles*«. (Star & Griesemer 1989: 413)

## Reference

- The quotes of Ehrlich, Janzen
- and Rosen were taken from:
- David Takacs:
- The idea of biodiversity.
- Philosophies of paradise.
- 1996

