Environmental Ethics and Land ManagementENVR E-120

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Our Historical Context: Colonialism, Imperialism and Sprawl



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Session 5 19 October 2006

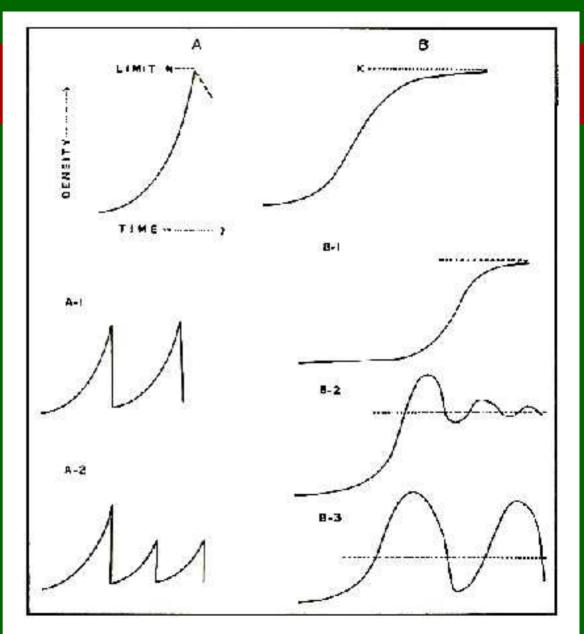
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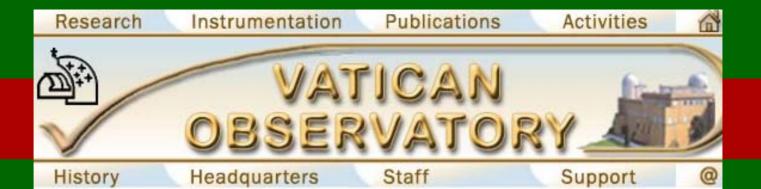
Patterns of population variation in biological species.

Species with J-shaped growth are said to be "R-selected" species.

Species with S-Shaped growth patterns are said to be "K-selected" species.







Recent History of the Vatican and the Galileo Case

by George V. Coyne, S.J.



In a solemn audience, held on 10 November 1979 before the Pontifica Academy of Sciences, the College of Cardinals and the Diplomatic Corps to the Holy See, to commemorate the 100th anniversary of the birth of Albert Einstein, John Paul II requested that theologians, scholars and historians, animated by a spirit of sincere collaboration, will study the Galileo case more deeply ... "This desire was concretized in the constitution by the Pope in July 1981 of a commission to "coordinate the research of theologians, scientists and historians which would help to further clarify the events which occurred between Galileo and the Church and,

more generally, the Ptolemaic - Copernican controversy of the 16th and 17th centuries in which the Galileo affair is situated".

The commission consisted of four working groups to deal with exegetics, general culture, science and epistemology, and history and jurisprudence. The task of the commission was officially described as a scholarly and calm reflection, founded on objective evidence and emphatically not a new trial nor an attempt at rehabilitation.



http://clavius.as.arizona.edu/vo/R1024/gghist_p1.html

To review....

Our Circumstance:

We live on the third planet from the sun, our closest star. As stars go, it is not a very big one. Nor is the planet, for that matter. Even with gadgets of our own making it can be circled in an hour or so. It's a pretty small place to call home in the vastness of all that we have come to know as creation.



Yet home it is; and an extremely vulnerable one at that. Most of the planet is covered with water, some of which periodically turns to ice in the high latitudes as solar radiation and the planet's orbital trajectory vary over time.

Moreover, the planet is enclosed in an improbable envelope of gases whose precise proportions -- essential for our existence -- can only be maintained through the continuous metabolism of countless life-forms on or near its surface.



Species, populations and communities of these life-forms coevolve over time in response to the alternate rhythms of ice and warmth and the variation of habitat created by drifting continental plates, changing sea levels, and shifting regional climates.



Humans are a recent arrival in the community of life-forms, prospering during the inter-glacial periods only over the last million years of a three billion year continuum -- that is, in roughly the last 0.03% of life's unfolding drama. Moreover, it now seems probable that we will not endure any longer than many of the other transient life-forms that have left traces of their bones or behavior in the sands and sediments of time.



The capacity for intelligence which humans possess may not prove to be an adaptive trait in the long run, especially since human intelligence is frequently deployed to kill fellow humans or extinguish other life-supporting organisms crucial for long term human survival.



In biological terms humans provide no essential functions for the survival of other large communities of life-forms -- save, perhaps, for our own domesticated animals, plants and parasites. If we disappear it is probable that wheat, rice, cattle, camels and the common cold virus will not survive in their current forms for very long.



But the vast majority of the earth's organisms can do perfectly well, indeed perhaps thrive even better, without us or our biological associates.



None of this is news. Common sense and a junior high school education can impress this much upon our minds. Yet the curious fact is that we refuse to believe it. We continue to strut and prance about with a sense of supreme self-importance as if all creation were put in place for our benefit.



As the zoologist David Ehrenfeld has observed, in spite of what science has revealed about our place in the universe "we still believe that the force of gravity exists in order to make it easier for us to sit down."



From where does such arrogance come? How can our beliefs be so far out of touch with our knowledge? How can we maintain such an inflated sense of personal, collective and species self-importance?



