

Fit for purpose? Expanding the Nature-Futures Framework: Linking plural values to plural knowledges and experiences

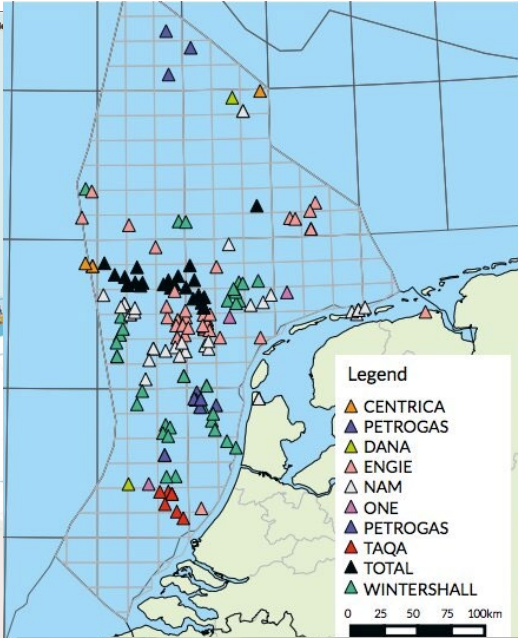
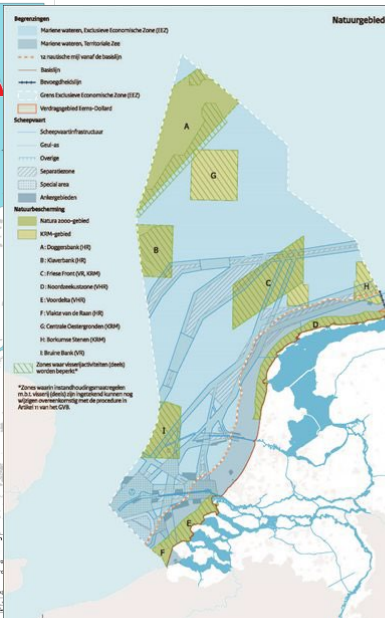
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Forest and Nature Conservation Policy Group, Wageningen University, NL

IASNR Europe conference, Wageningen 20-22 March 2024

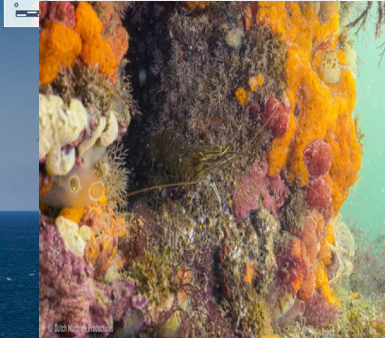


Nort Sea: Conflicting interest and future visions



Mogelijke indeling Noordzee met 60GW aan windenergie en nieuwe natuurgebieden

- Windpark (incl. visserij)
- Windparken en aquacultuur en passieve visserij
- Energieparken en internationaal natuurnetwerk
- Bescherm natuurgebied (geen visserij)
- Nieuw bescherm natuurgebied (geen visserij)
- Exclusieve Economische Zone Nederland



Conflicting concepts & perceptions

NbS: artificial reefs near

Wind turbines: nature?

TEK, cultural meaning of sea,

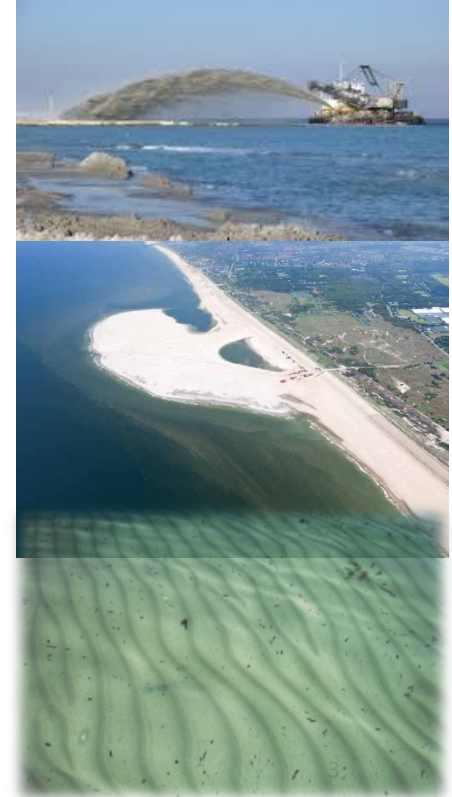
fish & fisheries

Wilderness experience -

Nature-based Solution?



