

God After Darwin

3. Evolution and The Great Hierarchy of Being

August 6, 2006
9 to 9:50 am in the Parlor
All are welcome!

St. John in the Wilderness

God Our Father,
open our eyes to see your hand at work
in the splendor of creation,
in the beauty of human life.
Touched by your hand our world is holy.
Help us to cherish the gifts that surround us,
to share your blessings with our brothers
and sisters,
and to experience the joy of life in your
presence.
We ask this through Christ Our Lord.

- *Every Day We Praise You*, Catholic Book Publishing Co., p. 136

J o h n F. H a u g h t



God After Darwin

A Theology of Evolution

God After Darwin. A Theology of Evolution.

John F. Haught,
Westview

Press, 2000.

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Background image on the
PowerPoint slides is
taken from the cover art
of *God After Darwin*

John F. Haught
**Responses to
101 Questions
on God and
Evolution**



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101 Questions
on God and
Evolution.**

John F. Haught,
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John F. Haught is the Landegger Distinguished Professor of Theology at Georgetown University, and Director of the Georgetown Center for the Study of Science and Religion.

Photos captured from the on-line interview with Dr. Haught at: <http://MeaningOfLife.tv>



The Great Hierarchy of Being

Great Hierarchy of Being

The Great Chain of Being

✚ Nearly all great religious and philosophical traditions have recognized a distinct **hierarchy of levels of being and meaning**:

- At the lowest level of being: inanimate things like minerals and liquids
- Then comes the distinct realm of living things:
 - Plants
 - Higher still: the domain of animals where there is consciousness for the first time.
 - Finally: human beings, with self-awareness, free will, ethical and religious longings
- Still higher are the levels of being in the divine realm.

Great Hierarchy of Being

Core Tenets of Religious Thought

- ⊕ Higher levels of being *cannot* be reduced to lower levels of being.
- ⊕ Furthermore, nearly all great religious and philosophical traditions have shared a belief that there is a single ultimate sacred reality that is the source, the wellspring of *all being and meaning*.

Great Hierarchy of Being

Core Tenets of Religious Thought

- ✚ The very term “**hierarchy**” is rooted in belief in an **ineffable, sacred “metaphysical” reality** that is the **origin** of all being, from:
 - the highest levels of being which are closest to the sacred source / origin,
 - to the lowest levels of being, farthest from the sacred source / origin.
- ✚ **hierarchy**:
 - *hier* = Greek for the “domain of the sacred”
 - *arche* = Greek for “origin” or “principle of being”

Great Hierarchy of Being

Example: Platonic Hierarchy of Being

✚ *Example:* the “Hierarchy of Being” in Greek Platonism strongly influenced Christian theologians like:

- St. Augustine in the West
- Dionysius in the East.

Great Hierarchy of Being

Example: Platonic Hierarchy of Being

† The Greek Hierarchy of Being*:

■ 1. The “One”

- Incomprehensible, beyond all Being, the source from which Being derives, the Goal that all Being strives to return to
- All Being **emanates** from the “One” like **light emanates from the Sun**
 - recall in the Creed, the phrase “light from light”

* As developed in Neo-Platonism

Great Hierarchy of Being

Example: Platonic Hierarchy of Being

✠ The Greek Hierarchy of Being:

▪ 2. **The Divine “Mind”**

- An emanation of the “One”
- Eternally contemplates the **“Forms”** which are “Ideas” within the Divine mind.
- Examples of **“Forms:”** Beauty, Justice, Goodness, “Tree-ness,” “Mountain-ness,” “Horse-ness”
- The **“Forms”** illuminate the matter of this world to produce the “shadowy” examples of beauty, justice, goodness, trees, mountains, horses that we see in this world
- St. Augustine: the Greek “One” and “Divine Mind” are both descriptions of The Christian God. The Christian triune God is both the “One” and the “Divine Mind.”

Great Hierarchy of Being

Example: Platonic Hierarchy of Being

† The Greek Hierarchy of Being:

▪ 3. **Soul**

- An emanation of the Divine Mind, but capable of change and entering into matter.
- All our individual souls are but “particles” of the one Soul which have fallen into physical bodies.

