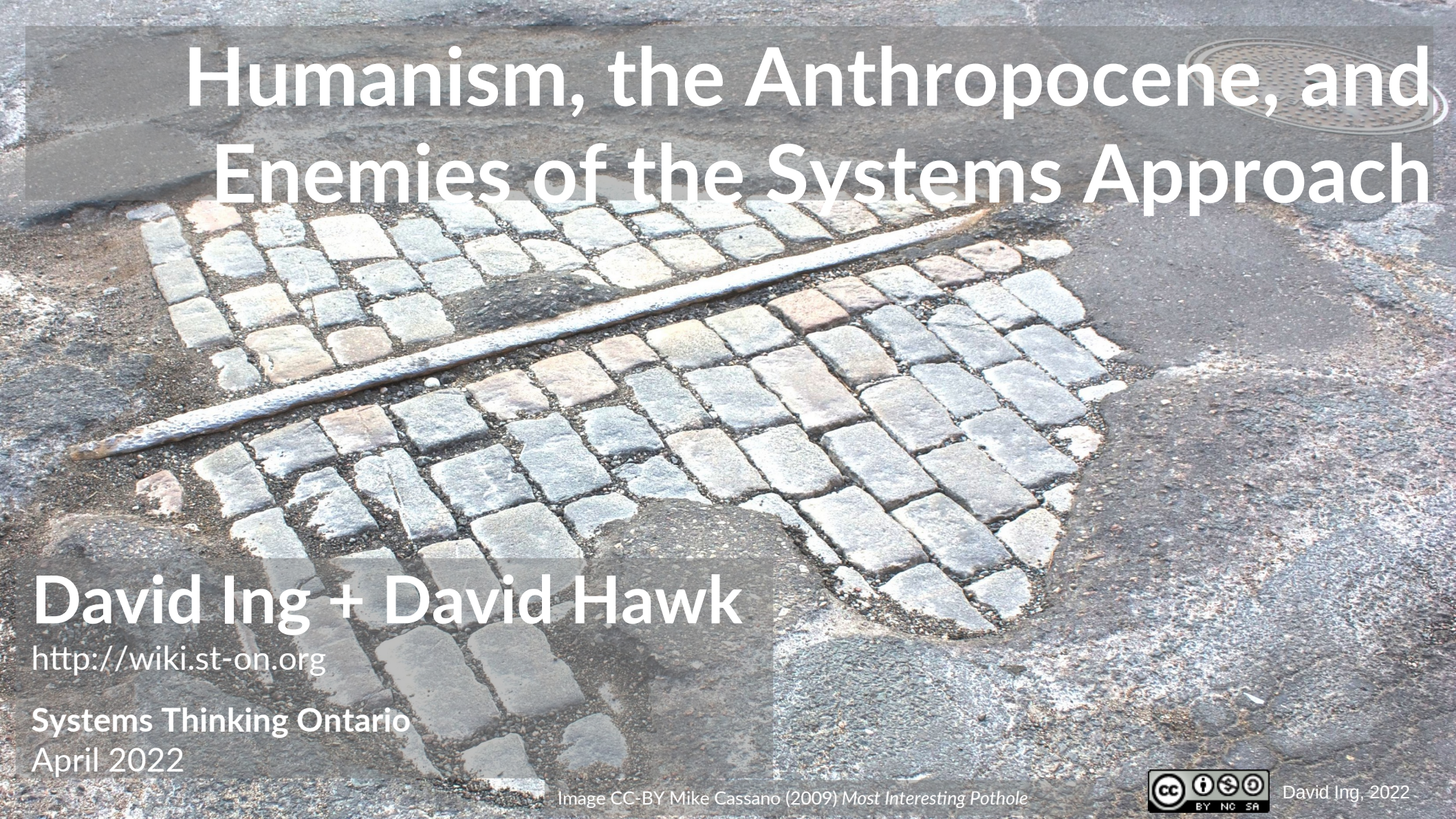
Humanism, the Anthropocene, and Enemies of the Systems Approach