Source: Bos, O.G. (Oscar)

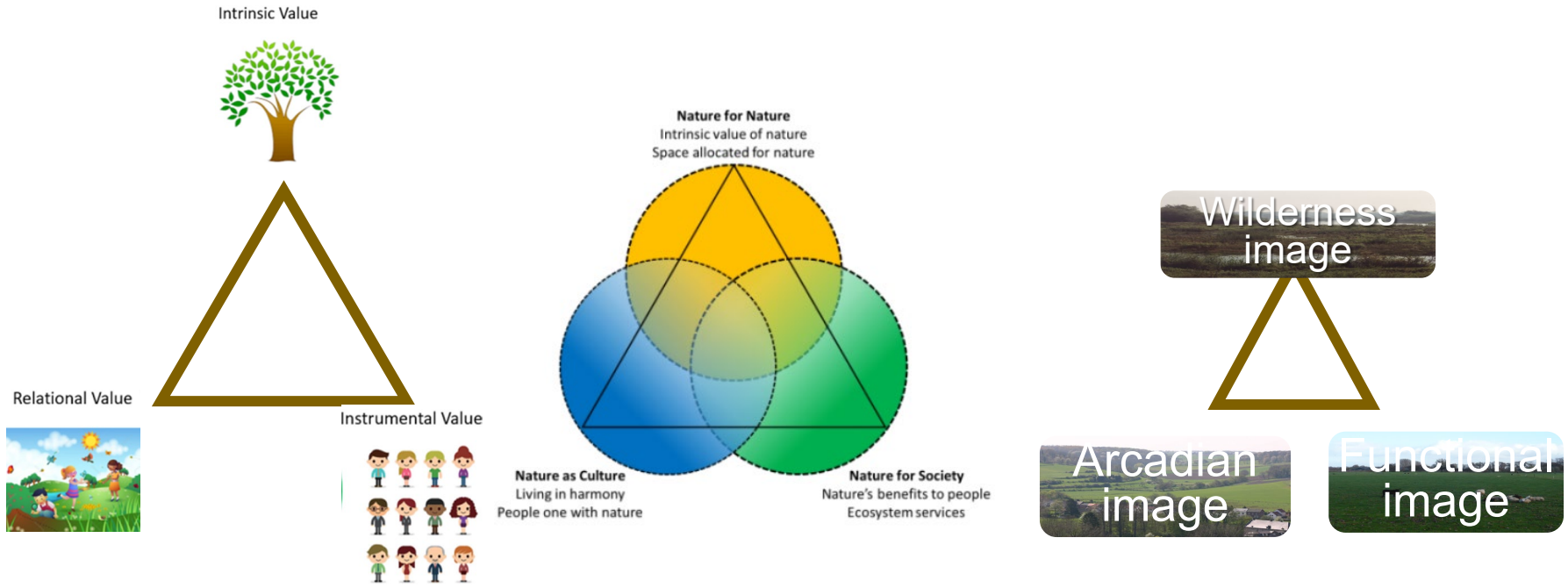


Methods

- 60 policy documents
 - Ministries, fisheries, science, transport, Sand suppletion, energy, Nature conservation NGOs
- 6 interviews
 - North Sea policy network
- 2 workshops to discuss future visions, scenarios and our categorization of future visions
- Analysis in ATLAS.ti

Administered by Dutch Ministry of Agriculture, Nature, Food security (and Fisheries) (2023) - Dr. Edo Knegteling †

Combining approaches from socio-environmental sciences: Values – Images of Nature – Nature Futures Framework



Approaches from socio-environmental sciences: Values – Nature Futures Framework – Images of Nature

