

NETWORK
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NOLOGIES

Environmental Innovations and Technological Developments in a Socioecological Paradigm

#1 On the Progress of SDG 9

#2 On the Semantics of Cultural Heritage

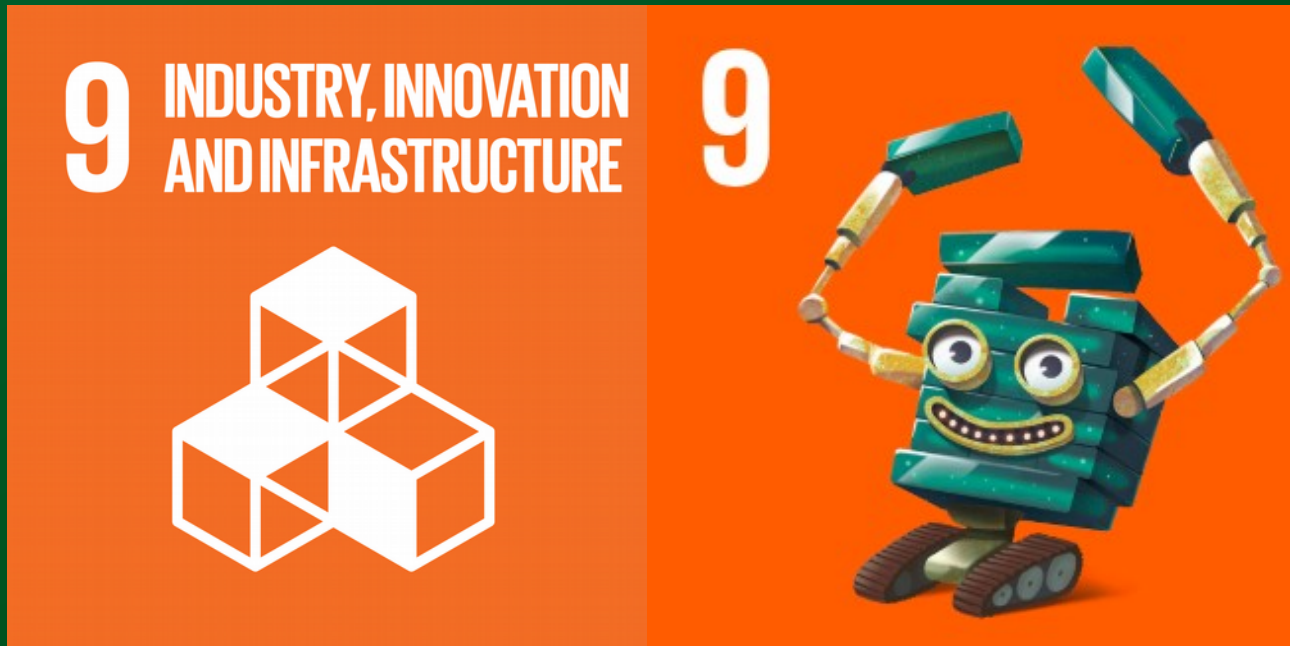
#3 On the Modern Way of Life and Cultural Sustainability

#4 On Ecological Justice and the Social Relations Principle

#5 On Paradigms, Innovations, and Pathdevelopments

#6 Discussion

#1 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



„Steady progress has been made in the manufacturing industry. To achieve inclusive and sustainable industrialization, competitive economic forces need to be unleashed to generate employment and income, facilitate international trade and enable the efficient use of resources.“

Source: Report of the Secretary-General, The Sustainable Development Goals Report 2018 / Die glorreichen 17, <https://www.dieglorreichen17.de/index.html#ziel-9>

#1

„The global share of manufacturing value added in GDP increased from 15.2 per cent in 2005 to 16.3 per cent in 2017, driven by the fast growth of manufacturing in Asia.

Globally, the carbon intensity decreased by 19 per cent from 2000 to 2015— from 0.38 to 0.31 kilograms of carbon dioxide per dollar of value added.

In 2015, medium-high- and high-technology sectors accounted for 44.7 per cent of total manufacturing value added globally. The value added reached 34.6 per cent in developing economies, up from 21.5 per cent in 2005.

