

Creatio continua
and **Evolving into**
the imago Dei

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“For now we see only a reflection
as in a rearview mirror; then we
shall see face to face.” (1
Corinthians 13:12)

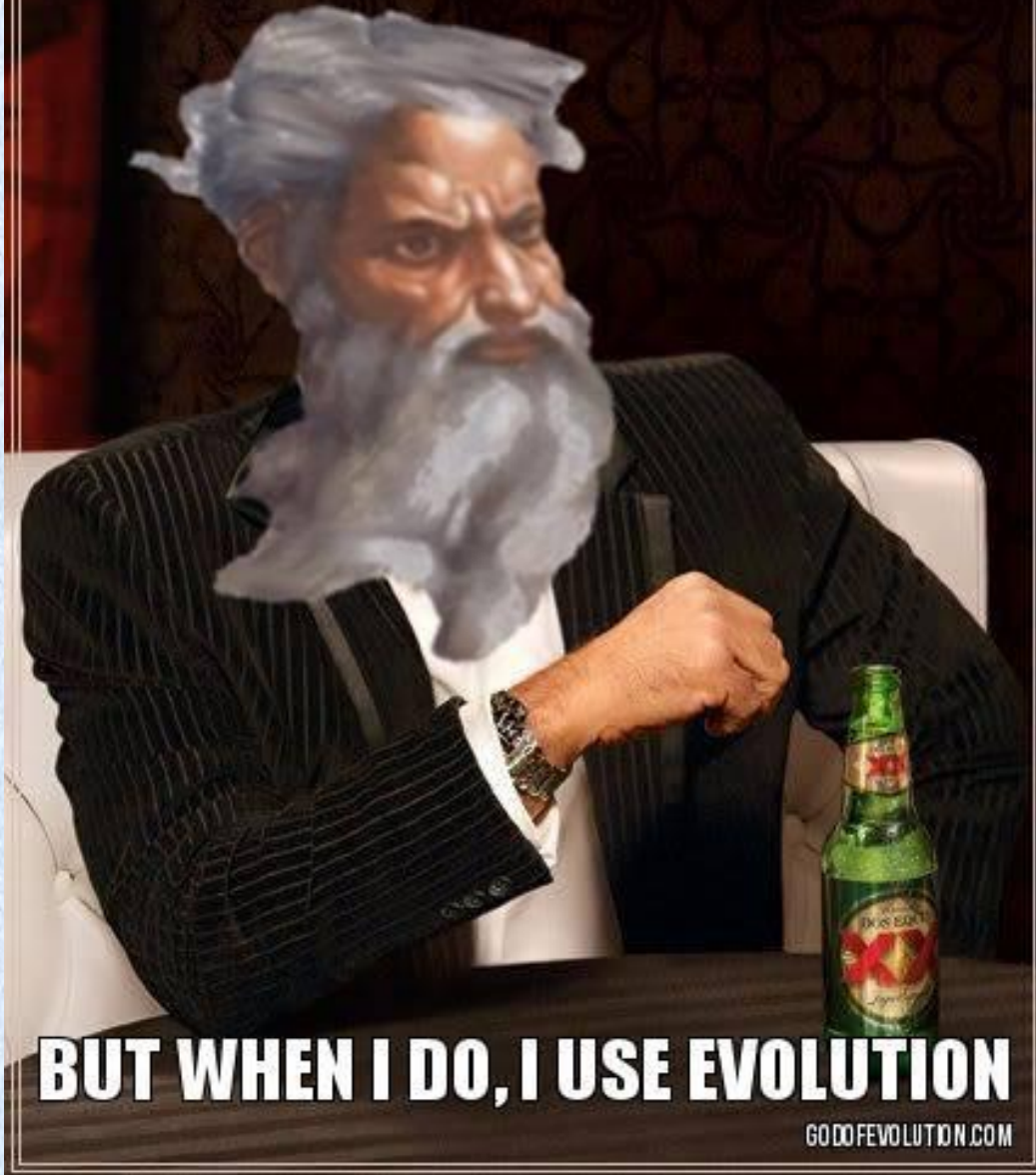
ASA Mammoth Cave People



Creatio continua and Evolving into the *imago Dei*



I DON'T ALWAYS FILL PLANETS WITH LIFE



BUT WHEN I DO, I USE EVOLUTION

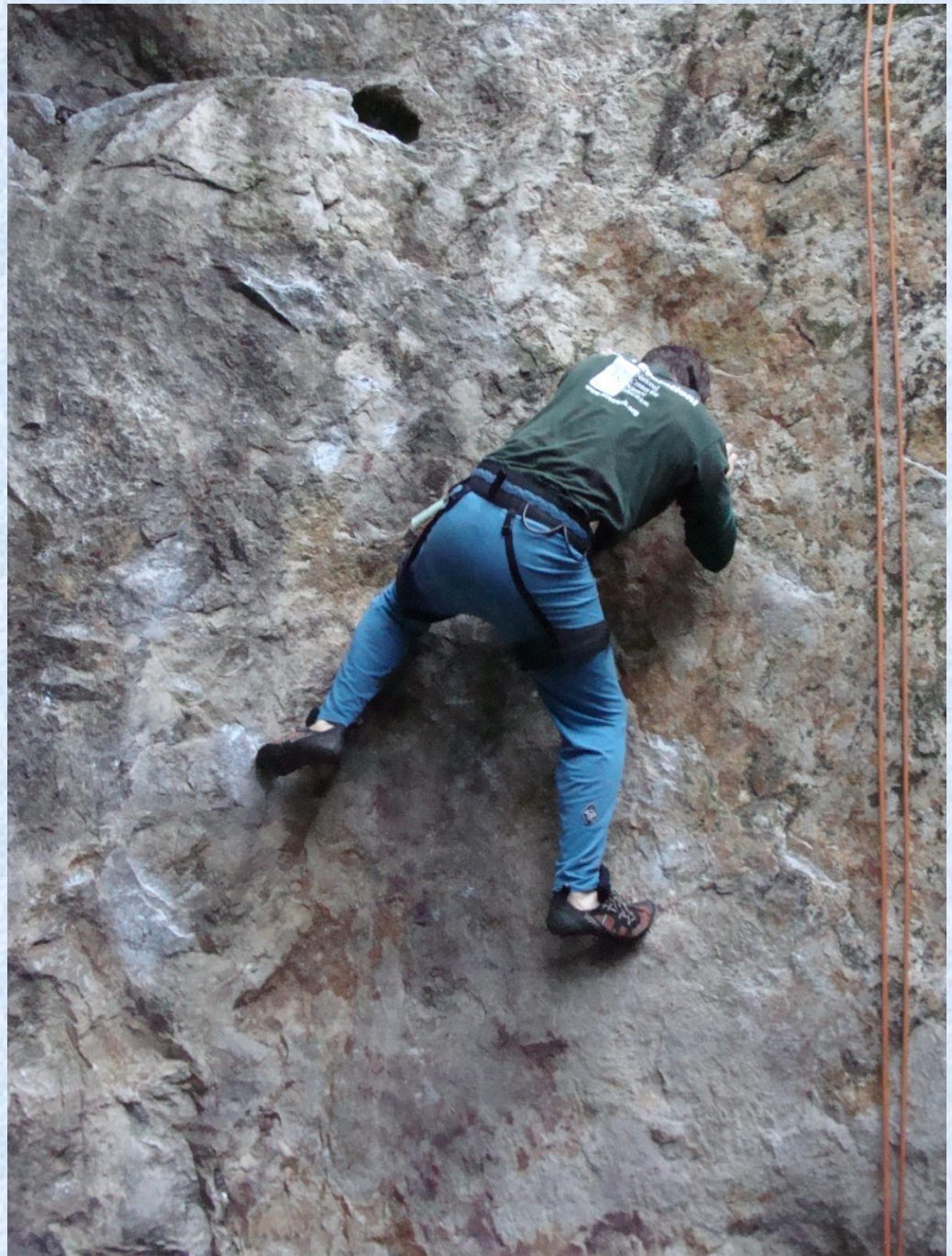
GODOFEVOLUTION.COM

*"Creatio
continua
and
Evolving
into the
imago Dei*

Considering the evolutionary trajectory of *Homo sapiens*, how can we rethink the theology of the “soul” and of human personhood in a way that is both faithful to scriptural revelation and doctrine, and responsive to what science progressively reveals about the universe and our place in it?

