Building New Traditions Using Traditional Concepts – a sustainable building workshop

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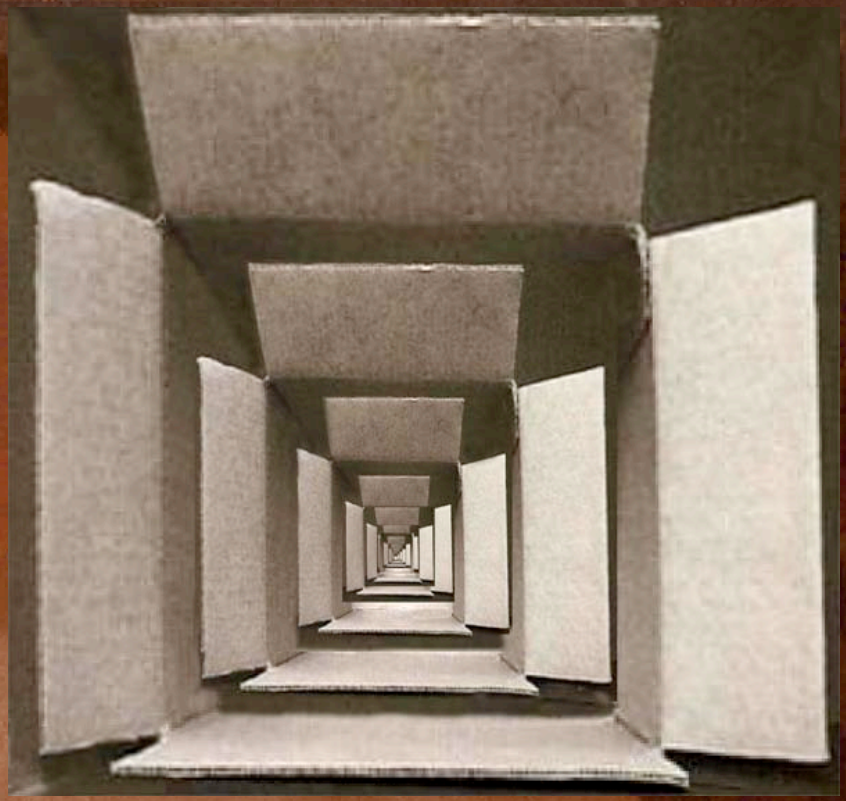
What About Codes and Regulatory Issues?

Get Out of the Box

We often hear that we need to think "outside the box" to deal with our problems today.

But it's a process -

expand your field of view, get out of the box you're in …into the next bigger box.



See the Details AND the Big Picture…

To get out of boxes requires knowing if you're working in the details or the big picture, in the past, present or future, and constantly shifting your focus back and forth.

That helps keep things in perspective and proportion, enabling us to see the *things* as well as the *relationships* between them.

The Purpose of Building Codes

International Building Code (USA) - 2000 edition

101.3 ***The purpose of this code is to*** establish the minimum requirements to ***safeguard the public health, safety and general welfare*** through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property ***from*** fire and other ***hazards attributed to the built environment.***

Big Picture in White - Details in Blue

What's Protected and What's at Risk?

Modern building codes enable us to design and build structures that are safe for their occupants, making it seem that we've eliminated or greatly reduced the risks associated with buildings.

What's Protected and What's at Risk?

We've just moved those risks in space and time:

- away from the building site into all the natural systems that support life on earth, and

- into the future, to our children and the future generations of all the other species on whose health and welfare our welfare also depends.