By 2016, the proportion of the population covered by a third generation (3G) mobile broadband network stood at 61 per cent in the LDCs and 84 per cent globally.“

Source: Report of the Secretary-General, The Sustainable Development Goals Report 2018

#2

On the Semantics of Cultural Heritage

04.02.2019

UNESCO World Heritage and the Sustainable Development Goals
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„The General Conference of the United Nations Educational, Scientific and Cultural Organization, meeting in Paris from 3 to 21 October 2005 at its 33rd session, Affirming that cultural diversity is a defining characteristic of humanity, Conscious that cultural diversity forms a common heritage of humanity and should be cherished and preserved for the benefit of all, [...]“

UNESCO General Conference, CONVENTION on the Protection and Promotion of the Diversity of Cultural Expressions. Paris, 20 October 2005

„From a purely normative approach, one went to a less restrictive approach, one based on the capacity of the object to arouse certain values that led the society in question to consider it as heritage and therefore, to a further step in which heritage is no longer defined on the basis of its material aspect. This development has also made it possible to recognise intangible cultural heritage, which was ignored for a long time, as heritage to be protected and safeguarded.“

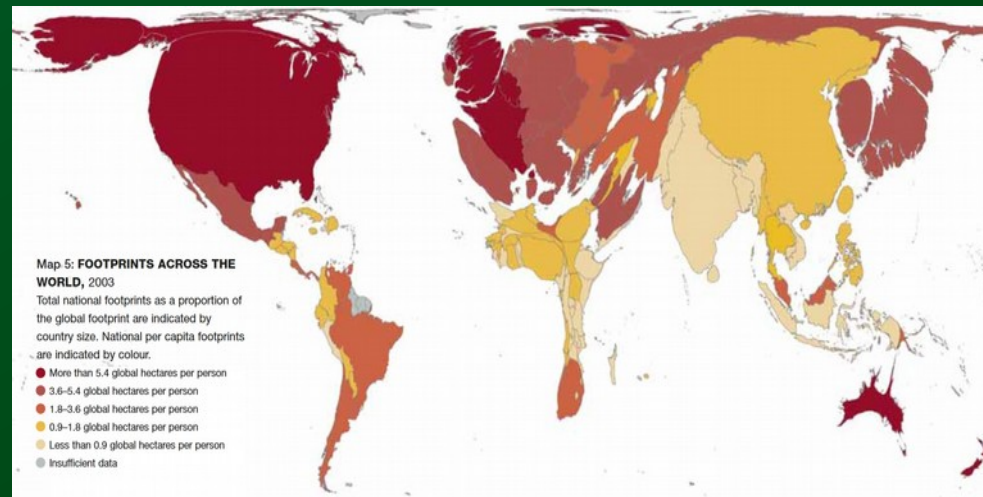
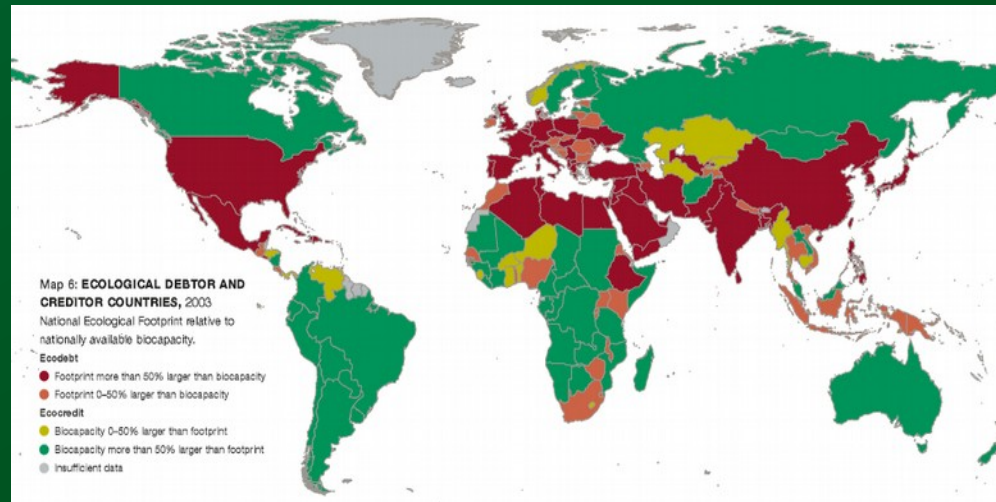
Vecco, Marilena (2010): A definition of cultural heritage: From the tangible to the intangible, p. 323

“This intangible cultural heritage is of continuing importance because (a) it is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity or (b) it is constantly taken up as a source for processes and exchanges that lead to the creation of new forms of knowledge, skills and meanings as well as new social and cultural practices and expressions, thus providing the breeding grounds for cultural diversity and human creativity.”