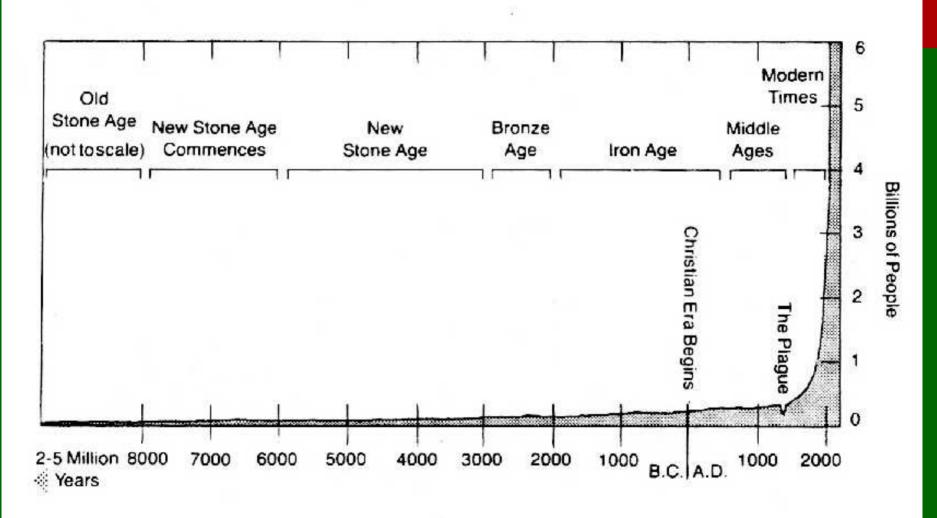
The answer, in part, is that Western religious traditions have generated and sustained this petty arrogance. A culture's religious beliefs are constructed from what that group has come to believe in religiously.



Ever since the advent of cereal agriculture and with increasing intensity since the emergence of humanist thought stemming from the European Renaissance, Western cultures have come to believe religiously in their own power, importance and capacity to dominate and control nature.

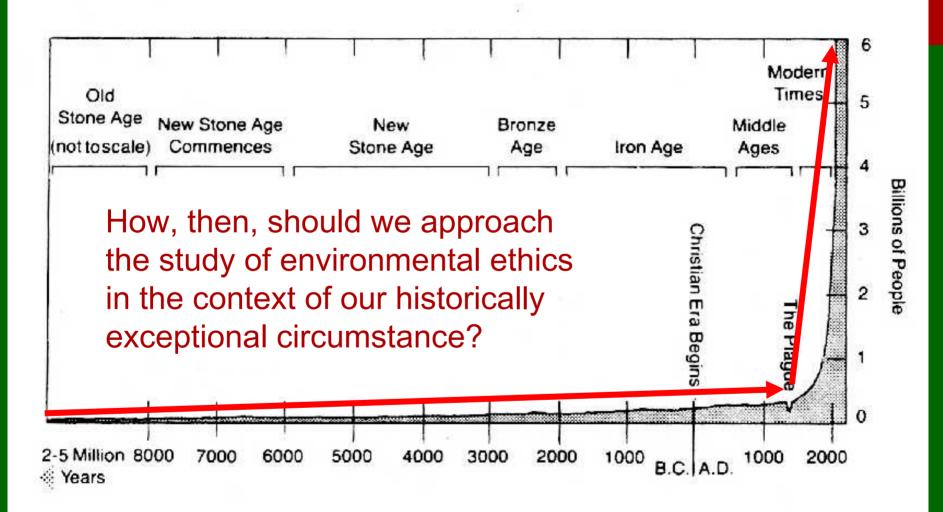


World Population Growth Through History



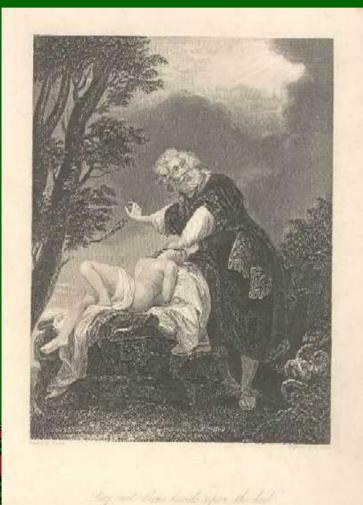


World Population Growth Through History





The *structure* Western belief systems is largely to blame. It rests upon an assumption of "exceptionalism" -- somehow we think "we" are "set apart."



Historically the Abramic religions which emerged from the marginal agricultural lands of the Middle East were an important source of this "exceptionalism."

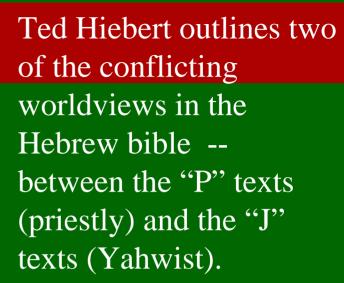
Covenantal Exceptionalism

People believed themselves to be "set apart" (from nature and history) by virtue of a special convenant with Yahweh -- an Israeli war god.

The YAHWIST'S LANDSCAPE

Nature and Religion in Early Israel

THEODORE HIEBERT



He emphasizes the antiquity of the Yahwist texts and their different version of the ecosystem and creation.



Christianity emphasized "Confessional Exceptionalism"



He saith unto them, It is I; be not afraid.... (John 6: 20)

According to some, the historical figure, Jesus of Nazareth, was said to be the "Christ" -son of God, and thereby an exception to the natural process everyone else experienced.

