

Okay.

Today we're doing lecture number four,

which is on the

Greek culture. Just to situate this a

little

time wise, let's look at the prezi.

Get out of the picture here. Note that

you know we started way down here,

we moved up quite a few hundred years to

Hebrew culture, and we're making another

jump to Greek.

And time wise a lot has happened, I mean

we haven't gone

you know to midway point quite yet

of where we need to go, but we're getting

there, which is

you know shows you just how ancient some

of this stuff is, especially the Epic of

Gilgamesh.

But also note here, if you look spatially,

we're moving over

this way. And in fact, we are now out of

Northern Africa

into the Mediterranean, and literally

into the Mediterranean and the Greek is
an
island. We will we will jump into
mainland Europe soon,
when we get to Rome, but for now
we're still in- we're in the
Mediterranean.

Okay so Greek culture is important, and
Roman culture is important,
because of the influences that it's had
on the West.

What do I mean by that? Well in the West
there are major
influences, strands. One of them is
you know Christian thinking, especially
Judeo-Christian thinking,
but another major one is greco-roman, and
by that we mean the influence of Greek
and Rome.

This has been historically incredibly
important in the history of the West.

In fact, you may know that the
Renaissance, roughly 500 years ago,
is- the word literally means rebirth, but

rebirth of what?

Rebirth of classical knowledge, classical thinking,

specifically we're talking there about Greek and Roman thinking.

It's been incredibly influential, and not just up until 500 years ago, but

it influences everything, art, thinking, culture,

even laws and all has been influenced by Greek and Rome.

So we really need to take a look at these cultures from an environmental point of view,

and see just what's up with that. So,

let's jump to the prezi.

Let's go right in to

lecture four, which is

Greek and Rome- Greek thinking. Note too

that of course we're doing an

introduction to the environmental

humanities here,

that this is, properly speaking,

eco-philosophy.

Not all of it, we're going to start with Hesiod, Hesiod is not a philosopher, but principally this lecture is going to deal with thinking of the type philosophers do. And really we're going to be focusing on Plato, an enormously influential character who pretty much inaugurates modern- inaugurates philosophy as a field of study and has enormous influence on thinking, and we'll see how in a moment. So still we're using our tools of textual analysis to look at this work, but it's really eco-philosophy that we're looking at today. So let's jump right in with Hesiod. Hesiod, first, is a roughly a contemporary of Homer. So you may know, as far as Greek writers are concerned, we are now back at the very

earliest written writing that we have from Greece. And in fact Homer, again, sort of predates writing, and then it was originally sung, so we're we're back very far with Greek thinking.

So let me note here that, let me pop back on the screen first, that Hesiod is environmentally significant because he recounts two creation myths. And these myths parallel the Genesis story, they suggest that the earth was once a perfect locus amoenus. So what's a locus amoenus? Again, it is a pleasant place, a perfect, pleasant place.

In fact the word amoenus, we get our word amiable from it, and locus, we get our word like local or locale.

So it was literally an amiable, or pleasant, really a perfect locale.

In Hesiod's story this is where human beings live at peace with themselves, and with the planet. So this parallels pretty closely, in this regard, the story of Adam and Eve in the Garden of Eden.

Adam and Eve lived in a perfect locus amoenus, and that's what Hesiod is recounting to.

So in each case, what we have here, are cultures that didn't have you know everything that we have as far as an understanding of the historical record, and anthropology, and archaeology, and all that.

So they had to speculate on what the lives of early human beings were like, and they imagined that it was pretty perfect,

and you know we know that as we call it eudenic.

Well the story that Hesiod is telling is an endemic life for early human beings.

And Hesiod suggest that there is a golden race of mortal men, that might

sound kind of familiar but not exactly
right,
and that's because Ovid and Virgil, both
Roman thinkers, both
people we'll be reading, suggested-
rechristened that the
Golden Age. Anyhow we'll get to that in a
moment,
but here's what the golden race was like
during this Golden Age.
Human beings "had all good things; for the
fruitful earth
unforced bare them fruit abundantly...they
dwelt in ease
and peace upon their lands with many
good things, rich in flocks."
Okay, this is Eden again, in the sense
that
mother earth takes care of you, does
you know not require you to do
agriculture, does not require you to work
for a living, you just walk out and you
know grab berries, and have a very
delucte life. And this idyllic life, by the

way, you'll see here, is characterized by the people, actually if they have a vocation, it is, in this view, tending flocks. It's different than Eden account in this sense, because Adam and Eve we really don't know, they do anything. But here, and this will be a conspicuous feature of

pastoral thinking, we'll get to pastoral when we get to Theocritus next class, he's also a great thinker, but later, a few hundred years later.

But if you're imagining what these people are doing, and what their life is like, well there's shepherds walking around with sheep, but they're not doing anything. I mean shepherd I guess is a vocation, but in this sense, it's not a very hard one. So.

As in the Genesis account, there's a break with this tradition, a break with this time. So we shift from

not Eden, pre-Eden, post-Eden,
which is referred to, as scholars
referred to, as a pre-lapsarian and
post-lapsarian area, before the lapse in
Adam and Eve's behavior. But here it's
called the golden
at the Golden Age, and during the golden race
and the Iron Age, or iron race.

And just like the biblical account, you
know human beings "never rest from labor
and sorrow." So a break has happened here,
and what it means is that life is no
longer perfect, a benevolent earth
doesn't take care of us any longer,
but just like in the Eden account, human
beings have to work for everything that
they do,
and it's a very sad time. So you know we
often think that if you go back
far enough, that human beings had it
really nice, but of course
we know that we don't have it really
nice. Well
you know even 2700 years ago, Hesiod

thought the same thing,
that life probably was pretty perfect at
one point,
but that wasn't his time, his time was
characterized as being very
unhappy, and where people had to work
very hard.

So he is doing history here, right? I mean
he's imagining what
the past lives of human beings were like
compared to the present, and the
present, to Hesiod,
is not very nice. Yup.

The interesting thing about this
story, and here again it parallels the
biblical account,
is that you know it explains
what happened. And in this case, a
single person
caused all these problems, in the
biblical account that's Eve.

So obviously from a feminist point of
view this is very problematic,
as is this story, because a single person

here, the single person is Pandora,
who had a shameless mind, and a
deceitful nature. She, like Eve,
stands for all women, she is the one who
brought this problem about.

Why don't we live perfectly with nature,
and you know
wonderful locus amoenus, what caused
the problem?

Women caused the problem, at least a
woman in both accounts, but
again, as with the Eve account,
this is going to you know cause people
to think about women
in obviously a very negative way if
they destroyed the perfect world we
once had.

So different stories in certain ways, but
you know key features of these stories,
that we lived a perfect relationship
with the planet
that is now lost, and was brought about
by a woman, who stands
metaphorically for all women. That, that's

both stories.

And again, not too surprising, we're really coming from the same part of the world, so stories would have spread.

Yeah. Before Pandora did this, before she released evil in the world, not by

you know disobeying God and biting an apple like Eve, but you know the story of Pandora, how she did it.

Before this, "the tribes of men lived on earth remote and free from ills and hard toil

and heavy sickness." Again, very very similar to the biblical account of what life was like there. "Remote,"

that means kind of you know out in different places,

sort of rural locales and all. But free from hard toil and heavy sickness,

life was good. Note this feature here too,

that free from sickness, and that was the way people imagined

Eden you know in the centuries after
and people thought about
it; that it is just a place where
nothing goes wrong,
everything is just wonderful, it's only
afterwards

that all our problems like sickness
gets introduced into the world.

Yeah. So both of Hesiod's stories, as
well as the Genesis account, and why I
say both of Hesiod's stories because
originally he talks about these ages, you
know the Golden Age going
through other ages up into the Iron Age.

But then again,
he tells a separate story about Pandora,
but both of those
are talking about the earlier period.

And the Pandora story is somewhat
different, in that it offers an
explanation as to what went wrong,
and who did it, and you know the person
who did it is Pandora.

Yeah. Here's an interesting thought,

because both the account of Eden
and the account of Hesiod,
and now so we're talking
about these two major traditions in the
West,
in the Judeo-Christian account as well
as the Greco-Roman account.
And I say Greco- I say Roman with that
because we'll see with Ovid and Virgil
they've repeated the same thing, so this
account of human history
was the one that was generally held
by both Greeks and Romans.
Because we've inherited this tradition,
and we're going to get through this and
go into this in details where we're
heading toward the end of the class,
but I'll mention it now kind of as a
spoiler, but also for something
for you to think about. Even today we
often buy into these
myths, as we imagine that there was once
a time when human beings lived
at peace with the planet. So,

let's see if I can pop out of the screen
there for a minute. Peace with the planet,
there you can see it. So the interesting
thing about this
is, if you look at what we
know now because of history, because of
science, anthropology, and all, we know
that's not what the original lives for
human beings were like. We know in fact
that human beings evolved, if you buy
into the
theory of evolution, we
evolved from you know other primates.
And there was never a time when we lived
like this, where benevolent mother nature
took care of us, and there was no disease
in the world, and we didn't have to work
for
our living. But many people will
believe,
and this is important environmentally,
that there was a time when human beings
lived
pretty perfectly with the planet. And

you know okay, if you believe that, but as we'll see that has big environmental implications because it kind of suggests where we should go environmentally. Again, we'll go into this in detail, but I'll just throw it out here, that if you believe this, then the key to getting you know having a good life would be to try to go back to nature, back to this earlier perfect relationship.