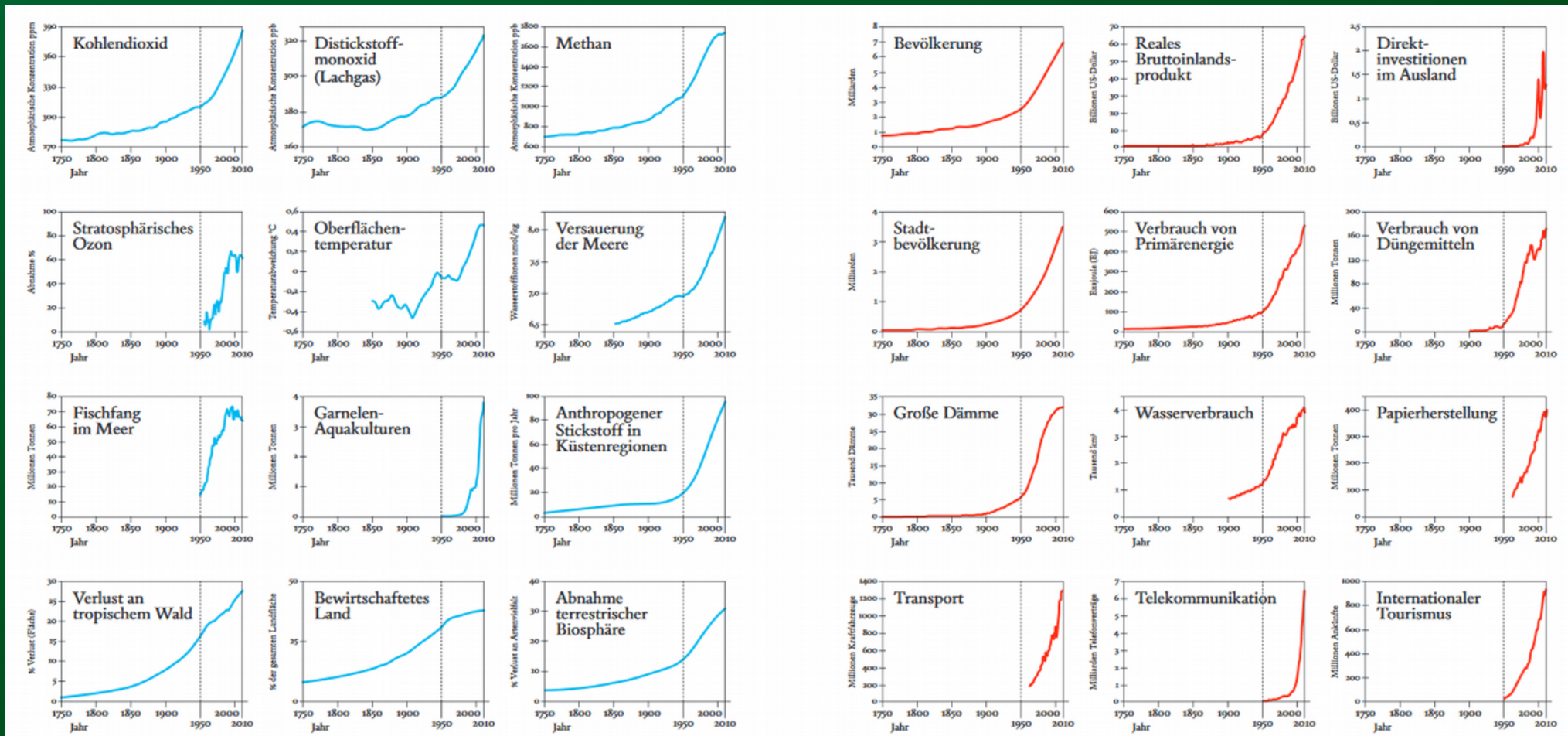
Halsdorfer Alice (2009): Meaning of the Internet for the Intangible Heritage Convention. Albert, Marie-Theres / Bernecker, Roland / Rudolff, Britta (ed): Understanding Heritage - Perspectives in Heritage Studies. De Gruyter, 2013.

