

ENVR E-130 / DHPP-347

**Global Climate Change: The Science, Social Impact and
Diplomacy of a World Environmental Crisis**

***Knowledge, Belief & Behavior:
Can We Change Our Mind?***

Timothy C. Weiskel

William R. Moomaw and Timothy C. Weiskel

Harvard University Extension School
Spring Semester - Session 3

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Early Climate Change Science

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Svante Arrhenius (1896) asks what if CO₂ variation in atmosphere were related to the procession and recession of continental ice sheets?

- Calculates how variation in CO₂ would affect temperature
- Notes that human activity adds CO₂ to atmosphere on a scale with natural processes.

What Can't Happen, Won't Happen...(I think)

Theory precedes evidence

- Theory generates a “model.”
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We say, “I'll believe it when I see it”

BUT in fact the reverse is true “I'll see it when I believe it.”

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“*This view of Nature – suprahuman, benevolent, and inherently stable – lay deep in most human cultures.*”

Well, not quite... Actually it was a relatively recent view of the natural world corresponding to the arrogance and hubris of an expanding, predatory industrial society.

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OR what if “Nature” turned out to be not so “benevolent” to humans? After all, geologists had information of climates quite “hostile” to humans from their evidence of previous ice ages.

OR what if the whole system turned out not to be stable, but perhaps inherently *unstable* -- perpetually changing, perhaps oscillating, animated by continuous feedback loops?

Our Beliefs Inform and Constrain Knowledge

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What do you do when knowledge systems conflict with belief systems?

Either you:

Throw out the knowledge that “doesn’t fit.”

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Or you “put it on the back burner” to deal with later... *meanwhile received beliefs persist...*

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But how can you change received beliefs?

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So what are cultural beliefs?

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- they are *collective* or *shared* -- not idiosyncratic.

Content and Structure of Beliefs

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Cultural beliefs have both **changing content** and **enduring structure**, so we need to...

Focus on 2 Key Features

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[subject-verb-object].

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In what way can structure (as opposed to content) convey meaning? *Can the structural meaning of moral propositions be as important as their cultural content?*

Can you 'diagram' the structure of the utterance?

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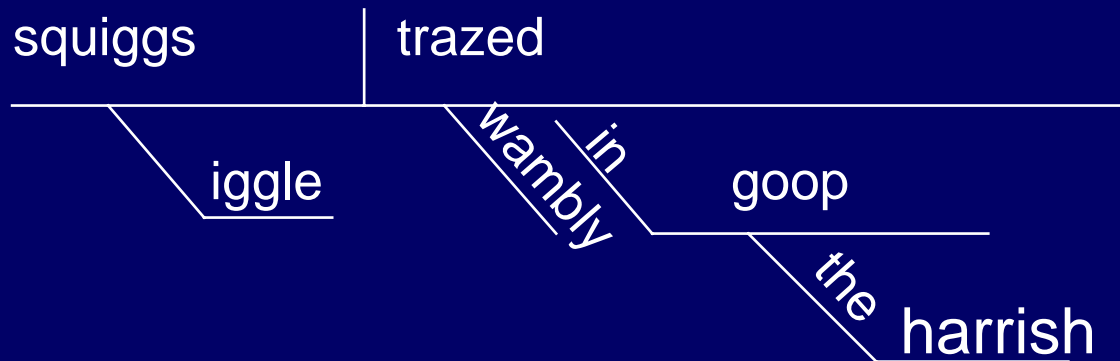
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Consider the **enduring structure of “exceptionalism”** in all Abrahamic religions....

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Evidence for new phenomena needs to be 'squared' with the expectations for what constitutes data in the existing texts (paradigms). If the new phenomena does not conform to what is expected, they are often rejected and their importance is denied.

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Consider the evolution of the worldview in grain-based agricultural societies of the “ancient” Near East....

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The question then becomes:

- Why did western religions “flower” or “explode” all of a sudden in history?

Anthropological approach:
Emphasis is upon a *functional* understanding of religions

Formal religions emerge primarily to mediate enduring anomalies and establish understandings about the existing world as part of the created order in the universe.

Religions provide plausible accounts of the ultimate mysteries of existence -- origin of things, the problem of evil, the reasons for suffering innocence, and the meaning of death -- through the elaboration of narratives.

Once narratives are committed to writing, however, literacy begins to have a radical transformative impact on the whole human enterprise for two contradictory reasons.