People like Henry David Thoreau, we'll be reading him at the end, he actually tried to do that, he went out into the woods because he wanted to be like one of these early human beings and live this perfect pastoral life.

Well life wasn't really like that. And if we're trying to get to a more perfect relationship with nature, maybe we need to turn around all together and not look back, try to live like primitive human beings

because they never had this relationship,
we might think they do because it's in
our cultural memory,
and because of these stories and promote
the Greco-Roman Judeo-Christian
traditions,
but we know from the historical
record it's not accurate.

So instead we might think about how to
get to a more perfect relationship with
nature,
not by going back in time, but by going
forward to it.

And we'll talk about this in detail, but
it's something to
to think about, and it sort of
underscores the significance of
these stories, and looking back to a more
perfect time.

So here's a question for you, did you
find Hesiod difficult to read?

You might remember when I introduced the
Epic of Gilgamesh, and I read that
introduction, I said that

this was as good as it got as far
as literature is concerned.

And especially because, and I didn't
mention the time but it's worth noting,
that the translation that we have of
the Epic of Gilgamesh is by a guy named
Steven Mitchell, and he does a great job
doing it, mainly because he doesn't know
how to translate that language.

He's actually a poet, that's his main
claim to fame,
but he is able to take a variety, I think
they're like seven different versions of
Gilgamesh, and come up
with a very readable, very poetic
translation based on
sort of aggregating together, and sifting
through
those translations. In this case, and in
most of the cases that we have coming,
we're not going to
be so lucky. This is a pretty literal
translation of Hesiod,
and that's important because we want to

literally know what the text says,
but I realize it is probably difficult
to read,

and don't feel bad if you struggled
through it.

And this is for people that of course
have already read it, if you

haven't read it,

you know brace yourself when you sit
down. It is going to be,

not so much difficult as to be really
blunt and call it like it is, it's going to
be boring,

you know it's not the most fun time-
exciting reading, it's not fun or
exciting at all.

But it is important when you think about
it because

you know we're really going through here
picking

out all these environmentally

significant moments in the history of
the West,

and Hesiod draws attention to

a very important one.

Okay. So here's a huge question, what is nature? And we're going to be tackling it today.

What do we mean by the word nature, it's a good question.

Raymond Williams, an environmental critic from- very active like in the 1970s, but he's active for decades really, said this is a really difficult question to answer because nature, the word, may be the most complex word in the English language, as it has accounted- accumulated many many meanings over time. In fact, other scholars have looked at it, and suggested that they're like 60 or 70 separate distinct meanings of the word nature in the English language.

Williams thinks it is one of the two or three most difficult words, and interestingly

going back to Gilgamesh, we talked about the culture, nature, you know binary, culture would be another one of those words to Williams.

And I agree with that by the way. A few years ago I was asked to write an encyclopedia entry for the Princeton Encyclopedia of Poetry and Poetics, and on the word nature,

and I was given like six thousand words as a limit to do it, which is another what like 10 pages or so.

And even in that amount of time, it was incredibly difficult, almost-

at the time it seemed impossible to

write a history of nature in

just a few words like that. So know that

it's a very difficult concept, but

don't worry because we're going to be

touching on it throughout the term, but

here's our first shot at it.

And part of the problem is that our word,

nature,

comes from Latin word natura, latin is of course the language spoken by the Romans.

And it also has meaning

is- our word nature is infused with meaning that even predates that, the ancient Greeks had this word

phusis, it was their word for nature. And that,

if you look at it, it's probably not hard to see the word physical coming out of it, which is where our word physical comes from.

And that's important because in the metaphysical, that word, it really means beyond nature.

So what's the metaphysical realm in Christianity? You know it's beyond nature, well that's Heaven, it's beyond it.

The Christian God, the Judeo-Christian God, is a metaphysical God because he's not here,

part of nature, he's beyond it, maybe even like another dimension or so.

But there are other words, and I threw

out one of them, which is the Old English

word

kynde. And if you look at that word you

may guess that our word

kind, k-i-n-d, came from it, that vestigial

e dropped and there was a great vowel

change,

and that also has-

it meant nature, but it still carries

some of that meaning. So in other words,

you'll talk about a dog, and you'll say

what

kind of dog is it. In other words, what is

the dog's nature.

So we'll see how it's related, but

just know that the word nature has this

long history, you might think it just

goes back to the Romans because it comes

from this Latin word,

but actually it goes back much further,

and draws from different cultural

traditions as well.

So nature is

often used somewhat synonymously with

words like the environment. So you say
save the environment, what do you mean
there? Well
people are kind of like saying save
nature, but in particular
wilderness is often the synonym for.
So you know you want to go spend time in
nature, you might go on a
trip to Yosemite or something, or
something like that, so it means
somewhere
free of human habitation. And that's
important
because that meaning actually doesn't
get attached to nature until
pretty much the 17th century with John
Milton, the poet, and we're going to
actually
look at exactly when that happens. But
know that,
in that sense, we have the same thing
we saw emerging in the Epic of Gilgamesh,
a binary structure between culture and
nature.

Gilgamesh's time, it was you know what was inside the walls, culture, and what was outside was nature.

We still think of it that way, so if you want to go to nature in a spatial sense of going out somewhere, the most pure nature, you're probably going to want to go pretty far away from human beings, to a place like a national park maybe where human beings are not allowed often to live there at all.

So that meaning, and we're going to see it, it's kind of a new one, but it's the one we- that most people have today when we think of

nature, we associate it with wilderness.

And again, we can see that the wall of Uruk.

It will, this nature-culture dyad, and dyad just means a binary structure appears again and again in western thinking, especially in later

Greek philosophical thinking, and we're going to look at that right today with Plato, about how the two are- about how this has philosophical implications.

When we think of it this way, we are for the most part, when we think of nature as being like synonymous with environment or more to the point wilderness, we're often thinking of it spatially.

And what I mean by that is, you know I'm in a place right now, town of Santa Barbara where a lot of people live. If I want to get to wilderness, in the sense of you know true wilderness, I have to go somewhere to get to it, go across space to another place like Yosemite, which is in California would be a good example, I can actually go there, and I can visit a place like Yosemite. That's how we think of

nature, in this sense, often. I mean there are other senses we think of, and we'll see that, when we think of something like a natural product, you go to a store and you want to buy something natural. It's kind of the same thing though, it's as free as possible of human intervention, so we like things that human beings haven't used any sort of pesticide, or herbicide, or the artificial fertilizer on them all, we think of those, which come under the heading usually, or if they're certified as organic. And in that sense, we mean things that haven't been touched much by people, just like a locale like Yosemite, at least the way we imagine it, it's not quite true that it hasn't been touched, we imagine it's not touched by human beings. Interestingly, and we're now- remember we're back so far, and I said that the idea of being separate from human

beings,
really nature, doesn't come around to the
17th century.

Well we're back so far, one or two
thousand years before that,
where nature isn't even thought of
spatially at all,
it's more understood temporally. And this
is kind of hard to wrap our heads around,
but it's important that we do because
the history of western thinking pivots
on this.

And to do it, we're going to look at an
artist
named Andy Goldsworthy. So I used to
actually assign a film by Goldsworthy
called 'Rivers and Tides'
for students to watch. And the
problem is,
to be honest, the film is a little dated
now, it's not quite the film it was when
it came out, I think in
2004 or something like that. But the other
issue

is, we just have so many important relevant films that I would like you to watch, and when I came to narrowing it down, Goldsworthy's you know I just didn't keep him in anymore. But not to worry, I am going to pull out the most important parts of Andy Goldsworthy, and why he's relevant. And I can tell you right now, just you know to think about, Goldsworthy is interesting because he reclaims this original temporal meaning of nature in his art. And because it is kind of hard to explain how nature can be understood temporally, it's great to have like a physical example of it, and Goldsworthy provides lots of it. So let's- we'll jump into him. Yeah, and this is just it, to give you a clear understanding of what nature means today. So we'll see this, and I

also will tell you, that this is not
just so that you happen to know this
idea of nature
that the Greeks had, and it doesn't have
any further relevance. You know
I'm not- this course is not set up that
way, I don't
want you to know things just to know
them, I want you to know them
because how it impacts us today and our
thinking today.