Great Hierarchy of Being

Example: Platonic Hierarchy of Being

† The Greek Hierarchy of Being:

▪ 4. The Visible World

- The previous levels of Being -- One, Mind, Soul -- were divine and hence immortal.
- The **lowest level** of Being, the visible world, is a mortal world of bodies, change, growth, decay
- Inert matter is darkness and ***non-being***, and hence “evil”
 - Goodness: fullness of Being

Great Hierarchy of Being

Example: Platonic Hierarchy of Being

✚ Notes:

- All that exists is an “overflow” of the “One”
- The other levels of reality exist not out of the choice of the “One,” but are the inevitable result of the abundance of the emanations of the “One”
- In each level there is an ardent longing (“Heavenly Eros”) for union with what is higher.

Great Hierarchy of Being

Longing for the Source of Being

- ✚ Many religions, including Christianity, share the same spiritual intuition as the Greeks that we were not made merely for this world, but rather for a greater / higher realm of being wherein lies the very source of our being and meaning.
- ✚ St. Augustine: Humanity has been made by God and for God:
 - “You have made us for yourself, and our heart is restless until it finds its rest in you”

Great Hierarchy of Being

Longing for the Source of Being

✠ Haught: The great attraction of the hierarchical scheme is that it embeds our own fragile lives and the whole fleeting temporal world within the larger framework of an eternal reality immune to transience and death. Participation in the imperishable permanence of God rescues the flux of transitory cosmic and human events from the oblivion of nothingness.



**Evolution
Flattens The
Hierarchy of
Being**

Evolution Flattens the Hierarchy

Darwin's Dangerous Ideas

- ✚ Darwin's first “dangerous” idea was his shocking theory that “**natural selection**” (given some random changes like mutations, and enormous depths of time), can account for all the diversity of life. No “intelligent designer” need apply.
- ✚ His second “dangerous” idea was that **all life comes from a common ancestor**, which itself arose from **lifeless matter**.
 - This idea was devastating to the notion of a “Hierarchy of Being.”

Evolution Flattens the Hierarchy

Darwin's Other Dangerous Idea

✚ Rather than having our origin from an ineffable sacred source of all being and meaning, we find our origin, deep in the past, is from the lowliest “level of being,” from mere mineral and liquid.

Evolution Flattens the Hierarchy

Darwin's Other Dangerous Idea

- ✚ Since it is ridiculous to think there could be meaning in dumb inanimate mineral and liquid, the sense that life and mind has meaning seems to have been stripped away.
 - A cosmos whose *source* is mindless inanimate matter cannot possibly be a carrier of transcendent meaning.
 - Life and mind are merely “*by products*” derived from mindless matter.

Evolution Flattens the Hierarchy

Darwin's Other Dangerous Idea

✚ Furthermore, all the former levels of being:

- plants
- animals
- human beings

can be easily “atomized” or “broken down” or “reduced” to the same level of being that is their origin and source:

- inanimate matter,
- mere molecules and atoms all moving to the same drumbeat of the same physical laws.

Evolution Flattens the Hierarchy

Darwin's Other Dangerous Idea

⊕ How then can we claim that we are made
“in the image and likeness of God?”

⊕ How can we believe that

- life and mind,
- our ethical yearnings for a better world,
- our intuitions of a greater beauty in a transcendent realm

are glimpses of a God who is their
source?

Evolution Flattens the Hierarchy

Darwin's Other Dangerous Idea

† Thus **scientific materialists*** like Daniel Dennett and Stanley Dawkins claim that Darwinian evolution is scientific evidence for atheism.

- **Materialism** (also known as **Physicalism** or **Naturalism**): the view that matter-energy is the only reality.
- **Scientism**: the only path to truth is through the methods of science. That is, *all real things* make themselves available in a scientifically measurable way.
- ***Scientific Materialism**: materialism + scientism.

The background is a composite of three distinct images. At the top, a DNA double helix is rendered in a light blue/purple hue. In the center, a hand is shown holding a glowing green, spherical object. At the bottom right, there is a bouquet of flowers with pink and green petals. The overall background is a dark, textured blue.

