

Barry Commoner was born in Brooklyn in 1917 and died there yesterday, having helped conceptualize environmentalism in the meantime. You can learn more about his life from the *NY Times* [obituary](#).

Commoner is probably best known today for his four environmental “laws”:

1. Everything is connected to everything else.
2. Everything must go somewhere.
3. Nature knows best.
4. There is no such thing as a free lunch.

I have been particularly struck by the first of these laws. Commoner was right to sense the truth of this law, but it is only today that we are really beginning to understand it at a deeper level.

Climate science is particularly revealing of the ways in which events at distant times and places may be connected. For instance, the reflectivity of northern forests depends partly on the type of evergreens. Some evergreens slope downward, so snow falls off and the dark needles are exposed to the sun. Others are horizontal and hold snow better, producing a more reflective surface. So the difference in trees affects the albedo of the forest and hence the amount of warming in the winter. There’s a feedback effect as well, because the increased warming helps melt snow, exposing dark ground, and further increasing the warming effect. So the pace of climate change is affected — perhaps just a little but still tangibly — by the types of trees in the forest. And the pace of climate change, in turn, affect droughts in Africa, with impact on plants, wildlife, and humans, decades in the future. The bottom line is that there is a very thin thread that joins with many other threads, and connects the type of trees in a patch of forests today with dying animals half the globe away and years in the future.

You might say that, even when Commoner first wrote, it was clear that the world had a complex set of links. Today, however, we are beginning to have glimpses of the wiring diagram.