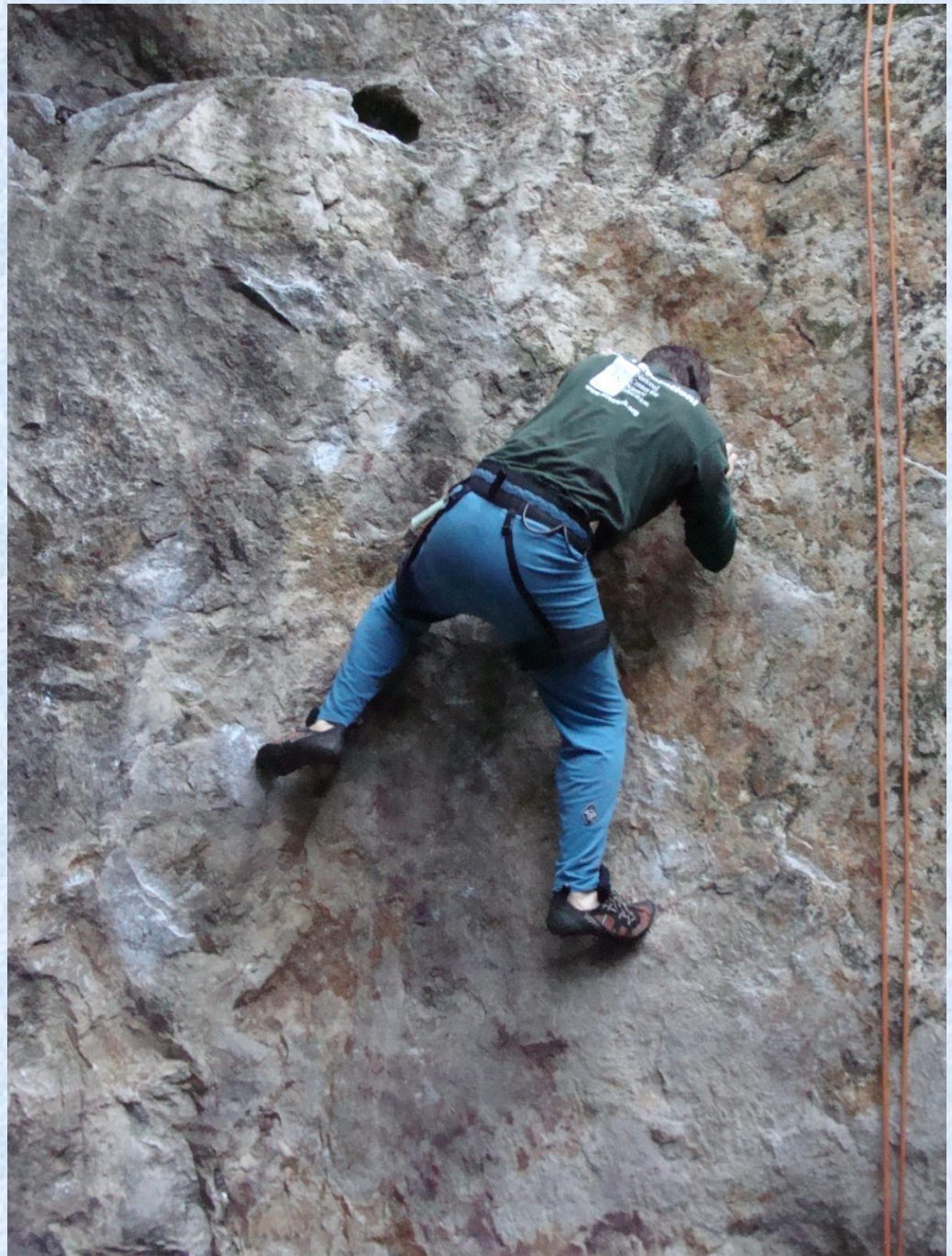
The “Crux” move in accepting evolution

The rating of a rock climb is generally determined by the difficulty of the “crux” move – the most difficult step confronting the climber on his or her route up the rock face.



The “crux” move in accepting evolution

What is the theological “crux” of the evolutionary model of the universe?



Evolving into the *Imago Dei*

The picture of a compact, young, finite and static cosmos has given way incrementally (and sometimes traumatically) to that of a universe understood as vast, ancient, dynamic and evolving. Stages were marked by incremental assimilation:

