



## SYSTEMS THINKERS MUST GO DOWN THE “RABBIT’S HOLE”

BY JON KOHL

**“Y**ou take the blue pill, the story ends, you wake up in your bed and believe whatever you want to believe. You take the red pill and stay in Wonderland and I show you how deep the rabbit hole goes.” In the Hollywood blockbuster *The Matrix*, computers imprison humans in a fictional virtual reality designed to keep them placated while energy is sucked from their bodies. As part of an uprising, rebel leader Morpheus invites new recruit Neo to risk the perils of a one-way trip out of this world of illusion and into the world of truth. Morpheus’s point is that only by truly understanding reality can Neo begin to change it for the better.

Likewise, in a time when the global system is spiraling toward unprecedented change, those of us who want to make a difference must jump into a rabbit’s hole in order to understand and change our reality. The other option is to remain standing at the edge, looking down, and endlessly treating the symptoms of much deeper problems, both out of sight and out of control.

### Changing the Paradigm

The late Donella Meadows, a renowned systems thinker, converted the metaphor of the hole into systems language in her essay, “Leverage Points: Places to Intervene in the System” (Sustainability Institute paper, 1999). She described 12 leverage points for effecting change, found deeper and deeper in a system, each with greater power than the last. At the top of this rabbit’s hole, we use linear thinking to tinker with parameters, numbers, and constants, such as taxes and subsidies, as mechanisms of social change. But as we descend

deeper into the hole, we reach other, harder-to-see but more powerful leverage points, such as managing feedback processes, information flows, rules, and goals. At the bottom of the hole, in the darkness, lurks the ultimate payoff—a system’s paradigms. Meadows wrote, “People who manage to intervene in systems at the level of paradigm hit a leverage point that totally transforms systems.”

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In her writing over the years, Meadows regularly sought to undermine many conventional paradigms, including:

- One cause produces one effect.
- Improvements come through better technology, not better humanity.
- Economics is the measure of feasibility.
- Possession of things is the source of happiness.
- The rational powers of human beings are superior to their intuitive or moral powers.
- We know what we are doing.
- Growth at any cost is good.

But these paradigms aren’t separate and unique, littering the bottom of the hole like autumn leaves lying on the ground. They fit together into a larger, cohesive structure. Some call this structure “mythology” or “cosmology.”

Others call it “worldview.” Although we popularly equate the word “worldview” with “mindset,” scholars define it as a story that answers the big questions of existence: Who are we? What is our significance? What are the laws of the universe? How was the universe created?

At the root of every system, every set of paradigms, beats a story so deep that most people are born into it and then die without ever knowing that a different way of viewing the world might exist. Our worldview operates like a cosmic screenplay that we enact each moment of our lives, guiding our actions and, ultimately, creating our reality. When we don’t realize it exists, our worldview manipulates us like a disembodied puppeteer, guiding our actions and thoughts.

Daniel Quinn traced the origins of civilization’s current worldview in his famed book, *Ishmael*. He writes that, 10,000 years ago, one culture among thousands that populated the earth took up intensive agriculture. As a result of food surpluses, its population exploded, requiring more land to accommodate its new numbers. With more land, its population grew again and annexed still more land. Quinn calls these people “Takers.” Their culture spread across the planet, assimilating other cultures, taking land, and converting wild lands to agricultural fields.

To justify this unprecedented activity, the Takers separated humanity, nature, and spirituality. In the new paradigm, nature was merely a resource, not a source of sacredness. Productivity became the measure of progress. The Takers believed there was just one right way to live and crushed all those who lived differ-

ently. These deep beliefs survived the rise and fall of many civilizations. Now every country in the world and 99.9 percent of the human population participates in this system. The few remaining indigenous cultures (“Leavers,” according to Quinn) exist on the margins of civilization, often exiled in poverty and isolation.

Critics often rebut the assertion that there is just one dominant worldview, citing the many distinct cultures and worldviews that coexist today—East and West, for example. But, in the grand scheme of Takers and Leavers, the difference between most cultures that participate in the global economy is minor, a question of degree rather than of basic view of the cosmos. To see a truly different paradigm requires studying an indigenous culture, looking back 10,000 years to the birth of civilization, or looking forward to the new spiritual stories that are trying to supplant the dominant mindset.