Intrinsic Value



Relational Value



Instrumental Value



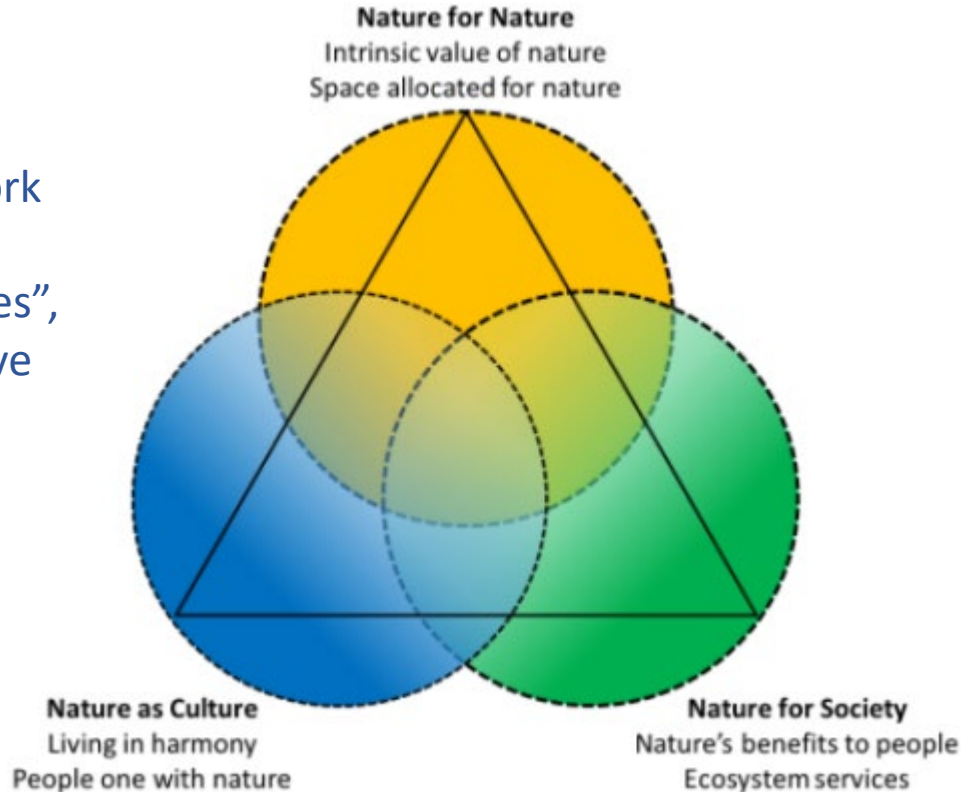
Chan et al 2016

Approaches from socio-environmental sciences: Values – Nature Futures Framework – Images of Nature

IPBES framework

“Positive futures”,
“Nature-positive
societies”

Scenarios



Strong:

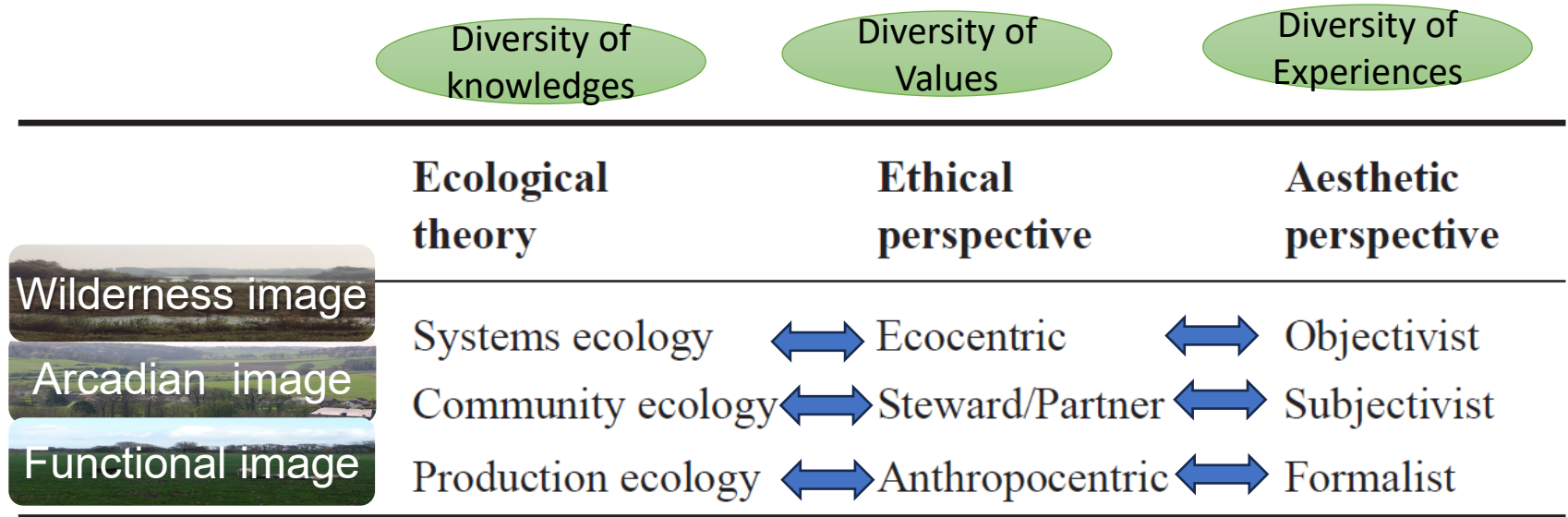
- Plurality
- Transformation oriented

Challenge:

- simplified

Approaches from socio-environmental sciences: Values –Nature Futures Framework – Images of Nature (1)

- Integration of dominant values, knowledges and experiences
- Plurality of conceptualisations/images of nature IN CONSERVATION

