



The Journey School 2023
Remembering Our ...

Evolutionary Journey

September 28, 2023



Aims

First and foremost, this is a story of **BECOMING**; becoming, always becoming.

- Scale for the human story - food for all three centers here
- Suggest connections between biological evolution and the traditions of the Work and contemplative Christianity
- Stir towards wonder, curiosity, **JOY** at the marvel that is us within the unfolding of our Ray

$$\text{Evolution} = \frac{\text{Change}}{\text{Time}}$$

Evolution itself is not forward-
looking; it is about what works
NOW.

Chris Stringer
Physical anthropologist



Biological Evolution:
Expression
of the Law of Three

First force (*affirming*):
life strains towards greater complexity

Second force (*denying*):
external pressures, physical or social, applied to organism
by environment

Third force (*reconciling*):
natural selection finds adaptations most suited for organism's
success

Biological Evolution: Expression of the Law of Three

“The universe, earth, life, and consciousness are all violent processes. The basic terms in cosmology, geology, biology and anthropology all carry a heavy charge of tension and violence. Neither the universe as a whole nor any part of the universe is especially peaceful. As Heraclitus noted, conflict is the father of all things.

The elements are born in supernovas. The sun is lit by gravitational pressures. The air we breathe and the water we drink come from the volcanic eruptions of gases from within the earth.”

Thomas Berry, *The Dreams of the Earth*

“For we know that all creation groans together and labors together in birth pangs, up to this moment ...”

Romans 8:22

So what is evolution from perspective of the
Work and the Law of Three?

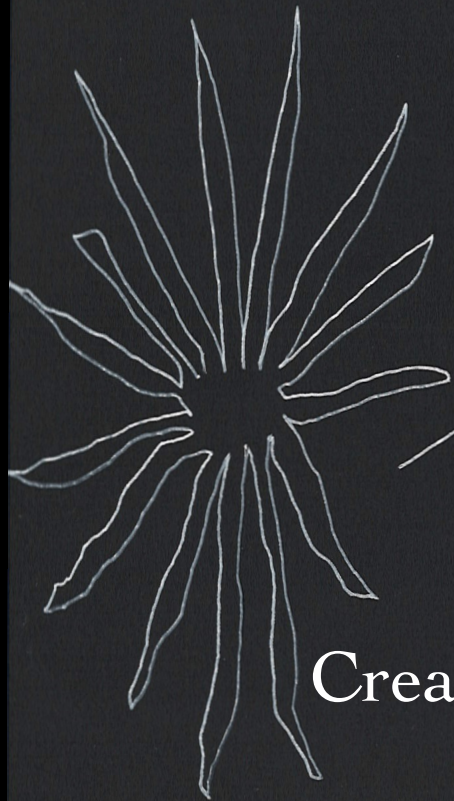
Evolution as dynamic process,
continually in motion

All is fluid, nothing is changeless

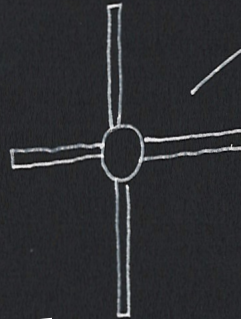
The universe, the earth, our species is an act of becoming!