Literacy both liberates and entraps human cultural evolution

Literacy “liberates” cultural evolution in this sense:

- The technology of literacy radically enhances the capacities of human societies in some respects:
- record keeping (taxation, military conscription)
 - conventions of ownership (land and non-bullion money)
 - inter-generational debt/wealth accumulation, inheritance, trans-generational debt collection, etc. are all enabled or enhanced by the technology of literacy

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Writing is a form of culture that takes an effort to learn. Some people must teach it, others learn it, and much of this depends upon the fidelity of replication. Success is, in the first instance, measured in terms of faithfully replicating the thought of others.

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Truth claims which ignore the text are labeled 'blasphemy.'

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What you *know* to be true can be -- and often is -- radically different from what you profess to *believe*.

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This worldview would have been a silly -- even laughable -- outlook to any foraging culture of the kind that characterized over 99% of human history.

But foraging cultures have been wiped out or marginalized in the last 1% of human history by expanding grain-based agricultural societies. Ever since this ecological process began **the illusion of human control over the ecosystem has become the dominant public worldview.**

THE
ARROGANCE
OF
HUMANISM
David Ehrenfeld

This has often led to what David Ehrenfeld has called the “arrogance of humanism” – examples abound....

This thinking is often driven by an unqualified commitment to ideologies and worldviews derived from the late-bronze age/early-iron age experience in the Palestinian hill country.*

These cultural assumptions need to be reexamined in our day. We need to move beyond the exceptionalism inherent in anthropocentrism if we wish to survive as a species in a complex ecosystem



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[Our Predicament](#)

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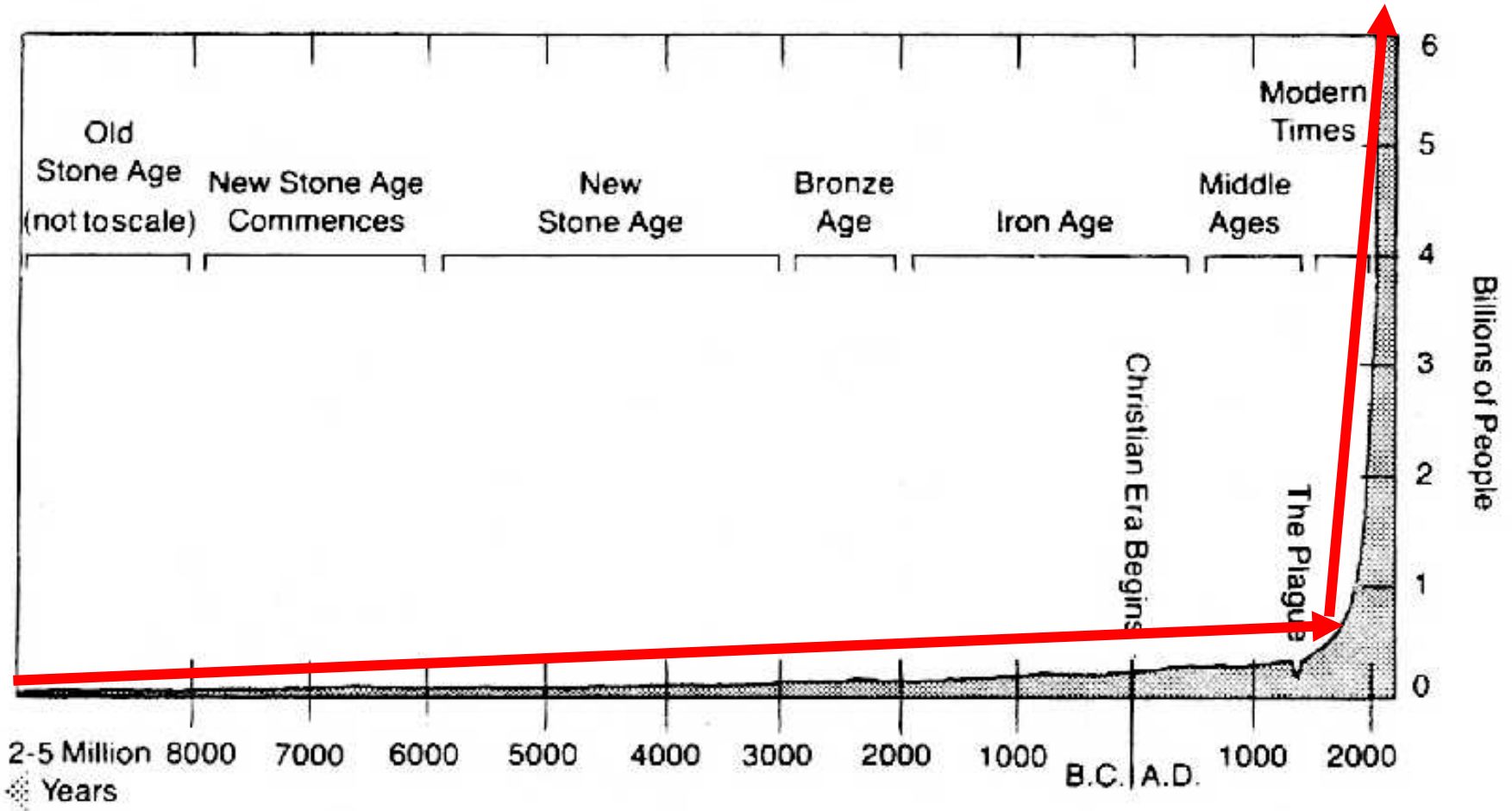