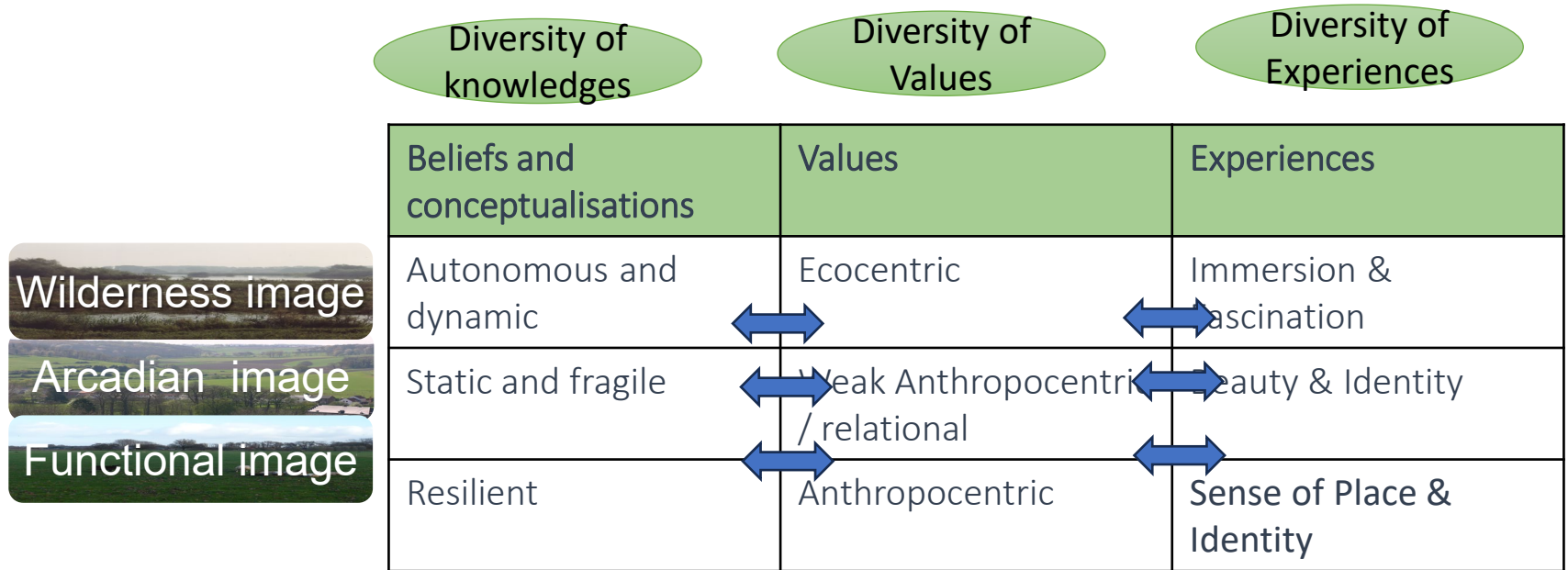


Approaches from socio-environmental sciences:

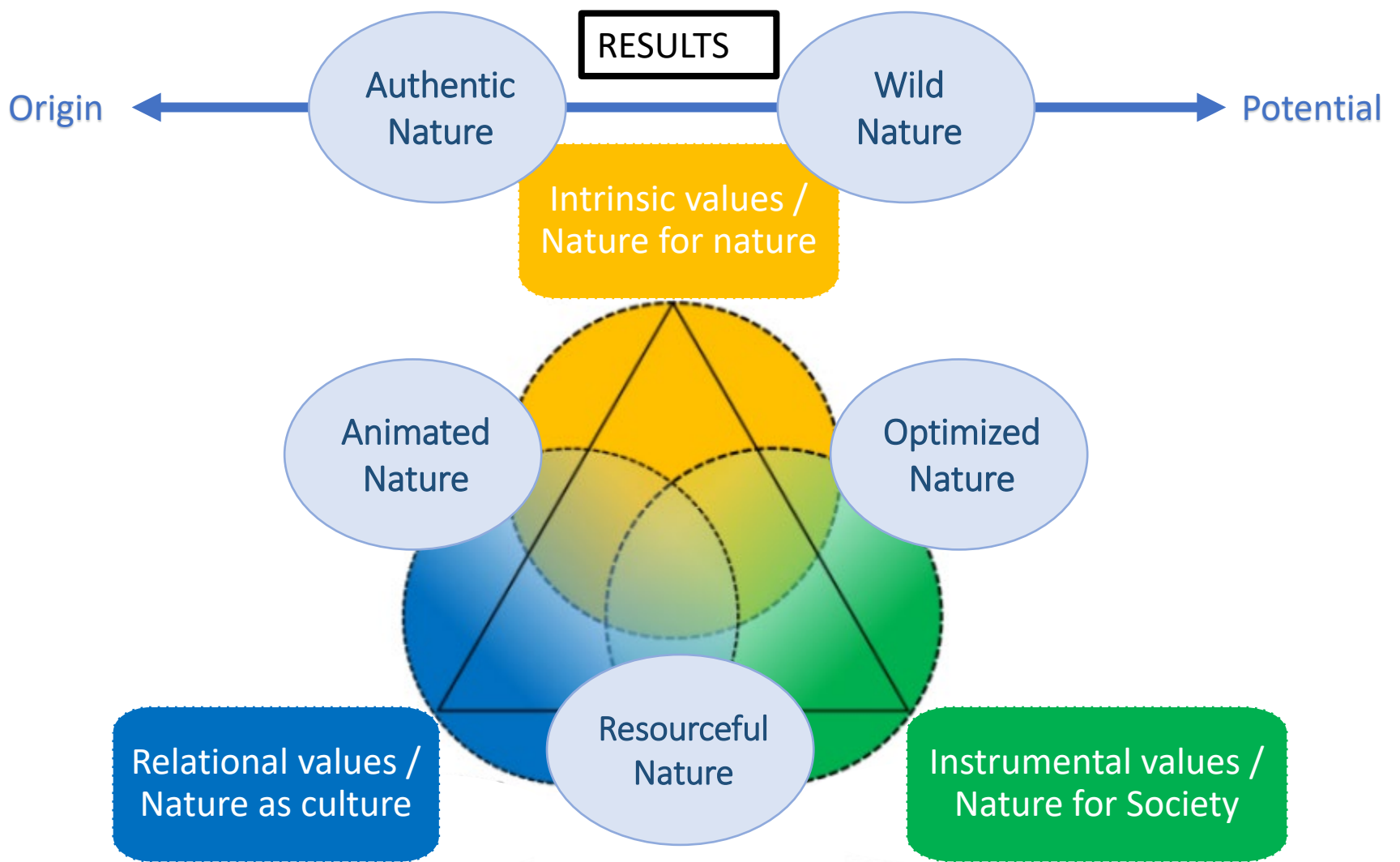
Values – Nature Futures Framework – Images of Nature (2)