Evolution as Cosmic Becoming:
From Glory to Glory

LET THERE BE
LIGHT

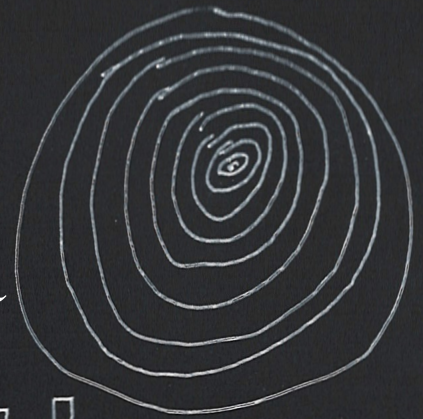


Creation



Redemption

Parousia



GOD WILL BE
ALL IN ALL

Evolution as Cosmic Becoming

Redemption

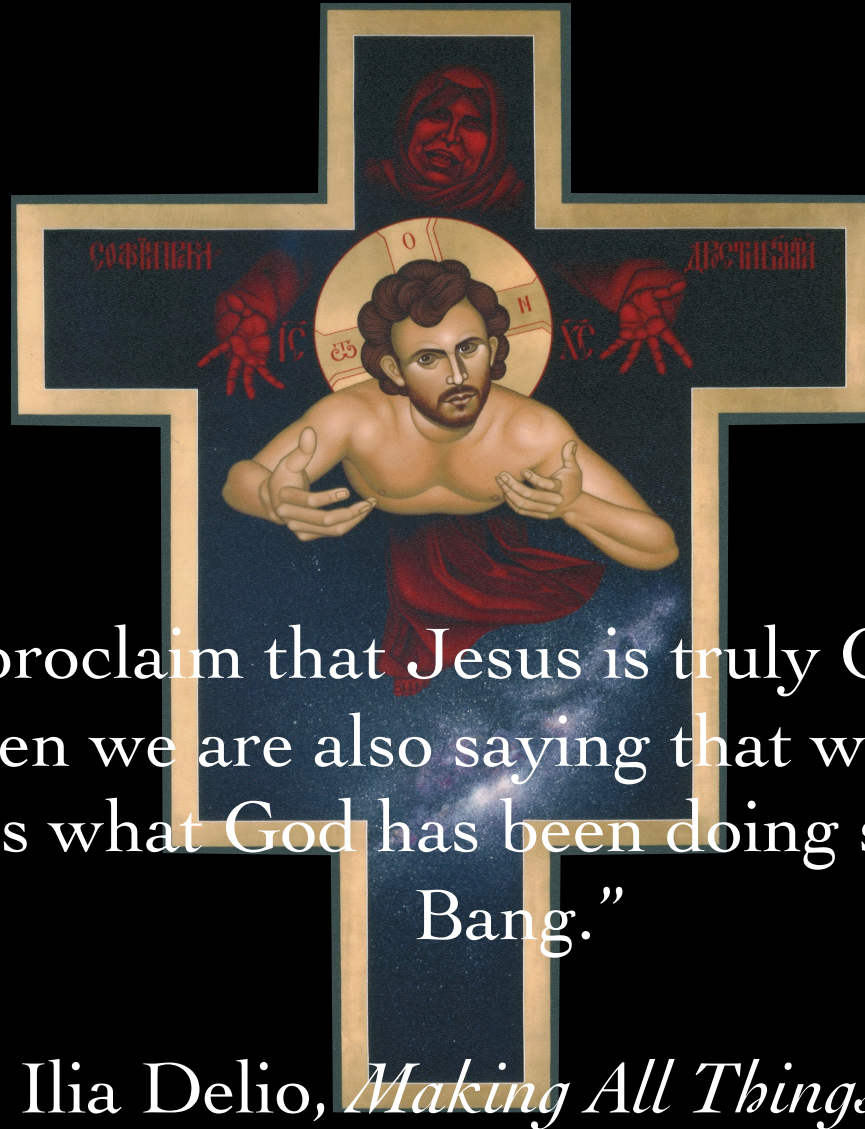
A
Creation

Ω
Parousia

I am the Alpha and the Omega ...
who is and who was and who is to come.