And the Greek view of nature is very
important because it's going to get
literally switched around, deconstructed,
by
Plato, and we'll see that directly. But
before we can understand what Plato did
to nature and how he deconstructed it, we
really need to
to get a clear understanding of what it
is, so let's jump to Andy Goldsworthy.
What that was, that just popped up
there, was an
actual- was a trailer for the film

'Rivers and Tides,' the Andy Goldsworthy film. Why I quickly moved- jumped over it, is if I played that in this video, and this video is uploaded to Youtube, that's copyrighted material, and Youtube's you know algorithms might figure it out, and block this video, my video. So if you want to see that, you can go watch the film, or you can just go get the trailer just you know put Andy Goldsworthy 'Rivers and Tides' into your browser, and you'll no doubt get the trailer. So Andy Goldsworthy.

So many of Goldsworthy's installations are like what the opening image in the film, and it is in fact, this isn't it, but it's a good- it's a picture of what it looks like.

They are drawing attention to the fact that

nature is temporal.

What I mean by that, nature is constantly in the process of emerging, coming into being,

decaying, always in flux. So

what he does at the opening of the film,

is he makes something like this

sculpture, which is another biome, but I

gave you this one because it's a good

example.

He actually took a bunch of icicles

and

put them together, and he does this all

by hand, there are no machines involved, he

breaks them, cuts them, he puts them in

his mouth to get them a little wet and

sticks them together,

and that is his sculpture. Now

why is that important? I mean you know

artists have always been doing

sculptures.

Well yeah, but they traditionally use

material,

especially like granite or marble,

that'll last for a long time and the idea is that it kind of lasts, well maybe not forever, but for multiple generations.

Goldsworthy doesn't do that, he does just the opposite, he uses something like ice here, an icicle, because it is going to decay almost immediately. In fact, when the sun hits this by the end of the day, this thing will be falling apart.

Why would he do this? Well he wants to draw attention to the fact that nature is constantly changing, and just to frame what we're doing here, that's the Greek concept of nature, that nature when you talk about it, when you say look at nature over there, you're not talking about wilderness, you're talking about the fact that it's constantly in the process of changing, and that means decay too. And Goldsworthy you know so much in

his work draws attention to the change,
so let's see this.

These installations, the artwork, make
little attempt at holding off temporal
change you know. So if you carve
something out of marble, you'd be holding
off change, right? You
make Michelangelo's David, you
make a statue of a person.

Then that person, even though they're
going to get old, they're going to die,
you've captured them in time, and
Michelangelo's David now,
you know 500 years old, hasn't changed
at all, and that's the idea of a lot of
artwork.

But Goldsworthy makes no attempt to hold
off
change, rather he wants to draw attention
to it.

If he wanted to make something to like
endure like that
you know thing we saw made out of
icicles,

he would have made it out of marble,
but again, he wants to do just the
opposite.

But I will note here, and just sort of
a little caveat to
note, he does, Goldsworthy, makes his
living
off of beautiful books of photographs
that he makes.

In fact, this film, I guess he made
money often, there's a subsequent film
more

recent that I considered showing to
people called 'Leaning into the Wind.'

But that's not really where he makes his
money, as far as I understand, it's
from these beautiful books that he sells.

So

that photograph was a Goldsworthy
photograph, and some people drawn
attention to this and

said well wait a minute that's just the
opposite of your project, I mean you made
the thing

so that it would decay in a single day,
and now you photographed it so that
years later we can still look at it.

Fair enough, I think that is a fair
objection, I think he does subvert his
own project, but

if you watch 'Rivers and Tides,' you'll see
he has a family and children and I you
know

he needs to make money too. I

mean I guess the ideal

thing would be to do these installations,

and then invite people

to see them, like performance art, and pay
people-

and have people pay to see them. I guess

that would work, but he often goes to

pretty

remote locales to do his work, so I

don't think that would work as well so.

But just know that that's kind of, I

don't know it's selling out I don't know

what, but

it is sort of counter to the

project itself.

Yup. But think of these

installations as emulating nature,

for example

something like a blossoming rose, because

that's what he's doing.

What I mean by that is, imagine a rose, at

some point in time the rose isn't in

existence at all,

right? Even if the rose plant is there,

that blossom is not there,

it emerges. If you know you walked by

rose plants you may know this, if you

have them in you know

you have a garden or whatever, that at

one point there's nothing,

and then there's a little bud, then a

bigger bud, then ultimately the bud

emerges to that.

This is sort of quintessentially what we

think of a rose here, this photograph,

that is this beautiful blossoming thing.

But again, that's not really what the

rose is because that's going to

die and decay too, and you know what
Goldsworthy wants to do
is draw attention to this. He could have
just you know
told us that what I'm doing is like what
a rose does and everything else in
nature,
but he does it in his installations to
keep you know
saying again and again, what is nature.
Nature is not a far off place that
we go to like Yosemite that is free of
human habitation,
that's not his approach to nature, and
that's not the Greek understanding of it.
Nature is change, the nature of the world
is change,
is flux, that is always coming into and
out of being.
You will hear this in Greek thinking, it
becomes very important Plato,
he'll talk about the world of becoming,
that's what this is, where everything is
always changing. And Plato uses the word,

well it's a Greek word, but it means flux,
Goldsworthy wants to draw attention to
flux.

And I'll be kind of a spoiler toward the
end because we are going to be looking
at this

non-western culture and looking at
how it relates to this. And I've chosen
Buddhism

because the Buddha's Buddhism
does not- Buddhism first thinks of nature
this way exactly, this is central to the
human experience and

of all life, that is a change in all, but
in Buddhism there is no attempt to hold
off the change, it is almost a
celebration of it,

certainly a profound thoughtful
acceptance of it, but

we'll get to that. First we have to see
how the West thinks of it, and we'll do
that with Plato.

Yeah. These installations, and this is
actually a photograph of the one that

opens the film, so maybe you'll be
you know encouraged to watch the film,
you see this, it's very
sort of beautiful, you see him actually
making this. So
you know this sculpture emerges into
being for one
shining perfect moment, and here
the installation works so well, and the
film he says he wasn't even
aware that it would work this well
because the sun is backlighting it now;
it's almost like you put illumination-
you know light on it to illuminate it,
and that's where it is, it's
perfectly- that's like the rose when it's
this
perfect bloom. But what's
striking is that the very fact that the
sun is
on it means that it is also at the
moment where it's beginning to decay,
that he has finished it, and now the sun
is warming it

and it will soon fall away. So you know
time is important here, and when I
said that nature is understood by the
Greeks temporally,
this is what I meant, it's all about
time,

things are caught up in time, they are
changing, they are emerging,
coming into being and falling away, all
that takes place over time,
and Goldsworthy is wonderfully
drawing attention to that.

He does this with a range of
installations, so I thought I'd show you
some other ones.

So if you watch the film, you'll see him,
he's actually putting together the
sculpture which is hanging from a tree,
and it's made from little sticks that he
found. But if you look at that, it is very
precarious the way this
is done, and the slightest little breeze
could make a topple. And in the film, they
want to draw attention to this fact, so

you see him working on this, and
he doesn't finish it because it keeps
falling down,
because it is so precarious it is
ready to decay that
you know he can't even get it done.

Here's a classic Goldsworthy
installation, showing that you too can do
art at home, lie down when on a
gravel like this when it's beginning to
rain, get up and
there's an image of you, you didn't have
to draw it, that's
compliments of the rain. But
this installation, this is it here not
him lying there,
this is it, this is immediately
going to decay, right? If it's continuing
to drizzle and rain,
this is going to very soon go away as
all you'll see is the damp
gravel there. So very clever, but
same idea, nature is change.
This one's from the film also, he

didn't put paint in this little hollow
here, he's actually gotten
the stones, local stones from the area
rich in iron, and he's ground them up,
and then he puts them into this little
stream, and the stream has these amazing
little strands of
red going down it, it looks like paint. And
that's the installation because he's
drawing attention, and when we get to
Heraclitus we'll see why,
to the stream streaming that it is
constantly changing, and you can see it
because he's actually putting this trace
in there,
but it'll very quickly go away, so the
installation,
this momentary thing, is drawing
attention to the streams
streaming, it's again constantly in
movement.

Do a little more with Andy Goldsworthy.

