Ecocentrism

According to ecocentrism, an action “is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.”

But, why would this be true?

**Claim 1:** An ecosystem is a complex interactive community (not a commodity).

The Land Ethic (Aldo Leopold): Ethics, Leopold says, is about recognizing that the individual is just a part of a greater community of interdependent parts.

But, the moral community of interdependent parts is much greater than the mere collection of human beings. Leopold proposes a “Land Ethic”, which “enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land.” Leopold describes the pyramid of life as follows:

**The Land Pyramid:** “Plants absorb energy from the sun. This energy flows through a circuit called the biota, which may be represented by a pyramid consisting of layers. The bottom layer is the soil. A plant layer rests on the soil, an insect layer on the plants, a bird and rodent layer on the insects, and so on up through various animal groups to the apex layer, which consists of the large carnivores. Each successive layer depends on those below it for food and often for other services, and each in turn furnishes food and services to those above. Proceeding upward, each successive layer decreases in numerical abundance. Thus, for every carnivore there are hundreds of his prey, thousands of their prey, millions of insects, uncountable plants. Each species, including ourselves, is a link in many chains. The deer eats a hundred plants other than oak, and the cow a hundred plants other than corn. Both, then, are links in a hundred chains. The pyramid is a tangle of chains so complex as to seem disorderly, yet the stability of the system proves it to be a highly organized structure. Its functioning depends on the co-operation and competition of its diverse parts. In the beginning, the pyramid of life was low and squat; the food chains short and simple. Evolution has added layer after layer, link after link. Man is one of thousands of accretions to the height and complexity of the pyramid. Science has given us many doubts, but it has given us at least one certainty: the trend of evolution is to elaborate and diversify the biota. Land, then, is not merely soil; it is a fountain of energy flowing through a circuit of soils, plants, and animals. Food chains are the living channels which conduct energy upward; death and decay return it to the soil.”

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Land is not merely soil. It is the base of the pyramid, the fountain from which life issues forth and is pumped up through the system. Clearly, then, it too is a part of the greater biotic community (as are water, minerals, and so on).

**Claim 2:** Humans are members, not masters, of the ecosystem.

The Conqueror Role: Leopold points out that we tend to view the land as something to be “tamed” or “conquered”. We generally think of ourselves as the MASTERS of the land. The “master-slave” mentality goes back a long way. He mentions a story about Odysseus, where he hangs a bunch of his slave-girls because he suspects them of sleeping with other men. Of the conqueror role, he says, “it is implicit in such a role that the conqueror knows … just what and who is valuable, and what and who is worthless.”

Slavery persisted through the centuries, but now (thankfully) we view it as a moral atrocity of our past. Ethics, Leopold notes, has helped us to get rid of this master-slave mindset with regard to other human beings. But: “Land, like Odysseus’s slave-girls, is still property.”

(It interesting that Leopold seems to have recognize both the implicit value hierarchy and the logic of domination in society that ecofeminists have pointed out)

**Claim 3:** However, we have not been acting in accordance with the above claims. In most parts of the world, we are doing two things to the ecosystems; (1) We are shortening the biotic chains by removing many of the links, due to environmental destruction, extinction, or even purposely (for instance, by feeding farmed animals fewer grains than they would eat in the wild), and (2) We are introducing foreign species into the system, due to an increase in transportation, exportation, etc.

Change has always been a part of nature. But, for the first time in history, it is happening (a) Extremely rapidly, and (b) It is SHORTENING the chains, or making the pyramid smaller, rather than longer. Can the system adjust? He writes,

“Man’s invention of tools has enabled him to make changes of unprecedented violence, rapidity, and scope.” But, “the less violent the man-made changes, the greater the probability of successful readjustment in the pyramid. Violence, in turn, varies with human population density; a dense population requires a more violent conversion.”

**Question:** But WHY would it follow from these claims that we then have a moral OBLIGATION to preserve nature, or ecosystems?
Instrumental Value? Perhaps we have a duty to promote HUMAN flourishing? Ecosystem health is essential to human flourishing and we should promote human flourishing.

