

# The Need for an Ethical Background for Advancing SDGs

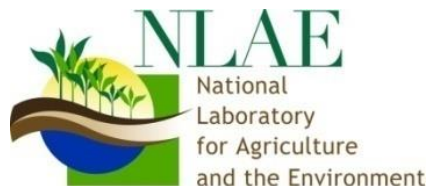
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# SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

**1** NO POVERTY

**2** ZERO HUNGER

**3** GOOD HEALTH AND WELL-BEING

**4** QUALITY EDUCATION

**5** GENDER EQUALITY

**6** CLEAN WATER AND SANITATION

**7** AFFORDABLE AND CLEAN ENERGY

**8** DECENT WORK AND ECONOMIC GROWTH

**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE

**10** REDUCED INEQUALITIES

**11** SUSTAINABLE CITIES AND COMMUNITIES

**12** RESPONSIBLE CONSUMPTION AND PRODUCTION

**13** CLIMATE ACTION

**14** LIFE BELOW WATER

**15** LIFE ON LAND

**16** PEACE, JUSTICE AND STRONG INSTITUTIONS

**17** PARTNERSHIPS FOR THE GOALS

**SUSTAINABLE DEVELOPMENT GOALS**

# Some Philosophical Concepts

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- **Utilitarianism** – the doctrine that worth or value is determined solely by utility
- **Ethics** – the study of standards of conduct and moral judgment
- **Moral** – dealing with, or capable of distinguishing between, right and wrong



# Developing Good Practices

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## Knowledge

- 1a** : the fact or condition of **knowing something** with  
: familiarity gained through experience or association
- 2a** : the sum of what is known : the body of truth,  
: **information, and principles** acquired by humankind

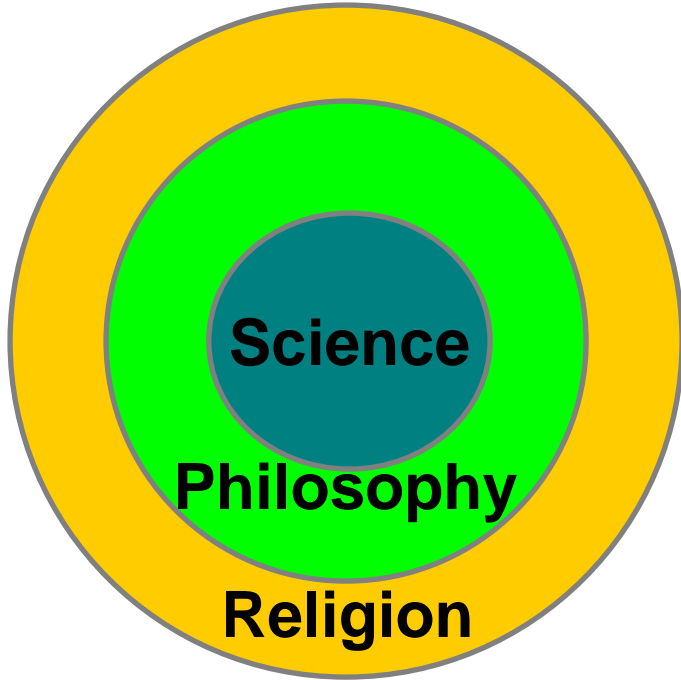
## Wisdom

- 1b** : ability to discern inner qualities and relationships  
: **insight**
- c** : good sense : **judgment**
- 2** : **a wise attitude, belief, or course of action**

