

# Science and Values: Holism and Radical Environmental Activism

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## Science and Values: Holism & REA

- This presentation focuses on the broad relationship between science and values. Specifically, I will try to illustrate the various ways in which holistic approaches to science (especially ecology and conservation biology) are connected with (or thought to be connected with) expressions of holistic value through forms of radical environmental activism.
- After outlining possible kinds of holism in the domain of science, as well as the possible kinds of holism in the domain of values, I will examine the justificatory relationship that may (or may not) exist between holism and radical environmental activism.
- This presentation has the explicit goal of presenting techniques for teaching this topic in the context of an environmental ethics course.

## General Outline

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- Introduction
- Science – facts, descriptions: how things ARE
  - Holism in science: metaphysics, methods, explanation
- Ethics – values, prescriptions: how things SHOULD be
  - Holism in ethics: values & duties
- Connections between facts and values:
  - Changes in science, same ethics → better success.
  - Changes in science → extension of ethics.
  - Changes in science → transformations in ethics.
- Connections to Radical Environmental Activism
  - Two Cases: Deep Ecology & Leopold's Land Ethic

## Science: Facts, Descriptions

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- Broadly construed, the practice of science is a method of coming to understand the world.
- Science is a way of knowing.
  - *scientia* = knowledge, understanding.
- The study of science
  - tells us how things are.
  - reports and explains facts.
  - generates descriptions.
- Philosophers call this study “metaphysics”
  - The study of reality (as opposed to justice, goodness, values, or logic).

## Scientific Change over Time

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- Early Cosmologists: Thales, Heraclitus, Democritus.
- Early Scientists: Bacon, Newton (Sci. Rev.)
- Modern Scientists: Einstein, Quantum Theory
- Ecology from “oikos” or household.
- Various Ecological Models of Nature:
  - Organism (physiological, superorganism)
  - Ecosystem (systematic, complex organization)
  - Community (natural professions)
  - Energy Circuit (flow of energy)

## Ecology & Scientific Holism

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- o Metaphysical / Ontological Holism:
  - Ecology recognizes various “ecological wholes” (such as species, populations, ecosystems, and biotic communities) that are distinct from their individual parts.
- o Epistemological / Methodological Holism:
  - Ecology develops methods of investigation and testing that results in new understanding of wholes.
- o Explanatory Holism:
  - Ecology incorporates these wholes into explanations of other facts: explaining why/how things happened, making predictions about what will happen.

## Ethics: Values, Prescriptions

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- The study of ethics reports how things ought to be (or how things ought not to be).
- The study of ethics reports what I should do (or should not do).
- The study of ethics
  - generates prescriptions.
  - tells us what is good.
  - leads to the expression of value.
- Traditionally, the philosophical approach to ethics was individualistic and anthropocentric.

## Ethical Holism: Values & Duties

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- Value (or “axiological”) Holism:
  - Suggests that various “wholes” are valuable.
  - Moderate vs. Extreme
- Deontic (or “duty” / “obligation”) Holism:
  - Suggests that we have duties or obligations to various “wholes.”
  - Moderate vs. Extreme
- Obvious connection between these:
  - If we have duties toward the things that we value, and we value wholes, then we have duties toward such wholes.

## Connections between Science & Ethics

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- Changes in science + same ethics → better success.
  - Anthropocentric: does not alter what we value; discovery of new, efficient ways to solve environmental problems for the benefit of humans.
- Changes in science → changes in the scope of ethics.
  - Non-anthropocentric: discovering that more than humanity falls under existing ethical criteria for moral consideration (sometimes called “extensionism” including animal rights).
- Changes in science → transformations in ethics.
  - Holistic and/or Ecocentric: we value ecological wholes and have duties toward preserving their integrity and stability, which represents a significant transformation of traditional ethical theories (Deep Ecology & Leopold's Land Ethic).