Plurality of images IN GENERAL PUBLIC

Social representation theory (Moscovici, 1984), Mental models of nature (Bang et al 2009)

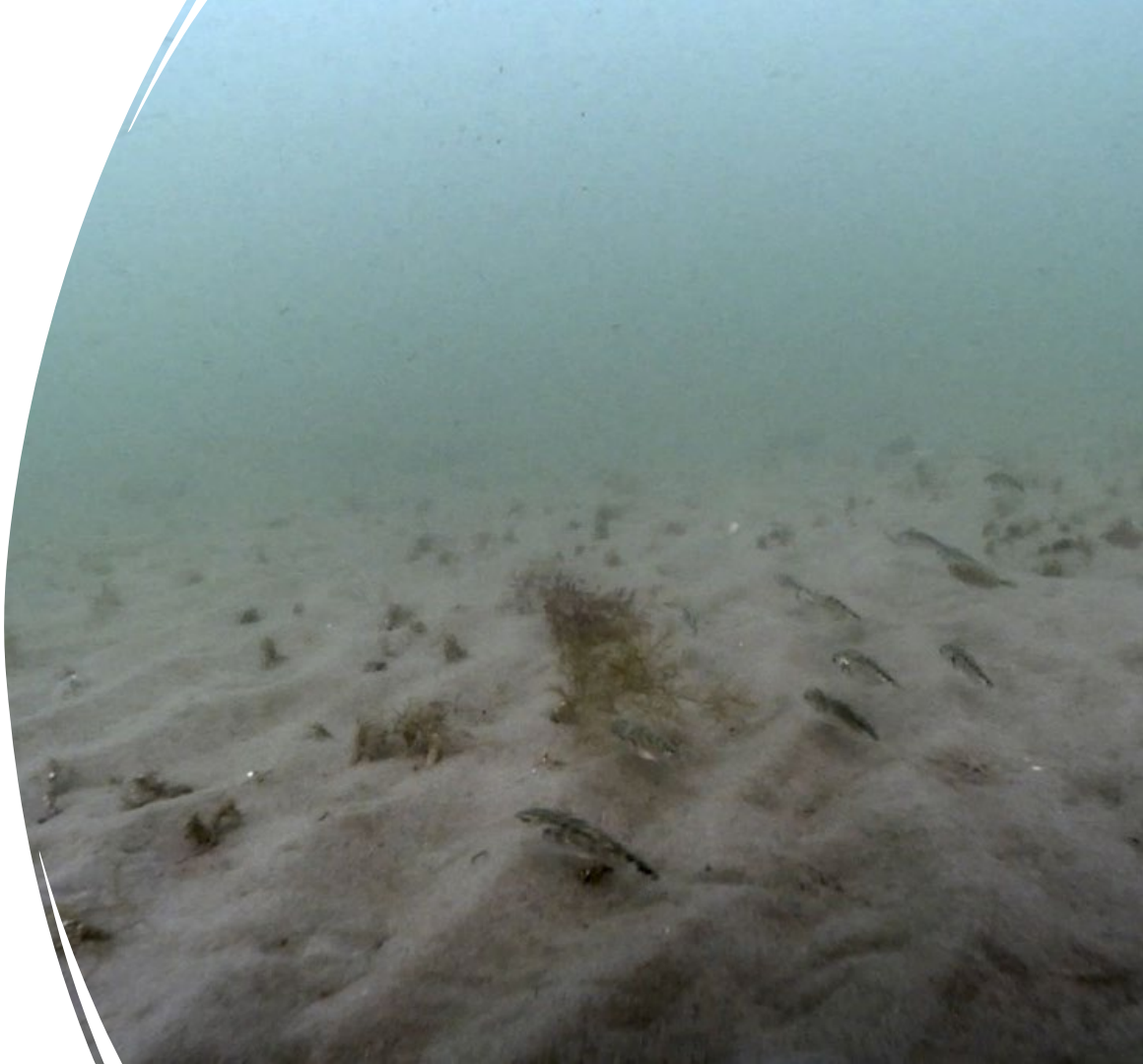


(Buijs et al. 2009, 2011; Farjon et al, 2016)