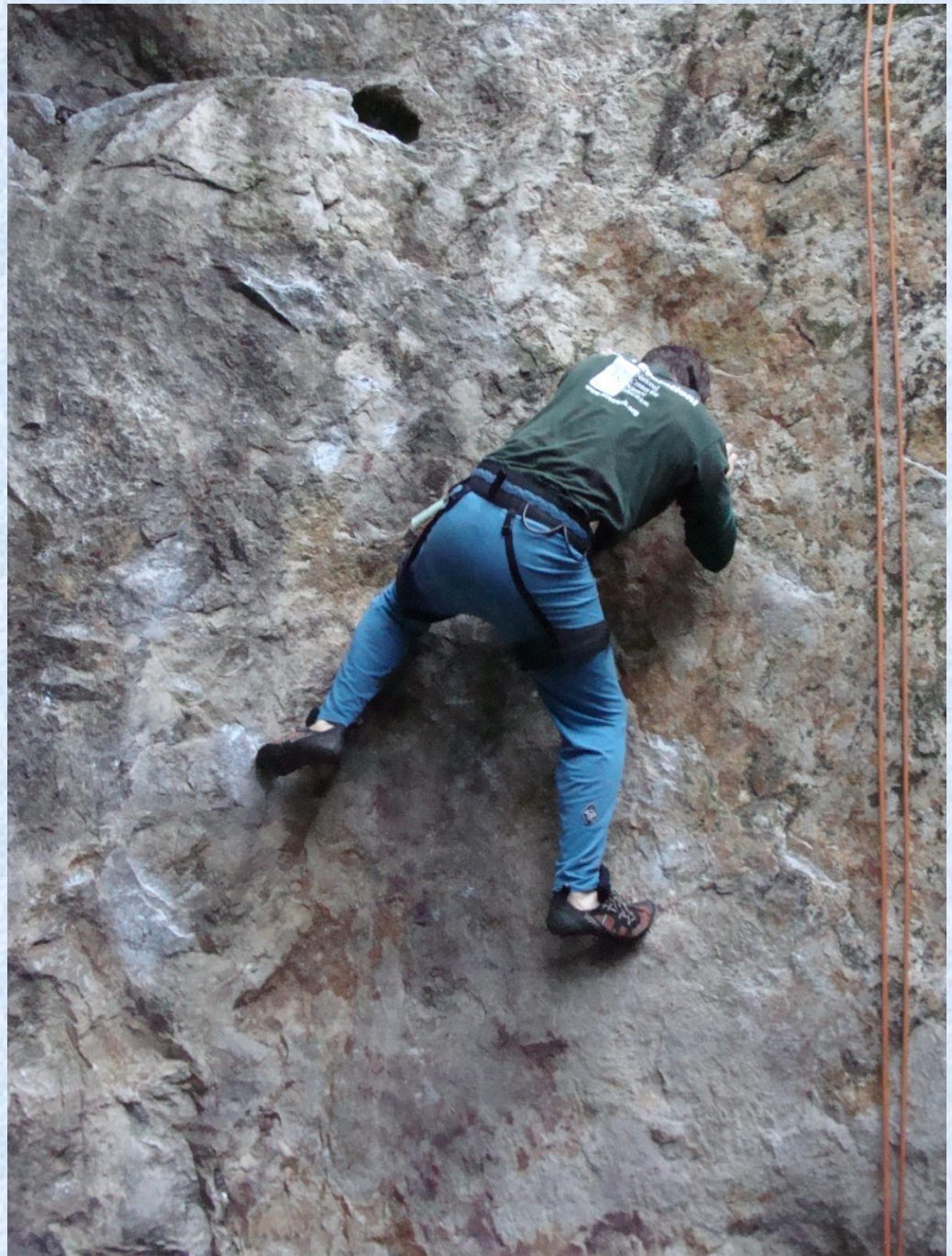
- Gestalt shift to Heliocentrism (16th -18th Centuries)
- Grasping an atomic theory of matter (17th Century)
- Perceiving deep geological time (18th Century)
- Seeing a universe of myriad galaxies (19th Century)
- Recognizing the extinction and evolution of species (18th – 19th Centuries)

Evolving into the *Imago Dei*

- Integrating genetics and DNA into biology
- Explaining the dynamism of earth through plate tectonics
- Unifying our account of the history of terrestrial biology from the first eukaryotic cell to the branching bush of life.
- Recognizing relativity, quantum mechanics, and Big Bang cosmology as offering intriguing prospects for theologies of divine action.
- Enthusiastic endorsement of evolution by mainline Protestant, Catholic, and Jewish congregations as “God’s way of working through nature.”

The “crux” move in accepting evolution

If the dialogue between religion and science over the last half century were portrayed as a climb, I believe the **crux move** would be the evolution of the human spirit, or of the **imago Dei**.



Evolving into the *Imago Dei*

- But the “crux” move in our climb into scientific post-modernity has not been made so easily by most religious communities. By some it has not been made at all.
- How can Christian theology integrate a naturalistic evolutionary account with questions in theological anthropology—questions about the nature of the soul, the nature of human personhood, and the doctrine of the *imago Dei*?
- How might we both affirm divine sovereignty and maintain the integrity of biological and genetic science?

Evolving into the *Imago Dei*

- The warrant for such an integration lies in the sacramental nature of Christianity.
- In its theology of creation Christianity affirms not only the infinite transcendence of God, but also the divine immanence.
- Because it exists within the divine reality—in a panentheist model—nature is capable of manifesting the divine through bread and wine, oil and water, fire and light.
- Divine creativity operates through the secondary causes of a universe capable of endlessly bringing forth wondrous forms, from the first eukaryotes to *Homo sapiens*.

Evolving into the *Imago Dei* Poses a complex of questions

What does it mean to say that humans are created in the *imago Dei*, or the “image of God”?

How can we reinterpret the doctrine of the *imago Dei* to reflect what we know from science, that humans are “stardust become conscious of itself” 13.7 billion years later?

What are the relationships between the terms “person,” “soul”, and “*imago Dei*”?

What about the *imago Dei* elsewhere in the universe?

Analogy

Our own being is represented with greater or lesser degrees of transparency through our relationships and the objects of our creation.

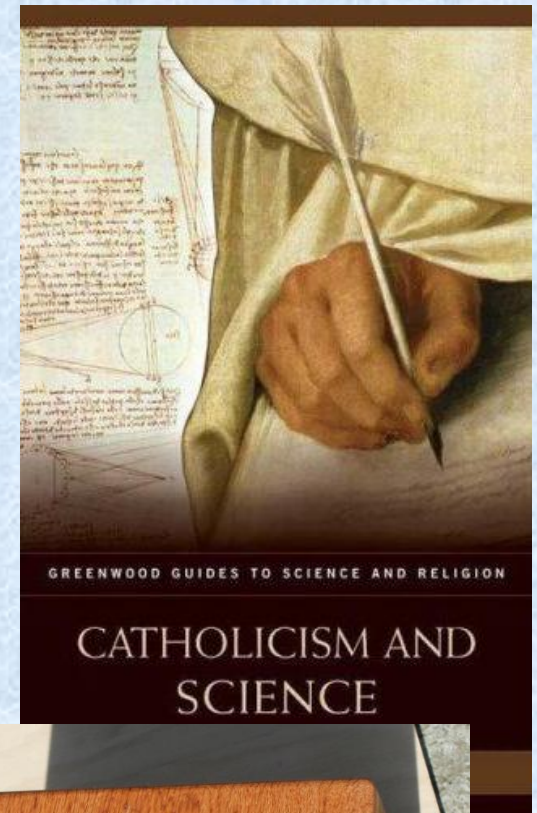
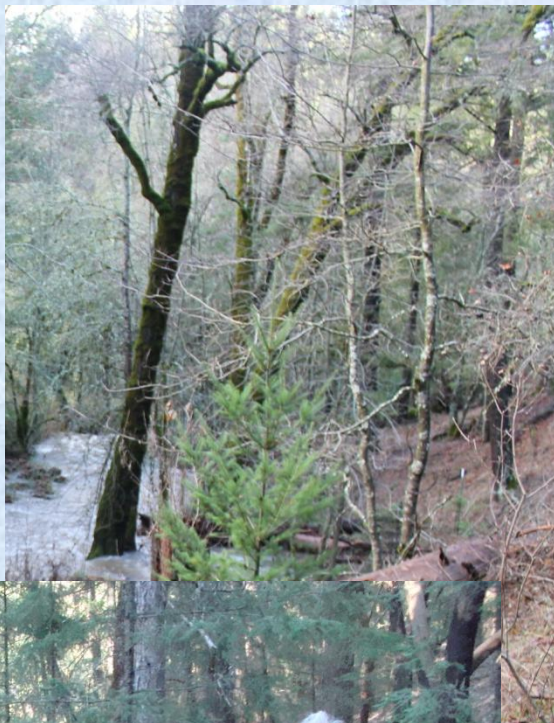
Imago Petri