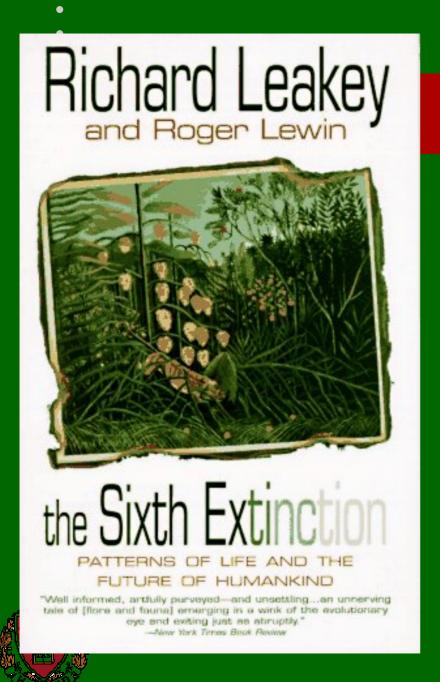
Tim Weiskel - 20

Confessional Exceptionalism

Confessing faithfulness promised abundance...

Jesus is presented in several narratives as if he has control over natural process. For those who trust him and declare their faith, he directs them toward resources they normally find hard or impossible to acquire on their own.





But scientists are reminding us that despite our sincere beliefs in covenantal exceptionalism or confessional exceptionalism, humankind is not an exception to the laws of the functioning laws of the ecosystem over time.

Further, they point out, that our enduring structure of belief grounded in exceptionalism is blinding us to the major biogeological fact of our time -- that we are in the midst of Earth's

<u>Sixth Extinction</u>. *

It would seem that we had better re-examine our Implicit Theories in our Ethical Discourse

Our (common) Theory of Community

Our (common) Theory of System

Our (common) Theory of Authority

Our (common) Theory of Change

Our (common) Theory of Agency

Our (common) Theory of **Time**



A Theory of Community

What community is assumed to be the relevant moral community by what the speaker has either stated or implied? Is this community aware of itself as a community? Are there a variety of moral communities? Who or what is "within" the moral community? Who or what is explicitly excluded or excluded by implication?



A Theory of System

What is the overall concept of system employed by the people concerned? How do various moral communities relate to one another in a larger system of connected relations? What are the relations between groups in all of "creation?" What are the principles or attributes of that larger system that govern how moral communities relate to one another?



A Theory of Authority...

What is the explicit or implicit concept of authority in the propositions being forwarded? What *warrant* do we have to assert that such-and-such is "good" or "right"? What source of authority exists to settle disputes between contesting ideas of the "good" and the "right"? In other words, what is the *ultimate source* of moral authority? A book? A prophet? A "person?"



A Theory of Change

Where does change come from? How is change explained? Does change emanate from *within* the system or is it conceived as *exogenous*? If it is endogenous *how* is change alleged to occur within the system? What is (or are) the presumed indices of change?



A Theory of Agency

Who or what the agent *of change* or *stability* in the moral community or in the larger system as a whole? Is it ever legitimate for moral agents to intervene in a wider interconnected system to achieve certain ends? If so, when and under what circumstances is intervention justified? If not, what is the justification for non-intervention or non-action?



A Theory of **Time**

What is the governing sense of time? How late is it? Are different kinds of intervention morally justifiable according to a "theory of moment?" When is it morally justified not to intervene because the "moment has passed" or perhaps it "has not yet come?" What is the narrative shape of time implied by the disciplinary discourse? Is it "never too late?" or "always too late?" or sometimes just the right "window of opportunity?"

Now let's try to begin to delineate these implicit theories and principles

How to Locate (an implicit) Principle

Principles are often not stated. They are simply assumed by those advocating particular courses of action. They can usually be identified – whether or not they are explicitly stated – by thinking about a particular policy or the perspective of one of the parties concerned and then completing the following sentence:

"I think we/you/I should do[such and such],...
because, in principle, ...[fill in the principle...]"



Principles are Drawn from an overall Worldview

- Principles are used explicitly or implicitly in arguments in order to persuade others that something *ought to be done* or *ought not to be done*.
- Principles evoked or implied are themselves drawn from the worldview of an individual.
- When principles differ this may be because there is an underlying clash of worldviews.
- Since a worldview is based upon underlying implicit theories of community, system, authority, agency, change and time, you can analyze the conflict of differing worldviews by examining the contrasts that in these underlying implicit theories.

Contrasting Worldviews...

Remember, we often need to look beneath the "surface utterances" or "content" of the statements by the different parties to discern the deeper structural components of the arguments concerned.

Let's turn, for example, to contrast the structure of difference between the worldview of "foragers" and that of neolithic and peasant agricultural societies.

It is instructive to learn about the ways in which the changes in "realized econiche" between these two types of societies altered their respective worldviews by changing their underlying implicit theories.

The Foraging Worldview

Implicit theories	Foraging Societies
Community	Those people are part of my moral community with whom I share common access to resources, language and ties of marriage and descent
System	The wider natural world is made one moral community of humans divided into two – those I am descended from and those I can marry. All groups acquire their material needs from a wondrously varied and continuously bountiful ecosystem. Original affluent society. "Wide" realized econiche
Authority	Authority is derived by descent and mediated through the recollection of elders. Disputes settled by council of elders acting to (re-)establish limits on individual actions appropriate to the needs of group.
Change	Change is constant, driven by rhythmic and seasonal change – estuaries/tides, migrations, summer/winter – and longer term variations – drought years, flood years. Social structure designed to accommodate and buffer change – sharing mechanisms, fictive kinship,
Agency	Spirits linked to specific resources (animals, fruit/nut trees), sometimes places (springs, rivers, etc), or large natural phenomena (Moon, Sun) engender change.
Time	Normal experience of time is that of "life cycle." Different things have different life-cycles, all nested within one another. One acts in reference to the time appropriate in the relevant life cycle.