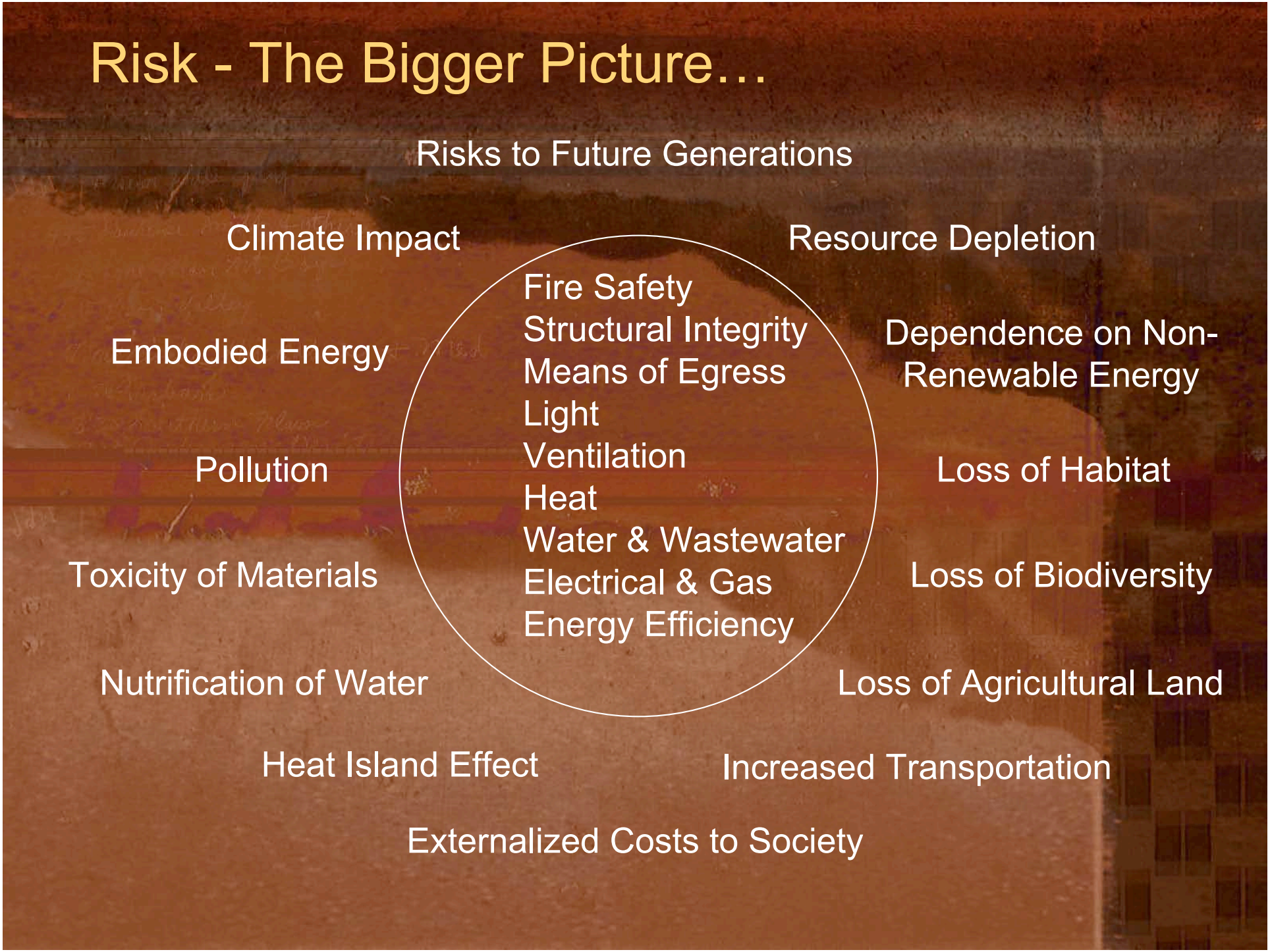
Big Problems Hidden in Plain View

Looking at buildings through codes is like looking through a microscope. The individual, building-related risks fill the field of view.

But, it's like dealing with risk with tweezers, while creating many orders of magnitude greater, generalized risk for everyone, including all future generations.

Risk - Through the Microscope of Codes…

Risk - The Bigger Picture…



Buildings are Complex Systems of Systems

English does not contain a suitable word for "system of problems." Therefore I have had to coin one. I choose to call such a system a "mess." The solution to a mess can seldom be obtained by independently solving each of the problems of which it is composed. - Russell L. Ackoff

Or, more simply put…

Optimizing components in isolation tends to pessimize the whole system.

