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‘Restoration ethics’

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Who am I?

- Biologist / ecologist
- Since 1990 in the Science & Society Group University of Groningen

Main research topics:

- Conservation and restoration affairs
- Animal experiments (incl. ecological research)
- Biotechnology and risk perception (3rd world)

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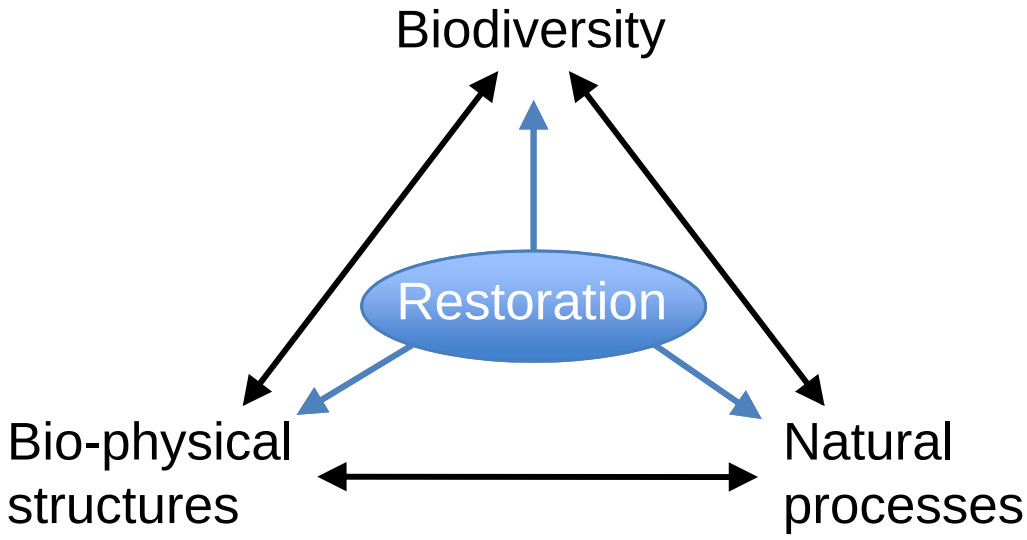
Ethics of restoration

- My lecture:
  - Visions of nature & restoration
  - Conflicting ethical theories: e.g. animal ethics versus eco-ethics: case Oostvaardersplassen

- Restoration: enhancing natural value



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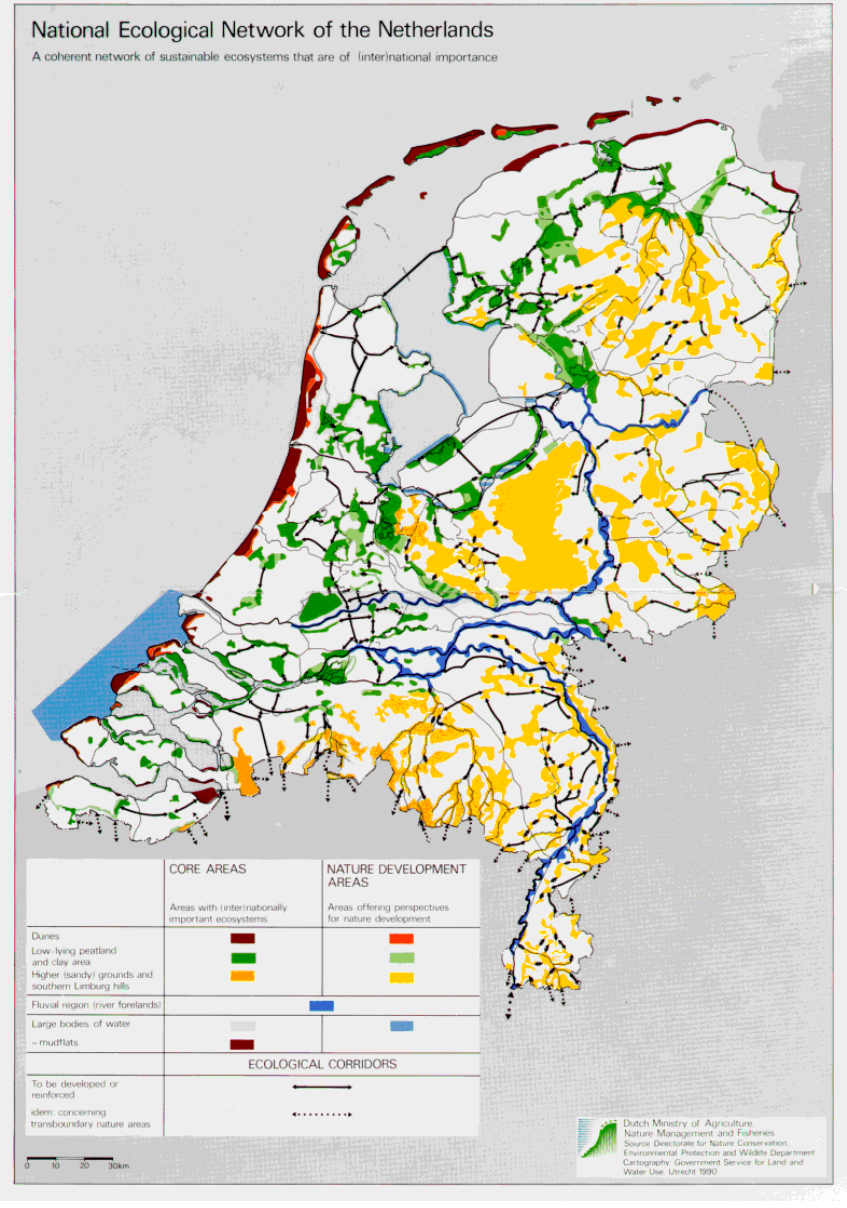
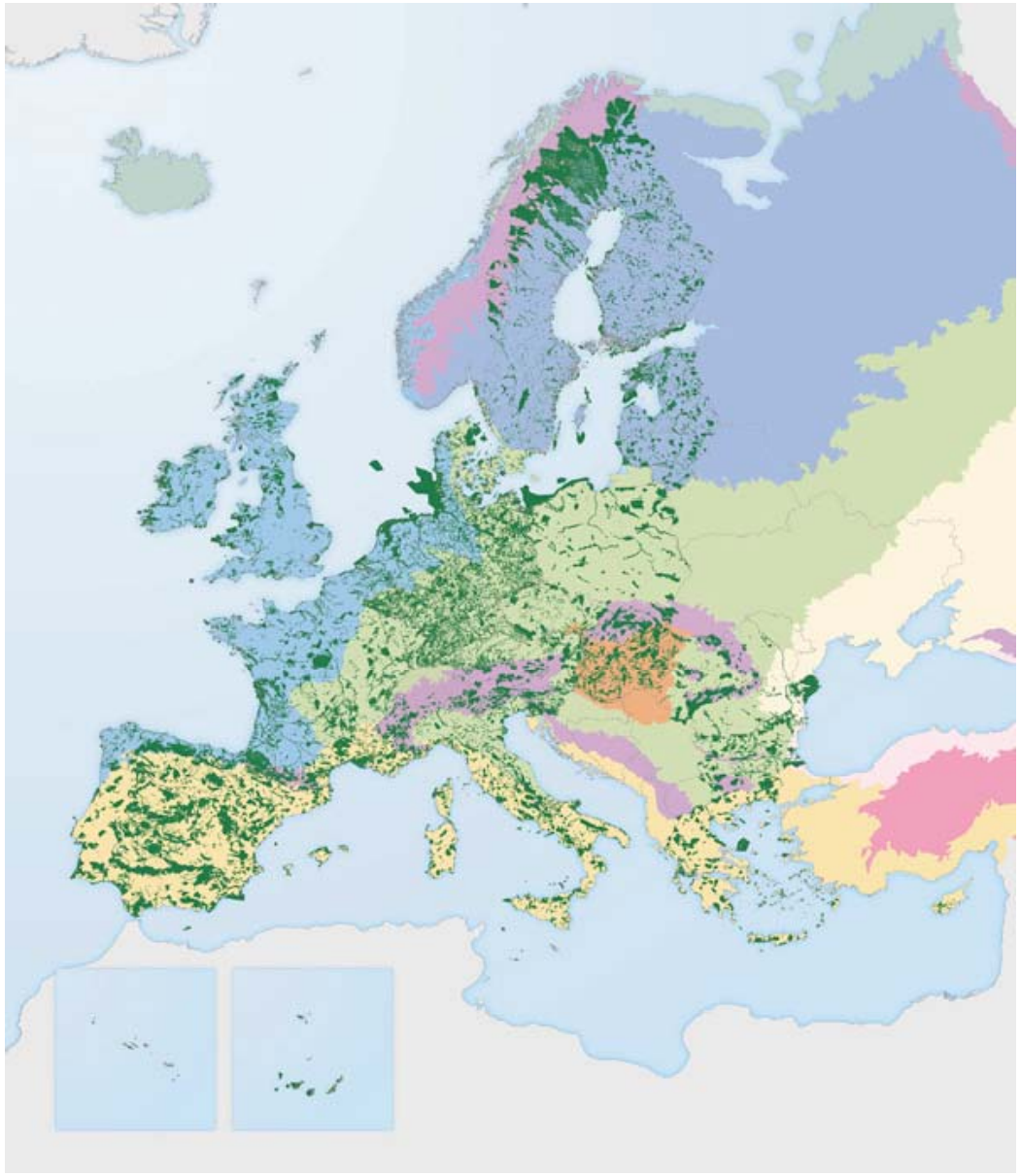
Ecological main structure / Natura 2000





