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## Resilience: Antidote for the Anthropocene

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# Resilience

Antidote for the Anthropocene

DAVID A. CLEVELAND

I think of resilience as the name for what we need to get to a sustainable future—flexible, open-minded, inclusive thinking. To define sustainable is to define our subjective value-based goals for the future. It is another way of saying what we believe is good or desirable—or what makes us happy. In other words sustainability is about the purpose of life, which is inherently subjective. Yet while sustainability can only be defined based on subjective values, the definitions need to be measured as objectively as possible, in universally valid ways, in order to be able to gauge progress and to compare alternative methods of getting there. So we need to be resilient in defining and measuring sustainability. But what is the core problem to which sustainability is the solution?

I think this core problem is the conflict between evolutionary biological success in the present in terms of increase in numbers and consumption, and teleological, human ecological success in terms of persistence through time. Our ability to resolve this conflict is reduced by our inability to recognize it—evolutionary and ecological success are conflated in much of our current thinking.

Evolutionary success is measured as biological fitness, or an increase in numbers (which means increase in consumption). Biological fitness is non-*teleological*, not future or goal oriented, and fitness is a relative, not an absolute, value; it is defined by the specific selection environment in which a population exists.

Human evolutionary success is irreversibly altering more and more of the environment that has supported it, creating rapidly changing

conditions to which it is no longer adapted. With the help of our unique and considerable cognitive abilities, fitness has expanded to include myriad forms of material consumptive growth, from Neolithic farming to global corporate capitalism. It responds to changing environments and other perturbations by seeking more control. For example, we are told by the UN and most of the global power structure that so-called green growth is the solution to anthropogenic climate change. This way of thinking has delivered the Earth, along with its inhabitants, into the Anthropocene epoch, what Steffen et al. have dubbed a “one-way trip to an uncertain future.”<sup>1</sup> Evolutionary success can lead to ecological collapse and extinction.

However, although humans’ evolved cognition was selected for and has accelerated our short-term biological success, it also provides our only hope for a transition to a more sustainable, happier future. In other words, blindly evolved cognitive traits that increase short-term biological fitness include the ability to consciously control thoughts and behaviors with the future in mind. For example, tendencies such as empathy, sociality, and altruism can be consciously encouraged at the individual or group level, whereas other traits such as territoriality, materialism and greed, can be subdued—or vice versa. Our choice.

To be human is to rescue our cognitive powers from service to evolutionary success and turn them to planning a better future based on ecological success. We will need concerted effort to become more resilient, to overcome the dominance of the easier but often deceptive system 1 mode of heuristic thinking that leads us to defining happiness as growth and consumption, and to commit to more demanding analytical system 2 thinking capable of defining happiness teleologically, applying human values to understanding biological and physical facts.<sup>2</sup>

The problem I have outlined hinges not only on the biophysical nature of human-environment relations, but also on subjective perceptions, values, emotions, and cultural dynamics—the variables that most of social and natural science find most difficult to deal with, but are core concerns of the humanities. Many humanists are uncomfortable with a materialistic definition of life, and in their writing, art and philosophy explore alternatives.

We live in an ominous time—the Anthropocene, the unresilient epoch humans have created. It is also a time of exciting possibilities—the Anthropocene challenges us to be truly futuristic thinkers. Many

people and communities around the world are taking up the challenge, waking up from the millennia-long captivation with growth and accumulation, and evolving culturally and socially to become more human, more resilient. My vision for *Resilience*, the journal, is that it contribute to this process by bringing humanist and scientific approaches more directly into interaction in dealing with the Anthropocene.

#### NOTES

1. Steffen, et al. "The Anthropocene," 757.
2. Kahneman, *Thinking, Fast and Slow*.

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