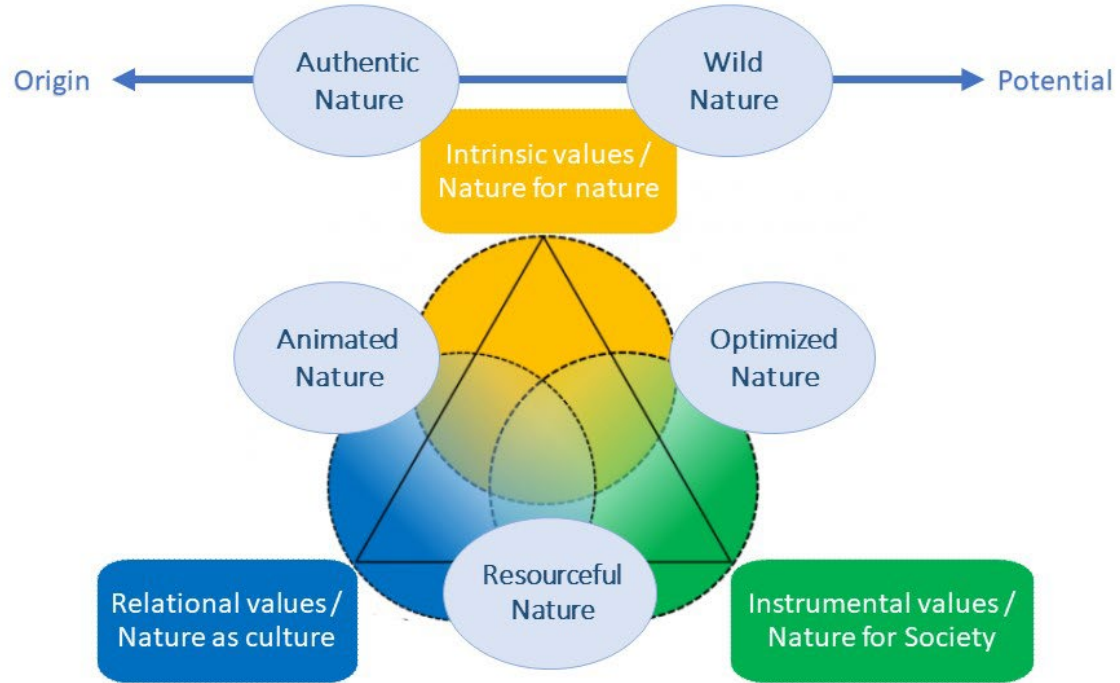
Authentic Nature

- Intrinsic value
- Original nature
- System ecology; nature has a natural state
- Conceptualization: nature \leftrightarrow culture
- Experience: authenticity
- Knowledge: Science



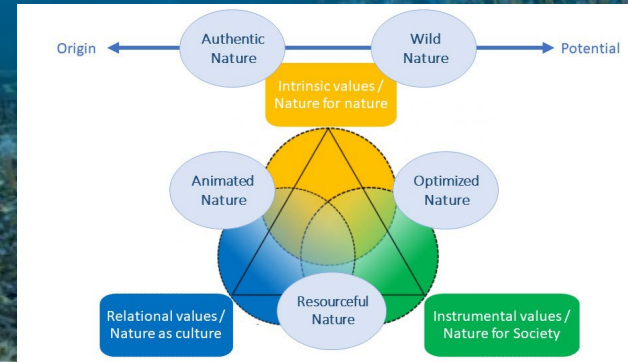
Wild Nature

- Intrinsic value
- Undisturbed, autonomic nature
- Process ecology; nature is dynamic
- Conceptualization: nature \leftrightarrow culture
- Experience: fascination, surprising potential of nature
- Science



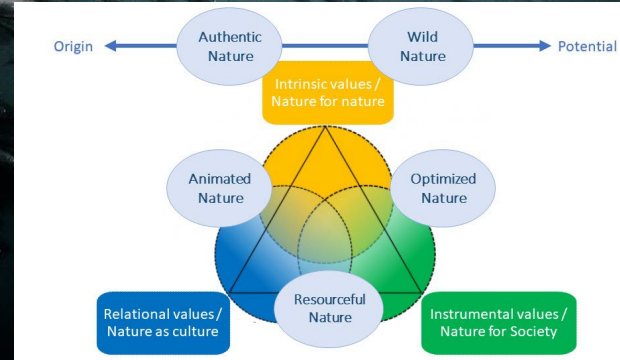
Optimized Nature

- Instrumental & intrinsic value
- Human-nature synergies, nature-based solutions
- Nature is dynamic
- Focus on potential of nature and use; maximizing utilization & biodiversity
- Science