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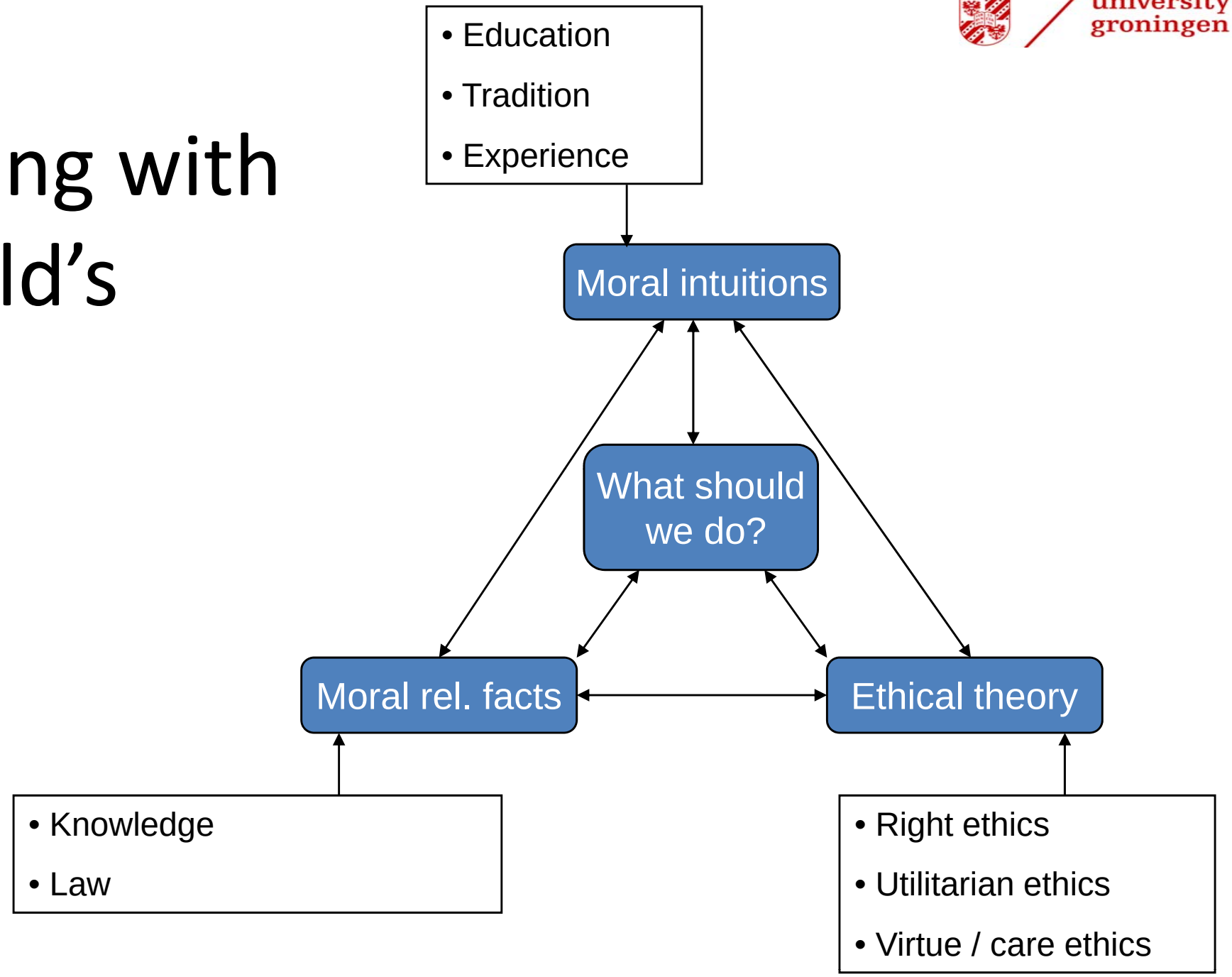
‘Restoration ethics’

- What and to what should we restore? Visions of nature
- How should we restore? Stakeholders
- Who should decide on restoration? Decision making

Should’s

Dealing with should's



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Protest against restoration

Awaits the green heart of Friesland a grey future?

Here the EHS??
……..NO!!!