What is the 'Neolithic Outlook' in these structural categories of perception?

Implicit theories	Neolithic and Peasant Cultures
Community	Those people are part of my moral community with whom I share common access to land, language and symbols of belief, e.g. the book.
System	The wider natural world is made up of many (competing) moral communities, mostly engaged in agriculture as well. – all subject
	hierarchically to vicissitudes of nature (floods, drought, epidemics,
Authority	epizoodics etc.) perceived as "acts of God" "ours" or "theirs" Disputes settled at appropriate level of hierarchy within land-based state/religious system. Ultimately God or gods have authority and
Change	express themselves through natural processes. Priestly class vs. King No change but cyclical change. Putatively changeless and eternal. Norm is to resist change. Ritual effort is to rehearse system and cycle in
	hierarchically arranged repetitive cycles – "There is nothing new under the sun" Innovation is not rewarded. Change thought subsersive.
Agency	God(s) is(are) agents of change – sometimes through privileged revelations to faithful followers. Prophets and "chosen people."
Time	Normal experience of time is as a series of cycles within a larger structure of "interval" a time between a "creation" moment and a "redemption" sometime in the future

While ideology seeks to deny change, much change occurs over time in peasant societies.

Change occurs because of the interaction of the different elements *within* the system:

- members of different moral communities (ie. "foreigners," "strangers in the land") dispute access to arable land, water and resources;
- conflicts arise between specialized priestly classes and land owners or between city-based land owners and permanent peasant class;
- conflicts arise between wealth based on agricultural production and wealth derived from trade.



Ultimately internal dynamic of conflicting elements in system push it "outwards."

In Europe, the loose confederations of competing landed gentry and the royalty they support focus their competition "outwards" to obtain new raw materials useful in their intra-European struggles for domination.

Because of the *lack* of hegemony and effective political power in Europe, competing feudal structures look abroad for resources to fuel and arm their intra-European struggles for power.



The "European Miracle?"

Thus, the "European miracle" is born...

Big Historical Question: "What accounts for European exceptionalism? That is, why did Europe 'lead'?"

One (essentially political) Answer...

Unlike other areas (China, India, the Middle under Ottoman-Turkish rule), the fragmentation of Europe meant that one of the most convenient and effective forms of competitive survival for royal aristocracies was to search outwards for new sources of established forms of wealth and novel forms as well.



Tim Weiskel - 37

A Royal-Charter <=> Bourgeois Revolution

Remembering, then, the nested, reciprocal and cumulative kinds of causation that we are sensitive to in ecosystems, it is understandable that European political weakness combined with the emergence of moneyed trading classes, sought to base power on *new* sources of wealth obtained *outside* and beyond the realms of political control.

Discovery, innovation, change, and movement become positively valued and a major shift in Europe's historical "worldview" that emerges.



The "Colonial Worldview"

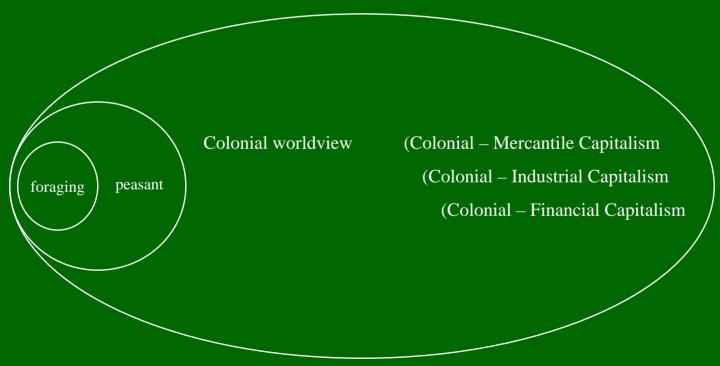
The dominant worldview that emerges out of the 500 years of experience since 1492 is still with us today.

It differs from -- but does not entirely displace -- the peasant worldview born of the neolithic revolution.

In many cases it extends and expands that earlier worldview. But in other respects it totally subverts that worldview.

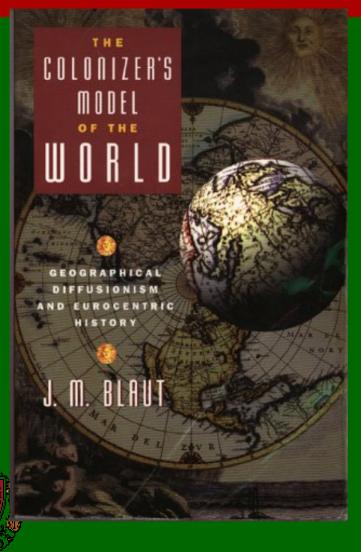


Historical Evolution of Worldviews





What are its key components?



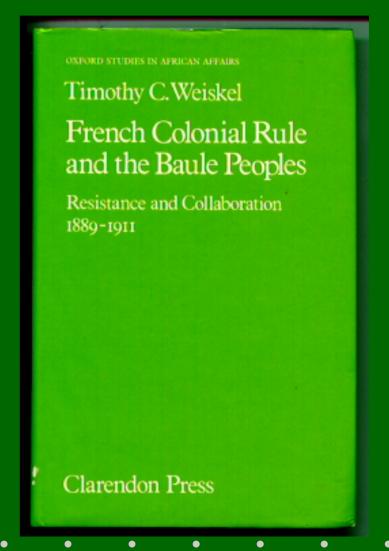
Numerous books abound to characterize the worldview of the colonizers, and it would be presumptuous to attempt to summarize all of Western European thought in this course.