Revelation 1:8

Evolution as Engine of Cosmic Becoming



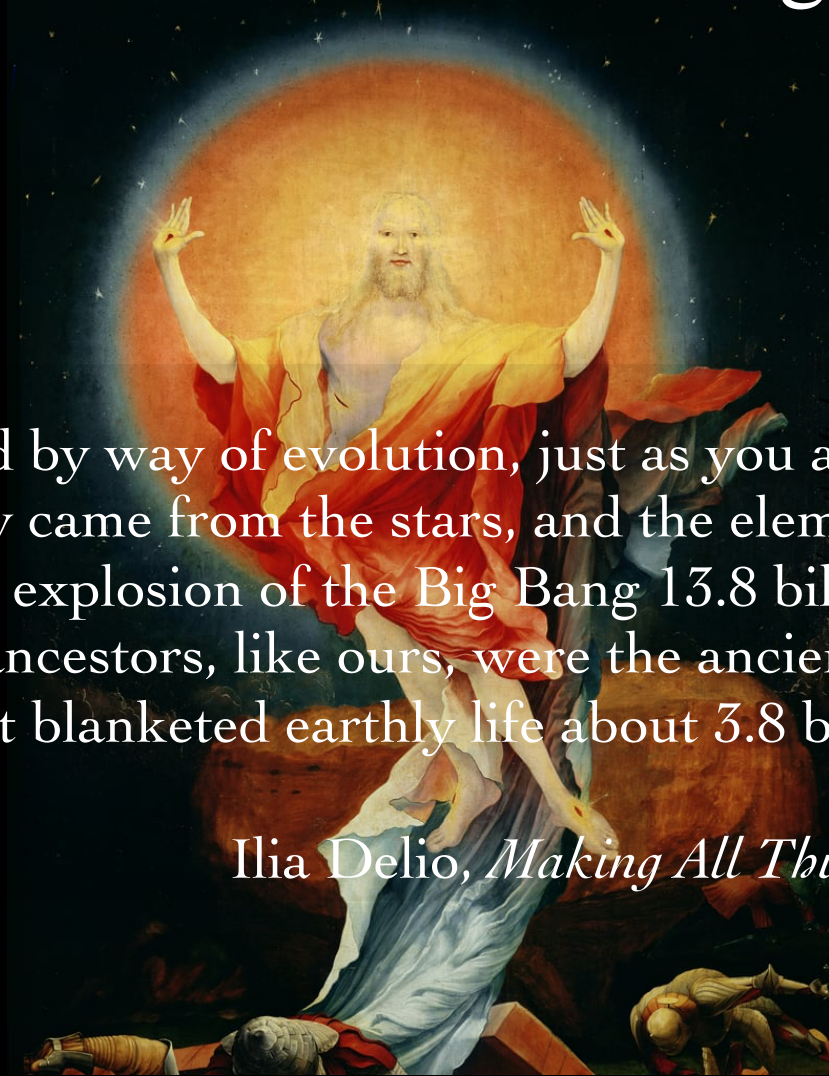
“If we proclaim that Jesus is truly God and truly human, then we are also saying that what God does in Jesus is what God has been doing since the Big Bang.”

Ilia Delio, *Making All Things New*

Evolution as Engine of Cosmic Becoming

“Jesus emerged by way of evolution, just as you and I did. The carbon in his body came from the stars, and the elements in his blood were first in the explosion of the Big Bang 13.8 billion years ago. His distant ancestors, like ours, were the ancient primitive cyanobacteria that blanketed earthly life about 3.8 billion years ago.”

Ilia Delio, Making All Things New



The Resurrection of Christ (Isenheim)
Matthias Grünewald

Evolution as Cosmic Becoming: Catalyst for Anticipation and Hope

“Anticipation trusts that something of imperishable significance is going on in the universe, but that we can encounter it now only by patient expectation.”

John Haught
The New Cosmic Story

“For one who sees the universe in the guise of a laborious communal ascent towards the summit of consciousness, life, far from seeming blind hard or despicable, becomes charged with gravity, with responsibilities, with new relationships. Sir Oliver Lodge very justly remarked not so long ago that, properly understood, **the doctrine of evolution is a ‘school of hope’.**”

Pierre Teilhard de Chardin
Hymn of the Universe, Pensees

“But if we hope for what we do not see, we wait with endurance.”

Romans 8:25

So what is evolution in this story of cosmic becoming?

Evolution as redemption in motion:
movement in time towards the not-yet

Evolution as prayer of the universe:
“Thy kingdom come”

Evolution as belonging:
we carry cosmic history in our bodies

Glory be to the Father,
and to the Son,
and to the Holy Spirit.

As it was in the beginning,
Is now,
And will be forever.

Amen.



“... I could see Sandia Crest from my writing desk, and for the first time in my evolutionary meditations, I began to tie up my personal existence with the people who, now extinct, built their hearthside here, hunted and prayed here, lived and died here ... it began to dawn on me that the evolution of *Homo sapiens* was *my* unfolding; that the hominid prehistory was *my* story. For the first time, I became aware of my spiritual continuity and solidarity with early mankind. They were no longer ‘those primitive creatures’; they were ‘my people’.”

Raymond J. Nogar, O.P., *The Lord of the Absurd*

Where did we arise in time?