Visions of nature

Theatre of nature

Nature waits on the work of our hands to be entirely completed

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Faking nature (Elliot & Katz) - 1

- Arrogance: do we think we really can restore?
- Artificial: restored nature is nothing more then an anthropocentric artefact

Faking nature (Elliot & Katz) - 2

- Replacement: an excuse for ongoing degradation

Flooding farmer's land (Hedwige polder) as natural compensation for dredging measures in Westerschelde

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Visions of natures

- Nature and wildness are cultural inventions (Nash, 1982)
- Scientific, aesthetic and ethic elements
- Three main visions of nature:
  - the wilderness vision
  - the arcadian vision
  - the functional vision

Swart et al. (2001)
Restoration Ecology 9(2): 230-238

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Wilderness Vision

Wild nature is the real nature
Natural processes
Pre-historic references

Arcadian Vision

Man and nature harmonise
Moderate use
Historic references

Functional Vision

Agrarian nature management

Nature follows man

Much attention for special species

Alternative view

This landscape is offered you by farmers and gardeners

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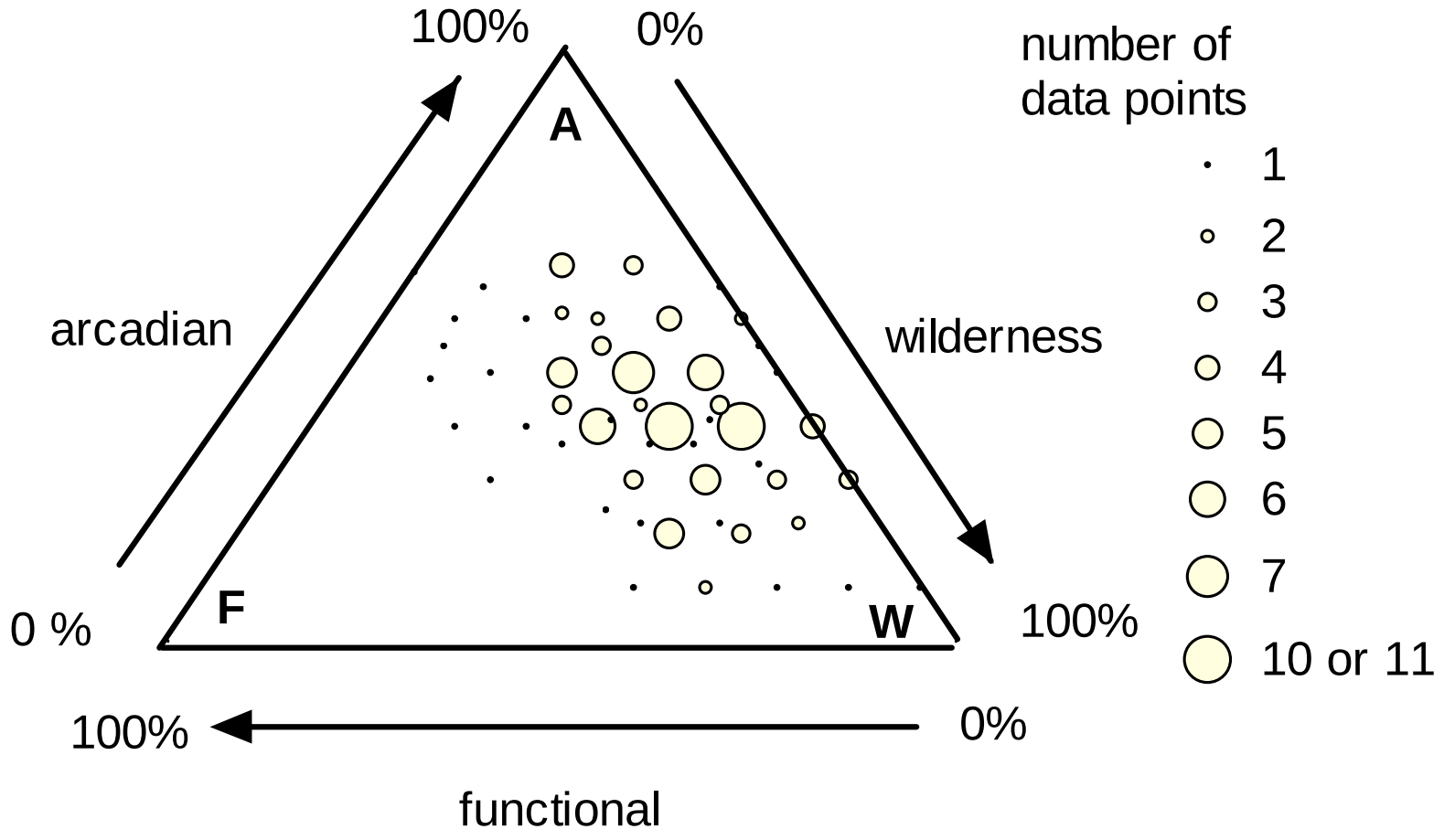
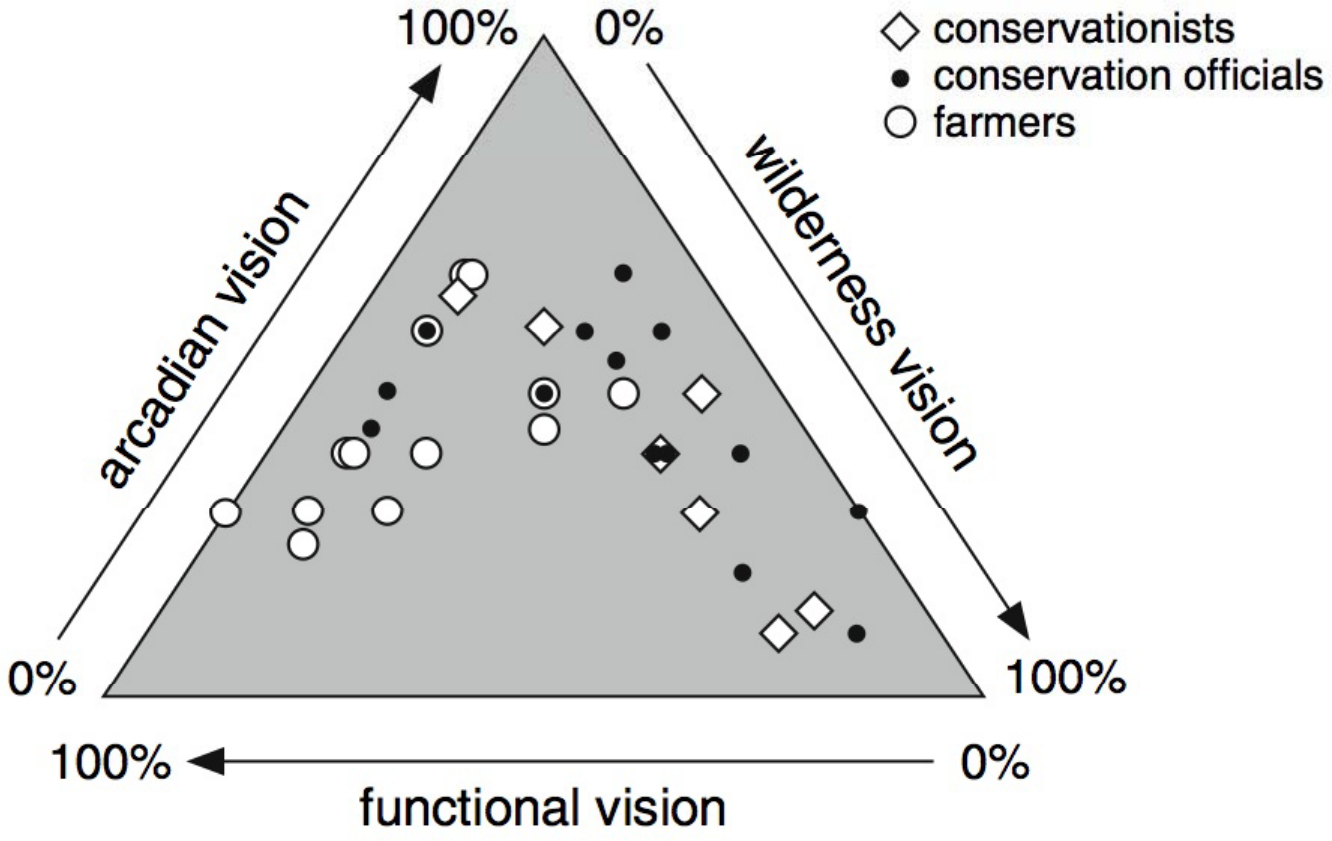
Vision distributions of 129 biology students