Nevertheless,...

Colonialism can be studied as an ecological phenomenon

The careful study of modern colonialism -- especially as an ecological phenomenon -- is a basic necessity for understanding the ecological worldview of Americans today.

Most of the time those who thought they were in charge were acting out roles on the ecological stage of which they were only vaguely conscious, and certainly did not control.



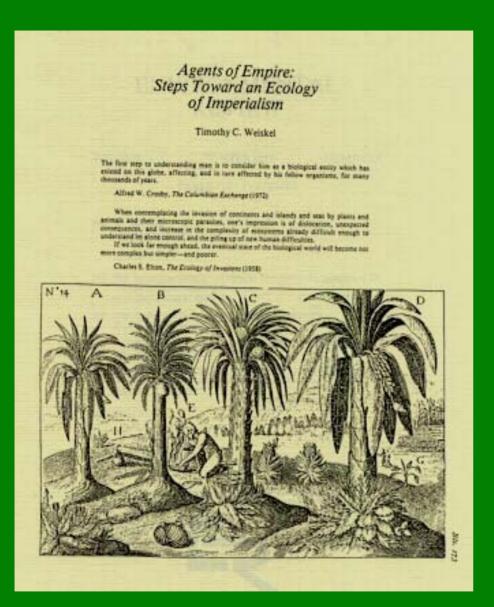
The approach is three-fold

This includes

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==> Cultural Ecology (emic approach)
==> Ecological Anthropology (etic approach)
==> Ecology of Culture (historical approach)
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Effort is to understand the origin, function and persistence of cultural beliefs about the environment and how these beliefs condition individual and collective behavior.





European mercantilism was based on the discovery, appropriation, transport, cultivation and sale of exotic plants, animals and animal products -- purposeful and sustained ecological disruption.

The 'Age of Discovery' was largely an age of ecological discovery -- and disruption.

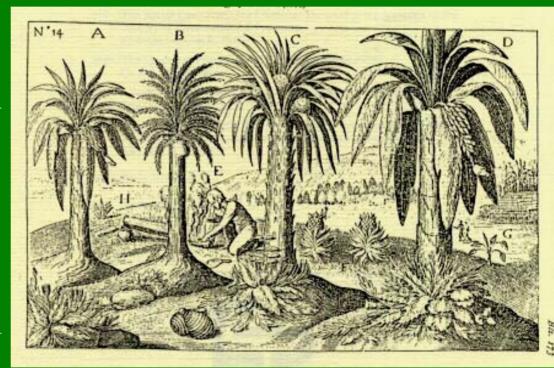
Europeans and their trading counterparts acted brutally to transform the ecosystems around the world.

We are heirs to this cultural tradition....

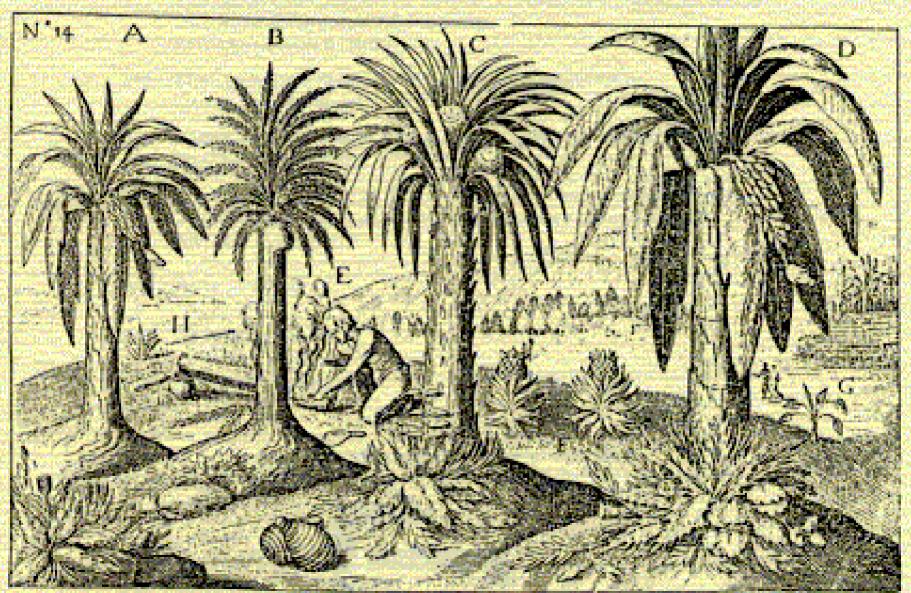
Colonialism was built on plantation agriculture

From 1492 (and before), Europeans observed native usage and looked to the 'economic' value of new and exotic plants (sugar, coffee, pepper, bananas, tea, etc.)

Some 'introductions' were intentional -- most were not. We are heirs to these cultural habits of behavior and thought....







Bit. 173

Our concepts of race emerge from the culture of colonialism as well....