My trees

*Catholicism &
Science*

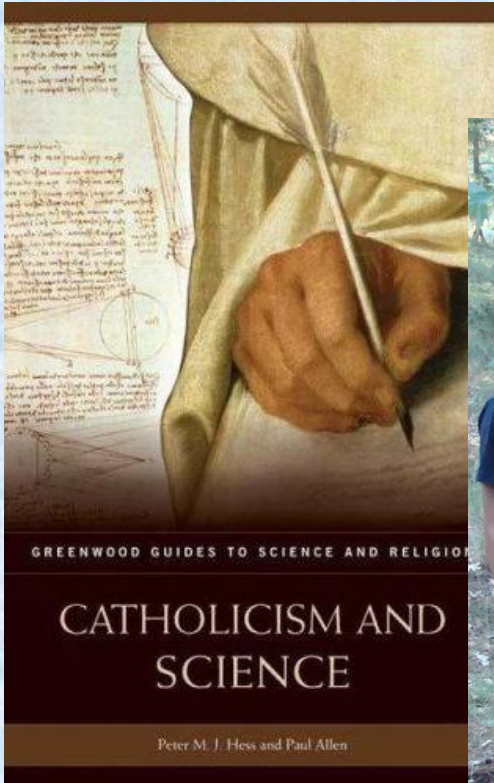
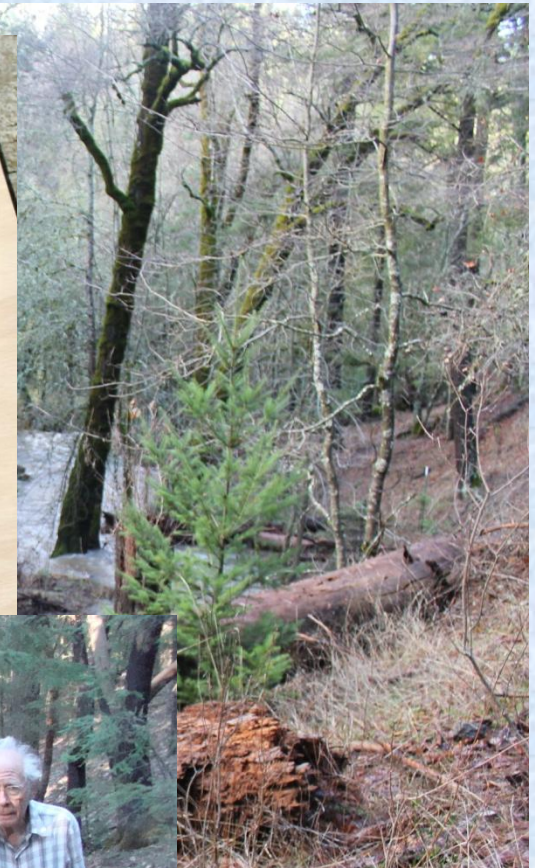
Memorial Urn

My Family

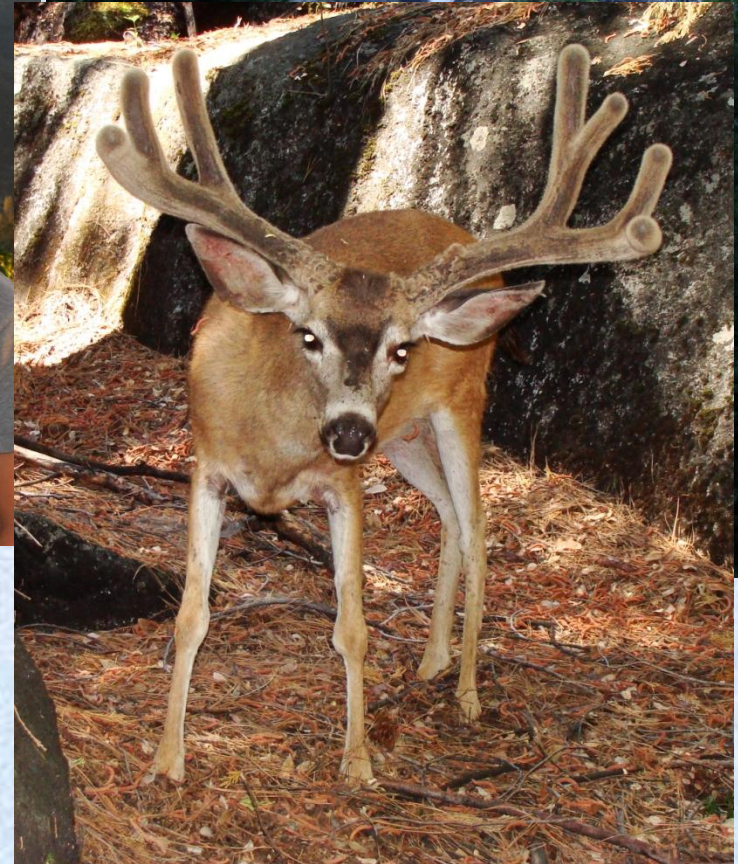
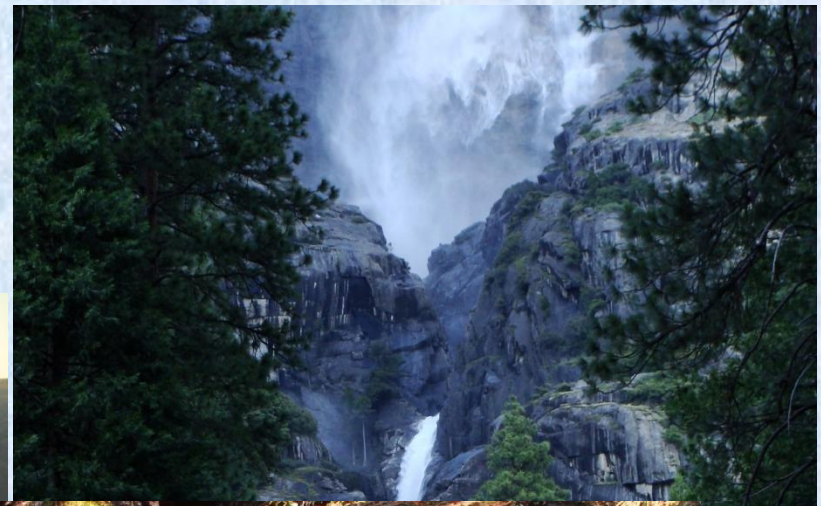