Even, and this is an important note,
and again Goldsworthy is clever for

approaching this, even things that
seem permanent
in nature aren't necessarily.
So in the film he has-, it's hard to see
in this photograph, I couldn't find a
better one,
this sort of stone wall that
if you're looking down on it, looks
almost like a snake
sort of meandering, and it looks like
that would be
pretty darn permanent right. So we talked
about Michelangelo making things out of
marble to be permanent, of course the
Greeks did this as well, they're the ones
most famous for it,
you would think this would be a
permanent thing. But what's interesting
is
he gets all these stones, and he has a
series of people working with him doing
it,
not from digging them out of the ground,
but these are actually stones that come

from previous walls that were made in
the
area, so this is in New York state. And
as you may know, in
places like back east and England
and
all over, farmers, to clear their
fields,
initially they had to get all these
stones out of the field,
so they carried them out of the field,
and put them along the perimeter of the
fields and these stone walls,
and they're useful to demarcate lands
you know where you own a field and where
it comes up to your neighbors, but also
to keep you know
certain small animals out maybe. But in
any event, these were all
over the place, but they start falling
down, so these were built you know in New
England,
maybe you know 300 years ago or so, all
depends,

but even in that time, they're beginning
to fall down.

So even though this wall is perfect
at this moment, it too is in the process
of decaying and it will become like the
walls that gave birth to it.

It's not going to happen like that
photograph of him lying on the gravel, it's
not going to happen in a matter of
seconds or a minute or two,
but it's actually going to take you know
hundreds of years, but even this will
crumble. Goldsworthy loves to make these
stone

cairns. So these are like-, if you've ever
been backpacking,

especially in like Europe they really
like doing it,

they will- before there

were maps and all, they will just put

little piles of stone

for you to see where the trail is. And if

you wonder if you're on the trail,

you have to look for where someone has

piled up these stones and go from sort
of one pile to another,
and that's how you follow the trail, you
don't need a map, you don't need GPS, you
just need

cairns. Goldsworthy sort of celebrates
these and makes them into art,
and they're very beautiful and they're
you know it takes a good bit of skill to
make these.

But in the film you see him actually
making one of these, and
he's doing it on the edge of water, and
it constantly is falling down, it's
another one of those things that he
can't quite make

because that's the purpose of the idea
of it. You see ultimately at the end he
succeeds,
and the water, the tide, comes in
and slowly it gets engulfed and you
don't see it anymore. When the tide goes
out, that one looked pretty stable, it'll
probably

be okay that day, but you know give it
a number of days or months or years and
it will
ultimately collapse, and again that's his
project.

Yup. By the way, and I just draw
attention to this, there are other
people
doing it, this is a guy named Patrick
Dougherty. And I mentioned him because he
has a local Santa Barbara connection
back in around 2006 or so, he did an
installation at the Santa Barbara
Botanic Garden,
which was called "Toad Hall," and this is
it. That's a building, and you could
actually go walk in and I did,
and it's very interesting because it's
made out of like
vines, like willow vines and things, and
you know it's a building, not
huge, but you could go walk in.
But it was designed to ultimately start
decaying,

and it was actually very you know
interesting and
popular attraction at the Botanic
Gardens, but
what happened was that it started
falling down, and they had to stop
letting people go in because it was no
longer quite safe, and they had
ultimately get rid of it,
but of course, that was the point.

Dougherty does striking things all
over the world, and you can see these
sort of installations. So
Goldsworthy usually attributed to sort
of inaugurating this kind of nature
art, this temporal nature art, but
there are a lot of people practicing it
now.

But why we're looking at Goldsworthy, and
why I gave you all these different
examples, because
he actually, through his installation,
provides an answer to that question we
posed:

what is nature? Well, one answer and this is to the ancient Greeks too, nature is birth, growth, and passing away, the endless process of process whereby everything everywhere is ever coming into and out of being. When I wrote this sentence I wanted to just kind of like keep pressing this point home, nature is constant change, nature is not stable, nature is always involving you know decaying, death, but that's okay because there's birth too, it always continues.

Again, Buddhism, other approaches to the world, will celebrate something like this.

It is not celebrated in the West, but any event, this was the Greek understanding of nature.

You can see through Greek art that already there was a dissatisfaction with this.

So- and you can see in Western art, more generally and I mentioned the pyramids here, this is a Greek temple, the Parthenon, these folks were creating art that defiantly attempted to stand against the process of nature.

You can see a pyramid is so massive you would imagine it would last forever, why did the Greeks- why were the Greeks so preoccupied with you know making things out of stone, like this building and sculptures. I mean this was not necessarily an easy thing to do, they had wood too, they could build houses out of wood, they did build houses out of wood and all was the simple thing. Why create something like this? Well the goal was to create something that would define nature, define- it was you know a defiant human action to prove that we could hold off this process.

Well I give you this picture because the

project

doesn't work. So Goldsworthy's you know installations may only last a few minutes,

maybe like that stone wall, they might last you know decades or

a couple hundred years, but they ultimately will decay.

And the pyramids, and buildings like this, are decaying too, it is what nature

is, nature will always prevail against any attempt to hold off

nature through a human action, it just doesn't work.

It may work for a while, it may work even for centuries,

but centuries add up, this is what happens.

Yeah. Now Goldsworthy's concept of nature is similar to one held by

presocratic,

certain presocratic philosophers. And

presocratic, by the way, the word means

pre-socrates, so

the great you know trio of western thinkers, original western thinkers.

Socrates has a student Plato, Plato has a student Aristotle, they're very big, but Socrates is the big one. People often think that western philosophy begins with them, even though they know they're pre-socratic philosophers.

One of them, an important one, is Heraclitus. Heraclitus imagine nature like

a stream, this is another Goldsworthy installation, he puts this in there, and these are just leaves that have been sort of pinned together with little sticks, he puts it in a stream.

And why is he doing it? To make the stream visible.

The stream, in the sense of it's streaming, moving.

So this thing will nicely uncoil and move down the stream, but because it's so precariously put together with

you know leaves with little sticks, it
will break apart,
revealing of course that nature is
constant change.

So is this concept of nature clear?

It is very different than the way we
think of
nature, right? We do tend to think of it
spatially, like oh I'm going to go out
and
you know spend a weekend with nature,
and we think of nature as-, even if it's
just in a garden, if you go to a local
garden, you have a garden in your
yard,
you know it's still- we think of it as
a place, a thing. This is not the way the
Greeks thought of it, and
it's not the way Buddhism thinks of it
too, it's- in this case it is
a temporal thing, it is change,
nature is change, that's the simplest way
of putting it, it is
birth, growth, and passing away.

If not, go back again and consider watching that film 'Rivers and Tides,' it is a little dated, but it's worth watching. So Heraclitus.

Heraclitus is an early Greek thinker, he predates Socrates by a generation or so.

Heraclitus is most famous for something that really- for saying something that really

is relevant to this conversation.

Heraclitus said that it's impossible to

step twice in the same stream,

he believed that all of nature was in

fact an endlessly streaming stream,

wildly in flux, as everything everywhere

is constantly shifting across time,

no sooner does it come into existence,

then it goes out of being.

So. A stream becomes this

wonderful perfect metaphor of nature for

Heraclitus,

and the reason is because a stream is

constantly

streaming, constantly moving you can't

step into the same stream
twice because you know you pull your
foot out and you put it down,
well it's entirely new water there. By
the way, you know I-
for years I thought this is a very
profound thought, and
I noticed however when my young
daughter was watching the film
'Pocahontas,' the Disney film, that this
view
is explained by Pocahontas. She actually
sings the song about
this, and she is disagreeing with her
father,
who is of the mind that you can't
step
in- that the stream is always there. So
what does he mean,
and Plato takes this position too? Well
just walk over,
the stream's there, you can walk over to
the stream, you know if there's a river
near your house you walk over to the

river, the river is always there.

Well that's right, you can say it's
always there, but you can also take the
position, which is the Heraclitus
position,

it's not the same stream- not the stream,
same river,

the stream that you stepped in has
already streamed away.

In fact, Heraclitus has a student, Cratylus,
says that streaming is happening so
quickly

you can't even step into the same river
that even before you take your foot
out, it hasn't-

it's already changed. So this is the idea
that nature

is endlessly changing, which again is
what Andy Goldsworthy is you know
drawing our attention to.

Another example would be a rose, right,
that you know it's just a bud, it's a
perfect rose, then it's decaying,
or any of Goldsworthy's

installations like the ice sculpture.

It just has a moment, it's only in the

world for a moment,

if you think about it flowers are

constantly doing this you know,

everything is constantly doing this.

According to Heraclitus,

the Greek word, phusis, in other words,

what did the Greeks mean when they said

the word nature,

their word nature, phusis, they meant this,

that's what was being referenced by the

Greeks, that was their understanding of

nature.

Again not spatial, not something you

could go over and see or go visit,

but something that was always happening

everywhere,

and that is phusis, that is

Heraclitus's understanding of nature, and

arguably the presocratic Greek version

of nature. And why I say that

is, nature, the view of it that the Greeks

held, is about to change.

And who changes it? Well Socrates and
and Plato
so.