And indeed, Leopold sometimes seems to speak of nature as instrumentally valuable. Of vanishing species, he writes, “They helped build the soil; in what unsuspected ways may they be essential to its maintenance? ... Who knows for what purpose cranes and condors, otters and grizzlies may some day be used?” He also speaks of the preservation of ecosystems as helping to maintain the integrity and stability of biotic systems—and one reason this might be good is that it is good FOR US to have a thriving ecosystem.

Problem: But, then, this is not really ecocentrism anymore. It's just a pragmatic reason to preserve ecosystems based on a human-centric (individualist) morality.

Intrinsic Value of Individuals? Perhaps all living organisms have intrinsic value, and it is therefore wrong to harm the INDIVIDUAL MEMBERS the biotic community? But, ecosystems are just COLLECTIONS of individual organisms. In that case, our duty to preserve nature, or ecosystems, is derived from the fact that harming ecosystems harms the individuals who make up the ecosystem.

Problem: Then it would be wrong to destroy Asian carp in the Mississippi River, or kudzu in the south, or any species (invasive or otherwise) that is harming the stability of the ecosystem. But, the ecocentrist will typically judge the destruction of these individuals to be a GOOD thing.

Answer: The Intrinsic Value of Ecosystems: The answer is that ecosystems have some intrinsic good; namely, when they are flourishing. An ecosystem can be thought of as a complex organism. Just as biocentrists argue that stability, self-preservation, health, and flourishing are good for LIVING THINGS, the ecocentrist argues that these things are good for ECOSYSTEMS.

Leopold points out that we currently tend to think of nature only in terms of ECONOMIC value. Land-owners will only preserve nature or wilderness begrudgingly, “with outstretched palm”, expecting government subsidies. A problem with this mindset: “One basic weakness in a conservation system based wholly on economic motives is that most members of the land community have no economic value. Wildflowers and songbirds are examples.” But, he writes, “If the private owner were ecologically minded, he would be proud to be the custodian of a reasonable proportion of such areas, which add diversity and beauty to his farm and to his community.”
Leopold speaks of the **intrinsic value** of nature, writing, “It is inconceivable to me that an ethical relation to land can exist without love, respect, and admiration for land, and a high regard for its value. By value, of course, I mean something far broader than mere economic value; I mean value in the philosophical sense.” Furthermore, perhaps it can also be good **FOR THE ECOSYSTEM** to remain stable, and thriving.

But, what specifically is the source of nature’s intrinsic value? Leopold mentions three reasons over the course of his essay:

- **Integrity/stability**
- **Diversity**
- **Beauty**

An ecosystem is a collection of organisms (a biotic community), and the interactions between them. What is good for the ecosystem is the stability and health of that biotic community. So **integrity**, or **stability**, or **flourishing** might be seen as intrinsic goods for ecosystems.

**Claim 4:** It is intrinsically good for an ecosystem to be healthy (i.e., in some stable, robust equilibrium)

[Furthermore, perhaps **diversity** is IN AND OF ITSELF valuable, as is **beauty**. We will examine these two claims in more detail later on in this unit.]

**Holism vs. Individualism:** Ultimately, Leopold’s proposal is a call for a shift from individualism (the idea that individual organisms are the fundamental bearers of moral value/standing) to **holism**, or **ecocentrism** (collections or groups of organisms are the fundamental bearers of moral value/standing).

So, what is intrinsically valuable is not the individual organisms, but rather the **WHOLE** system. In this way, each species is akin to an organ in a body. For example, consider the stomach, which has no value apart from its contribution to the flourishing of the body as a whole.

Note that this proposal explains why we think invasive species are bad. For instance, kudzu is flourishing really WELL in the American south. Yet, it is bad insofar as it is bad for the ecosystem as a whole. See **here**.
**Conclusion:** Leopold seems to think that we have a duty to promote the well-being of ecosystems—and flourishing is good for an ecosystem. But, much of what we do is destructive to ecosystem flourishing. It is almost as if we have introduced a DISEASE into the many ecosystems. He writes, “This almost world-wide display of disorganization in the land seems to be similar to disease in an animal.”