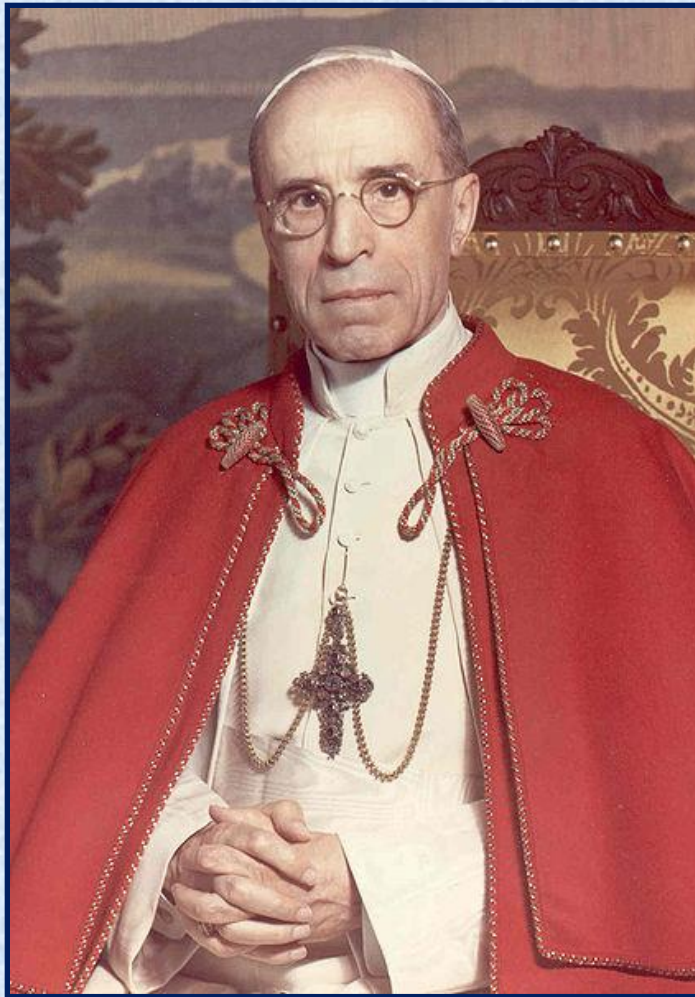
Imago Petri

Each of these entities reflects my image with lesser or greater degree of transparency.

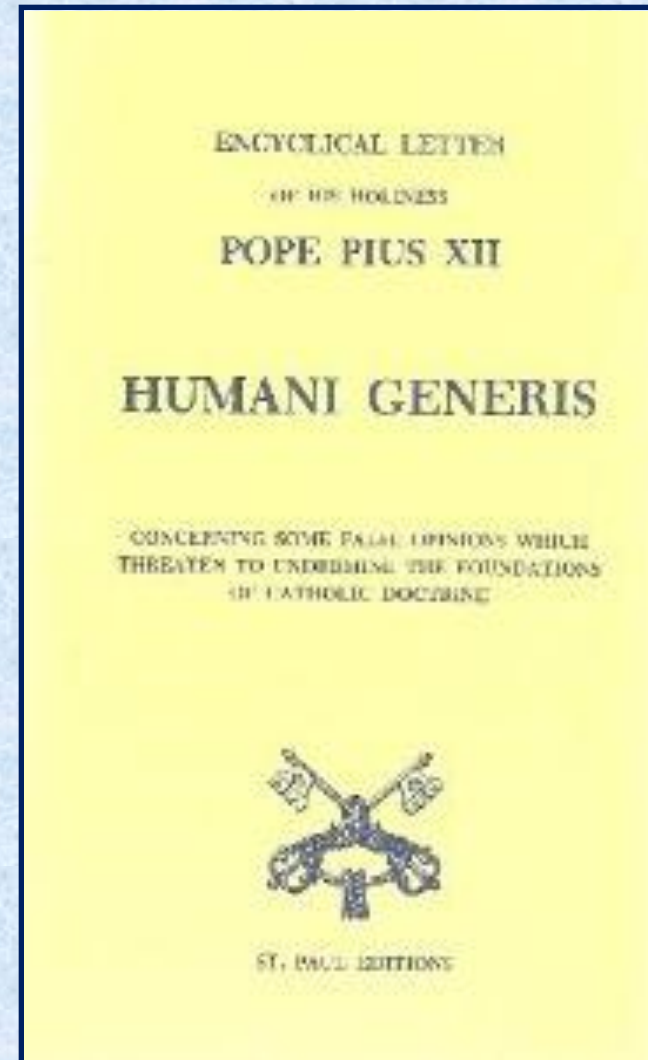


What if every part of creation is evolving to reflect God's image with lesser or greater degree of transparency?

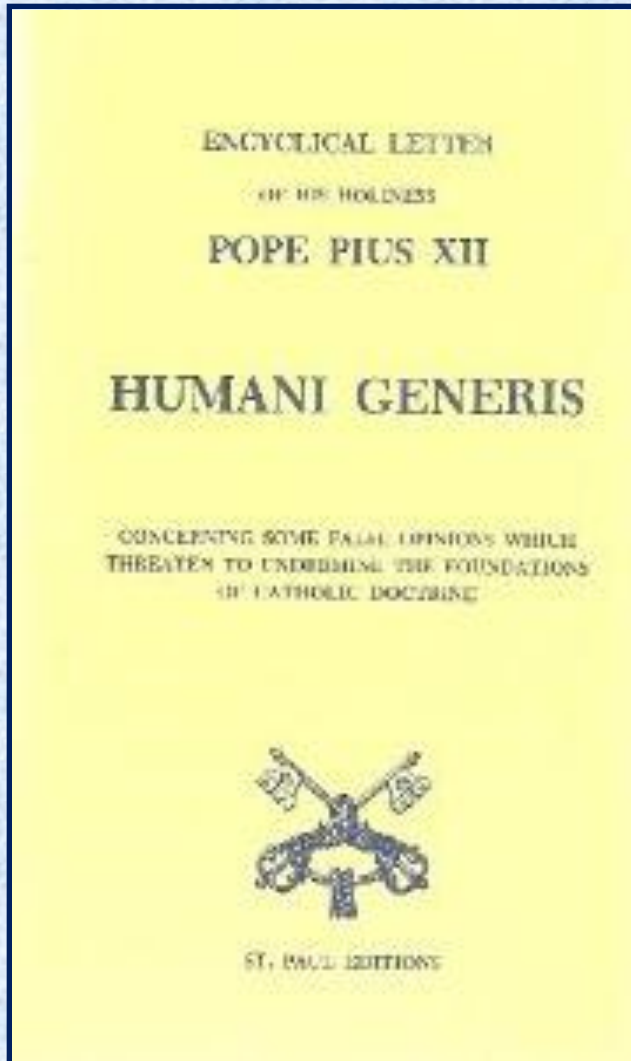
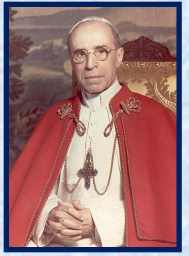




Pope Pius XII and
the protective belt



1950



In *Humani Generis* (1950), Pope Pius XII cautiously endorsed evolution, including that of the human body, **but he drew a protective belt around the soul**, which he declared in each case to be uniquely created by God. The human is uniquely *in imago Dei*.