Yeah. It makes
you know less sense to talk about nature
spatially
than temporally in this way. So that's
why the Greeks,
when they referenced nature, while they
talked about it, because they thought
that was the most important quality of
nature. In other words, we might say
the most important quality of nature is
that it's separate from human beings,
well that's an odd idea, and we're going
to talk about the significance of that
in the-
what it means for us environmentally and
all. But for
the Greeks, you know if you
know you said look
tell me what is the most important thing
that makes nature
nature. It's not that it's separate from

human beings,
that is emerging in the West, and we saw
it even with the Epic of Gilgamesh with
the separation of
what's inside the wall culture and
without nature. But to the Greeks,
what was you know important is that it's
temporal, and what Goldsworthy is trying
to do
is reclaim that original meaning and
reveal it
in his work. Yeah Plato,
Plato and Socrates. Socrates doesn't
write anything,
and Plato is literate, and Plato writes
down
what Socrates had to say, mainly
in the form of dialogues that Socrates
had, which are
not exactly verbatim transcripts that
Plato is writing,
these are work too, they're literary
works, he creates them and imagines
them.

But Plato and Socrates are important because this is just a generation after Heraclitus writes that, that you know- that life- that this stream is always changing, that nature is always changing.

Plato redefined, and arguably he even deconstructed, and that means completely inverted the definition of physis, to no longer signal the process by which everything emerges and passes away, but rather to reference what never passes away, but endures permanently. So let me, let's get to Plato and see this here.

For him to do this, and we're going to make the jump now, he has to make a huge epistemological shift, a metaphysical shift. So for him to argue that true nature never changes, you can't do it in the physical

realm because everything in the physical
realm

changes. We even know this, right, our
theory of

you know big bang that happened 13
billion years ago,

all of nature is in flux, and has been
for billions of years and will be for
billions more.

So let's talk about Plato and see

what he's up to

because wow is it big, it changes western
thinking for good

in a huge way. By the way we read Plato
via this introduction to him

in Abernethy. I thought about giving
you Plato directly,

especially the central books of 'The
Republic,' or a dialogue like 'The
Parmenides,'

but it would have been kind of long, and
kind of difficult, and

I thought it would be easier on you just
to have this introduction.

So Plato of course was born in a world where phusis signaled flux, endless change and becoming (and passing away), he knows that, it's the definition of nature.

In fact, one of Plato's teachers is Cratylus, remember the guy who said you can't even step into the same river- you can't even step into the same river without it

changing instantly, that's Cratylus, one of Heraclitus's students. So there's a direct link between Heraclitus and Plato, it's just a generation separating them.

Although, Plato has this other teacher, not just Cratylus, but Socrates, and Socrates has a different approach, and well the two of them together Socrates and Plato.

Socrates and Plato argued that there must be something more than the ever-changing world that we apprehend through sense experience. In other words,

everything that we know, whether you see
it, smell it, taste it, touch it, or
whatever,
that's how you know. And of course,
since everything in the world is
changing,
your perception of nature in the world
has to be of change and of decay, it's
just the way that it's going to be.
Plato and Socrates, and for a range of
reasons and I'm not going to get into
them here,
believe that there should be something
apart
from that, something free of all that
change, a realm where this didn't happen.
And just to give you a little part of it,
they needed that, they thought they
believed- needed it
because for something like language to
work across
time, you know words should reference
something that never changes, so we can
always talk about a mountain when we

say the word mountain.

But even beyond that, Plato and Socrates have this theory of ideas, theory of a day, for things like beauty and justice, and they believe that these ideas never changed. In other words, a just act, what is the right thing to do is not culturally relative, doesn't change over time, but is always the same, murder is always bad no matter what. If that to happen for them, for that to be the case for them, they had to have something that didn't change, that like laws and all had to reference something that was beyond all this change, that was solid and never changed.

To do that, well let's jump ahead.

They postulated, and again, this is not religious belief, this is why it's eco philosophy.

They came up with the theory, an idea,

that there must be this immutable realm
where it's free of change, they called it
literally
the meta-physical realm. Where does our
word from
metaphysical come from? It dates back to
this,
and the idea that there is a realm
beyond nature. Beyond nature in what
sense? Beyond nature in the sense where
things
never changed, this was you know where
things were forever and forever
just as they are. If you were in this
metaphysical realm,
you would never change, you
wouldn't decay over time, you
would stay
youthful forever. If you took a rose
into this metaphysical realm
when it was blossoming, it would stay
perfect there all the time,
that's what they imagined, a realm like
that, that was separate and apart

and free of all these problems that
nature has of decay and all.

And this is you know

a realm not of becoming, and by becoming

and this is

their word, well it's- in Greek the word

is gignomai,

it means becoming the realm of change.

But instead,

they imagine a realm of being and that's

agathon, or ousia in Greek, and it means

never changing. So you can imagine- you

can see this is

not surprising coming out of

Greek thinking. And

why would I say that since the Greeks

believe that nature is all change?

Yeah, but look at the you know the person

on that building we saw decaying, look at

their statues and all,

there is a propensity in Greek thinking

toward

something fixed and immutable and never

changing,

and Plato and Socrates take that and
build it into a philosophy.

So again, in reference to Buddhism,
you know there's a celebration and a
full acceptance that the world is
changing, and

that will involve bad things you know
like decay

and disease, bad from the perspective of
human beings are getting old

and getting sick. But in

the Greek thinking, there was this sort
of defiant,

some might say almost arrogant desire to
hold back

change.

Yeah. So you think about it, this is

similar to metaphysical

theology in that they- you know they,

Socrates and Plato, imagine a

metaphysical realm that's

superior to the physical earth,

phusis. And in fact, what's so

radical is Plato, in fact, calls this

true nature. Okay, so what's going on here.

They imagine this metaphysical realm, it

is a metaphysical realm, it is

literally- I mean what the word means, it

is beyond nature.

Beyond nature, not in like a spatial

sense, but in a temporal sense, beyond

nature is constantly changing

and emerging. And that realm,

Plato argued, and this is a

deconstruction of reality,

he called that the true nature,

and this marks an incredibly important

deconstruction

in western thinking that will define

western thinking for

centuries to come. So you may have

thought that Plato

is this wonderful guy that

creates the original western philosophy

and thinking and we should all be very

indebted to him.

And just like we saw in the last lecture,

you could say the same with

Christianity,
people have looked at this, and
said well Christianity may have problems
environmentally,
and there may be problems with this too.
But think about what he does
here, it's rather remarkable because
true nature before Socrates
and Plato,
just a generation or so before with like
Heraclitus; Heraclitus is I know what true
nature is,
step in a stream, you'll see it at work,
nature is always changing.
Socrates and Plato say yeah yeah we know
that that exists, that realm of gignomai
of becoming,
but that's not true nature, real nature
is this metaphysical realm that we've
postulated,
real nature is metaphysical, it's beyond
the physical,
that's the real world. There's a parallel
here, right,

with Christianity and imagining a realm
beyond the physical, the realm of Heaven.

And this thinking will-

this Greco-Roman and

Judeo-Christian thinking on this regard

will link up like in the late

medieval period, like a scholastic

thinking, because they fit so well

together.

Socrates and Plato don't believe in this

metaphysical realm because of religious

conviction, because it's passed down in a

text like the Bible,

they do it because they reason it

through, this is logic at work, this is

philosophy,

but they still firmly believe that this

is a real realm.

And again, as arrogant as it may be,

Socrates says

that's real nature, everything that you

know that you can apprehend through sense

experience that you can smell and touch

and all,

this is all an illusion, and he
says that and you know in 'The Republic'
elsewhere, it's all an illusion, you
think it's real,
but it's not. He has an analogy, it's
the cave,
and the cave analogy is very
famous with
Plato, it's in 'The Republic.' And that is,
you are like a person who lives in a
cave, who spent your whole life in a cave,
and you see images, shadows, and all, and
you think that these images are
reality. But you have to do what Socrates
has done, through a sheer act of intellect,
step out of the cave and see true
reality, which is going to like
burst forth in technicolor and be
so superior to what you thought was real.
But what you thought was real was nature,
was
the reality, things that you can touch
and are real.
He's saying his reality is

not that, you can only apprehend it
intellectually,
so that's where philosophy, in some ways,
begins in the West.

And you know from an environmental point
of view, you can see here's kind of a
problem, if you're saying
everything here doesn't matter, that
everything here is an inferior copy, and
he says that in the closing book 'The
Republic' book 10,
that's a problem because I think
this is the real world here. And someone
says that they imagine
something that's beyond it, you know
I kind of wonder about someone who does
that, who actually thinks that this isn't
the real world.

And you know you saw someone in the
street you know
saying wildly about how you know
everything isn't real here, and it's you
know you're all being tricked into
believing it's real,

you'd think that's kind of well a little

bizarre.

And yet that becomes the way that the

West imagines its relationship

to nature, in a philosophical sense.