13.8 billion years post Big Bang
4.54 billion years post formation of the Earth
Homo sapiens appeared only 200,000 years ago

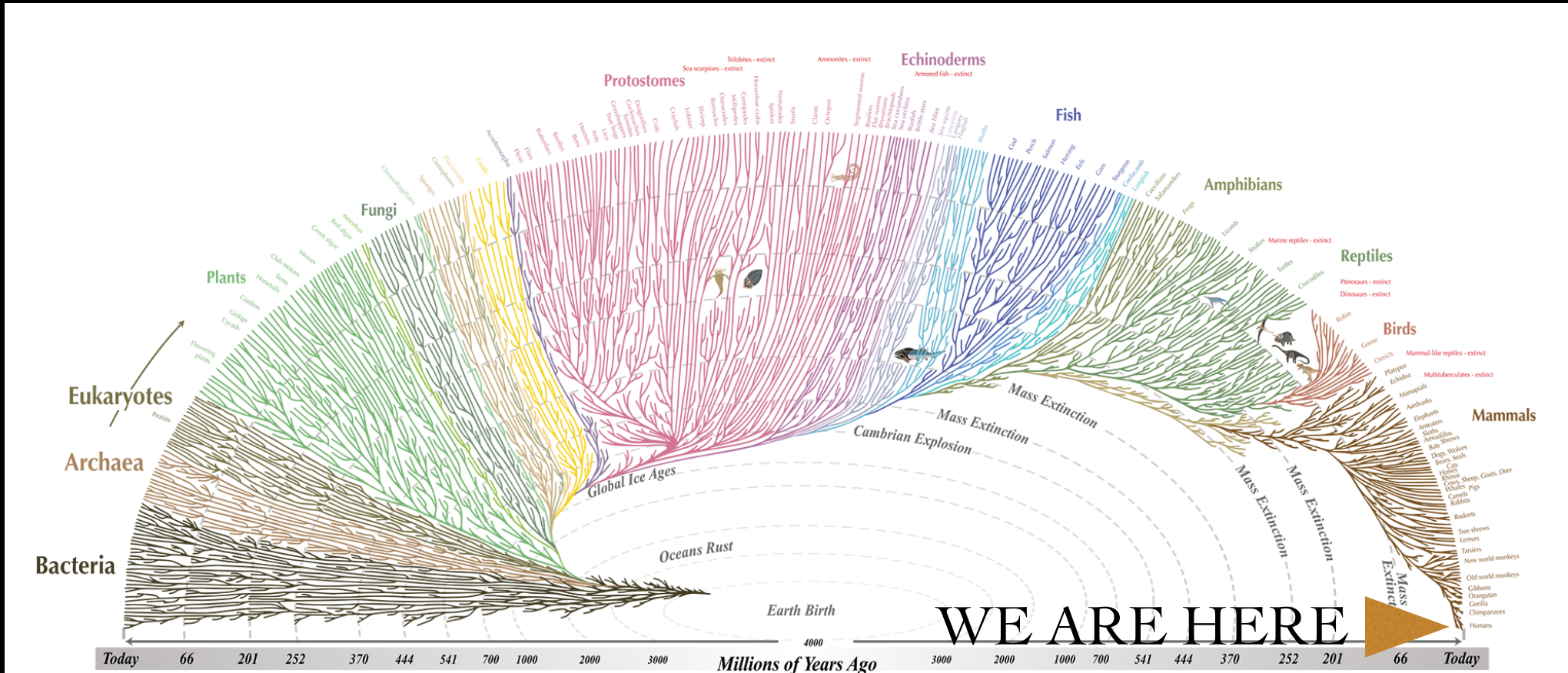


Where did we arise in space?