Humani Generis (1950)

When, however, there is question of another conjectural opinion, namely polygenism, the children of the Church by no means enjoy such liberty. For the faithful cannot embrace that opinion which maintains that either after Adam there existed on this earth true men who did not take their origin through natural generation from him as from the first parent of all, or that Adam represents a certain number of first parents. Now it is in no way apparent how such an opinion can be reconciled with that which the sources of revealed truth and the documents of the Teaching Authority of the Church propose with regard to original sin, which proceeds from a sin actually committed by an individual Adam and which, through generation, is passed on to all and is in everyone as his own.

Human
Brain

Human
Body

Human
soul

Universe

Ele-
ments

Planets

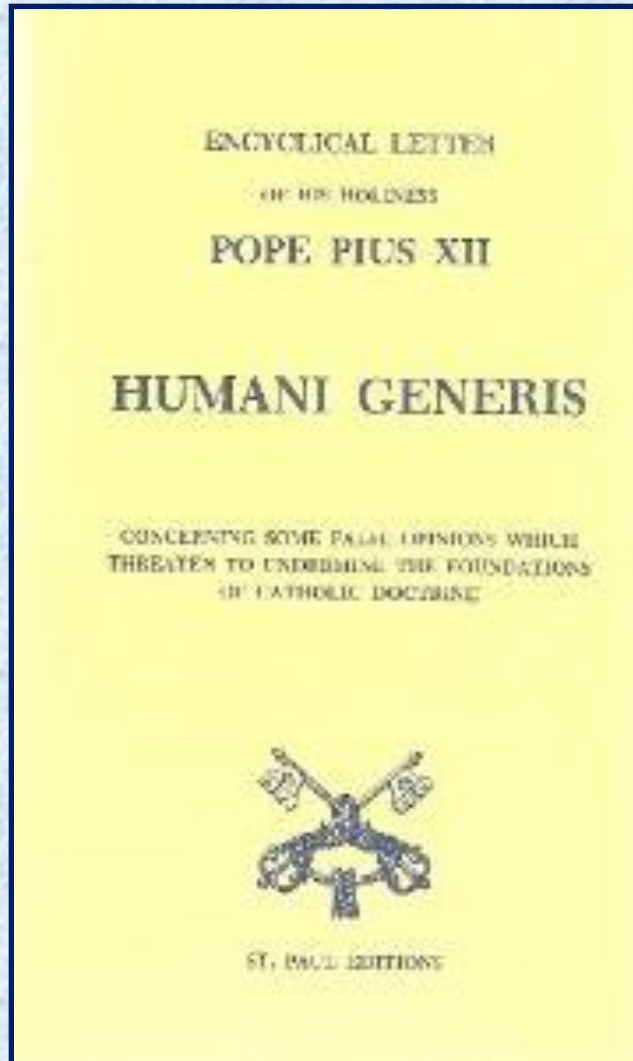
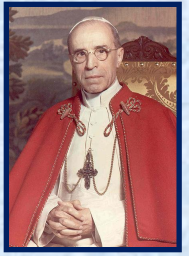
Life

