

A Philosophy for Working on Wicked Problems

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A wicked problem is a term used in policy analysis to describe an environmental situation where no matter what policy actions are taken there are still going to be unacceptable losses. Examples of wicked problems can be found in climate change, endangered species, invasive species and environmental justice issues.

In order to deal with the psychological stress of threat and uncertainty associated with wicked problems many people are tempted to take a strong position, such as moral outrage. This approach has its place (i.e., activism) and can work in the short term, but can be deleterious to your work and mental health in the long term. If you are tired or feel so overwhelmed by emotions, it may be time to build a philosophy that will allow you to more effectively engage in the problems you work on.

A philosophy is not a belief or a position but an approach to navigating complex issues. There is also no single philosophy or better philosophy. Most practitioners gain clarity on issues by building their own philosophy over time, or set of principles, to help give them a more well-rounded perspective.

The principles I share with you here are a reflection of my own experiences, the advice I was given as a graduate student at the University of Florida and the approach used by many of my colleagues. They also underpin what I call the three “C’s” for taking responsible action: curiosity, critical thinking and compassion.

For this approach to work it is important to first accept the idea that wicked problems exist. This realization usually emerges the more you get to know a problem and determine just how complex the problem is. The concept of wicked problems is also grounded in utilitarian theory which posits that for every action there are tradeoffs. In some cases, tradeoffs can be morally justified by compensating the losers. In wicked problems, however, there are no clear compensation solutions.

Recognizing that you may be working on a wicked problem underpins the *first principle in my philosophy*, to accept the loss of the things that are going to be lost anyway. In other words, accept that climate change will continue to disrupt natural systems and human wellbeing. Likewise, species that are currently endangered will likely go extinct in the foreseeable future. Because of how social-ecological systems function the momentum behind many wicked problems cannot be reversed or the pathway back doesn't exist. Fixating on the goal of a perfect solution is to invest in a plan that is doomed to fail.

Accepting loss can be difficult for many people, and the grieving doesn't happen all at once. Part of the process also includes giving up the illusion of certainty and control and accepting that we live in the age of the Anthropocene. More on this later...

Once a person accepts that there is no road back, they can then focus on the road ahead. In truth, wicked problems cannot be solved, but the momentum behind these problems can be redirected towards a new steady state. As a professional in natural resources, you will impact the future one way or another. Since wicked problems are complicated, control is limited, and the future is unknown it can be difficult to determine if the impact you make will be positive. I have found it more useful, rather, to assess how you think about decision-making as a predictor of how much value you can add.

Impact is when a change occurs that would not have occurred except that you made it happen. To make a positive impact you often have to think beyond the boundaries of the wicked problem. These boundaries tend to be set by the people who came before you. In some cases, boundaries are meant to be barriers, but boundaries can also help us identify the frontier of understanding. The way to move beyond the boundary is to embrace curiosity.

Curiosity is a state of being where one asks questions and avoids judgement of the answers. This initially seems to interfere with critical thinking skills, which are important in science and policy. This is why the *second principle in my philosophy* is to find balance between critical thinking and curiosity.

One way to find balance is to pay attention to where your curiosity and critical thinking activities are focused. The foundation of every great leader is to know yourself. It is easier to be critical of ourselves rather than curious about ourselves. However, when we are curious about ourselves, in a constructive way, we can then generate compassion towards ourselves. Where critical thinking about ourselves really should be applied is in regard to our actions, or how we conduct ourselves. As students, managers, educators and researchers, we should always be critical of the things we say and do because these things have an impact.

When we find balance between curiosity and critical thinking about ourselves, we can then transfer this skill to working with others on problems. When we are curious about other people and the systems we live in, we are able to gather more information. More information helps improve critical thinking and finding ways to manage the problem towards a more sustainable future. When we are curious in a constructive way, we can also generate compassion towards the people and beings whose lives are disrupted by the problem.

This leads me to the *third principle in my philosophy*, compassion is necessary for precaution. Wicked problems arise because those with the power to create change were not cautious. The urgency around wicked problems can cause some people to justify throwing out caution in order to resolve the issue more quickly. This, however, tends to make wicked problems even worse. When we follow the first principle, accept the loss of things that are going to be lost anyway, we can avoid the urgency trap. When we exercise compassion, we become more cautious about how our actions may impact others (i.e., recognize the larger consequences). Compassion is also needed to honor those who are compelled to sacrifice when hard choices have to be made. I have found when actions towards wicked problems are applied with compassion and caution, they are more likely to be sustainable and considered acceptable.

Here are my principles in summary:

1. Recognize that wicked problems exist, and you may be working on one.
2. Accept the loss of things that are going to be lost anyway.
3. Find a balance between curiosity and critical thinking, about yourself and others.
4. Cultivate compassion to facilitate caution in your actions.

Also keep in mind that one practices a philosophy. Falling short of the standards you set is not a mistake, but part of the learning process. Your philosophy will also change over time based on the trials you face. In my experience following these principles has helped me navigate complex management issues more easily by allowing me to focus on the task at hand. I am able to sleep at night knowing my virtue as a scientist and educator is intact. I am also better at accepting responsibility for my actions, which is important for growing and for self-actualization. The desire for control and certainty in life can actually start to fade as you start to meet your potential as a person with a purpose in life. Compassion for others can also help you take the focus off yourself and help you honor others who face different challenges in life. So, next time you start to feel overwhelmed about the work that you do, take a hard look at the principles you follow for engaging in the problem and adjust your philosophy.