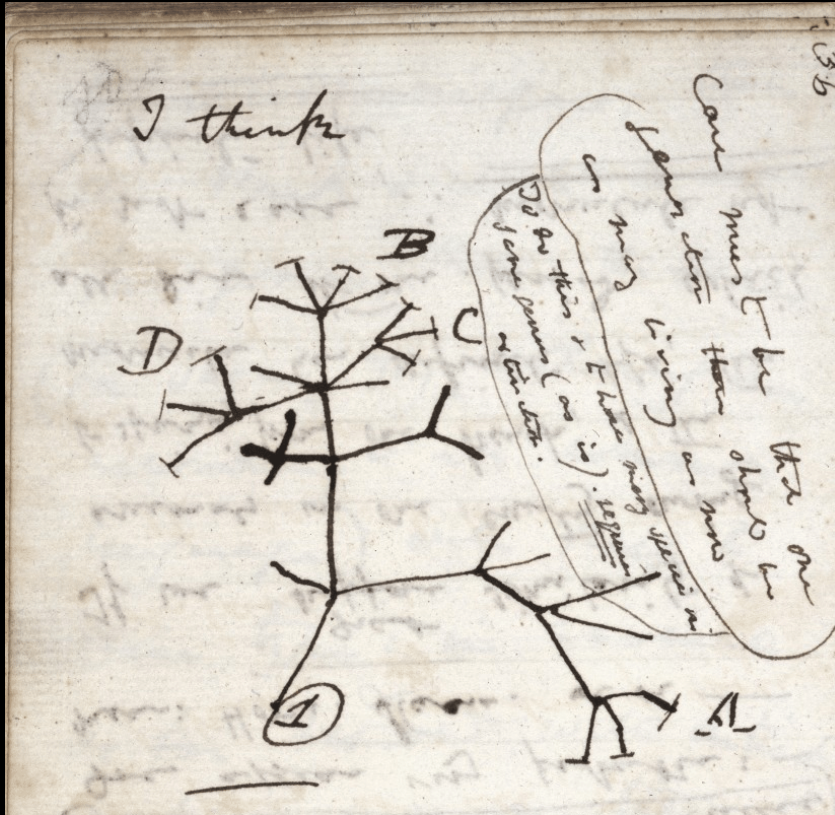


“Africa is the birthplace of humankind. This is where our collective umbilical cord lies buried.”