TIMOTHY C. WEISKEL Rubbish and Racism: Problems of Boundary in an Ecosystem

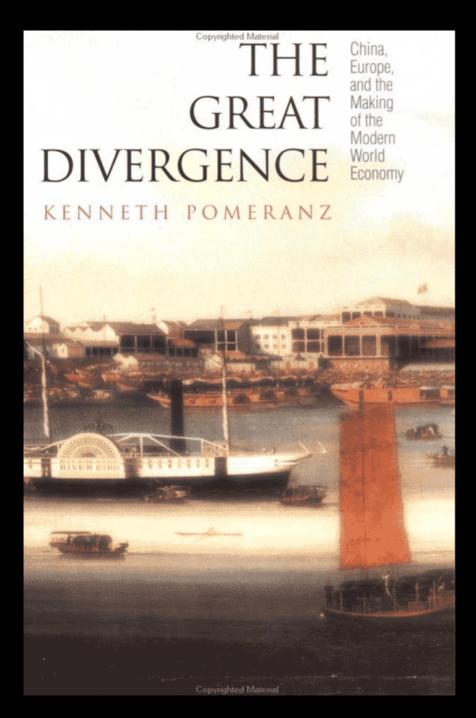
We had fed the heart on fantasies:
The heart's grown brutal from the fare.
W. B. Yeats, Meditations in Time of Civil War

In an age of mounting racial tensions and in the presence of an impending environmental crisis, it may seem irresponsible for anthropologists to fly off to remote corners of the world and continue their studies of people who, even if they do survive, will have no effect upon the world's major problems. As research money becomes scarce, government agencies and foundations appear to agree that such field work is a luxury they can ill afford. Anthropologists, of course, have always maintained that their research has been intimately bound up with the total human condition, and if their peoples have been remote and their theories esoteric, this has been so only in order to offer a fresh approach to the problems we all face daily. If anthropologists have been right, then they should have something to offer concerning two of the major crises which confront us: the growth of racism and the threat of irreversible environmental pollution.

Environmental problems and racist thinking are deeply related in western culture.

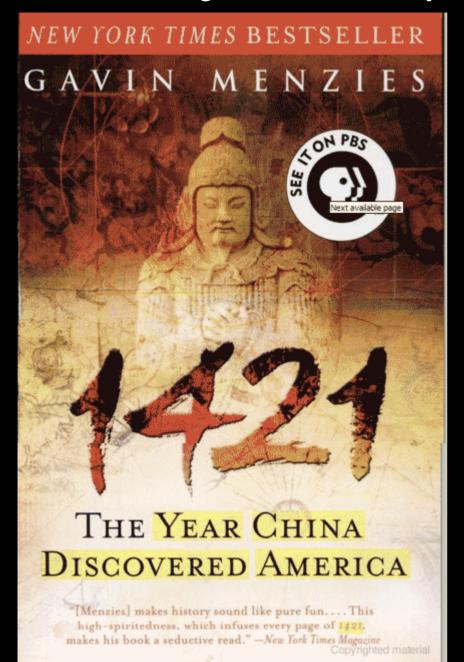
No effective effort can be made to address environmental issues without addressing the social experience of racism in this culture's history.





The "Great Divergence," in the world's fortunes and outlooks, in effect, emerged from this period of European maritime empires that became dominant after 1492.

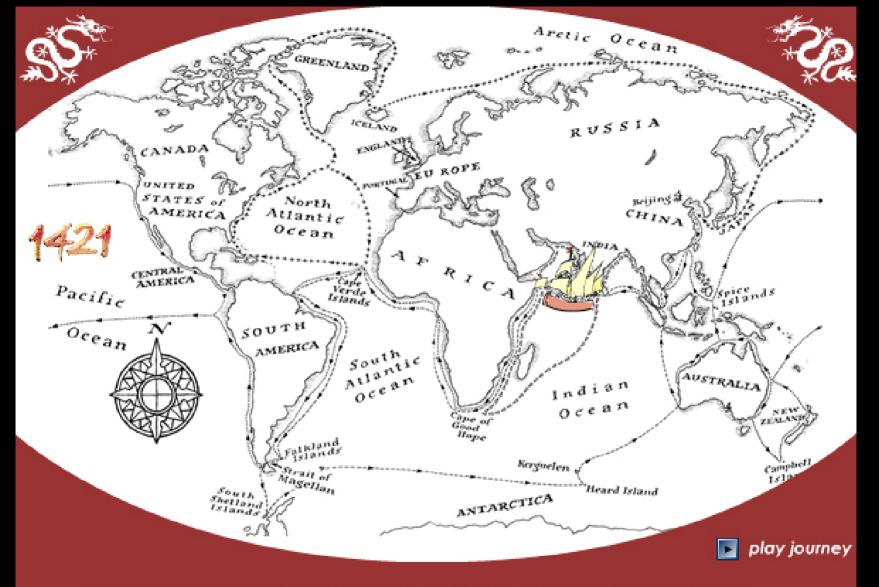
Did Columbus get here first? Maybe not...