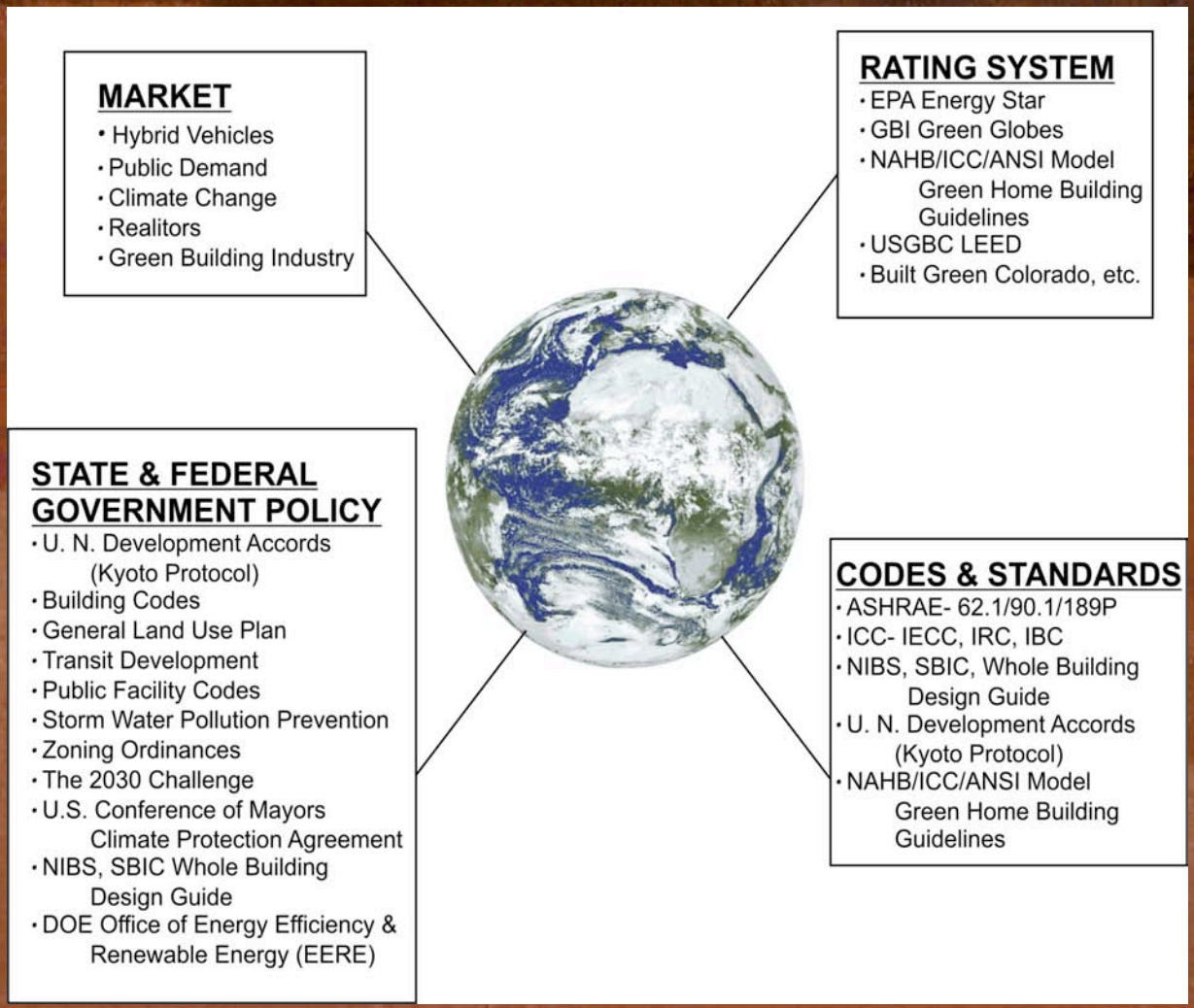
- Paul Hawken, Amory & L. Hunter Lovins

How to Not Pessimize the System?