# Science and Culture

**East / Pre-19<sup>th</sup>  
Century West**

**Understanding**

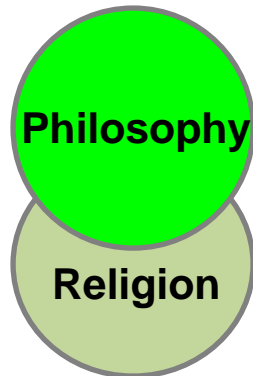
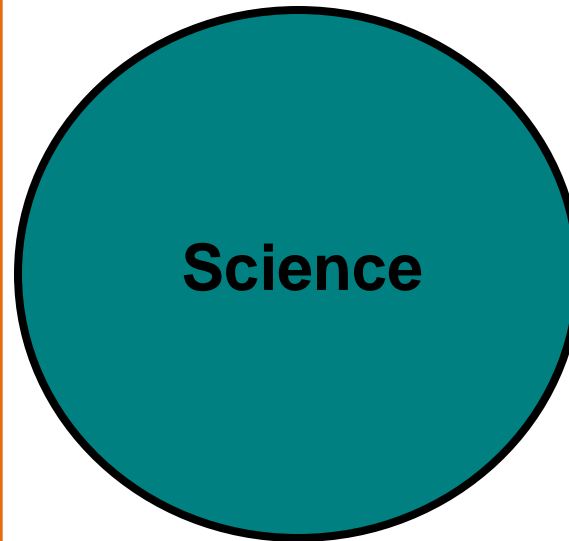


P. Khan, 1999

**Modern West**

**Knowledge**

**Value  
Structures**



**Wisdom?**

# Aldo Leopold

- Americans: “...self-imposed doctrine of **ruthless utilitarianism.**” 1935. Am. Forests 41:205-208.
- Wrote but never submitted “Some Fundamentals of Conservation in the Southwest – **Conservation as a Moral Issue**” in 1923 (Published in 1979: Environmental Ethics 1:131-141)



“If there be, indeed, a special nobility inherent in the human race – a special cosmic value, distinctive from and superior to all other life – by what token shall it be manifest? **By a society decently respectful of its own and all other life**, capable of inhabiting the earth without defiling it?”

# Leopold's "The Land Ethic"

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- Essay in "A Sand County Almanac" (1949)

“The case for a land ethic would appear **hopeless** but for the minority which is in obvious revolt against these ‘modern’ trends.”

“Despite nearly a century of propaganda, conservation still proceeds at a **snail's pace**; ...”

“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, I of course mean something far broader than mere economic value; I mean value in the philosophical sense.**”

## Lynn White, Jr. 1967. The historical roots of our ecologic crisis. Science. 155:1203-1207.

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“... no item in the physical creation had any purpose save **to serve man's purposes.**”

“**science and technology** ... joined to give mankind power which, to judge by many of the ecological effects, **are out of control.** If so, Christianity bears a huge burden of guilt.”

“... our present science and technology are so tinctured with Orthodox Christian **arrogance toward nature** that no solution for our ecologic crisis can be expected from them alone.”



# White - Continuing the Conversation

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**“The artifacts of society, including its political, social and economic patterns, are shaped primarily by what the mass of individuals in that society believe, at the sub-verbal level, about who they are, about their relation to other people and to the natural environment, and about their own destiny.”**



Lynn White, jr.

**“Men commit their lives to what they consider good.”**

**TJS 2021: “People commit their resources to what they value.”**

White, L., Jr. 1973. Continuing the conversation. pp. 55-64 In: I.. Barbour (ed.) Western Man and Environmental Ethics – Attitudes Toward Nature and Technology. Addison-Wesley, Reading, MA. 276 pp.

EDITORIAL

# When facts are not enough

Science is based on a shared respect for the scientific method—the principle that, by gathering and analyzing data and information, scientists and others can draw conclusions that are robust and generalizable across cultures and ideologies. Scientists furthermore assume that disagreements can be resolved by more facts. So when people object to the reality of climate change with science-y sounding arguments—"the data is wrong," or "it's just a natural cycle," or even, "we need to study it longer"—the natural response of scientists is simple and direct: People need more data. But this approach often doesn't work and can even backfire. Why? Because when it comes to climate change, science-y sounding objections are a mere smokescreen to hide the real reasons, which have much more to do with identity and ideology than data and facts.

