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Can Humans Move from Tweaks to Leaps?

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Reacting to my post on “[Embracing the Anthropocene](#),” [Bob Doppelt](#), executive director of the [Resource Innovation Group](#), posted a response that’s worth highlighting here as a “Your Dot” contribution:

Humans suffer from what psychologists call “[bounded rationality](#).” We just can’t think about everything and are especially bad at projecting the consequences of our actions over time and space or imagining delays in the social and ecological systems we are embedded within.

If we are now in control of the planet, transformative cognitive and cultural changes will be needed in a very short time frame to prevent us from continually making conditions worse all while thinking we are doing good. That’s because humans are mostly skilled at “first-order change” — tweaks and improvements to our existing cognitive, behavioral, social, institutional systems that leave the basic goals, structures — and outcomes — of those systems in tact.

But if we are now charged with sustainably managing the planet, second order changes will be needed. These are transformative shifts in values, beliefs, and thought processes that produce fundamentally different types of behaviors, practices, institutions, technologies and policies. Second order change does happen — but mostly through major crisis — and even then there is no guarantee that the outcomes will be constructive.

So yes, we are now in control of the planet. This means our primary task must be to put massive amounts of resources into figuring out how to manage the process of human change so that second-order change comes about with as little harm as possible.

Doable? Yes.

Likely? The jury is out, as most of our resources now go to technologies and resources rather than to scaling up human change processes.

Can we take a “[crude look at the whole](#),” as [Murray Gell-Mann](#) recommends for complex problems, and then maximize our capacity to leap?