Vision distributions of professionals



Swart J.A.A.(2008) 'Visions and Scales of Nature and Society in Nature Management'. *In*: J. Keularz & G. Leistra (eds.) *Legitimacy in European Nature Conservation Policy*. Dordrecht: Springer. pp.127-136.

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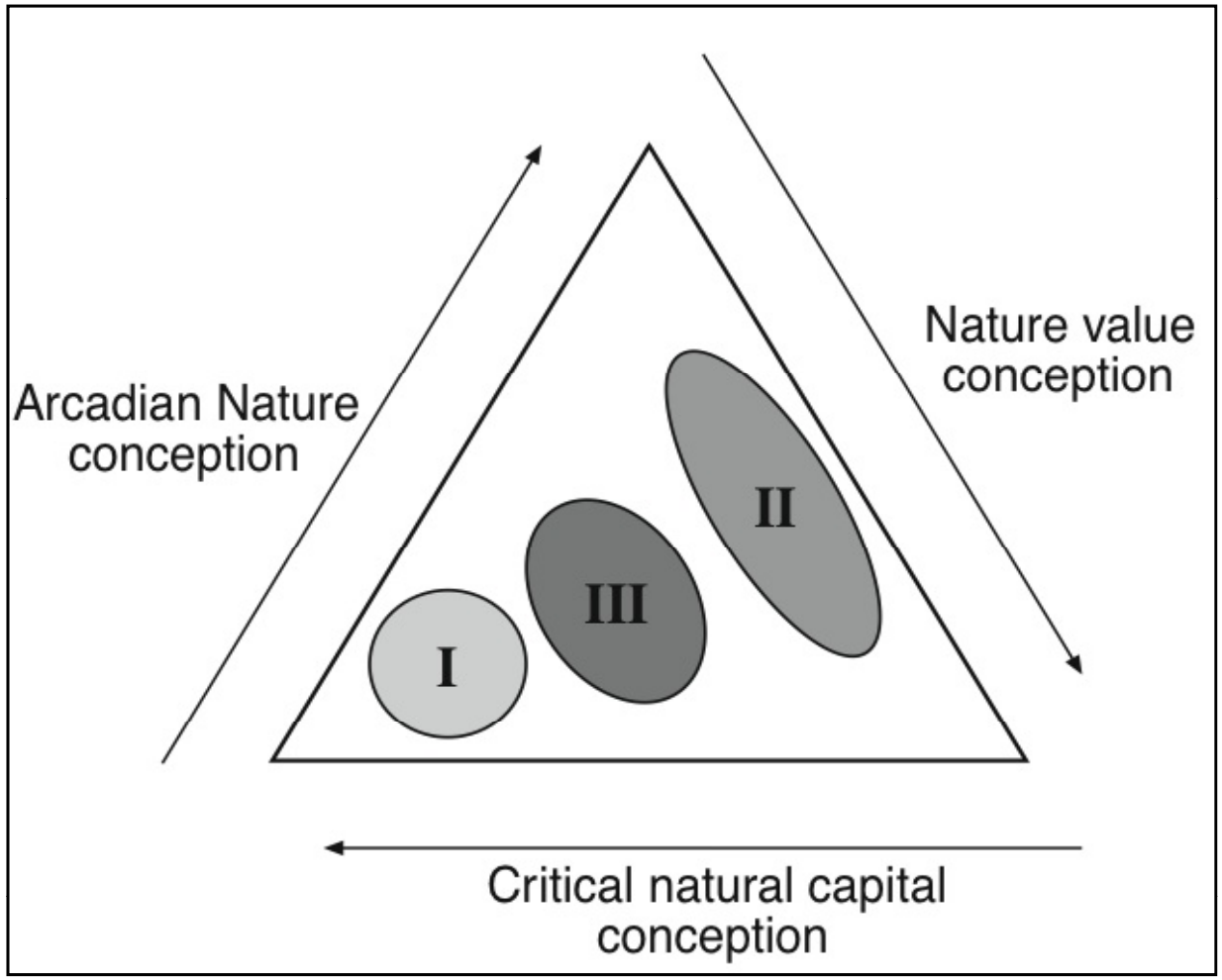
Environmental sustainability visions



From: Swart J.A.A. & H.J. van der Windt 2005) Visions of Nature and Environmental Sustainability: Shellfish Harvesting in the Dutch Wadden Sea. Restoration Ecology 13(1) :183-192.