#4

On the Modern Way of Life and Cultural Sustainability



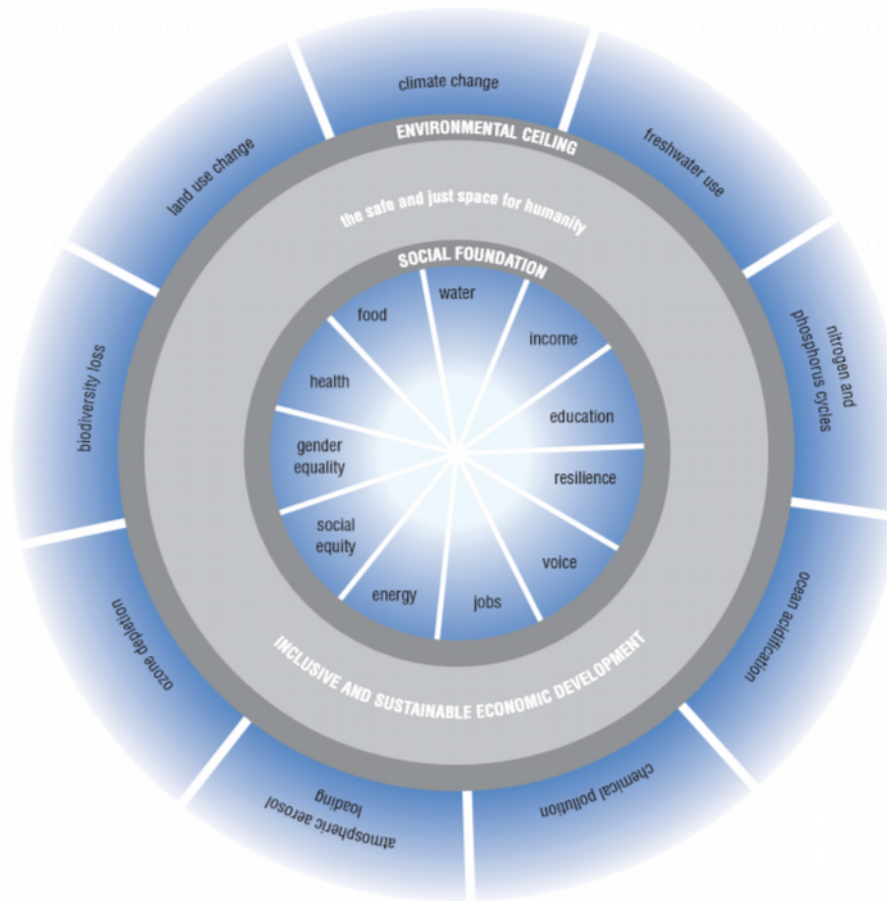
Source: WWF, Zoological Society of London and Global Footprint Network (2006) Living Planet Report 2006.



Renn, J. and Scherer, B. (2015) 'Das Anthropozän - Einführung', in Renn, J. and Scherer, B. (eds) Das Anthropozän - Zum Stand der Dinge. Berlin: Matthes & Seitz, p. 268.

PART 1.6. BETWEEN SOCIAL AND PLANETARY BOUNDARIES: NAVIGATING PATHWAYS IN THE SAFE AND JUST SPACE FOR HUMANITY

Figure 6.1. Social and planetary boundaries



Source: K. Raworth (2012), "A safe and just space for humanity: Can we live within the doughnut?" discussion paper, Oxfam, Oxford, based on J. Rockström et al. (2009), "A safe operating space for humanity", *Nature*, Vol. 461, pp. 472-475.

#5 paradigms, innovations and pathdevelopments

Historical Paradigms

- 1.) Technical arts and crafting
- 2.) Engineering science and mathematization
- 3.) Technological development
- 4.) natural science oriented instruction and construction
- 5.) Modern Technology or Technoresearch.
- 6.) social innovation

#5

Methodological Paradigms

1.) Crafting Paradigm

→ technical constructions are legitimized by past experiences

2.) Machine Paradigm

→ rationalization of working processes

→ calculation of success and construction

3.a) Paradigm of Autonomous Intelligent Technology

→ digitalization of working processes

3.b) Virtual Device Paradigm

→ interfaces dominate interaction with machines

→ virtual structures dominate knowledge production

[3.c) Paradigm of Technology Transfer]

Discussion



Source: World Food Programme, Innovation Accelerator, 2018. <https://innovation.wfp.org/project/building-blocks>