Primates

Animals

Plants

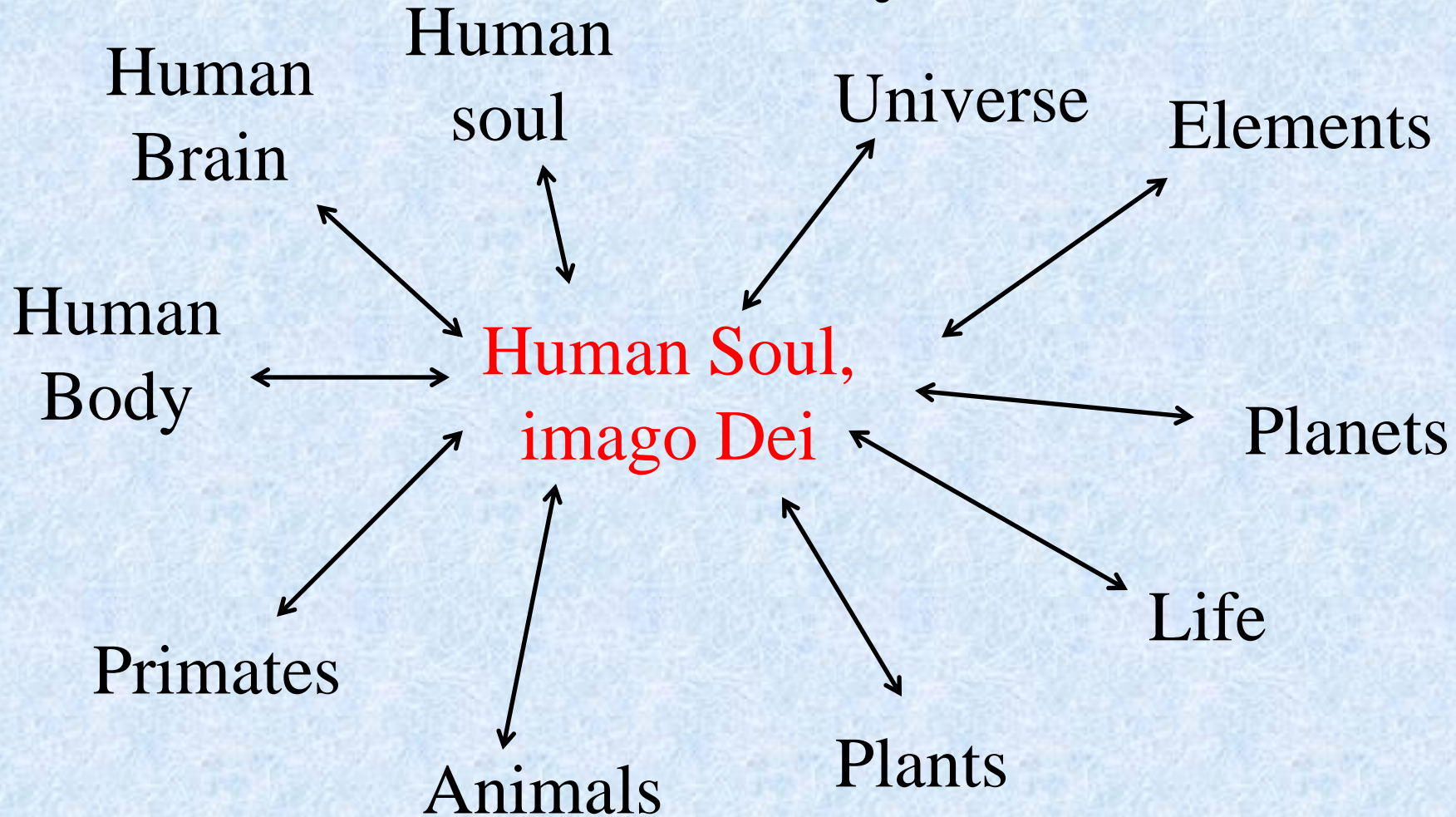




The protective belt seals off forever from scientific study the most interesting and important dimensions of what it means to be human.

This seems both scientifically absurd and theologically misguided.

What if we just threw away the belt?



Evolution and the *Imago Dei*

Theological anthropology is intricately bound up with other aspects of doctrine:

- The “Fall,” sin, and moral consciousness
- Christology and soteriology
- Suffering and theodicy
- Eschatology and the far future of the cosmos

Evolution and the *Imago Dei*

The Bible does not contain a well-developed doctrine of the *imago Dei*, or “image of God.”

However, the *imago Dei* is the foundational assumption of the scriptural teaching about the nature of human existence.

The moral and spiritual response of humans to the Word of God is intelligible only in light of the *imago Dei*: only if humans reflect God’s image are we able to comprehend and respond to God’s invitation.

What the “image of God” is not

Having two legs, two arms

Having a human face, nose, two eyes

Being male or female, gay or straight

Looking European

Being white, wealthy, Republican (or Democrat)

Getting angry, smiting people

What is the “image of God”?

Capability of sustaining authentic relationships

Moral understanding and judgment

Spiritual awareness and responsiveness

Responsibility for creation

Emotional awareness

Rationality, reason

Thanks to Noreen
Herzfeld, *In Our Image*
(Fortress, 2000)

Adam, Eve, and Genetic Bottlenecks

Science has now shown that monogenism — in the sense of the descent of our entire species from one set of parents, Adam and Eve — is genetically impossible.

- In-breeding reduces population viability through lack of genetic diversity.
- A genetic bottleneck” carries the risk that the population will suffer irreversible genetic degradation (e.g., modern cheetahs)

Science: Adam, Eve, and Genetic Bottlenecks

- Humans appear not to have suffered any catastrophic bottlenecks within the last ten thousand years (*pace* Mt. Toba eruption) severe enough to reduce the population significantly.
- The minimum population during the tens of thousands of years of it took hominids to evolve into full human consciousness was between 3,000 and 10,000 breeding pairs.
- All humans are descended from a population of ancestors, including “mitochondrial Eve” (who, however, never met or had children with “Y-chromosome Adam” as he lived in a different location of Africa from Eve.)

What does this genetic evidence imply about the story of Adam and Eve in Genesis?

- It implies that the author(s) of Genesis were employing richly symbolic theological language, as is true of the other cosmogonic stories in Genesis 1-11.
- “Adam” (Ādām, “dust, humankind”) and “Eve” (Hawwā, “living one”) do not denote individuals, but symbolize rather the whole human race.
- Their names may appropriately be applied to *Homo sapiens* as a whole as the species was evolving into rationality, moral consciousness, and spiritual sensitivity.

- In the story, the breathing of God produces a *nefesh hayya* or “living being.”
- It seems pointless to pursue even a modified literal interpretation that seeks to map Genesis 1:26-28 or 2:7-25 onto a prehistoric infusion of souls into some tribe of suitably prepared hominids tens of thousands of years ago.
- *Prima facie*, this would seem flatly to contradict *Humani generis*.
- It seems to reject established dogma about Original Sin as caused by Adam’s and Eve’s disobedience, and as transmitted to their descendants through the “carnal begetting” frowned upon by Saint Augustine.

Can we use a different theological model?

- “Essentially, all models are wrong, but some are useful.” (George Box, *Empirical Model Building and Response Surfaces*, John Wiley & Sons, New York, NY.
- It by no means self-evident that Augustine’s is the only theologically viable model of original sin.
- Jerry Korsmeyer, Ilia Delio, and numerous others have articulated models of original sin that are more reflective of what we know from science

- *Homo sapiens* is now understood as being intimately bound up with the universe.
- From the atoms or “star dust” that compose our matter and the genetic information that is our form, to the self-reflective awareness that drives us to try to understand ourselves, the universe, and God, we are part of the universe.
- Theology has been able to accommodate evolution of the human body from pre-human ancestors.

- Therefore, once we have accepted a symbolic, non-literalistic interpretation of the Genesis creation story, theology seen from a sacramental perspective should also be capable of accommodating evolution of the “soul,” or of “souliness,” the moral and spiritual capacities that set our species apart.
- This sacramental principle should be capable of accommodating the evolution of “souliness” wherever life-bearing planets are found throughout the universe; God is Lord of the Universe, not a species-specific terrestrial demi-god.

- Related to the difficulty of justifying a sharp demarcation of immortally ensouled from non-ensouled primates is the problem of the range of manifestations of “personhood” within the human species.
- It is deceptively simple to look at “normal” human beings as carrying the *imago Dei*, and on that basis to ascribe to every human—and *only* to humans—an immortal soul.
- Some experts estimate that up to fifty percent of human conceptions result in miscarriage because the zygotes or are otherwise so genetically compromised that they cannot develop to mature gestation and a normal birth.

- If immortal souls are imputed to these zygotes, fifty percent or more of humanity will never have lived conscious lives on earth, but rather will have entered immediately into eternity without ever having been able to make any decisions at all, moral or otherwise.
- The eternal destiny of more than half of humanity will be independent of ethical decision making or moral life, and while we are not in any position to pass judgment on the status of these embryos, the implications of this disconnect are not insignificant.

The Evolution of Moral and Spiritual Consciousness



Evolution of Moral Awareness



- Planets have finite energy resources.
- Evolving life must compete for these finite resources.
- As life spreads, predation between species and competition within species will inevitably arise.
- Prior to the evolution of self-consciousness, competition and predation are not moral issues.
- With the dawn of self-consciousness comes more awareness: realization of the possibility of doing otherwise, or in other words, understanding of “sin.”