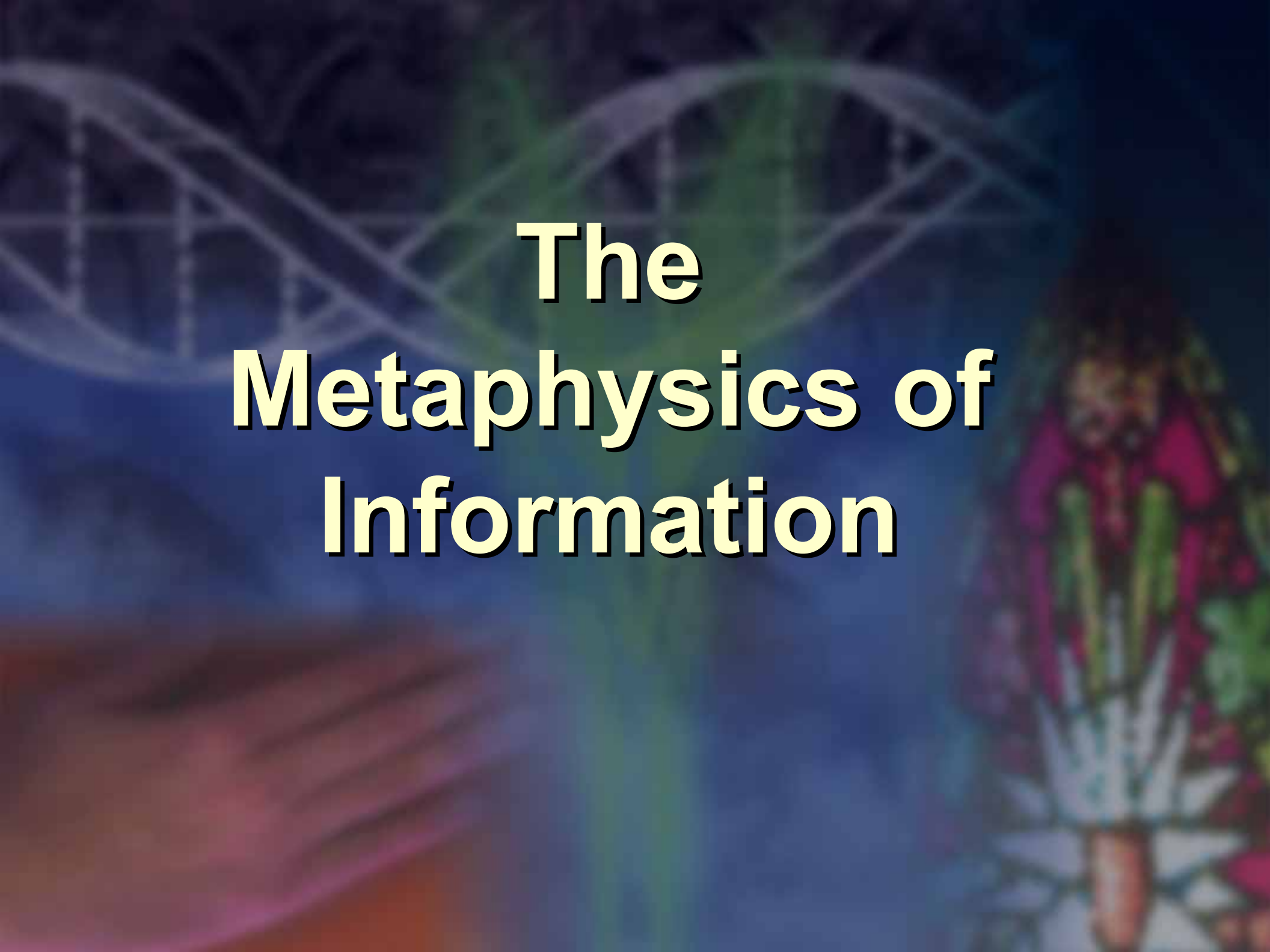
Vitalism

Vitalism

- ✚ The idea that higher levels of being like life and mind can emanate from the lower level of inanimate matter not only violates religious intuition, but strikes some as a violation of logic and common sense.
 - “no effect can be greater than its cause”
- ✚ **Vitalism**: the view that some **intangible force** or **spiritual principle** must have been added to matter by God during evolution to “lift it” from level of dead matter to the higher level of life.