David Ing + David Hawk

http://wiki.st-on.org

Systems Thinking Ontario

April 2022

Image CC-BY Mike Cassano (2009) *Most Interesting Pothole*

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Agenda

A. Self-introductions

B. Review of pre-readings (David Ing)

C. Commentary + discussion (David Hawk)

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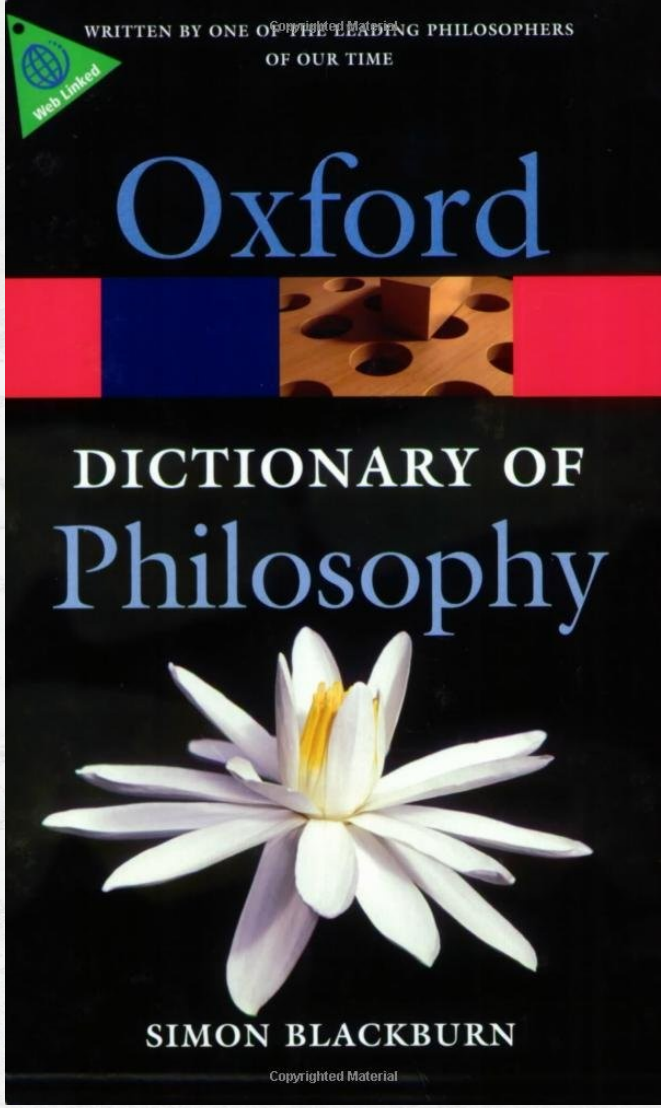
Humanism is ...

... most generally,
any **philosophy** concerned to emphasize
human welfare and **dignity**,
and either
optimistic about the powers of **human reason**, or
at least **insistent** that
we have no alternative but
to use it **as best we can**.



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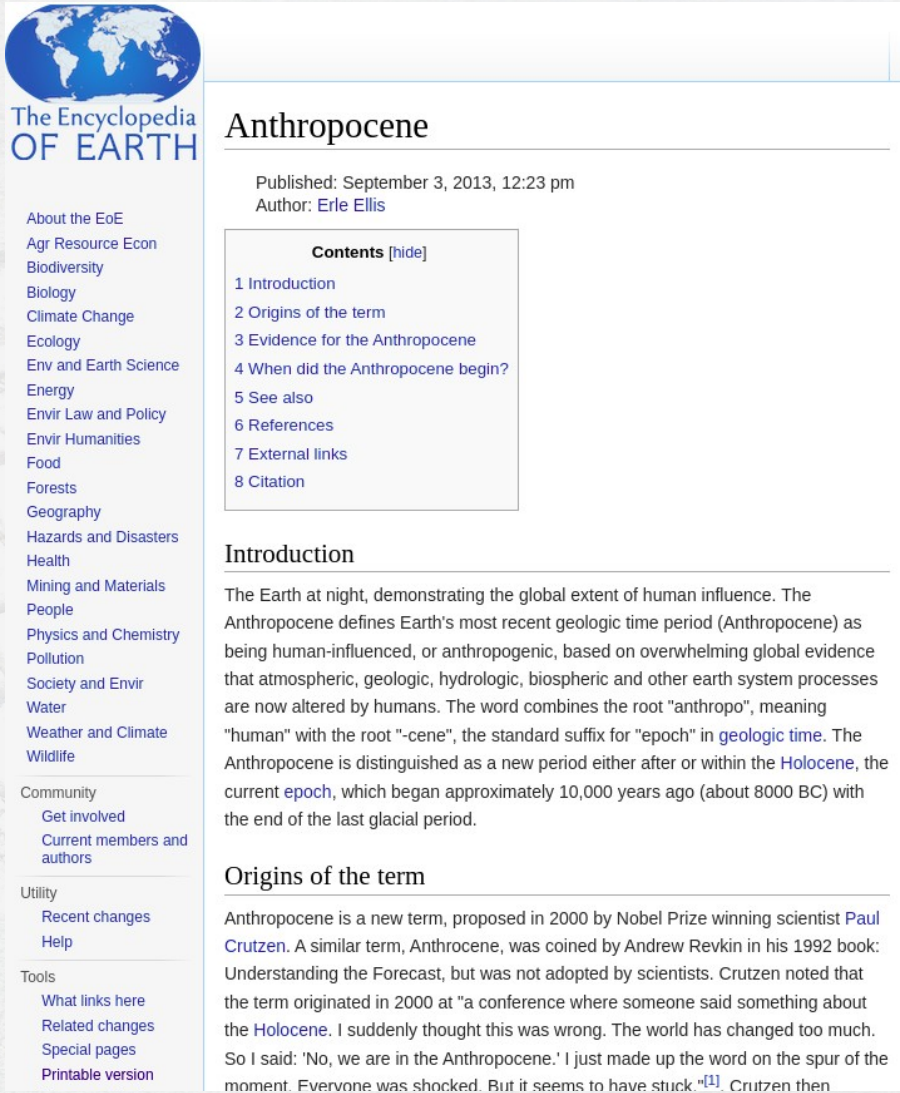
The anthropocene ...