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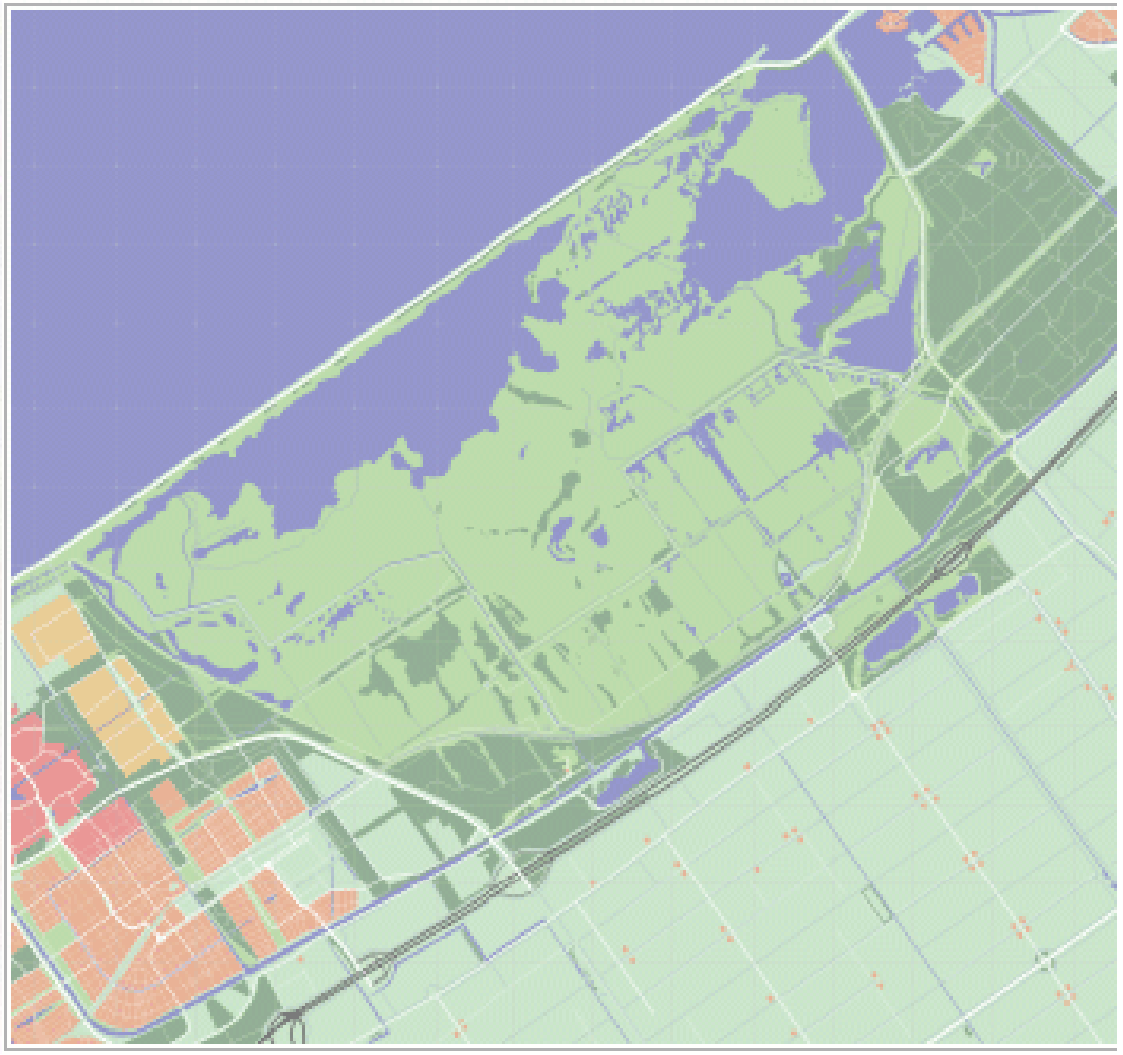
Case Oostvaarderplassen

Animal ethics versus eco-ethics



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Now a days: Populations of herbivores (ca. 3500 Heck cattle, Konik horses, deer)

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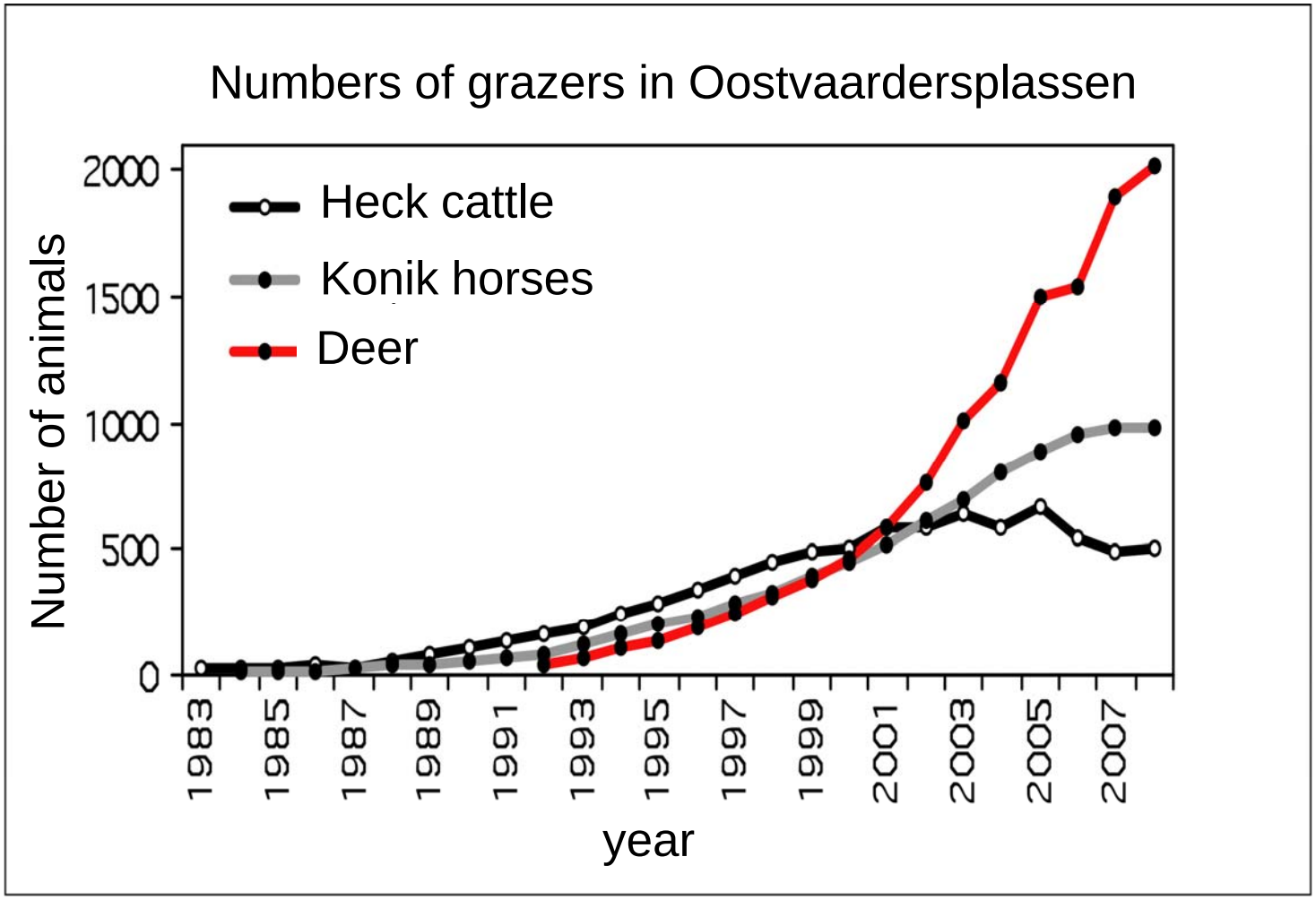
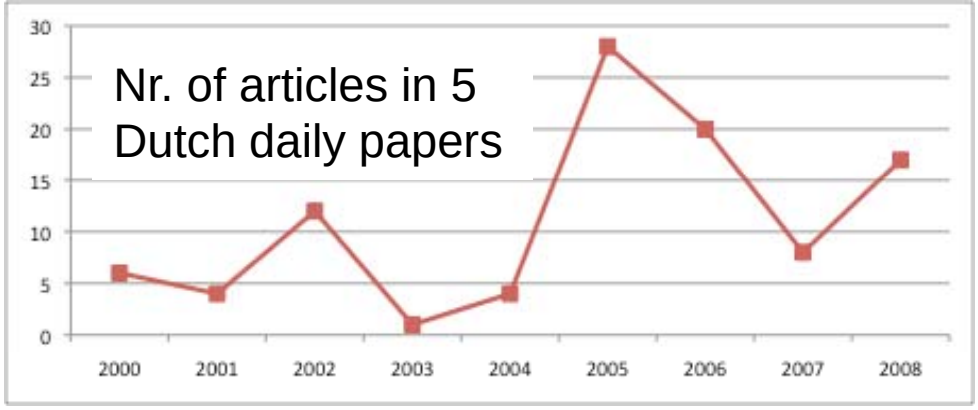
Increasing numbers