Vitalism

- † A major and influential proponent of Vitalism: Henri Bergson (1854-1941).
- † However, today **vitalism** is less attractive, as modern science has revealed:
 - The enormous, unimaginable depths of time evolution had to “play with” in its meandering journey to evolve life and mind
 - The discovery that the basic machinery of life (DNA) is just chemistry, that “organic” or “bio-” chemistry works just like inorganic chemistry.

The background is a complex collage. At the top, a DNA double helix is rendered in a light blue/purple hue. Below it, a green and blue globe is visible. On the right side, there is a vertical image of a person wearing a purple robe, possibly a religious or historical figure. The overall color palette is dominated by blues, purples, and greens.

The Metaphysics of Information

The Metaphysics of Information

Rescuing the Hierarchy of Being

✚ Dr. Haught feels that there is a more promising way to rescue the religious intuition of a **hierarchy of being**, an approach that is fully compatible with evolution.

The Metaphysics of Information

Emergent Properties in Complex Systems

- ✦ Science is in fact beginning to understand that it cannot explain all the phenomena of nature purely on the basis of physics and chemistry.
- ✦ Scientists are now speaking of “**emergent**” or “**epiphenomenal**” properties that appear in complex systems (like an ecosphere or a biological organism) that are not present at the level of the system’s parts.
- ✦ There is a growing realization that complex systems cannot be understood simply in terms of the less complex parts that make it up.

The Metaphysics of Information

Information

- ⊕ What complex systems have that their less complex parts don't have is something that might be termed **“information”**
- ⊕ **Information** = the pattern or the “recipe” for ordering of entities (atoms, molecules, cells, genes...) into a more complex form or arrangement.

The Metaphysics of Information

Information

- ✚ The presence of **“Information”** in complex systems seems rather obvious.
- ✚ Try to pin down the concept of **“Information”** however, and it becomes rather mysterious:
 - It is clearly distinguishable from matter and energy
 - It does not show up when studying physical systems on the atomic or molecular levels
 - It does not therefore violate “lower-level” laws of physics or chemistry.
 - Yet it is clearly a major part of nature – take away **“Information,”** and you dissolve the world into an amorphous random glob of particles.

The Metaphysics of Information

Information

✚ **Information** “orders” systems and cannot itself be “reduced” or “broken up” into smaller parts, which is the usual method used by science to study nature.

The Metaphysics of Information

Origin and Nature of Information

✚ The “origin” and “nature” of **information** is also rather mysterious:

- Why is there something and not nothing? And why is the something organized into complex entities and structures? Why is the something not just an amorphous chaotic scattering of particles?
 - Why are there “things” instead of “no-things”?
- Why does nature have the puzzling tendency to “organize” itself, and where do the organizing patterns (= **information**) come from?
 - Is it reasonable to believe that the organizing patterns / informational recipes for the possible structures of every living organisms, and of mind itself, already existed within the quark soup microseconds after the Big Bang?
 - The common vague suggestions that **information** “bubbles up from below” or “emerges” is an *evasion* (confusing description with explanation)

The Metaphysics of Information

Origin and Nature of Information

✚ The “origin” and “nature” of **information** is also rather mysterious:

- Like mathematics, **Information** has a timeless quality to it.
- It does not “transform” like mass and energy does
- It seems to “exist” in the realm of “possibility,” waiting to be actualized.
 - Philosopher Alfred North Whitehead: Possibilities must reside somewhere.
- One might say **Information** exists in some *metaphysical* realm, waiting to become *incarnate*.

The Metaphysics of Information

Information and Hierarchy

- ✚ **Information** does in fact configure nature into **hierarchies** with sharp discontinuities.
- ✚ At the same time it does not interfere (or show up) when science, as it is apt to do, focuses its gimlet eye on a system's constituent parts.

The Metaphysics of Information

God as the Ultimate Source of Information

✚ Haught: Why not think of God:

- as the ultimate source of **information**,
- that is, as the ultimate source of the novel informational patterns and recipes available to evolution,
 - patterns that then configure nature into a **Great Hierarchy of Being**,
 - while still retaining the continuity of nature on the physical and chemical level?
- *More on this next session ...*