... defines Earth's most recent **geologic** time period (Anthropocene) as being **human-influenced**, or anthropogenic, based on overwhelming **global** evidence that **atmospheric**, **geologic**, **hydrologic**, **biospheric** and other **earth system processes** are now **altered by humans**.



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Anthropocene

Published: September 3, 2013, 12:23 pm
Author: Erle Ellis

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Introduction

The Earth at night, demonstrating the global extent of human influence. The Anthropocene defines Earth's most recent geologic time period (Anthropocene) as being human-influenced, or anthropogenic, based on overwhelming global evidence that atmospheric, geologic, hydrologic, biospheric and other earth system processes are now altered by humans. The word combines the root "anthropo", meaning "human" with the root "-cene", the standard suffix for "epoch" in geologic time. The Anthropocene is distinguished as a new period either after or within the Holocene, the current epoch, which began approximately 10,000 years ago (about 8000 BC) with the end of the last glacial period.

Origins of the term

Anthropocene is a new term, proposed in 2000 by Nobel Prize winning scientist Paul Crutzen. A similar term, Anthrocene, was coined by Andrew Revkin in his 1992 book: Understanding the Forecast, but was not adopted by scientists. Crutzen noted that the term originated in 2000 at "a conference where someone said something about the Holocene. I suddenly thought this was wrong. The world has changed too much. So I said: 'No, we are in the Anthropocene.' I just made up the word on the spur of the moment. Everyone was shocked. But it seems to have stuck."[1] Crutzen then