So this does get disclosed,

or people begin to realize what happened

thousands of years ago, but they really

don't do it until the end of like-

Well I've argued that you can see the

beginning of it in the early modern

period, and certainly in like the 19th

century with someone like Friedrich

Nietzsche,

but it's really in the 20th century with

the Martin Heidegger and others, like

Heidegger's teacher

that you see this emerging. And I'll

talk about what- I'm kind of

talking around the subject here, I'll get

to it

in a minute what I actually mean, but I

have to tell you something about

Heidegger first.

Heidegger was very active during the time of the nazis, and Heidegger's thinking does dovetail with nazi thinking at times, and Heidegger was- in fact he was made the rector I guess at Fryeburg University. 1935, if I'm remembering, he's appointed to leadership role in a university, a major university, by the nazis, so there's a problem with Heidegger. You know people debated back and forth, was Heidegger a nazi was Heidegger a nazi, I don't want to get into that debate, but there's certainly a lot of very disquieting parallels between Heidegger's philosophy and nazis, and I've written about this, so know that, and bracket him off. Heidegger is not a nice man, I think there are lots of indications that he just wasn't a nice man or a good

man,

but he does have some interesting things

to say that have a major bearing on this,

so let's you know bracket him off as not

a nice man,

but let's listen to what he had to say.

So 20th century, his main work,

'Sein und Zeit,'

'Being and Times', was written in 1927. He was

aware,

he obviously knows Greek and Latin, and

he studied for

Plato and pre-socratics very carefully.

He's aware that physis originally

signaled this idea of endless becoming

(coming into being and passing away) to

Heraclitus

and other pre-socratic thinkers, so he

knows just what

we know now. And he also knows that

Socrates and Plato

reversed this, deconstructed it, and said

that in real domain nature,

true nature, is metaphysical and has

nothing to do with nature
that we know. Heidegger,
and he made this deconstruction popular
or famous. And what I mean by that is, he
was the first person, 100 years ago, who
started saying yes very loudly then you
know we have to realize what the western
tradition
did, where it came from, originally
physis, nature, was something different
and
these guys completely inverted it, they
deconstructed it. In fact,
Heidegger in 'Being and Time,' section
100 if I'm recalling correctly,
actually uses the word, not the word
deconstruction, his word in German was
like destructure,
but he will become the philosophical-
he inaugurates what will become the
modern philosophical process of
deconstruction that
someone like Jacques Derrida will use. If
you know about deconstruction, this makes

sense, otherwise it probably doesn't. But he's the person who really inaugurated our understanding of deconstruction in a modern sense, arguably.

And he knew that this meant that we had shifted what we meant by true nature, and he calls this a metaphysics of presence, so not only is it a metaphysics, but he talks about it as-, and this is- and we'll see, in the West there's this preoccupation with presence, things that last forever that are always here.

Why this word present matters, and if you know about like Derrida's deconstruction, he's very interested in the play of absence and presence, because something is present now, but if you think of Goldsworthy's installations and the nature in the original Greek sense,

it will go away and be absent, that is
what nature is about.

Roses, a rose is present, then absent,
everything is in an endless play of
absence and presence.

Heidegger said that we in the West
became fascinated with
constant presence, that we don't
want to think about absence and presence
together, we just want to think about
presence. And you know this is why
Plato was so influential, because he put
an end

to thinking of nature as this play of
absence and presence, things being absent
were no longer absent- no longer present
absent,

and that that is what you know
originally that play of absence and
presence was called nature,
and Heidegger- and Plato reversed that.

Heidegger you know wanted-
you know saw this as incredibly
important, a big shift, and we should see

it as incredibly important
too, and we should be very clear about
what Plato did.
You can see though why Greco-Roman
thinking would merge so nicely with
Judeo-Christian,
in that this Christian view is that
there is a constant presence too, that's
the realm of God, the realm of Heaven,
and you know we can go there, and there
is you know
never-ending life there, that's what it's
about.

Thinkers had trouble, especially medieval
period, fully reconciling these two
systems because they are different.

And so one is
you know philosophical, one is
theological, but they did manage it
relatively well so.

Even though you know Christian
thinkers knew that
you know Socrates was 500 years before
Christ is born,

they felt that he was on the right way
of thinking, and he provided additional
support

to suggest that the world is in fact you
know an illusion, that the world that we
you know experience and are in,
this is not the true world or a true
home, there is something beyond that.

So it works well with western thinking,
but Heidegger wanted to make clear that
this is all something that happened, was
constructed.

Yeah. What Heidegger did next is
fascinating, he

argued that modern technology is the
completion of metaphysics,
that's an odd thing to say when-, I'll
explain what that means.

And to do so he considered a
hydroelectric power plant being built in
the Rhine

to follow Heidegger, it's interesting to
return to Heraclitus's streaming stream.

So.

What you need to know is, 1940s they were building a big power plant in the Rhine, major river in Germany. Heidegger was sort of an environmental protester saying well this is a problem, he did so for very- I think at the time surprising reasons, but maybe not at all surprising knowing now what you do about the nature of nature.

Is Heidegger clear here? I'm just curious because you know what he's doing is, he is deconstructing Plato's deconstruction. What I mean by that is, you know Plato inverted the view of what nature is, so that nature is not the nature that we know through our experience, but another nature, a true nature, a nature where there's no change, a realm, sort of an imagined realm like that, which has parallels to the Christian view of Heaven.

Hopefully that's clear, but if not, maybe it'll become a little more clear when we actually look at what Heidegger is doing by way of Heraclitus's stream.

So recall, we said a few moments ago- a few minutes ago, that you know a streaming stream is a near perfect metaphor for phusis, for nature, it's constantly streaming through time.

In other words, if you want to just give a person an example of it, you could use the example

that I keep coming back to, of the rose, and how it's you know blooming and then going away.

But you know point someone to a stream, walk over to a stream, and say ha there's nature right there, look, put your foot in it, take it out, put it in again, it won't even be the same stream because nature is always changing, always streaming, so even the word we use right, it is a

streaming stream,
the streaming of it is nature, the
change of it.

They are an apt metaphor for
physis, additionally, because you know
it reveals something about our
relationship to nature by way of that
change.

So say you know you are-,
and I gave this example in a previous
lecture, but I'll repeat it again.

If you live near a stream or a river, you
build your village there and all,
well it's not only that it's streaming
from moment to moment, but across seasons,
across

years, the stream changes, it's not
something you can count on. What I mean
by that is,

you know there's a huge rain, there's a
torrent, a flood, the stream becomes this
massive thing that could wipe away your
village.

In the summer, you're having a drought

like we had for years here, not that long ago in California, whole streams have gone away. In fact, in Santa Barbara here, if you look at something like the Mission Creek, which is I guess our biggest stream or river in the city, and for the most time it's not there at all, it's just a dry bed, and it only comes during the rains that we have here, which are seasonal, and not very great compared to other parts of the world. So if you think about it, it's kind of hard, if you're a human being, to deal with this nature in the fact that it's always changing. And a stream is a good example, I mean you need to be near the stream, it supplies water and life and maybe use it agriculturally and all. But on the other hand, yeah it's pretty hard to deal with in vexing. Yeah. You just can't rely on nature in this sense, and why

could you, because it's always changing,
everything is
changing. And something like the
drought that I referenced,
I mean that's physics at work. You
can't you know
we'd like to think that seasons are
pretty predictable, but they're not,
and now, as we're especially seeing you
know in our
era of the climate crisis, things are
changing wildly and unpredictably.
That's hard, that's hard if you
live near
something like this, because change is
always happening.
Heraclitus- or Heidegger rather has
a response to Heraclitus,
and more accurate, he argues that the
West has a response to Heraclitus.
So he sees this hydroelectric power
plant being built in the dam
as an effort to respond to this
frustration with nature by undoing it.

How does it undo it? Well if you know how a dam works, a dam literally stops the river from flowing and backs it up. And a big dam, if you look at something like the Hoover Dam or the Three Gorges-, Hoover Dam in the US and Three Gorges Dam in China, they create a massive reservoir behind the dam, like a big lake, and then the dam is allowed to slowly let water through. And how this can produce electricity, because when you let it through, if you have it passed through a turbine, it'll spin and create electricity, and you can create a massive amount of electricity, something like the Hoover Dam, or even more, the Three Gorges Dam, which is the the largest dam on the planet. In fact the Three Gorges Dam is so large that it aggregates enough water, that

when it was completed a few years ago,
the earth is slightly wobbling
on its axis because the mass of the
planet has
changed. But if you think about it,
this puts an end to physis in some sense,
in at least Heraclitus' sense. What I
mean by that is,
you stop the stream from streaming, you
create a stream
or a river into a reservoir, and then
you are not caught in
the cycles of nature, the change of
nature,
and you don't have to put up with the
problems. So look back
to the Epic of Gilgamesh, you know
Gilgamesh's frustration, he wanted the
resources of that
forest and he cut it down to get them.