Del. G. B. Piranesi. Sculp. M. G. B.

in front of the

World Population Growth Through History



Our *Real* Uniqueness...

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We need now to overcome the deep seated “exceptionalism” at the core of this cultural myopia. (*The Need for Miracles...”*)

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But *do we believe this?* Can we *change our beliefs* to accommodate our new *knowledge* in time to change our *behavior?*



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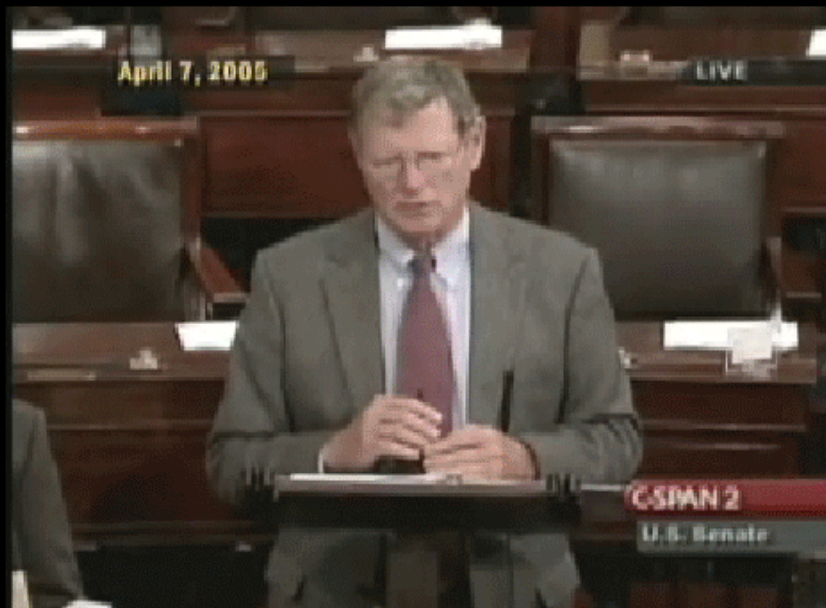
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Spring Semester 2006

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William R. Moomaw and Timothy C. Weiskel