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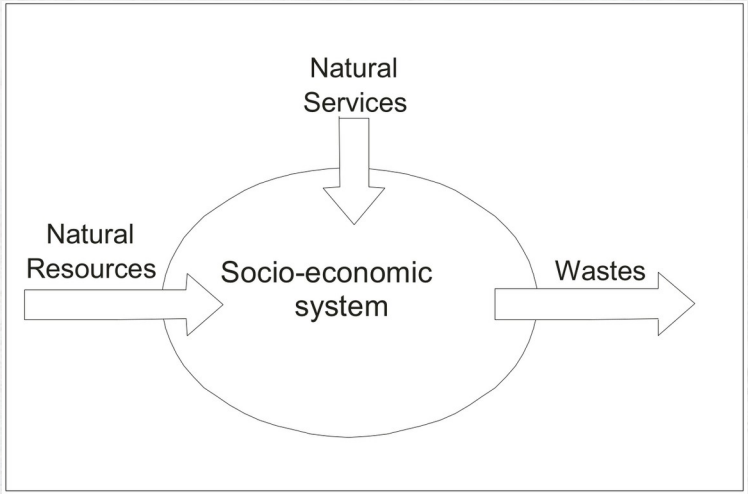
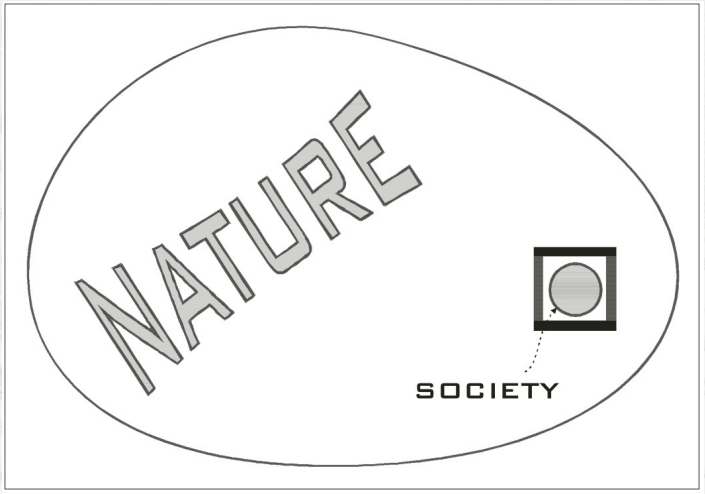
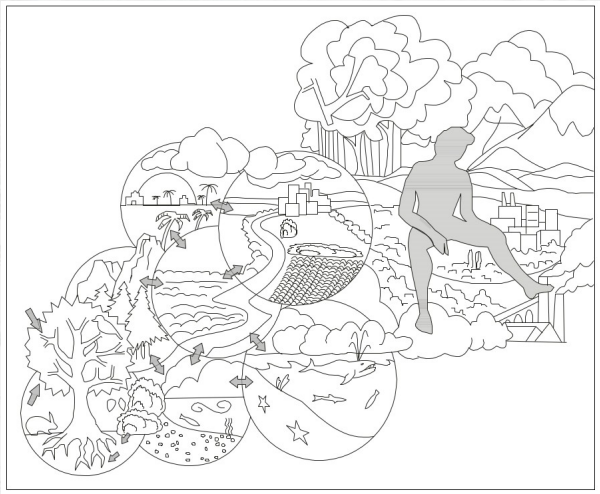
Sustainability and sustainable development … alternative views







The **Extreme Anthropocentric** Position: Sustainability of the **human system** only

The classical economicist view … regards the economy as the relevant system, and relegates nature to the role of provider of natural resources and services and of a sink for the wastes produced by human activities.

"Weak sustainability"

The **Extreme Biocentric** Position: Sustainability of the **human system** only

Those who would value ecological sustainability above and beyond, rather than equal or subordinate to, economic and social sustainability represent an extreme "deep green" position …

"Very strong sustainability"

The **Socio-Ecological** System: Sustainability of the **whole** system

… system composed of a societal (or human) component (subsystem) in interaction with an ecological (or biophysical) component.

"Strong sustainability"

Gallopín, Gilberto. 2003. A Systems Approach to Sustainability and Sustainable Development. Economic Commission for Latin America and the Caribbean 64. United Nations Publications. https://repositorio.cepal.org/handle/11362/5759 .

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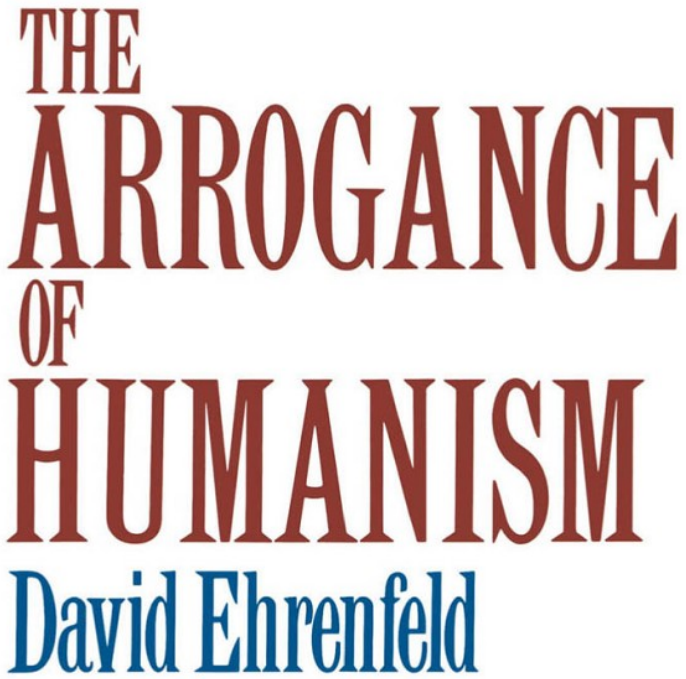
Ehrenfeld, Preface (1981)

When one chooses a **guiding philosophy of life** — and the modern world has chosen humanism — one becomes **responsible** for all the **consequences** that flow from that choice.