Well

we also have used resources like
rivers, in fact you know most cities,
traditionally in history across the

planet, are built near
you know water. We've been frustrated
with it, but
here we've come up with the way by
building a dam like this, people have
built dams for thousands of years, but
this is a huge one,
of putting an end to it. We control the
stream.
Stream, yes it still streams, but it
streams when we want it to.
If we want it to come out a little,
or a lot, or we want to convert that into
a perfect stream,
so we don't have to worry about you know
floods, we don't have to worry about
droughts,
we can do that, it's constantly present.
So in other words, using Heidegger's word,
presence,
the problem with the stream was you know,
like the Mission Creek here in Santa
Barbara, most of the time it's absent,
there's no stream there, nothing's

streaming along. Other times
there- it can actually cause major floods,
even that stream,
that's the play of absence and
presence, we've had to accommodate
ourselves to that as a species,
but we found ways of undoing that, of
making it
constantly present, and the reservoir is
an example,
the stream is now totally under our
control.

We control the stream, literally in the
sense

that we control the stream of water
going out, we control it
to the exact gallon per minute that we
want, the stream
is yeah now constantly
present, it is not present and absent, it
is what we want it to be.

Heidegger suggests that you know with
Plato

and Socrates, we had this deconstruction

of metaphysics, where we
very much like the idea of not being
caught up
in the endless cycles of nature, we
wanted to be free of all those problems.
And the only way Socrates and Plato can
do that is imagine
a realm free of it, but that's
just an intellectual
imagined place. To Heidegger,
we've actually enacted that, Heidegger would
argue that the West has been intent on
enacting that for
thousands of years, ever since Socrates
and Plato.

Can we actually do it, can we actually
make a metaphysical realm beyond this,
another dimension or something? Well
not yet anyhow, maybe quantum physics
will do it one day who knows,
kind of doubt it. But what we can do is
come up with ways
of not making the world
endlessly changing in the same way.

And think about it, the Greeks have been in the business of you know- we've been in business wanting to do this ever since the Greeks, look at the you know the Parthenon again, this building made out of stone and marble and all, it's intent not to change, that's the idea. And Heidegger argues that the dam is a really good example of it, and it's such a good example because it actually uses Heraclitus as example, it controls the stream, the amount of water streaming and all. We are no longer caught up in the ravages of time, we completely have control of it, and you know this is us not accepting change, not accepting nature as it is, but making it more constantly present, using Plato's words, less a realm of becoming kingdom I, but more

realm of eternal
being to own rusia, where nothing ever
changes,
free of the ravages of time and phusis.
Of course, literally the you know
the reservoir is not a metaphysical
entity, it's not like
Heaven, but it's imagined
as coming closer to that than the
ever-changing river.
So okay, here you have a river, Heraclitus
see that's a perfect example of nature,
it's always streaming, it's always
streaming, and
moreover you know sometimes the
stream won't be there, sometimes it'll be
a tourette, what a good example of nature.
And you know someone could come along
and say yeah well guess what, I can
modify that through you know technology
to not be such a good example of nature,
to be a great example of something else,
which is our ability to convert
something into a constant presence that

doesn't change.

In that sense, the- you know

Heraclitus's point, which is well taken,

that the streaming stream is an

excellent example of phusis,

Heidegger's counterpoint is the reservoir

is an excellent example

of our desire to enact thing- to make

things more metaphysical,

and to not want phusis.

Metaphysical, in the sense of being

beyond nature, beyond the ravages of time

and change,

and the reservoir in a way, is just a

good example of that.

So you could think about this if Andy

Goldsworthy were to

you know to carve one of his serpentine

ice sculptures

out of marble, it would be kind of the

same thing, it would be an

effort to make it endure, to bring it

under

control, or to pull it out of nature,

to pull it out of you know endless
change in physis.

So Heidegger argues, incidentally, that
the quest for this metaphysical
sort of existence in our physical
realm

is a key feature of technological
modernity.

So another example, a prime example, would
be fossil fuels.

So you know the sun's energy-, let me get
out of the scene here for a minute.

The energy of the sun comes down
in a very sporadic way, right. What I mean
by that is of course

you know sun days, like in the summer,
it's incredibly powerful, the sun, you're
getting a

ton of insolation incoming solar
radiation. Other times, like during
your night, you get zero solar radiation,
and other times in the middle,
you know on a cloudy day or partly
cloudy day, you have some sun some not.

If you were going to try to use solar energy

in a constructive way for human beings, this would be a problem.

Why? Because it's caught up in the endless play of absence and presence, totally present on a sunny day, totally absent at night.

If you're trying to heat your house with this, not just

with this, it would be a problem. So I'm looking over in my garden,

20 feet over there is a little

greenhouse that I built. And I can tell

you in fact if you lived in that

greenhouse,

it would be unpleasant because

sometimes

they have a thermometer in there, and I

have to watch it, I have to make sure the

doors are open and a

top window is open because it'll get

very hot, it'll get- my thermometer goes

up to 120 degrees,

it'll go way beyond that. On the other hand, even on a hot day where it got to be over 120 degrees in there when the sun was shining, at night, it can be very cold in there. If you had no way of storing that energy, and storage is what would be key here, then you know it would be very difficult to survive with solar energy- to rely on solar energy, you just can't rely on it as a constant presence because it is Goldsworthy's insulation that's constantly changing. You have to have a way of storing it, and that's one of the great challenges of like solar energy, and all renewables right now is: how do you store it?

Batteries are an example. You can actually store solar energy in the sense of heat light for buildings, like with passive solar

energy buildings,
by having thermal mass in the building,
so you can have ways of
storing it by having like large stone
mass in the building,
and you can block the sun coming in, you
can pull shades down and all that.
So there's strategies that can be done,
but if you think about it, these are all
attempting to put an end to the play of
absence and presence.

There is a way, however, to use fossil
fuels and
never worry about it- to use solar
energy, sorry I let the cat out of the
bag there,
to use solar energy and not worry about
any of this,
and that is fossil fuels. What
are fossil fuels?

Fossil fuels are
plant and some animal material,
principally plant material from
hundreds of thousands- hundreds of

millions of years ago,
that are in existence. Because
of photosynthesis, solar energy
was captured
and converted into plant material,
which like wood, is like half of it is
carbon.
And for reasons, we'll talk about in
another lecture,
it became fossilized over the millions
of years, and if you pick up something
like coal,
or oil, or so-called natural gas (methane),
it's a great deal of
carbon there, and you can burn it.
But if you think about this in the big
picture, what happened was solar energy
came to the planet,
and that solar energy
was stored in the plant material and
ultimately fossilized. So
when you burn a piece of coal or any
fossil fuel, you are
releasing that solar energy, that energy

was stored there

by virtue of what the sun does,

which is pretty cool.

But if you also think about it, it puts

an end to the problem of the sun's

constant absence and presence thing. And

what I mean by that is,

go now over to you know your wall

and click your light switch, and when your

light comes on,

that is fossilized solar energy that can

be deployed

whenever we need it, whenever we want it.

So

if everyone clicked their light on, the

demand would go a little higher for

electricity and a power plant somewhere

would start burning more natural gas.

If you're in California, or in other

parts of the country, it could be

burning coal or something.

So it is solar energy,

fossil fuels are in the sense that

that's how it got there, it's the energy

of the sun that is actually stored
in fossil fuels. But we love it
and we build our culture around it
because we don't have to wait
and worry about it changing, it is
just like the reservoir...
excuse me...in the sense that it is not
you know changing all the time like
the sun,
you know stopping when a cloud goes by
and all, you have it all
in its pure form whenever you want it,
which is why we like it.
And the challenge for our culture today,
with renewables,
is how to get around that. Everyone says-
you'll hear them say that the challenge
is how to figure out you know storage,
you know whether it's batteries or in
some other way.
Yeah that's true, but something to think
about is what if you imagined a culture
where you accepted the fact that you
didn't have energy

all the time. And we've done
this, right, so it was something like you
know washing your clothes and
drying them. Traditionally, people put
their clothes out
on a line to dry, but you can only do
it on sunny days. If you want to you know-
put that another way, if you want to dry
clothes, you had to accept the fact that
you're caught up in the endless play of
absence and presence that is the sun's
energy,
and you could only- you know don't
go ahead and wash your clothes on a
rainy day because you're not going to be
able to dry them, wait you have a nice
sunny day, it looks like it's going to be
clear most of the day,
and quickly dry your clothes then. In
that sense, you have to accommodate
yourself to nature, right, in the sense of
the vagaries of what's happening.
We don't want to do that, we want to be
able to dry our clothes 24/7,

anytime, anywhere, and fossil fuels have allowed that to happen.

Just something to think about, maybe we need to rethink that, we'll talk about examples as we go on by this point.