Data given by Perry Cornelissen, Rijkswaterstaat/RIZA

Winter starving 2004/5

- Deer: 22 %
- Konik horses 14 %,
- Heck cattle: 34 %



- Public concern
- Questions in the parlement
- Animal protection movement: kept animals
- National Council for the Rural Areas:
  - Just a consequence of ecological management
  - Need for public communication
- National Council for Animal Affairs:
  - Kept animals / carrying capacity
  - Starvation not acceptable, use anti-conception
- Installation of a expert committee: ICMO

Two contrasting paradigms

- Animal ethics
  - Animals are able to suffer
  - Have an intrinsic value as sentient beings
  - Belong to our moral circle
  - Animal > populations and ecosystems

- Eco-ethics
  - Ecosystems & populations have intrinsic value
  - Animals are part of the ecosystem
  - Populations and ecosystems > Animal

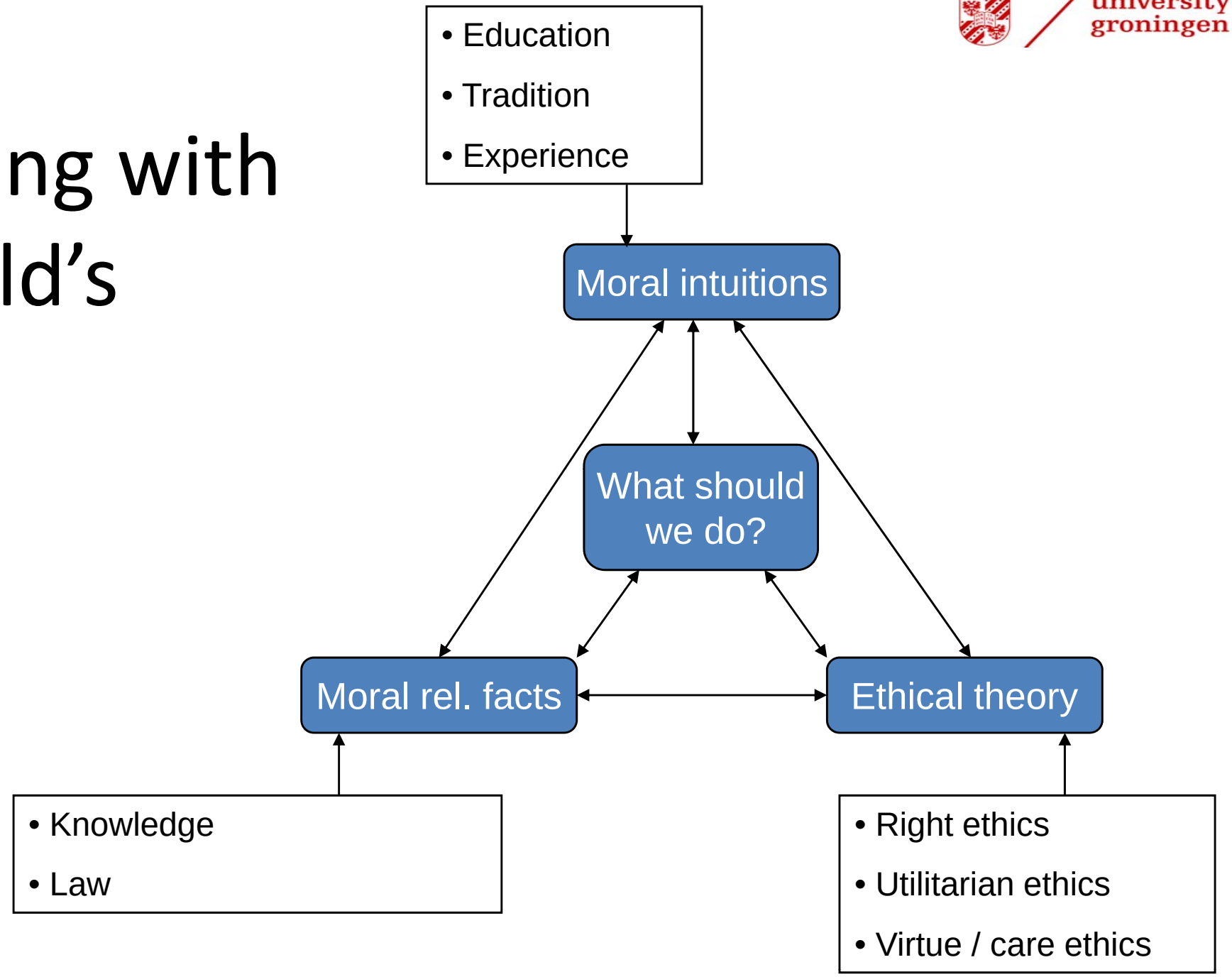
Eco-ethical view

Seal policy:

Generally, for these areas this perspective implies that seals are not considered as individuals but as parts of a larger more or less stabilised system. [...]. The self-regulating capacity of natural systems is a pivotal point of departure. The principle of integrity is authoritative. With sick and wounded animals, nature is allowed to take its course, thus not depriving them of their dignity

(LNV, 2003, translation by JAAS).