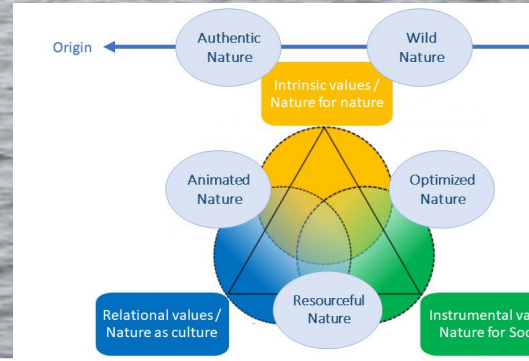
Animated Nature

- Intrinsic & relational value
- **(Deep) Experience:**
Unknowable, mystic nature, fascination
- Relationships & meaning
- Focus on present, relating to 'what is'
- TEK & experiential knowledge

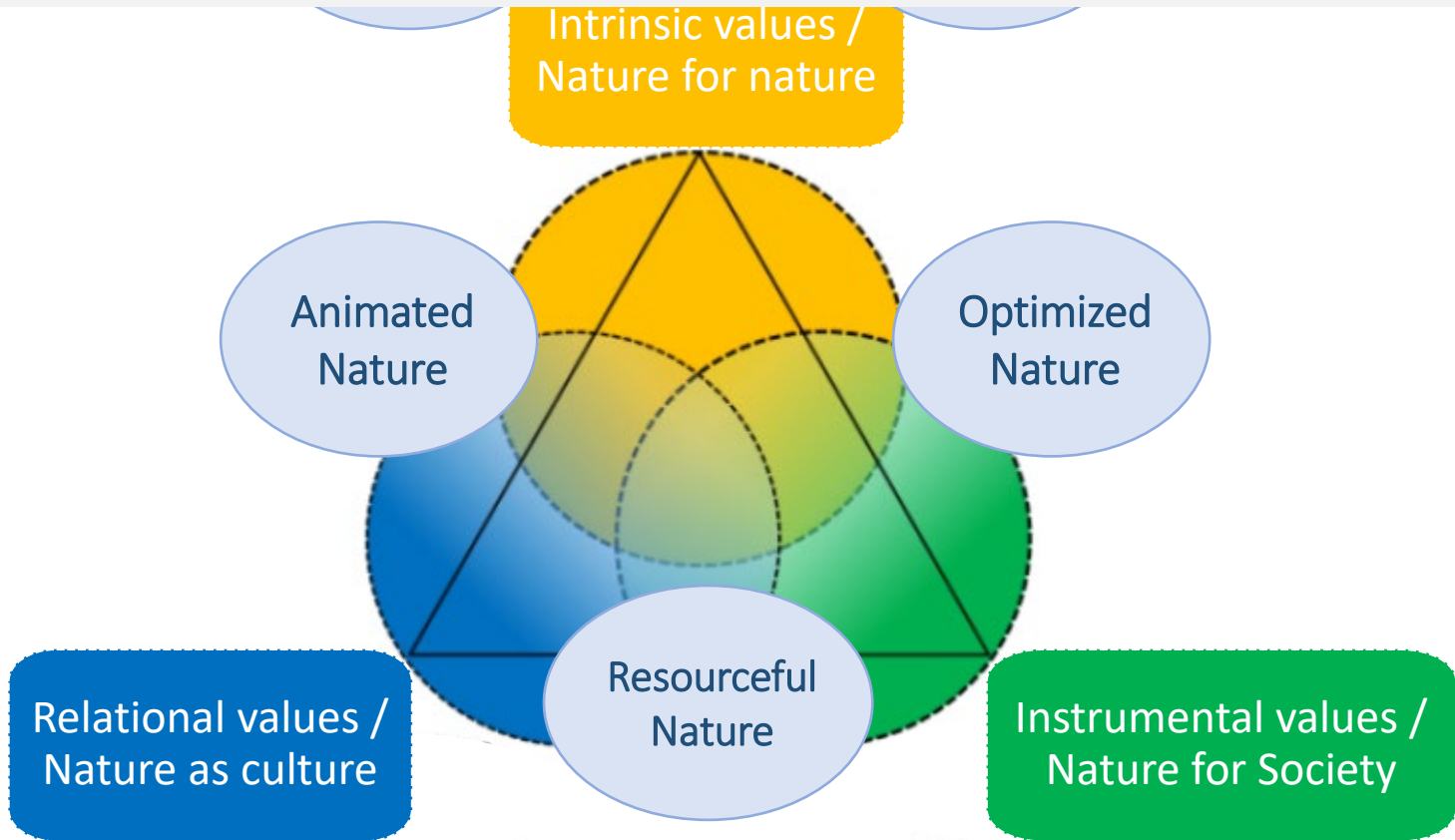


Resourceful Nature

- Instrumental & relational value
- Nature as resource and providing identity & familiarity
- Science & expertise