We have chosen to transform our original faith in a higher authority to **faith in the power of reason and human capabilities**.

It has proven **a misplaced trust**.

This is the **other side of humanism**, as I point out in the first chapter, and no amount of denial will make it go away.



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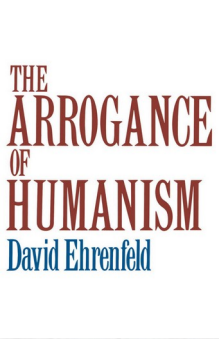
False Assumptions (Ch. 1)



The principal humanist assumption, which embraces all of our dealings with the environment, and some other issues as well, is very simple. It says:

All problems are soluble.

In order to make its connection with humanism clear, just add the two words that are implicit; it becomes:

All problems are soluble by people. [p. 16]

There are other humanist assumptions that are either less or more sweeping than the principal assumption, but which lack some of its force.
These secondary assumptions include:

Many problems are soluble by technology.

Those problems that are not soluble by technology, or by technology alone, have solutions in the social world (of politics, economics, etc.).

When the chips are down, we will apply ourselves and work together for a solution before it is too late.

Some resources are infinite; all finite or limited resources have substitutes.

Human civilization will survive.

So far, these assumptions cut across political lines; they are humanist in the broadest social sense.

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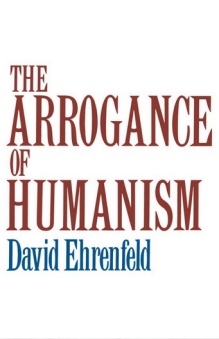
Emotion and Reasons (Ch. 4)



It is extremely difficult to trap or poison wild Norway rats. Traps, no matter how skillfully laid and attractively baited, are avoided. [….]

[….] Rats have **an innate distrust of anything new in their environment**.
When this occurs in human beings it is **called superstition or emotion**, and is characterized by its lack of an immediate, rational relationship to the object of the behavior. So it is with rats. [p. 133] [….]

This **inborn protection**, the behavior already described, is **too complex to merit a simple name**, depending as it does on many parts of the sensory, central nervous, and endocrine systems. But things that are to be written about must have names, so I have grouped these protective reactions under the heading "**emotions**." This is a poor name, because emotion is in bad odor in modern society, and also because it **does not indicate the services provided to the organism by the complex of reactions that it represents**. [p. 136]

Emotion is necessary and more sensitive in situations with a wider context.
Emotion is an integration and summarization phenomenon: for instance, it tells us things about unemployment that are beyond the grasp of the census bureau. The example of the Rasmussen Report confirms that this is not a know-nothing attitude; **there are realms beyond the realm of reason,** and their **proper designation is "a-rational" rather than "irrational."** [p. 163]

