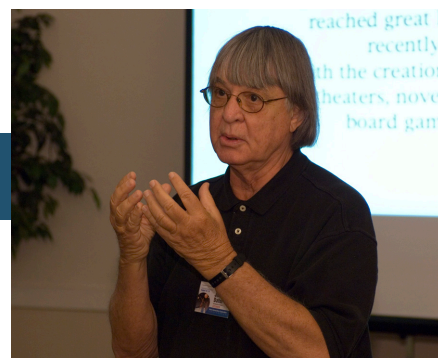


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Comments about "Earth 3.0"

Jim Dator

Next Generation Exploration Conference

August 17, 2006

My position can be
dramatically stated:

Earth and everything on it
is increasingly artificial.
"Nature" no longer exists.

By "nature" I mean
"processes and places
entirely uninfluenced
by human activities"

By "artificial" I mean
entirely or largely
made or influenced
by human activity

All "once-natural" processes
are now more or less
"artificial"
Meaning
"influenced by
human activities."

I am NOT saying
that humans not part of
nature,
broadly understood.

Of course humans are
a part of nature!

Neither am I saying that
human influence on the rest
of nature is somehow
"unnatural".
Since humans are part of
nature,
what we do must
by definition be "natural."

Nonetheless, humans have
substantially modified
themselves
and their environment
from what they were
when they first emerged
as *homo sapiens*, *sapiens*
roughly 50,000 years ago.

As a consequence,
all once-natural processes
now operate the way they do
in part because of
human activities.

We understand
some once-natural processes

individually fairly well
some poorly
some not at all
and do not understand the
totality of their interactivity
at all.

We did not intend
to impact these
once-natural processes.

The impact is an
unintended by-product
of other human intentions,
for the most part.

Nonetheless, we humans
must assume responsibility
for what we have done.

We must learn
"to govern evolution"
(title of a book written
some time ago by
Walter Truett Anderson)

Anderson says it is too late
to say we should wait
until we understand nature
better
before we undertake
this obligation.

Such advice is like telling
a 13 year old that
she should wait a few years
until she has gone to college
before entering puberty
so she will have the wisdom
necessary to handle
the changes
of puberty better.

That may be true,
but it is not helpful.

She WILL enter puberty
and have to deal with it.

So also, humanity HAS
created increasingly
artificial environments and
must learn how to invent
and govern new ones.
It is far too late for humans
to decide they should
stop and learn more.

So far, I have only focused
on
what humans and their
once-natural
biological environment.

But there is much more to it
than this.

Humans live in completely
artificial and increasingly
virtual
cultures and built
environments
that are entirely
human inventions.

While human capability
of speech depends on
biophysical properties
unique to humans,
human spoken languages
are entirely artificial,
while written languages are
even more obviously so.

The human ability to
imagine and describe
entirely imaginary worlds

and eventually to write,
depict, enact, and
otherwise record them
reached great heights
recently
with the creation first of
theaters, novels and
board games

then with the creation of
radio, movies,
and television,
and now with
virtual realities
and interactive
electronic video games.

More people spend time
in, worrying about, and
interacting with
imaginary and
artificial people
and situations
than with those in the
"real world" around them.

The very idea of modern
"democratic government"
also assumes that humans
are not at the mercy of
nature, gods, or kings,
but can make up and follow
their own rules and so
govern themselves
individually and collectively.

The emergence of
genetically-modified or
engineered humans and
posthumans as well as of
artificially-intelligent beings
and cultures
is also expected
over the 21st Century.

The Search for
Extra-Terrestrial Intelligence
and the field of Astrobiology
suggests the existence of
forms of life and intelligence
that did not originate on
Earth
which humans might
eventually encounter.

For more discussion about
this,
and an extensive
bibliography, see

<http://www.futures.hawaii.edu/dator/artificiality/DatorAssumeRose.html>

Humans on Earth
need all the help
they can get
to learn how
"to govern evolution"

Space research
can help them

There has been research
and experiments
by space agencies,
industries, and others
about creating
viable environments
for humans in space.