Most social and environmental change programs deal only with symptoms: erosion mitigation, alternative energies, poverty reduction, and pollution control. They never reach the level of changing the underlying paradigm. At best, these efforts can only slow the degradation. As Quinn says, “Vision is the flowing river. Programs are sticks set in the riverbed to impede the flow.” Only a change of vision, a new story, can redirect the flow away from catastrophe and toward sustainability.

### An Emotional Shift

Thus, systems thinkers must go after worldviews. Many social change advocates generate data and arguments about why we need to alter our global behavior to avoid terrible consequences. But as Thomas Kuhn wrote in his classic *Structure of Scientific Revolutions* (from which Meadows adopted the term “paradigm”), when scientists ultimately change from one

paradigm to another, they don’t do so because they have proven the new one to be true; they do so because they experience an emotional shift or awakening. Stories can reach these deeper affective levels and, as such, are an intrinsic part of every systemic change process. Changing people’s



stories re-orders their relationships with others and the world around them, and thus the system structure in which they live.

Some people have targeted our shared worldview head-on, identifying the assumptions that anchor people’s cosmic story. Physicists Albert Einstein and David Bohm did it; philosopher Ken Wilber and many in the spiritual evolution camp do it. But suddenly seeking to alter a worldview can provoke a maelstrom of resistance. Meadows took on the challenge willingly, illuminating hundreds of murky, deep-seated social beliefs. And she memorably experienced the force of resistance after she, Dennis Meadows, Jorgen Randers, and William Behrens published their world-shaking book, *Limits to Growth*, in 1972. Donella wrote, “We could not understand the intensity of the reaction our book provoked. It seemed to us far out of proportion to our simple statement that the earth is finite and cannot support exponential physical growth for very long. We wouldn’t have guessed that that idea could generate so much surprise, emotion, complication, and denial.”

As most systems thinkers know, treating symptoms at the mouth of the rabbit’s hole usually generates policy resistance because it leads to unintended and unforeseen consequences. Working at the bottom, too, provokes a different kind of visceral reaction, one that Meadows herself learned could actually be seen as a positive sign. No one can change their view

of the universe without significant experiential shaking. Resistance may indicate the labored thinking of changing views.

We don’t yet understand what it takes to change the worldview of the earth’s population. Very likely, when enough individuals set off on their own change journeys, their numbers will reach a certain threshold or tipping point, allowing the rest of us to make the transition more quickly. Wilber says this positive feedback loop creates a structure—a field—that drives exponential change. He calls it a “Kosmic habit”: “And the more people [that] have that [spiritual] experience, the more it becomes a Kosmic habit available to other human beings.”

I took up non-fiction writing at Dartmouth College, where I studied environmental journalism under Professor Meadows, and have been in the field for the past 15 years. Now I write fiction as well, so I can illustrate system dynamics in action. By doing so, I hope to help people see their worldview from the outside and envision a different future through the less-threatening medium of stories.

In the process, I’ve come to believe that, as systems thinkers, we must grit our teeth and jump down the rabbit’s hole, no matter the risk. The farther we fall, the more impact we are likely to have. As Meadows wrote, “It is in the space of mastery over paradigms that people throw off addictions, live in constant joy, bring down empires, get locked up or burned at the stake or crucified or shot, and have impacts that last for millennia.” ■

**Jon Kohl** is a writer and consultant working to combine systems thinking, spiritual evolution, and global change in his projects, prose, and fiction. For more information about his work or to contact him, visit [www.jonkohl.com](http://www.jonkohl.com).

### Donella Meadows Archive

Donella (Dana) Meadows was a pioneer in the application of system dynamics to critical issues of human survival—poverty, growth in population and consumption, and ecological degradation.

For a collection of her writings, go to [www.sustainer.org/dhm\\_archive/](http://www.sustainer.org/dhm_archive/).