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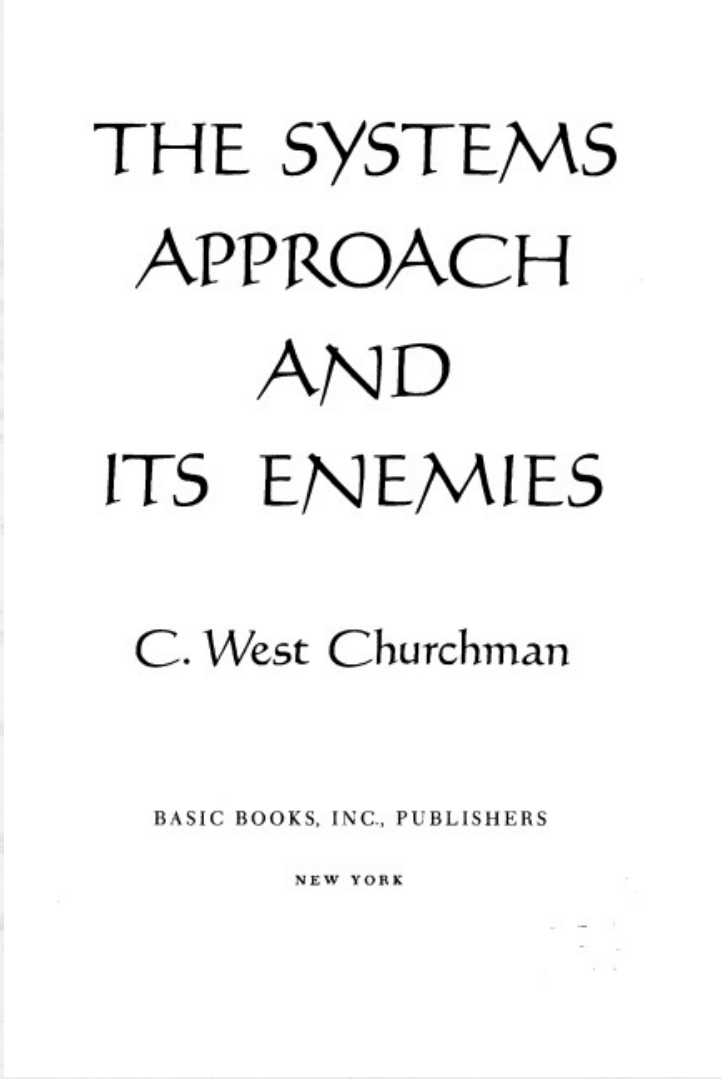
Churchman, Preface (1979)

[….] This book is just another step in the search for the meaning of *generality*, in this case **a general design of social systems**. [….]

… there is an immense part of **social systems reality that is none of the following popular dichotomies** in the current literature: rational-irrational, objective-subjective, hierarchical-nonhierarchical, teleological-ateleological, deductive-nondeductive reasoning (for example, inductive or dialectical), ineffable-effable.

In the text I have used the word ***enemy*** to connote this immense **land of social systems that has remained largely unexplored by "hard" systems analysts**, who thereby reveal a distinct softness of living by avoiding the dangers of exploring unmapped lands. [p. xi]



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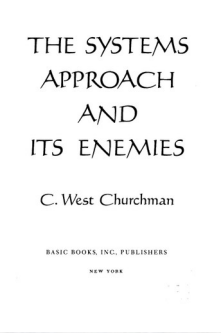
On Systems and Their Design (Ch 01)



The Environmental Fallacy

… The fallacy in point can be called the "**environmental fallacy**"; it might be called the "fallacy of ignoring the environment," but this label doesn't have nearly the clout of the simpler one. [p. 4] [….]

… in the broader perspective of the systems approach **no problem can be solved simply on its own basis**. **Every problem has an "environment," to which it is inextricably united.** [pp. 4-5] [….]

The Systems Approach

Our hero espouses something he calls the "**systems approach**," which is **designed to avoid the environmental fallacy**. In order to appreciate the systems approach, we should try to understand what it really is. [p. 7] [….]

On the broadest level, the **systems approach** belongs to a whole class of approaches to **managing and planning our human affairs** with the intent that **we as a living species conduct ourselves properly in this world.** Everyone adopts at least one such approach during her/his life, even if he/she is a recluse, an agnostic, a nihilist. [p. 8]

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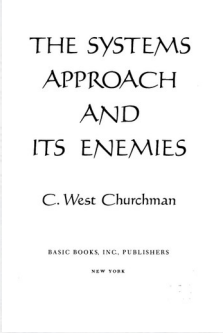
The Enemies of the Systems Approach, or Learning from SA's Enemies



… I was listening to a talk about the **virtues of the world models** which the Club of Rome had sponsored; the speaker was asking **why the world's leaders had not more rapidly responded** to the models' results. The answer came like a flash, **"Because they're not 'in' the systems approach but rather live and decide 'outside' it."** Thus was born my idea of the "enemies" of the systems approach.

Politics means primarily the way in which people gather together around **issues** of human living, food, shelter, education, patriotism, war, security, etc.

Morality is the underlying **spirit** of all action that drives a person to act as he does.

Religion refers not only to the actions of organized religions but also to everyday human action in relation (often in worshiping relation) to **something higher, more powerful, more knowing, more comprehensive** than the action itself, or else to something fantastically small and refined.

Aesthetics is the core of all action, that which **makes action "radiant"** for us: beautiful, ugly, pleasurable, painful, comic, tragic, whatever.

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