Evolution of Life on Earth



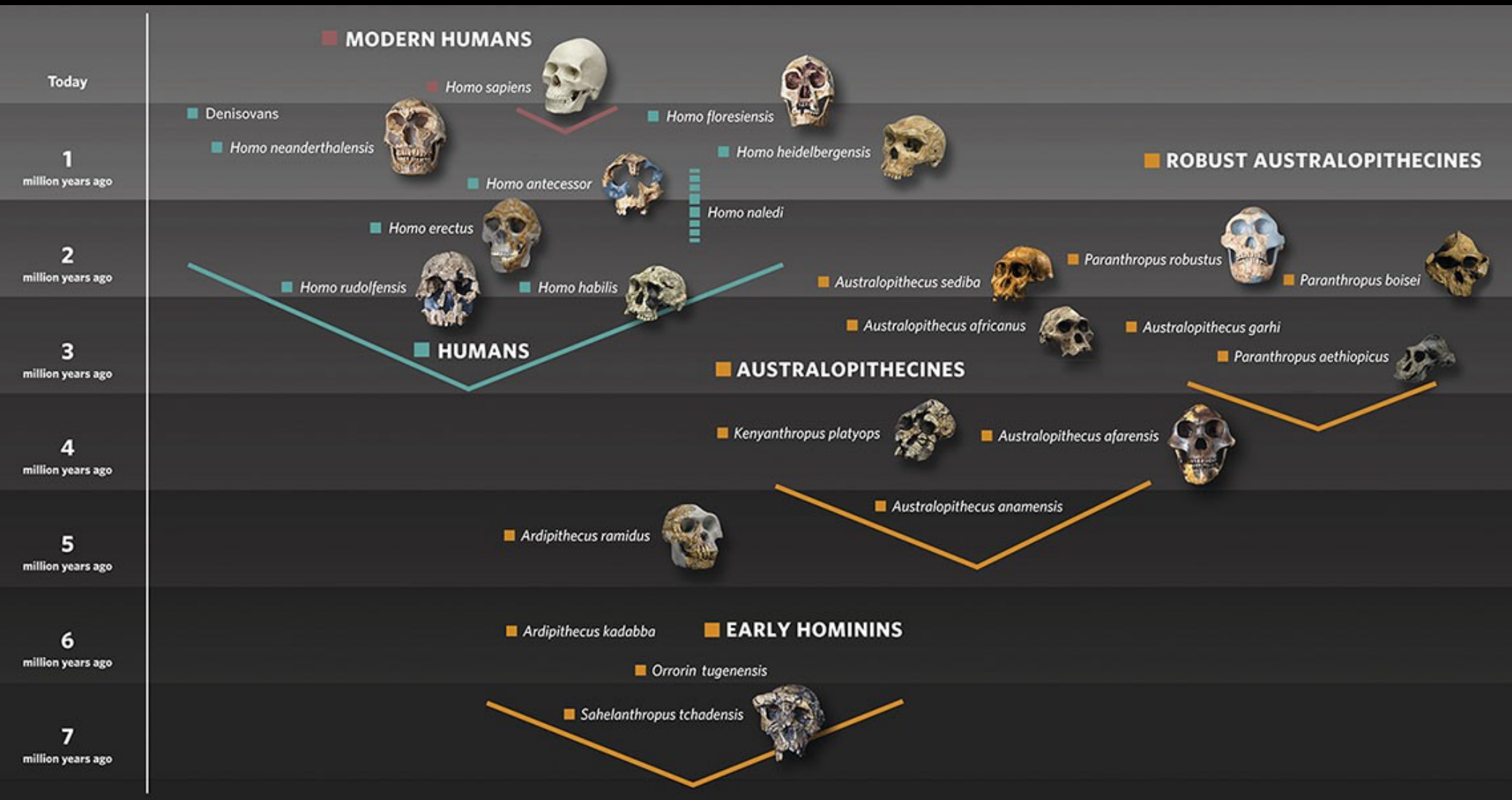
Our “address” on the Tree of Life



Charles Darwin's first sketch of an evolutionary tree of life (1837)

Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Primates
Family: Hominidae
Genus: Homo
Species: Homo sapiens

“Recent” Ancestors



Bipedalism, Bipedalism, Bipedalism!

- *Homo* is only living genus of bipedal mammals.
- THE key innovation for our species.
- Adaptations that enabled bipedalism to arise: descent of spinal cord from back of our skulls, long, flexible spinal column, sideways facing pelvis, knees angled under hips, arched foot

In learning to walk upright, we are
suspended between heaven and earth; feet
on the ground and head in the heavens

Australopithecus afarensis
3 million years ago

Tanzania, Kenya, Ethiopia

Features:

- Small body (male 4'7"); long arms, short legs
- Powerful jaws for chewing tough foods
- Wide/tall faces with forward-facing cheekbones
- Widely spaced hips
- Stiff foot with partial arch
- Short big toe in line with other toes



Homo habilis, female
2.4-1.4 million years
ago

Tanzania, Kenya

Features:

- Australopithicine body (small)
- Large and thickly enameled cheek teeth
- Rounded skull without snout
- Larger brain than *afarensis*



Reconstruction by John Gurche



Reconstruction by John Gurche

Homo erectus

1.9 million to 200,000 years ago

Originated in Africa; spread to Europe and Asia by 1.6 million years ago

Features:

- Modern-shaped feet, legs and arms
- Smaller teeth (indicates change in diet)
- Larger brain than *habilis*
- First ancestor to be identified as largely “human”

Homo heidelbergensis, male
700,000 - 200,000 years ago

Africa, Europe

Features:

- Like *erectus*, long, low skull with massive brow ridge
- Larger brain than *erectus*
- Large face and nose
- Large body (estimated weight: 150 lbs)



Reconstruction by John Gurche/Smithsonian Institution

Homo Neanderthalensis
200,000 - 30,000 years ago
Europe and Asia

Features:

- Large brain (equivalent to or larger than ours)
- Massive face
- Muscular and stocky with short forearms and legs
- Skilled and intelligent hunters





Steve Evans
Thailand, 2007

Homo sapiens
200,000 years ago to present

Everywhere

“Be fruitful and multiply, and fill the earth.”
Genesis 9:1

“the not-quite thing that is the human self”
(Rowan Williams)

In our genome, we record the contributions
of our ancestors, both those of recent
memory and those lost in deep time.

We are not alone, even in our own bodies.

The Curious Case of *Homo naledi*

*Rising Star Cave System, Dinaledi Chamber
near Johannesburg, South Africa*



Mark Thiessen/National Geographic



Berger et al., 2023

Glory be to the Father,
and to the Son,
and to the Holy Spirit.

As it was in the beginning,
Is now,
And will be forever.

Amen.



Homework

- Pick a quiet moment, listen to *“The Extinct Human Species Found in Remote Cave Chambers”*, a PBS Eons podcast about the wonders of God’s work in our Ray.
- Perhaps at another quiet moment, view *“On the Road with Thomas Merton”*. “We must realize that the love of God seeks us in every situation ... the contemplative turns to God to be created.”
- Unite Heaven and Earth within our very bodies: each morning this week, as part of your morning practice, pray the “Glory Be Prayer”, a sensation exercise.