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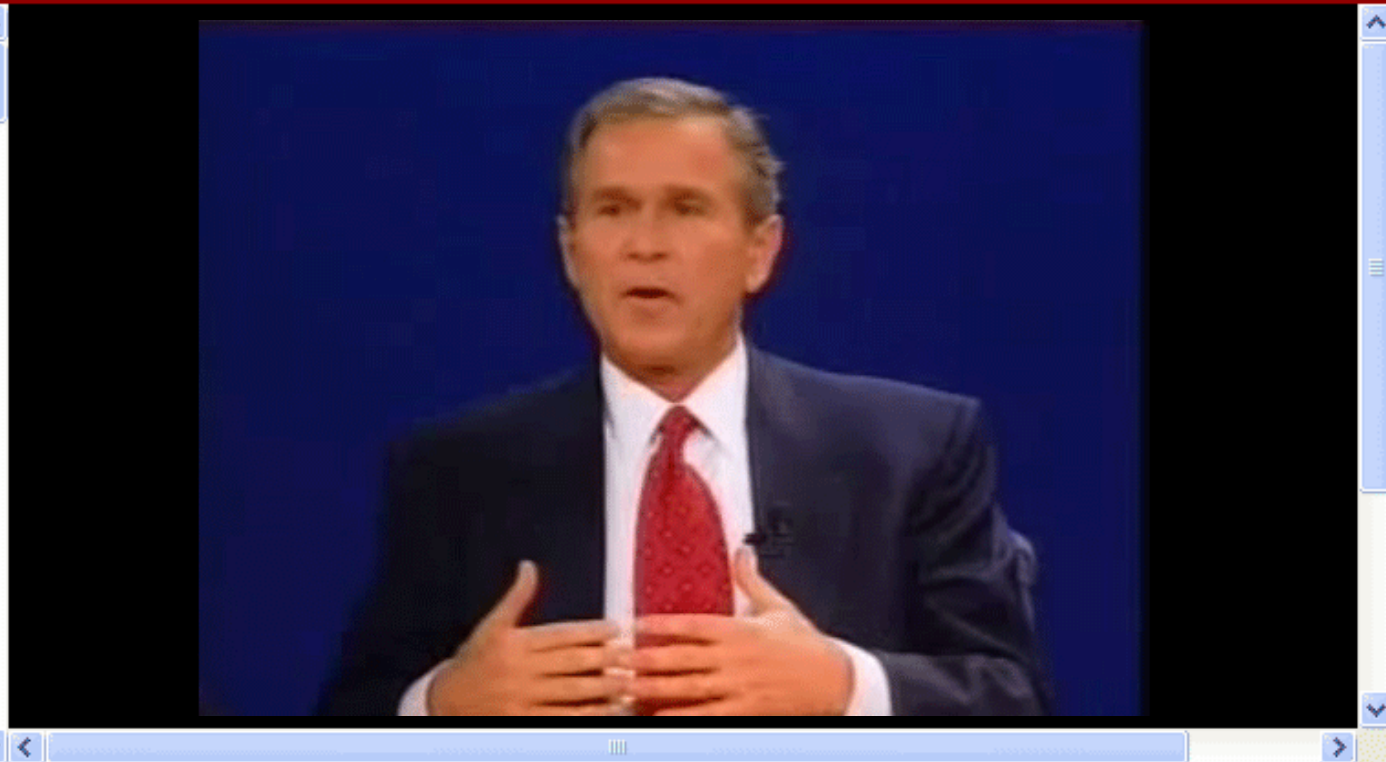
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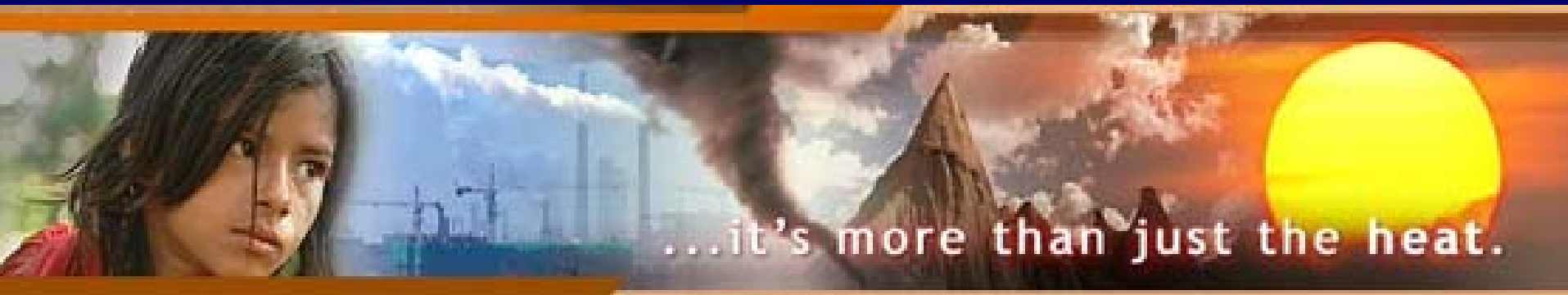
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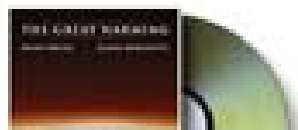
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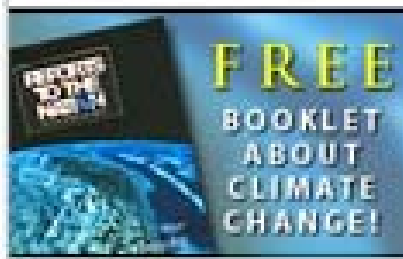


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***Knowledge, Belief & Behavior:
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Timothy C. Weiskel

William R. Moomaw and Timothy C. Weiskel

Harvard University Extension School

Spring Semester - Session 3

15 February 2007



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***Knowledge, Belief & Behavior:
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**Not easily, it will take a lot of hard science and hard
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