

# GAIA

ECOLOGICAL PERSPECTIVES FOR  
SCIENCE AND SOCIETY  
ÖKOLOGISCHE PERSPEKTIVEN FÜR  
WISSENSCHAFT UND GESELLSCHAFT

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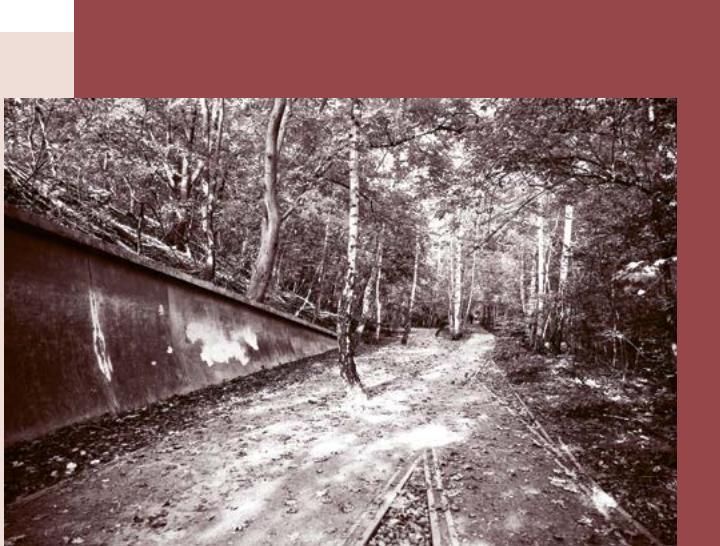
Miscellaneous authors

### FOCUS NOVEL NATURES – NEW TECHNOLOGIES AND CONFLICTS IN NATURE CONSERVATION

Which nature should we protect? And how?  
Are new technologies such as gene drives the answer?  
Do we need new concepts like *novel natures* to draw  
attention to the interactions between novel natural  
environments and societal processes? Do we need to  
rethink the role of invasive species in nature conservation  
and restoration? This Special Focus opens the floor for  
cross-disciplinary debates on human relationships  
with natural environments and technologies.

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ideas about humans and nature



#### COVER PICTURE

A former railway site turned into a public park and now largely reclaimed by nature won the *International Carlo Scarpa Prize for Gardens 2022*: Natur-Park Südgelände Berlin. Ingo Kowarik, an urban ecologist and our interviewee in this issue, was involved in the design and planning of this novel urban ecosystem (pp. 128f.).

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Marion Meyers

## ARTIFICIAL INTELLIGENCE AND DEGROWTH

Addressing the degrowth movement's vague vision of technology, this study discusses the appropriateness of Artificial Intelligence in the context of degrowth, using the concept of convivial tools designed to enhance human autonomy and relationships with others and nature.

LEVELS DIMENSIONS	MATERIALS	PRODUCTION
RELATIONSHIP Who can produce and who is being affected between people?	>= environmental impacts of ML: use of rare earth elements  [Ad.M] market driven —— need-driven [Ad.M] alien implementation —— respects local traditions	>= high complexity of ML: highly complex devices production  [Ad.P] organization convivialized —— organization [Ad.P] distance-creating —— corporate esp.
ACCESS Who can produce/ use it where and how?	>= environmental impacts of ML: use of rare earth elements  [Ad.M] elitist —— open to anyone [Ad.M] cost intensive —— low-cost	>= high complexity of ML: highly complex devices production  [Ad.P] elitist —— open to anyone [Ad.P] cost intensive —— low-cost [Ad.P] sacred or profane —— knowledge free!
ADAPTABILITY How independent and flexible is it?	>= environmental impacts of ML: use of rare earth elements  [Ad.M] special machines —— everyday tools [Ad.M] big scale economical —— small scale economical [Ad.M] special materials —— standardized materials	>= high complexity of ML: highly complex devices production  [Ad.P] big scale economical —— small scale [Ad.P] special machines —— everyday [Ad.P] special conditions —— everywhere
BIO-INTERACTION How does it interact with living?	>= environmental impacts of ML: environmental impacts of ML throughout supply chain	>= environmental impacts of ML: environmental impacts of ML throughout

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