Broadening the foundation of the NFF: Linking values – knowledge claims- experiences



Broadening the foundation of the NFF: Linking values – knowledge claims - experiences

Nature for nature

Values: Intrinsic

Knowledge: science.
System **OR** Process
ecology

Experiences: Fascination
OR authenticity

Nature as culture

Values: relational

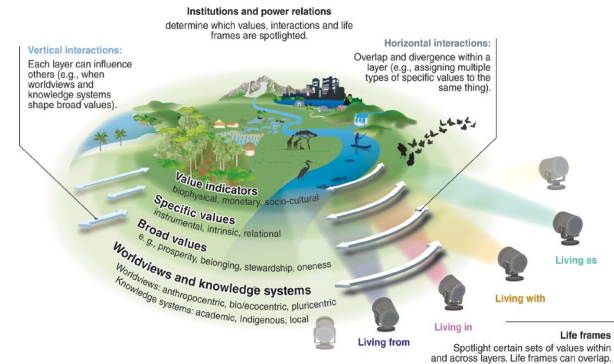
Knowledge: TEK, local, place-
based knowledge &
experience

Experiences: fascination &
spirituality **OR** identity

- Values: Instrumental
- Knowledge: science **OR** expertise
- Experiences: **?** Economic lense?

Conclusions & Discussion

- The Nature-Futures Framework is helpful as *analytical* tool to understand *plural vision* on nature-positive futures
- The Nature-Futures Framework may need expansion towards knowledge claims and experiences.
- Further theoretical development needed
 - Images of nature (Buijs et al 2009), Concepts of Nature (Keulartz et al 2004)
 - Worldviews (De Witt et al 2016)?
 - Life frames (Raymond et al 2023)?
 - Others? Ontologies?
- Trade off simplicity – complexity
- In development!



THANK YOU!

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Buijs, A. E. (2009). Public Natures. Social Representations of Nature and Local Practices. (PhD). Wageningen University, Wageningen.

Buijs, A. E. (2009). Lay people's images of nature: Comprehensive frameworks of values, beliefs, and value orientations. *Society and Natural Resources*, 22(5), 417-432.

Chan, K. M. A., Balvanera, P., Benessaiah, K., Chapman, M., Díaz, S., Gómez-Baggethun, E., . . . Turner, N. (2016). Why protect nature? Rethinking values and the environment. *Proceedings of the National Academy of Sciences of the United States of America*, 113(6), 1462-1465. doi:10.1073/pnas.1525002113

de Witt, A. (2016). Global Warming Calls for an Inner Climate Change: The Transformative Power of Worldview Reflection for Sustainability. In S. Dhiman & J. Marques (Eds.), *Spirituality and Sustainability: New Horizons and Exemplary Approaches* (pp. 199-214). Cham: Springer International Publishing.

Pascual, U., Balvanera, P., Anderson, C. B., Chaplin-Kramer, R., Christie, M., González-Jiménez, D., . . . Zent, E. (2023). Diverse values of nature for sustainability. *Nature*. doi:10.1038/s41586-023-06406-9

Pereira, L. M., Davies, K. K., den Belder, E., Ferrier, S., Karlsson-Vinkhuyzen, S., Kim, H., . . . Lundquist, C. J. (2020). Developing multiscale and integrative nature-people scenarios using the Nature Futures Framework. *People and Nature*, 2(4), 1172-1195. doi:https://doi.org/10.1002/pan3.10146

Raymond, C. M., Anderson, C. B., Athayde, S., Vatn, A., Amin, A. M., Arias-Arévalo, P., . . . Zent, E. (2023). An inclusive typology of values for navigating transformations towards a just and sustainable future. *Current Opinion in Environmental Sustainability*, 64. doi:10.1016/j.cosust.2023.101301

Keulartz, J., Van der Windt, H., & Swart, J. (2004). Concepts of nature as communicative devices: The case of Dutch nature policy. *Environmental Values*, 13(1), 81-99. Retrieved from <http://www.scopus.com/scopus/inward/record.url?eid=2-s2.0-1642335703&partnerID=40>

Pereira, L. M., Davies, K. K., den Belder, E., Ferrier, S., Karlsson-Vinkhuyzen, S., Kim, H., . . . Lundquist, C. J. (2020). Developing multiscale and integrative nature-people scenarios using the Nature Futures Framework. *People and Nature*, 2(4), 1172-1195. doi:https://doi.org/10.1002/pan3.10146

Zafra-Calvo, N., Balvanera, P., Pascual, U., Merçon, J., Martín-López, B., Noordwijk, v. M., . . . Díaz, S. (2020). Plural valuation of nature for equity and sustainability : Insights from the Global South. *Global environmental change : human and policy dimensions*, 63.