Evolution of Religion and Spiritual Awareness



- Prior to the dawn of self-consciousness animals seem not to exhibit spirituality.*
- Self-consciousness entails intuition of transcendence, that there may be something more.
- Early humans
 - ✓ Rituals (birth, puberty, marriage, death)
 - ✓ God(s)
 - ✓ Cosmogonic explanations
- Theology with first civilizations

**Pace* numerous ongoing studies.

The Hebraic vision of the human as a psychosomatic unity created in the image of God was at the core of the earliest Christian theological anthropology.

- Submerged by Platonic dualism in the Patristic era, although Thomistic metaphysics held for a closer relation between body and soul.
- Catholic theology since Vatican II has moved back in the direction of a Hebraic psychosomatic unity of the person, a view supported by various theories of emergence.

Traditional dualist conceptions carry the usual problems of defining what the soul is and how it is connected to the body. Recent reconsiderations:

- Defenses of a modified dualism or a dipolar monism
- Various forms of non-reductive physicalism and philosophies of the soul as an emergent property of what is essentially a psychosomatic unity

Imago Dei – Hebrew Biblical Passages

Gen. 1:26-27 – “Let us make man in our image, in our likeness, and let them rule over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over all the creatures that move along the ground.”

Gen. 5:1 – “When God created man, he made him in the likeness of God.”

Gen. 9:6 – “Whoever sheds the blood of man, by man shall his blood be shed; for in the image of God has God made man.”

Psalms 8:3-8 – “You made him a little lower than the heavenly beings and crowned him with glory and honor. You made him ruler over the works of your hand.”

Imago Dei – New Testament Passages

Acts 17:29 – “Therefore since we are God’s offspring, we should not think that the divine being is like gold, or silver, or stone — an image made by man’s design and skill.”

James 3:9-10 – “With the tongue we praise our Lord and Father, and with it we curse men, who have been made in God's likeness. . . . this should not be.”

2 Cor. 3:18 – “And we, who with unveiled faces all reflect the Lord's glory, are being transformed into his likeness with ever-increasing glory, which comes from the Lord, who is the Spirit.”

Non-reductive Physicalism:

An anti-dualist perspective: the person is what we see – psycho-somatic unity. Higher levels of complexity and organization emerge from and are not reducible to lower levels.

Nancey Murphy and Warren Brown, eds. *Whatever Happened to the Soul? Scientific and Theological Portraits of Human Nature* (Augsburg-Fortress Press, 1998)

Emergentism

- The Universe emerges from pre-Big Bang initial conditions
- Matter emerges from energy of the Big Bang
- Life emerges from energy and matter
- Mind emerges from life
- Spirit emerges from mind

Philip Clayton and Paul Davies, eds. *The re-emergence of emergence: the emergentist hypothesis from science to religion*. Oxford University Press, 2006

Evolutionary and Emergent Non-reductive Physicalism

A theology in which God works in, with, and through creation can conceive of the soul as being transmitted integrally through the evolution of human physical nature and its increasing neural endowment.

This is consistent with a Hebraic understanding of the person as a psychosomatic unity, and addresses a number of important theological problems:

What the Evolutionary Theological Model of the *Imago Dei* Addresses

A theology in which God works in, with, and through creation can conceive of the soul and the *imago Dei* as being transmitted integrally through the evolution of human physical nature and its increasing neural endowment, consistently with a Hebraic understanding of the person as a psychosomatic unity. This theology addresses a number of important theological problems:

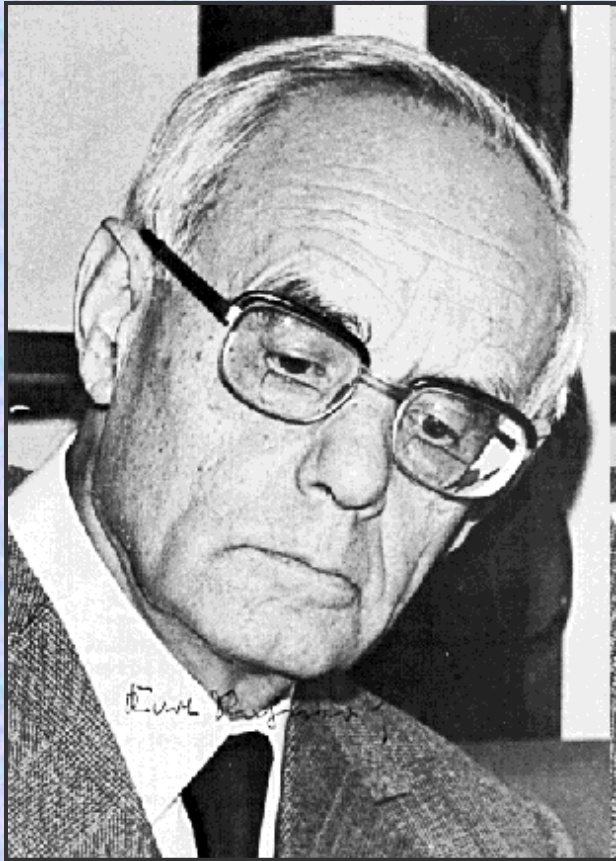
1. It preserves the sacramental idea of the universe as transfigured by God, and it rejects a Platonic dualism in which all and only human souls are “saved,” a position that in itself renders unintelligible the Pauline notion) that “all creation is groaning together” (Romans 8:22). “Salvation” involves the whole of creation, not merely human souls being somehow “raptured” out of bodies.

2. It addresses the problem of a radical and genetically unintelligible disjunction between pre-human hominids and *Homo sapiens*. Since all life on earth shares a common ancestry, and *Homo sapiens* represents the one twig on the great terrestrial bush of life that so far has evolved into rational self-awareness, it is impossible to draw a sharp dividing line between creatures that possesses an immortal soul and those that do not.

All beings are possessed of soul, at an intensity appropriate to their level of neural complexity. In the evolutionary model we avoid the irrational conundrum of having a generation of non-human parents giving birth to “ensouled” human children, or of one single breeding pair as progenitors of the entire human species.

3. It makes sense of an ecological theology that regards all of God's work as the subject of a new creation, including the whole spectrum of life sharing in the *imago Dei*, from the evolution of the first self-replicating molecule to the evolution of rational life wherever suitable conditions are found in the universe.

4. It maintains the integrity of both scientific and theological perspectives on reality. Theology does not need to assert a soul infusion that is in principle undetectable by science, or an historical Fall of Adam and Eve, because there never was such an infusion or historical Fall. In evolutionary history in sacramental perspective, the soul and the *imago Dei* evolves concomitantly with the capacities of the body, at a rate commensurate with it.



Karl Rahner, S.J.
1904-1984

Christ as *imago Dei perfectus*

“In our context it is especially worthy of note that the point at which God in a final self-communication irrevocably and definitively lays hold on the totality of the reality created by him is characterized not as spirit but as flesh.

It is this which authorizes the Christian to integrate the history of salvation into the history of the cosmos, even when myriad questions remain unanswered.”

— *Hominization* (1958)



Mt. Shasta,
August 2010