Dealing with should's



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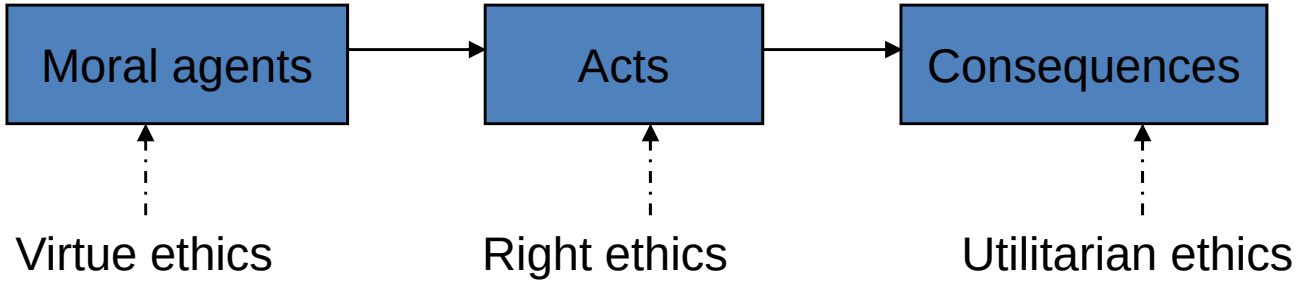
Ethical theories

- Right ethics
  - Human acting: e.g. restoration, introducing animals,
  - Principles: e.g. intrinsic value autonomy, justice

- Utilitarian ethics
  - Consequences, interests
  - Criteria: utility, welfare, health, etc.



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The ethical labyrinth in conservation and restoration

Perspective: What or who counts?	Right ethics	Utilitarianism
Humans & Human communities	autonomy, doing good valuated traditions & cultures	utility, welfare, happiness
Scientific community	freedom of research intrinsic value of knowledge	practical applications
Animals	animal rights animal integrity	animal welfare
Living entities	intrinsic value	a flourishing live
Populations	Intrinsic value / viable population	survival
Ecosystems / Environment	intrinsic value ecological integrity	Long term human profits

Conflicts

Conflicts

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Many sources of conflict and ethical dilemmas

- Visions of nature
- Role of stakeholders
- Decision making
- Conflicting ethics
  - Animal animal versus eco-centric ethics
  - Anthropocentric versus non-anthropocentric ethics
  - Right ethics versus utilitarian ethics

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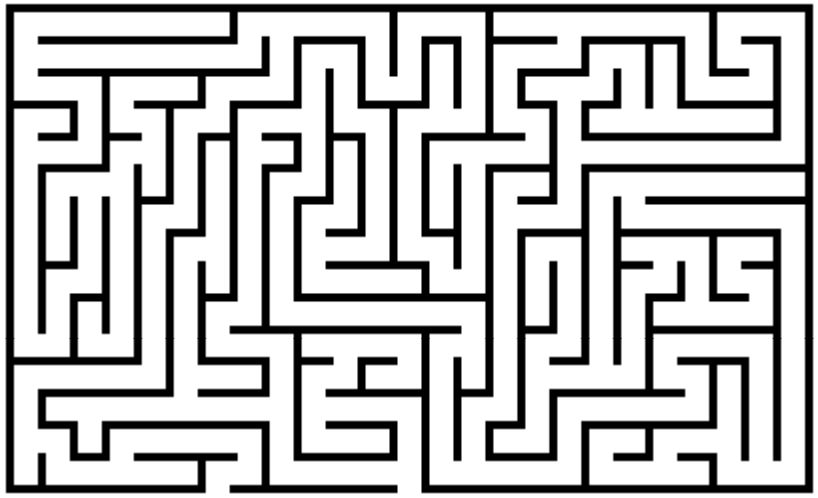
Pluralist society

- Different traditions, cultures, actors interests and visions
- Mutual dependency of involved actors
- Science has a limited role
- The moral labyrinth?



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Pragmatic ethics

- Rejects a monistic, universalistic ethical stance
- Takes concrete situation as a starting point
- Uses different theories as source of reflection
- Procedural rules are important:
    - Transparency and involvement stakeholders
    - Respect for other views
    - Open mind
    - No power play
- Learning attitude
- Accepts compromises

However

- Dilemmas often remain
- Decisions cannot always be postponed
- Compromise are not always possible or acceptable

Need for guidelines to choose in particular situations that are ethically valid and explainable

- ‘Moral allocation principles’ (MAP’s):
  - Indicate what kind of ethics has a leading role in a given situation
  - Do not unify but distribute ethical theories among practical affairs
  - Need continuously to be updated by practical discussions

Swart, J.A.A. (2008) The Ecological Ethics Framework. Finding our Way in the Ethical Labyrinth of Nature Conservation. Science and Engineering Ethic, 14(4): 523-526.

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A ‘MAP’ for the Oostvaardersplassen

In general:

1. Animals are dependent on their environment
2. If we valuate animals, we have to take care for their environment
3. Animal’s environments vary from purely human to ecological: from pets to wild
4. So: the type of care depends on the environmental type

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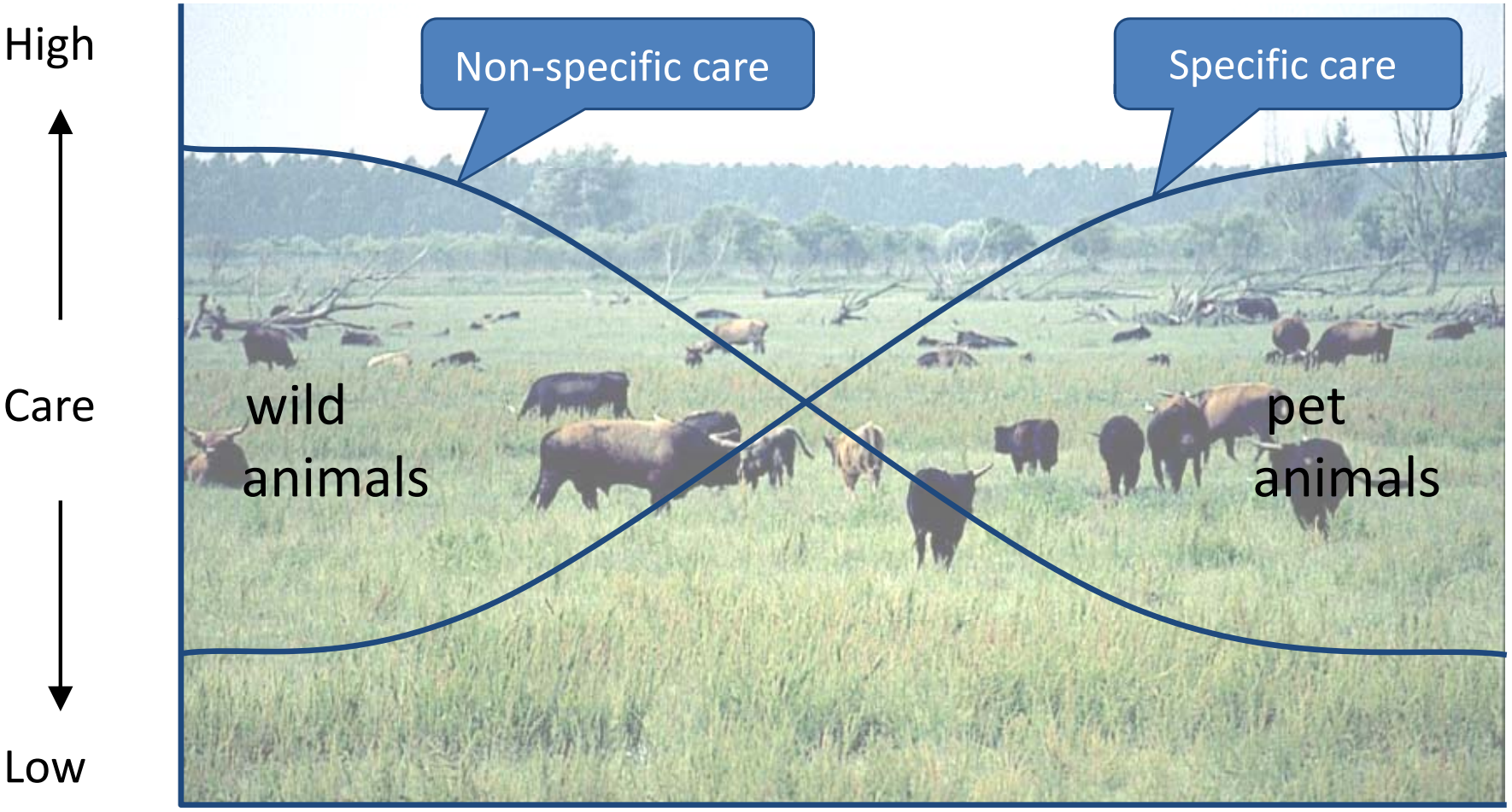
Different contexts: different types of care