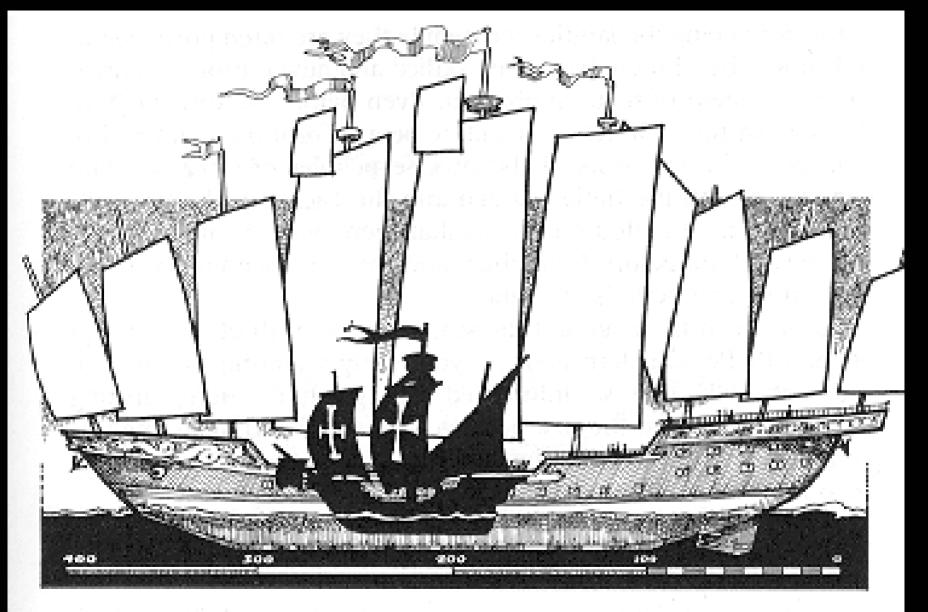


Columbus discovered America in 1492, any elementary school student will tell you. But an amateur historian says Chinese beat him to it in 1421. NPR's Bob Edwards talks to Gavin Menzies, author of 1421, The Year China Discovered America.





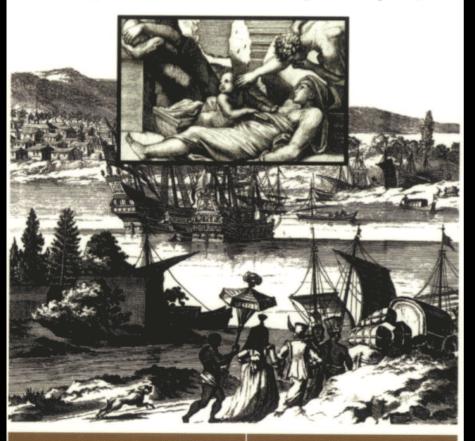
At Calicut, Admiral Zheng He, the Commander in Chief, returned home via South East Asia. He reached China in November 1421. By this time his three rear admirals Zhou Man, Zhou Wen and Hong Bao had years of experience commanding fleets in earlier expeditions, yet they had never been in control of a force of such magnitude.



Zheng He's treasure ship (four hundred feet) and Columbus's St. Maria (eighty-five feet). (Illustration by Jan Adkins, 1993.)

The Columbian Exchange

Biological and Cultural Consequences of 1492



The world would certainly be a different ecological phenomena had the Chinese sustained contact with the "New World, but as it is, the "Columbian Exchange" created the dominant "biological and cultural consequences of the 15th Century

Ecological Imperialism

The Biological Expa Europe, 900–1900

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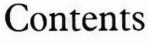
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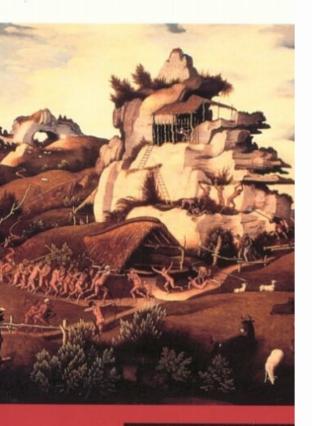
- 8. Animals
- 9. Ills
- 10. New Zealand
- 11. Explanations
- 12. Conclusion

Appendix: What was the "smallpox" in New South Wales in 1789?

Notes

Index







List	of illustrations	page xi
Acknowledgments		xii
Ι.	Prologue	I
2.	Pangaea revisited, the Neolithic reconsidered	8
3.	The Norse and the Crusaders	41
4.	The Fortunate Isles	70
5.	Winds	104
6.	Within reach, beyond grasp	132
7.	Weeds	145

What is the 'Colonial worldview' in these structural categories of perception?

Implicit theories

Community

System

Authority Change

Agency

Time



Colonial Worldview

The moral community is made up of those who share in the effort of discover, conquer and dominate 'wild" or untamed nature.

The system consists of various moral communities which are also engaged in this competition or which are destined to be subdued by it. All of this is played out in a vastly expanded natural world of plentiful resources that are there simply for the appropriation.

Authority is vested in competing sovereignties which settle disputes by treaty, alliance or warfare. Nothing like the authority of power.

Change occurs through the invention of new sailing techniques, manufacturing technology and willful innovation. Change is good -- and necessary – for competitive survival of rival trading powers. Growth for the sake of growth is good – stored as "money".

The "Lord helps those who help themselves." Explorers, discoverers and innovators are valued as agents of change.

The focus is neither upon the past nor the remote future, but upon the present and the immediate future in which plans for growth, innovation and measurable expansion can be realized. The "New World" is a "New Heaven and a New Earth" -- Messianic communities abound.

Elements of Early Colonial Worldview

Implicit theories

Colonial (Mercantilist) Worldview

Community

System

Authority Change

Agency

Time

The moral community is made up of those who share in the effort to discover, conquer, exploit and dominate 'wild' or untamed nature.

The system consists of various moral communities which are also engaged in this competition or which are destined to be subdued by it. All of this is played out in a vastly expanded natural world of plentiful resources that are there simply for the appropriation.

