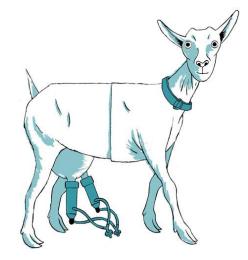


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Biotechnology

Lukat, Till

Humankind's influence is no longer limited to the geological surface of the Earth; it now also significantly impacts genetic landscapes. A few decades ago, breeding efforts were limited to combining the genetic materials of existing agricultural plants and farm animals. Today, biotechnicians are creating new types of plants and animal species in their labs: from genetically altered plants to bacteria with synthetically created DNA. "Traditional" biotechnology starts with the established genome of an existing organism and changes it, while "synthetic" biology aims to circumvent evolution completely and create life using so-called "Bio Bricks." If we can create life in a laboratory, thereby turning it into a consumable to be patented and traded, are we running the risk of losing our respect for life?



Biotechnology: Goats and Tissue Culture *Till Lukat*

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Goats and Tissue Culture: Biotechnology

Text and images by Till Lukat
University of the Arts (UdK), Berlin

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The Model Gene Kit
Father - "Well, the time has come. Your mother and I think that
you have finally reached the right age for this."
Daughter - "My own biology lab!"

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"Don't worry, Uwe. You're just my guinea pig."

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"Change a chromosome here, take out a gene there..."

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"...maybe I should have analyzed the DNA first."

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"Hello, little girl. I'm Flora, green biotechnology. I mess with plants."

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"And I'm Fauna, red biotechnology. I enhance animals, and in doing so, I help humans." $\,$

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"But what happend to Uwe?"

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"We'll cure you of disease, we'll feed you. You don't need Uwe anymore. You have us."

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Artist's comment:

Biotechnology is omnipresent in all areas from medicine to agriculture. It would not be possible to produce certain medicines or vaccines without it. Genetic engineering also plays a major albeit controversial role in biotechnology. Does biotechnology cross ethical borders or is it okay to manipulate DNA if it could help make sick people well again?

How to cite

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The comic also appears in Alexandra Hamann, Reinhold Leinfelder, Helmuth Trischler, and Henning Wagenbreth, eds., *Anthropozän – 30 Meilensteine auf dem Weg in ein neues Erdzeitalter. Eine Comic-Anthologie* (Munich: Deutsches Museum, 2014).



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Further readings:

• Sources and Literature for the Anthropocene Milestone Comics

Related links:

- Welcome to the Anthropocene. The Earth in Our Hands. Special exhibition at the Deutsches Museum http://www.deutsches-museum.de/en/exhibitions/special-exhibitions/archive/2015/anthropocene/
- Welcome to the Anthropocene. The Earth in Our Hands. Virtual exhibition on the Environment & Society Portal https://www.environmentandsociety.org/node/6354
- Comic-Anthology, Deutsches Museum Website http://www.deutsches-museum.de/sammlungen/entdecken/comics/

Websites linked in image captions:

• http://www.deutsches-museum.de/ausstellungen/neue-technologien/nano-u-biotechnologie/biotechnologie/