## Holistic Environmental Ethics

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### Deep Ecology:

- maintains that all parts of natural systems are inter-connected, inter-dependent, and valuable (individual humans, non-human species, and biotic communities).
- via Self-realization, DE transforms the narrow notion of “self” to encompass a wider “ecological self” or “relational self” which results in an ecological conscience.
- because the Self is identified widely, environmental degradation is a form of Self degradation (and so environmental protection is Self protection).
- does not challenge the fundamental concept that the self is valuable, but it does radically transform the concept of Self (a concept unavailable prior to ecology).

## Holistic Environmental Ethics

### Leopold's Land Ethic:

- ecology recommends a new view of land: to understand the land as a complex biological community (rather than property).
  - this is a fundamental change in metaphysics and epistemology (i.e., the biotic community, the land, is a metaphysical reality).
- as with human communities, healthy biotic communities are valuable (for us & for the land itself).
  - so a thing is right when it promotes the integrity, stability, and beauty of this community.
- Leopold recognizes that we will not value what we do not love, respect, and cherish (such things trigger our moral sentiments)... but this requires a new understanding of the world, which ecology provides.

## Environmental Activism

### "Moderate" forms:

- Letter writing
- Public awareness
- Lobbying
- Boycotting
- Protesting

### "Radical" forms:

- Civil disobedience
- Ecotage
- Monkey wrenching
- Tree spiking
- Ramming whaling ships

- I work with students to generate a list of possible forms that environmental activism might take, acknowledging that the distinction between "moderate" and "radical" may be messy and imprecise (usually divides along what's "legal" and "illegal").
- We discuss various examples and it helps them to see the "logic" behind various forms of activism.

## Deep Ecology & Enviro Activism

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- For Deep Ecology, the most obvious (and most common) justification of (radical) environmental activism is:
  - Self Defense: we are justified in defending ourselves when attacked or our well-being is threatened, and because the deep ecological Self is intrinsically connected to the larger biotic community, when the biotic community is attacked or threatened, we are justified in defending ourSelves from such attacks.
  - It is thought that Self defense can take many forms: protesting, boycotting, acts of ecotage, and monkey wrenching.
- That we are justified in preserving ourselves is commonplace.
- That we are justified in preserving ourselves through any means possible is questionable.

## Land Ethic & Enviro Activism

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- There are several options open for the Land Ethic:
  - Self Defense / Self Interest: each of us is a member of the biotic community, and because our health and well-being is intimately tied to the health and well-being of this community, we are justified in promoting the health and well-being of the community (and preventing that which contributes to the degradation of health).
- As with Deep Ecology's use of the Self Defense justification, there are limitations on what is an acceptable form of self defense.

## Land Ethic & Enviro Activism

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- But not all of the Land Ethic is a matter of self interest:
  - the biotic community is valuable in its own right, and so sometimes the well-being of the biotic community diverges from the well-being of some of its individual members (this is true for non-human members as well as human members).
  - So, if (when) a biotic community is threatened with an overpopulated species or the invasion of a non-native species, it is “right” to eliminate them, or reduce their impact.
  - Or, if human impacts (e.g., hunting wolves or other top predators to extinction) threatening the stability and integrity of the biotic community, the it is “right” for humans to refrain.
- This is also a major point of criticism with “holistic” environ-mental ethics because it is feared that by valuing the “whole” we must thereby sacrifice the well-being of individuals.
- However, when approached sincerely from the perspective of the whole, it makes sense (you’d be willing to get rid of your gal bladder if it was contributing to your poor health).

## Concluding Thoughts

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## Arguments in favor of REA

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- Self-defense
- Strategically Important
- Too Expensive
- Time Delay
- Calls Attention to Illegal Activity
- Only as a Last Resort

## Arguments against REA

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- Hypocrisy Argument
- None-of-your-business Argument
- Wasteful / Counterproductive Argument
- Two Wrongs Don't Make a Right
- Makes Global Situation Worse

# Philosophical Ethics

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- Philosophical study of ethics has two levels:
  - Practical:
    - What should I do?
    - What is the right action given this situation?
  - Theoretical:
    - What is good? What is valuable?
    - What does it require for an action to be a right action?
    - What is the justification for what is judged to be good, valuable, and/or right?