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Industrial Capital Worldview

Implicit theories

Community

System

Authority Change

Agency

Time



Colonial (Industrial) Worldview

The moral community is made up of those who work to develop industrial processes with new labor-saving devises. Entreprenneurs

The system consists of various other industrial entrepreneurs engaged in competition. Natural world is a resource base for industrial processes. Plants, animals and minerals are "raw materials."

Authority is vested in nation-states under elected governments or constitutional monarchies whose role is to facilitate industial development

Change occurs through the invention of manufacturing technology through invention and the application of science for willful innovation. Change is good -- and necessary – for competitive survival of rival industrial powers. Growth for the sake of growth is a goal .

The state and the entrepreneurial classes need to act together. The state should act to facilitate and "free up" the potential for industrial growth.

The focus is upon the immediate future in which plans for growth, innovation and measurable expansion can be realized. The preindustrial past becomes "outdated." The system moves toward the "new" and innovative. The "modern" is "good" the "old-fashioned" is simply discarded, bypassed or ignored

Tim Weiskel - 57

Finance Capital Worldview

Implicit theories

Community

System

Authority Change

Agency

Time

Colonial (Financial) Worldview

The moral community is made up of those who share in capital to undertake investments in industrial capacity and trading ventures

The system consists of investors engaged in differential strategies of investment throughout the world. The world as a whole is available as a theater for profitable investment. Financial resources knit the system as a whole together.

Authority is vested in trans-national and multinational alliances and agreements that work to facilitate the unimpeded movement of capital

Change occurs through the identification and investment in new ideas.. Change is good and has become essential for competitive survival of rival financial groups. Growth is both good and necessary.

The investor is the agent of change in the system. The state should act to facilitate and "free up" the potential for the global movement of financial resources.

The focus is upon the next "quarter" or a shortened time horizon determined by a calculation of the annual average rate of profit. Rapid "turnover" of capital is necessary for maximum profit generation. "Time is money."



Worldview in action: Sprawl!

What are its main manifestations?

What drives it?

What are its manifest and hidden "environmental costs?"

What are its manifest and hidden social correlates?

Is anyone in favor of sprawl?

If not, why does it occur if everyone is against it?

If it is fundamentally a *cultural* problem, what would have to change to overcome sprawl?



"Field Trip"

How does an anthropologist try to answer these ponderous of questions? **

....when in doubt, take a field trip. Do some first hand participant observation...

(Thanks to Alex MacLean we can get a glimpse of how the "natives" live.)









Is sprawl haphazard? Or planned?

According to one specialist:

"Urban sprawl is random unplanned growth..."

(Robert Bullard, 2000)

But is this true?

Does this look "random" or "unplanned?"





What about this?





This may look pretty "random" and "unplanned" at the moment.....





but it may well be on the way to becoming this...





....and then this.





To future archaeologists, these sweeping monuments, built for the exercise of our cars, may hold the key to understanding the essence of our culture's values. They will certainly be our civilization's most ambitious, expensive, impressive and enduring design and engineering achievements.



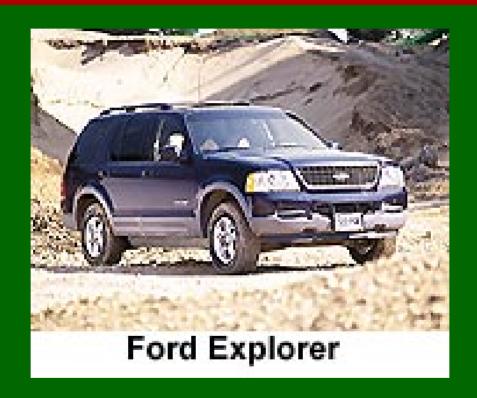
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And where do they lead?
In part, round and round,
but also....
from the "core" to the "periphery."
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And what is on the periphery?

This.....









Is this space in America?



How can you tell?

How would people in American culture view this space?

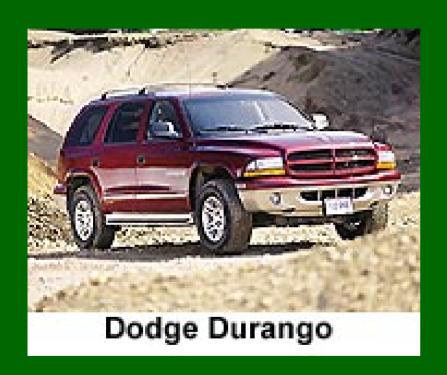
Is it a wetland? A river mouth?

Who or what were its previous inhabitants?



Do they have "rights"?



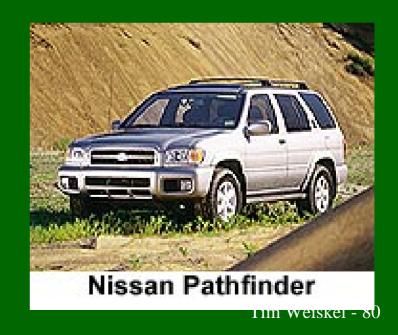












Cascading Environmental Implications...

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Increased use of cars

needed to do anything

can't buy a loaf of bread without a $10,000 investment in

auto-mobility

==> Increase in CO<sub>2</sub> emissions + ground level ozone + NOx +

particulates

==> Smog

==> Health hazards
```

→ Move to country...(need to use a car)...



Cascading Environmental Implications...

- ==> Increased use of energy in cars + energy in "conditioning" the air in cars and home and offices.
 - ==> Car usage leads to demand for more roads.
 - ==> More roads ==> More traffic + change in surface and groundwater hydrology -- i.e.. water pollution and localized "flooding/drought" cycle.