For years, climate change has been one of the most politically polarized issues in the United States. Today, the best predictor of whether the public agrees with the reality of anthropogenic climate change is not how much scientific information there is. It's where each person falls on the political spectrum. That's why the approach of bombarding the unconvinced with more data doesn't work—people see it as an attack on their identity and an attempt to change their way of life.

I am a climate scientist who has spent a lot of time trying to make climate science more accessible. I've authored National Climate Assessments and numerous outreach reports; I host a YouTube show called Global Weirding; I tweet; I've even promoted knitting patterns that display rising temperatures. Yet the most important step I've taken to make my science communication more effective has nothing to do with the science. As uncomfortable as this is for a scientist in today's world, the most effective thing I've done is to

let people know that I am a Christian. Why? Because it's essential to connect the impacts of a changing climate directly to what's already meaningful in one's life, and for many people, faith is central to who they are.

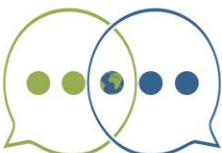
Scientists can be effective communicators by bonding over a value that they genuinely share with the people with whom they're speaking. It doesn't have to be a shared faith. It could be that both are parents, or live in the same place, or are concerned about water resources or national security, or enjoy the same outdoor activities. Instead of beginning with what most divides scientists from others, start the conversation from a place of agreement and mutual respect. Then, scientists can connect the dots: share from their head and heart why they care.

Talking about impacts isn't enough, though. Sadly, the most dangerous myth that many people have bought into is, "it doesn't matter to me," and the second most dangerous myth is, "there's nothing I can do about it." If scientists describe the daunting challenge of climate change but can't offer an engaging solution, then people's natural defense mechanism is to disassociate from the reality of the problem. That's why changing minds also requires providing practical, viable, and attractive solutions that someone can get excited about. Conserved homeowner? Mention the amazing benefits of energy conservation. Worried parent? Bring up the practical steps to take to make outdoor play spaces safer for kids, even in the hot summer. Business executive? Talk about the economic benefits of renewables.

We all live on the same planet, and we all want the same things. By connecting our heads to our hearts, we all can talk about—and tackle—the problem of climate change together.



Katharine Hayhoe is a professor and director of the Climate Science Center at Texas Tech University, Lubbock, TX, USA. www.katharinehayhoe.com



*"...changing minds...requires... practical, viable, and attractive solutions that someone can get excited about."*

—Katharine Hayhoe



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## Dialogue on Science, Ethics, and Religion

Building on AAAS's long-standing commitment to relate scientific knowledge and technological development to the purposes and concerns of society at large, the Dialogue on Science, Ethics, and Religion (DoSER) facilitates communication between scientific and religious communities.

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**"Because it's essential to connect the impacts of a changing climate directly to what's already meaningful in one's life, and for many people, faith is central to who they are."**

**Katharine Hayhoe**



# Going Forward

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- The focus of **science** is on data, in pursuit of **knowledge**. Methods and protocols for collecting, interpreting, and reporting **are** well established and widely accepted.
- The development of equitable/sound management **practices** requires accurate interpretation and application of information (**i.e. wisdom**). Methods and protocols **are not** as well established or widely accepted.
- In order to achieve the SDGs relating to soils, land management must move beyond utilitarianism and economics as the **primary** determinants of good practice.
- To achieve the full benefit of science's contributions, greater appreciation of **ethical perspectives** is needed to assure **wise** use of resources.

# Why Not “Soil” Ethics?

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- Soil is typically not considered “living”
- Some exceptions
  - P.D. Ouspensky “Tertium Organum” (1911)  
p. 198 A living and rational universe: “Inanimate objects and mechanical phenomena are to us lifeless and irrational. *But this cannot be so.*”
  - Rene Dubos “A God Within”(1972)  
p. 36 “the soil is thus a truly living organism”
  - J.E. Lovelock “The Ages of Gaia” (1988)
- Most environmental ethics arguments take a holistic, ecological approach (Leopold)
  - Soil as a non-living *component* of the ecosystem