



# BOOK REVIEW

## *Emergent Ecologies*

Eben Kirksey. Duke University Press, 2015

By Trine My Thygaard-Nielsen

In *Emergent Ecologies* Eben Kirksey takes the reader on a thought-provoking trip to emergent ecologies around the world. With theoretical concepts and methods from various disciplines across the sciences multiple species give their perspective. The result is an attention-grabbing, timely and well-written book with the noble goal of exemplifying and enhancing the positive hopes for future ecosystems in a time where apocalyptic presentations dominate.

Kirksey takes his point of departure in the field of conservation biology. Combined with contemporary philosophy and anthropology he sheds new light on how multispecies communities are shaped by chance encounters, historical accidents and parasitic invasions. With this base for the understanding of multispecies worlds Kirksey takes the reader on a journey through a complex entanglement of political agendas, commercialization strategies, scientific knowledge, local livelihoods, conservation projects and global funding all of which have been undergoing historical transformations. Throughout the journey Kirksey represents and threatens the natural world as inhabited by multiple species in which species close down and open up opportunities for each other. Kirksey manages this ambitious task by adjusting how much attention he pays to each factor throughout the chapters. Both by empirical and theoretical example Kirksey masters the fine balance act between coherence and fragmentation by moving beyond conventional distinctions between humanities, natural and social sciences. Throughout the book he introduces a vast amount of concepts, a myriad of actors and ecosystems, and an impressive interdisciplinary data-set produced in places as different as ant colonies, bird whisperers, snake breeders, microbes and a conservation forest school. All of which he impressively succeeds to interweave into a coherent interdisciplinary book that lets the reader know why the different subjects are central when understanding the various ambitions and agendas at play in emergent ecologies.

The book consists of ten chapters in which theory and empirical merge elegantly making the book a fluent read. In the introduction Kirksey sets off with a twofold ambition: a) to punctuate the lonely "umwelt" (understood as phenomenological bubbles or one's world of perceptions and actions) of humans only in love with themselves (p. 84) and b) to move beyond the dialectic discussion of messianic and apocalyptic presentations of the future by focusing on the hopes for the future expressed by a multitude of actors working within and around conservation. In order to

meet his ambitions both Kirksey's theoretical and methodological apparatuses are diverse stemming from the fields of biology, philosophy, sociology, and anthropology.

The biological concept "umwelt" is one of Kirksey's key concepts throughout the book. Through the study of chytrids' (microbes) "umwelt", under the guidance of Joyce Longcore, Kirksey learns to expand his own "umwelt" and thereby his understanding of emergent ecologies (p. 73). He makes this gift tangible for the reader both through the empirical chytrid example and through the discussion of the theoretical strives over the concept.

Despite the focus on multiple and diverse actors in various research sites most empirical examples engage in a dialogue with each other and Kirksey has empirically investigated every single subject, either on his own or in collaboration with other researchers. The approaches range from fieldwork, artistic installations, participant observation, and laboratory work. Even though they can seem fragmented, together they make up a convincing and necessary starting point wherefrom we can get closer to understanding emergent ecologies from multispecies' perspectives. Namely by enhancing our own "umwelt" as humans.

The study of chytrids not only brings along the foundation for widening our "umwelt" but is also linked to chapter four on frog conservation demonstrating that chytrids are important actors transported by frogs who again were transported by humans leading to the almost extinction of other frog species. This cleverly constructed interrelation between chapters not only further develops the concept of "umwelt" but also demonstrates how we as species (humans, chytrids, and frogs) are co-creating ecosystems although coincidental. Another strong example of co-created ecologies is the Palo Verde natural park in Costa Rica and its surrounding farmland. The natural park was cattle-farmland owned by American farmers who introduced jaragua grass to the local flora. After the farmers were stripped of their land part of it were turned into a natural park and parts were turned into parcels given to local farmers. Today local government is struggling to fight back jaragua grass and bring back local flora and fauna while local rice farmers are struggling to secure their crops from endangered species feeding on their fields. At the same time a local school is engaged in pragmatic conservation. This example presented in the last two chapters of the book makes up a description of an emergent ecology on its own complete with conservation strategies, intentions at a local school, local farming