- A human environment: specific care based on the animal's individual – species dependent – needs
- A natural environment: non-specific care directed to the care for the natural environment of the animal
- Increasing number of mixed zones and mixed animals
  - Animal experiences with wild animals
  - Semi-natural landscapes
  - (Re)introduced animals in restoration areas

Specific and non-specific care



ICMO advice to the minister of nature management (2006)

- International Committee on the Management of large herbivores in the Oostvaardersplassen (ICMO).

- Some of the recommendations of the ICMO:
  - Monitoring of entire population on a daily basis during the winter months. Culling of the weak animals
  - Create more shelter opportunities and ecological corridors to give the animals more foraging possibilities

Restoration science

- Applicative science: enhancing natural value
- Many disciplines are involved
- Often different research groups operates
- Role of visions, ethics and societal debates
- Besides peer reviewing, public approval is often nescessary

Contextualized science
(mode 2 science)

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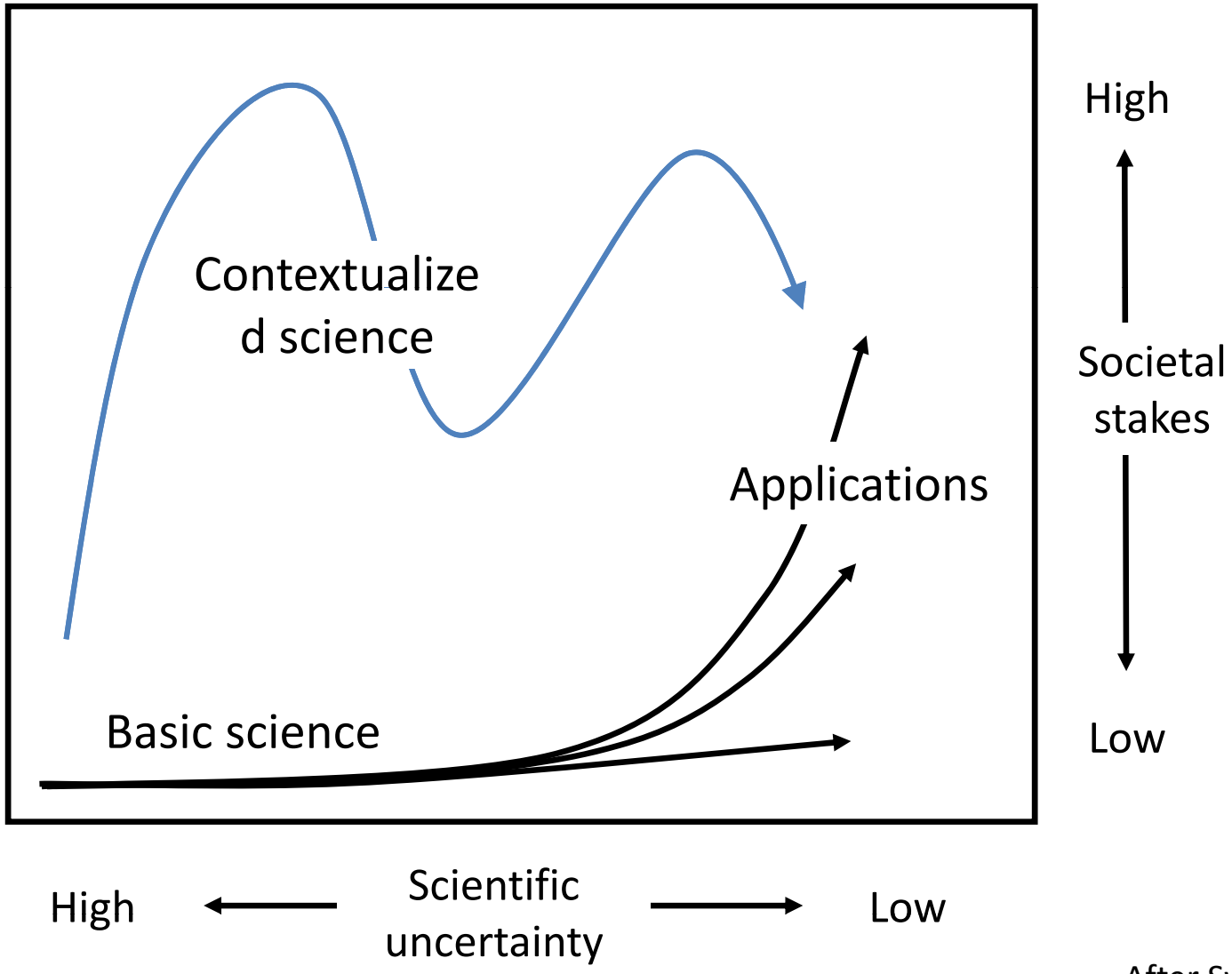
Contextualization



After Swart & Van Andel (2008) Journal of applied Ecology 45: 82-90

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Towards an pluralistic restoration ethics:

- Realize:
  - The ethical content of restoration and conservation
  - That we live in a pluralist society
- Cooperate with societal groups: multidisciplinary project teams
- Adopt a social learning attitude; feedback on experiences
- Develop and apply ‘moral allocation principles’ that can help to justify intervening decisions.
- However realize that every ‘MAP’ represents only one aspect of a (moral) landscape and may contains errors.
- Educate students on these issues