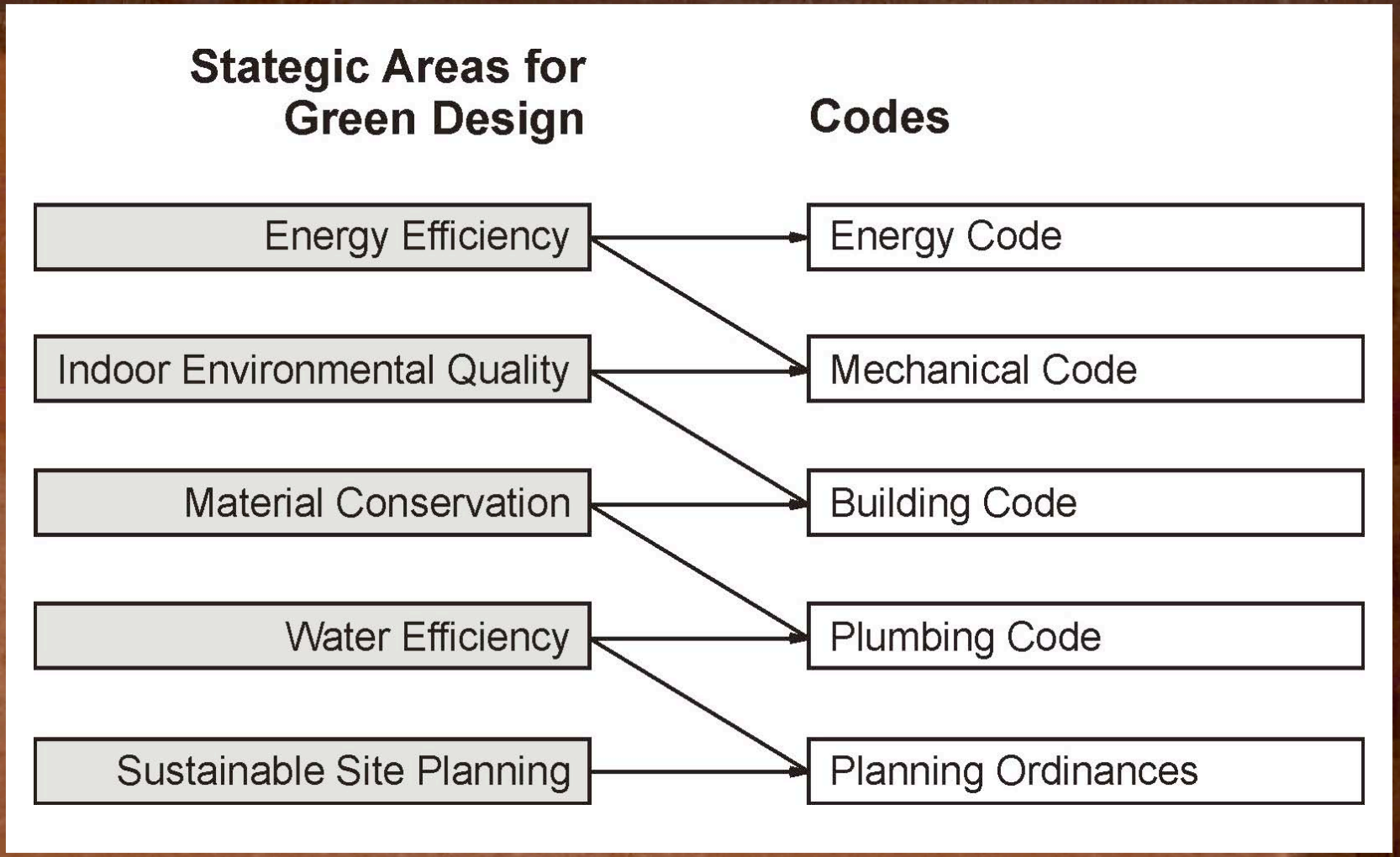
Building codes typically optimize components of a building in isolation, often pessimizing both the building and the systems to which it's connected.

To truly optimize buildings requires considering the whole system of systems. All technologies need to be viewed this way, to include their whole risk/benefit profile.

Regulatory Framework



Building Codes and Green Building



What Buildings Should and Shouldn't Do...

We should be operating with a set of principles for what buildings should and shouldn't do…

A good first principle would be a corollary of the Hippocratic Oath; buildings should first do no harm.

But that means looking at the whole lifecycle…

More Principles…..

- The following questions may help your community develop other principles?
  - ✓ Do they allow future generations to maintain the same quality of life we enjoy?
  - ✓Will future generations have access to adequate natural resources?
  - ✓Will their environment be a healthy and thriving one?

Solutions Abound for Open Eyes and Minds

There is an opportunity to re-envision the role of building departments - from being the "building police" preventing bad things from happening to becoming effective community resources for the best building practices.

What if you were psychologically partnered with those designers, builders and developers pushing for more sustainable solutions - without abandoning our commitment to public health and safety - rather than seeing them as a problem?

Native Communities and Codes

Native Communities are in a unique position to choose the building and development codes that will guide what gets built and where.

This could be a time in which to create new codes that enable us to build in ways that honor all people, and living systems, and the past, the present, and the future…

Is it necessary to follow a pattern that creates relatively safe structures but does so much harm elsewhere?