struggles, “wild”-life, international donors and thereby the scene is set for various agendas that collide, die or meet in pragmatic solutions. E.g. As an attempt to exterminate and capitalise the dominating “non-native” cattails of the area international donors, donated money to start up a local artisanal cattail-paper-making cooperative. After the first order it turned out that cattails was a bad papermaking source and the initiative as well as the funding died out. Another more durable story is the flourishing forest school where volunteers and pre-schoolers rebuild a pragmatic forest with attention to local traditions, rare wildlife, and future climate change.

Together these central parts make up the bearing elements of the book and are backed by examples of other arisen ecologies that have caused species to mingle or going extinct in new ways as e.g. monkeys set loose in Florida to attract tourists or the African clawed frog that spread around the world as a pregnancy test. The insistence on the multi-sited is both the book’s weakness and strength. Weakness because the important message of interconnectedness in some examples fades in the midst of diverse sites and many actors. Strength for the same reason, namely that Kirksey demonstrates how complex these ecological entanglements are and how coincidental connections can be made, including a frog invading ecosystems worldwide because it at a point in history was the best pregnancy test available. This frog is one of Kirksey’s living examples of a co-creation on a global scale causing locally emergent ecologies across cityscapes, construction-sites, agriculture, natural parks and other types of ecosystems.

On a more critical note, although actors are copiously described, notions such as assemblages and ecologies used in a variety of constellations such as (unruly) assemblages, (emergent) ecologies lack the same sharp and copious description. Though all empirical examples ads each their perspective on multispecies worlds at times the connection between empirical example and the notion of emergent ecologies is lost. E.g. the chapter on multispecies families in which Kirksey demonstrates how endangered animals are “flexible persons” turned into loved ones and commodities through change of moral spheres (p. 135). Indeed a very important precarious situation however the link to hopes for future ecosystem is not straightforward.

Nevertheless, this does not take away the book’s incredibly fascinating insights into how ecologies do not simply evaporate but are constantly emerging in ways humans cannot (un)plan. By placing all actors on an equal footing, both empirically and theoretically Kirksey succeeds in “taking seriously” (see Swanson 2015<sup>55</sup>) all sorts of things around him as ethnographic objects and valuable scholarly thinking. By doing so Kirksey demonstrates to us how we as human researchers have to expand our phenomenological bubble or “umwelt” to grasp the ways that plants and animals are equal participants in emergent ecologies. A lecture that is good to think with when considering social worlds as not created solely by humans but rather with and alongside other living species of which there are more than we might have imagined.

Therefore this book is of interest to any scholar, across the sciences, whose interest is in the (natural) world on the premise of multiple species’ interaction and conservation strategies. Policymakers and conservationists too should read this book to get insights into how nature is the project of multiple species. All in all, Kirksey offers a groundbreaking approach to the natural world and by knitting together various examples from very diverse research sites and perspectives Kirksey offers hope to the future of ever emerging ecologies. A must read for scholars that seek to grasp the jammed intersections connecting the roads of various species, material technologies as well as national, local and international interests in a historical still frame affected by ideas from past times and hopes for future scenarios.

#### Reference and bio

Swanson, Heather 2015: Who’s in the room?: The importance of multidisciplinary spaces for anthropology and STS. Part of: *Anthropology and STS Generative interfaces, multiple locations*. Hau: *Journal of Ethnographic Theory* 5 (1)

*Trine My Thygaard-Nielsen holds a MA in Anthropology from Copenhagen University and is an anthropological assistant at the Interculturalism, Migration and Minorities Research Center, at KU Leuven. Her studies focus on the European supply chain of the Spanish tomato and the relation to nature in the era of the anthropocene.*

[thygaard@gmail.com](mailto:thygaard@gmail.com)