The sun's energy is like Heraclitus' stream, right, in the sense that it's streaming down all the time, coming out of space, and sometimes it's just the right amount.

You may you know have had the experience in your house, without any you know heating or cooling on, that you know one room was just perfect, you know you open the window and the temperature is just perfect, because the sun is coming down, you know the temperature outside is just right.

That may not last for too long, because then it you know may get colder. It could happen, you know the sun could be, not so much in

Santa Barbara here but in certain
locales if we were
up the coast a little like in Portland,
where you know a week or more could be
without the sun
showing itself at all. So it's
very much like the river, right?
Sometimes it's like the river when
it's all dried up, it's absent,
in Portland it can be for more than a
week like that,
or it's you know overbearing,
it's just in the middle of the summer
where you get nothing but sun sun sun
and you get you know a real heat wave.
Yup. And you know Heidegger calls
fossil fuels standing reserve, it's his
phrase,
derbashtand in German, and it means
stockpiled, held in reserve, ready to be
deployed. So it's imagine, like people needed,
it's like standing there, waiting to be
used, or you have it like stockpiled.
So and again, this is different than a

stream, where nothing is stored, but exactly-, and this is why Heidegger likes his reservoir metaphor, exactly like a reservoir, where it's standing in reserve, waiting to be deployed, and if you're the person working the valve that that supplies that generator and letting the water in, you can use it exactly the way you like. Heidegger argues that this is what western metaphysics has always wanted, you know we couldn't actually create a metaphysical realm like Heaven, but we could do this, we could take human beings into an era where nature and all wasn't always changing in the same way, at least in a way that was difficult for us, but we've rather created a realm where things aren't changing very much at all. In this sense, you know our love of

fossil fuels is
metaphysical, metaphysical, where it points
to the fact that we
want to get beyond physis in the
sense of change,
it's a frustration with physis and
change.

Yup. Heidegger took it even further by
arguing that you know
not only your so-called natural
resources being stockpiled,
but human beings are too. And so Heidegger's
way of looking at this is kind of like
we created this sort of whirlwind, and we
got a little too close, and we got sucked
in ourselves.

And the notion here is that you know the
standing reserve,
Bestand, is that
we ourselves are like that. So in other
words, you know
not only is water held in a reservoir,
people are all lined up in a factory
waiting to be deployed exactly, you stand

at your point in the
you know factory, and you do exactly what
you should do at the time, you're
doing, and you're created into a resource
too. And you know we know you'll be there
because you have to go to work, and be
there eight hours a day, and working
exactly at the right time, and you're
really no different than that reservoir
or those fossil fuels.

That's his argument, and a guy
named Michel Foucault
will pick up on this and talk about
this in great deal about that's
been the project, the implication,
and the impact of the project on human
beings is that
we were caught up too, and we are now
called upon to be a constant presence in
the project.

Office workers and cubicles are another
example that you know
you're there to do exactly the thing
that you're doing at the time,

you can't just work whenever you feel like it, you can't work when the mood strikes and things like that, you have to be a constant present. Anyhow that's the argument, and for a lot of people, like Foucault, yeah that's pretty disturbing. Although, Foucault was enormously influenced by Heidegger, but another person who would be Hannah Arendt, in fact Heidegger's student. I thought there's a scandal there because Heidegger had an affair with her while he was married, when she was quite young actually, as an undergrad, but that's not quite relevant to what we're talking about. She agreed with Heidegger in many respects, but realized and drew the point, that you know Heidegger says this is the completion of metaphysics and all, this is what Plato you know where he was leading us, and we're finally there.

But she said you know that this has been happening for thousands of years.

And you can see this, right, even in the myth of Gilgamesh, we see the mention of bread and grain, I haven't talked

about it- I didn't talk about it then because it wasn't quite relevant to the theme of that lecture,

but this was a major technological innovation in that period, and it's major to like the

Egyptians as well. Because what it means is, you know

people talking about absence and presence, well you know if

you know how seasons work agriculturally, sometimes

there are wonderful bounty seasons where you get a

ton of you know fruit and vegetables and all, and

other years, like during droughts, you get very little.

And for- your human beings and you're

trying to live in a culture
that is you know accommodating this kind
of change,
that can be a real problem, and you know
starvation
and famines have marked human history
for this reason.

But what an innovation certain products-
certain
plants were, and arguably
they made possible the beginning, and
sustaining, of western civilization. What
I mean

is, you know thousands of years before
the Epic of Gilgamesh, people in that
region of the world
began eating the seeds of plants and
grains, which could be dried and stored,
not for days or weeks or months, but
actually
years. And what happened, in case
of Egypt, I mean they literally had
vast granaries, where grain was stored
for multiple years so that if you

were caught up in the cycles of nature,
just like the stream where you're in
the middle of a drought,
well you'd be in the middle of a famine
because, it's not that there wouldn't be
enough water, but there wouldn't be
enough food being produced by the plants.

Even if you're doing- practicing
agriculture, so if you're not just
you know hunting and gathering, but if
you're actually you know planting and all,
you still might not get the yield you
need.

But not to worry, because you could have
a constant presence of food that would
be stored for
a year or more, and you could tap
into those reserves.

We still do that today, the US maintains
massive stores
of grains for this reason. And Arendt
said well
yeah Heidegger your dam is a good example,
but you know there are others examples

like this

that- let me get out of that picture

again, sorry I don't mean to block things.

They're other examples, this has

always been what human culture is. So yes,

there has been a western propensity

toward metaphysics ever since Plato

and Socrates where they made an

explicit. You know think about the very

fact that Greeks before them were

building these stone buildings trying to

hold off indicative of time.

Arendt argues, and she would see this

cross culturally, so not only in the West

that we're looking at, but everywhere,

this is basically what human beings are,

we are people who like this notion

of constant presence.

And I would note, before I jump to that,

that Arendt actually says that you

know the only people-

the only human beings deserving of

the name human,

she calls them

homo faber, which means....

she calls them yeah homo faber sorry....

which means man the maker,

or human beings as maker. The

only people deserving of the

the name "human" are those that do this,

that that interrupt the cycles of nature

and hold on to constant presence.

Those earlier human beings, or even

people who are alive today in cultures

that don't do that, who exist through

like hunting,

and like gathering, and things like that

and don't hold off nature, but allow

themselves to be part of it.

Arendt says yeah they're barely

human,

she calls them laboring animals, it's

very harsh characterization by the way,

should make you cringe. I don't think

people who don't practice this are any

less human. In fact,

you know the argument that we're

deploying here is that this

fascination with constant presence, and
you know idolization of it, and
working so hard to create it in our
culture, is not necessarily
a good thing because it means you know
that centrally, from our point,
environmentally a disruption
of nature. But it does raise a question
then you know.

Is this what makes us human, the fact
that we can intercede in nature, that we
can stop nature from its temporal
endless change, whether by building a
reservoir, or by stockpiling food, or by
other things?

I'm not so sure. In fact, I'll give you a
counter example, and we can end on this.

That you know there's been a
fascination, since

really 1970s or so, if you're here in
California

you know it especially, fascination was
like the slow food movement.

The slow food movement is an effort to

kind of knock us out of this thinking.

So instead of you know going to a store

where you can buy something like you

know bananas

365 days of the year, where they

literally have to be brought in from the

other

half of the world, literally the southern

hemisphere. In the winter, they're brought

here-

when it's- in the northern

hemisphere, when it's winter, they have to

come from the southern hemisphere, where

it's summer so we can always have

bananas. And if you go to your local

supermarket, you can always have bananas,

they're available

whenever. But the slow food movement says:

but why do we need to do that?

Why can't we celebrate being caught up

in the cycles of nature? Why can't we

celebrate

seasonal food? Why can't we just eat-

now when I'm- the time I'm filming this

you know stone fruit are
in California, our local
seasons, why don't you just eat stone
fruit when you have it?
Only lasts a few months, but then you
know when stone fruits over, there'll be
something else, and then true enough
apples will be coming in then,
and they'll be great. So you accept
that you're caught up in the cycles of
nature, you
celebrate that, you enjoy the food, you
see it as a gift-, and we'll talk about
this
next lecture really, as a gift of
nature and all.
So yeah. But anyhow,
hopefully you get the idea
that we're looking at a different way of
approaching nature here,
that this is nature, again not spatially
like a place you can go,
but it's caught up in time. And that this
does have profound implications, whether

you just accept it
with something like slow food, even
celebrate the changes of nature,
or whether you resist them, and we're
going to see
how all this thinking comes together in
the next lecture. And by that I mean the
Greco-Roman, Judeo-Christian,
and the true implications of all this
metaphysical thinking,
the beyond nature, the postulating beyond
nature and trying to get beyond nature.
We're going to see how all that works,
and the
implications that it still has for us
today.

So looking at the clock here, sorry it
went kind of long today,
but it was a lot to cover. Okay.