**Objections:** Several objections below.

1. **Holism is problematic:** If it is morally permissible to destroy kudzu to save the southern ecosystem, is it also permissible to kill human beings (who are similarly choking the life out of all ecosystems)? The underlying worry here is this: Ecocentrism does not respect INDIVIDUAL rights. Regan: According to ecocentrism, “The individual can be sacrificed for the greater biotic good.” And as Taylor noted:

   **Human Beings: The Most Invasive Species:** “Every single man, woman, and child could disappear from the face of the Earth without any significant detrimental consequence for the good of wild animals and plants. On the contrary, many of them would be greatly benefited. The destruction of their habitats by human "developments" would cease. The poisoning and polluting of their environment would come to an end. The Earth’s land, air, and water would no longer be subject to the degradation they are now undergoing as the result of large-scale technology and uncontrolled population growth. Life communities in natural ecosystems would gradually return to their former healthy state. Tropical forests, for example, would again be able to make their full contribution to a life-sustaining atmosphere for the whole planet. The rivers, lakes, and oceans of the world would (perhaps) eventually become clean again. Spilled oil, plastic trash, and even radioactive waste might finally, after many centuries, cease doing their terrible work. Ecosystems would return to their proper balance, suffering only the disruptions of natural events such as volcanic eruptions and glaciation. From these the community of life could recover, as it has so often done in the past. But the ecological disasters now perpetrated on it by humans—disasters from which it might never recover—these it would no longer have to endure.”

**Reply:** But, in addition to kudzu, think of deer who are overgrazing, pigs in Hawaii, rabbits in Australia, etc. We ALREADY think it is morally right to kill animals for the greater biotic good. Perhaps it IS our duty to “thin the herd” of human beings for the greater biotic good? We could just bite the bullet here. [In unit 3, we will examine an argument which concludes that human procreation is morally wrong (!)]

2. **This is too demanding:** Consider how restrictive this proposal would be:
• If this were true, using natural resources would be wrong; e.g., logging even ONE forest would be impermissible—the only sort of logging that would be morally acceptable would be the sort that thins out a single tree here and there in order to better help the forest flourish. Is logging morally wrong?
• Any activity which damages or interferes with an ecosystem would be wrong (e.g., visiting national parks).
• Having children would often (always?) be morally wrong.

(3) Identity of ecosystems: Is it necessarily the case that ecosystems overrun with, e.g., invasive species get “less healthy”? For instance, maybe the kudzu invasion is not a sick version of the SAME ecosystem. Could it be the case that it is, rather, a NEW, thriving ecosystem? For example, removing keystone species could be viewed in one of two ways: As either (a) making the old ecosystem worse off, OR (b) replacing the old, healthy ecosystem with a new, healthy ecosystem.

Perhaps (b) is the proper way to understand what is happening? Underlying problem: What are the identity conditions and boundaries of ecosystems?

Reply: An ecocentrist might point out that it is not MERE flourishing that is morally important, but also that the STABILITY of an ecosystem matters morally as well. What is often the case with, e.g., kudzu is that the invasive species will overrun the terrain and then consume all of the resources there until it chokes itself out. The end result is a very poor and unhealthy ecosystem. But, TRULY flourishing ecosystems are ones that have a ROBUST DIVERSITY, which makes the ecosystem more STABLE and able to survive healthily for much longer.

(4) Intrinsic goods: Is it REALLY intrinsically good for an ecosystem to be healthy? This claim was based on the claim that it is intrinsically good for a HUMAN to be healthy. Imagine 2 people, one who has some condition which is deemed to be “poor health” and the other who is deemed healthy. But, their lives contain equal amounts of happiness, desire satisfaction, etc., and both claim that their life is awesome. If health is INTRINSICALLY good, then the “healthy” person’s life is “better”, even though it makes no difference to their lives or mental states, etc. That seems weird, so perhaps health is not an intrinsic good.

[Proposal: In addition to ecocentrist claims, could we ALSO retain the biocentric conclusion that all living things are deserving of equal respect, and ecosystems are just ONE OF the living things? In that sense, perhaps we have a moral duty to maintain healthy ecosystems AND we have duties to the particular individuals within those ecosystems? (note that this would be an individualist-holist hybrid).]