Steven R. Van Hook, PhD Science Circle Seminar

Transgalactic Relations: Our Possibly Common Traits

May 3, 2025 / 10:00 AM PT SLT

Transgalactic Relations

Abstract:

Ongoing military reports of unexplained objects flying in our skies have sparked renewed interest in alien visitors. Some scientists predict that we will have contacted advanced civilizations on other worlds within years, if not already. What might they be like, and — more importantly – how might they act? Steven Van Hook, a researcher in transcultural relations, will consider what universal social traits we could share in common with our galactic alien neighbors, with developmental theories of exobiology and exosociology.







Research Website

Bio:

Steven R. Van Hook has taught courses in transcultural communications and global affairs for the University of California and other universities in the United States and abroad. He's been a newspaper columnist, radio talk show host, TV news anchor, and television bureau chief in Moscow covering the fall of the Soviet Union 1990-91. He has a PhD specializing in transcultural education, and is published in scholarly journals including SAGE, and UNESCO's *Prospects*. Research website

UFO/UAP Headlines

New Pentagon Report on UFOs
 Includes Hundreds of New Incidents
 but No Evidence of Aliens
 Military.com



May 2021



 DOD Examining Unidentified Anomalous Phenomena



- For some Navy pilots, UFO sightings were an ordinary event: 'Every day for at least a couple years'
- The Washington Post

 Democracy Dies in Darkness



Astronomers Detect a Possible
Signature of Life on a Distant Planet
The New York Times



Doctoral Research

- SocioculturalSystems
- SocioeconomicSystems
- TranscendentUniversalCommonalities





War of the Worlds

'In my heart, I don't believe that aliens will be sinister' — Steven Spielberg



- Interstellar (2011)
- Cowboys and Aliens (2011)
- When Worlds Collide (2010)
- Transformers (2007)
- War of the Worlds (2005)
- Men in Black (2000)
- Brief History of Time (1991)
- ET (1982)
- Close Encounters of the Third Kind (1977)







New Worlds Discovered



16th Century meet of Europe & Japan

Based on English sea captain Will Adams

ShogunBy James
Clavell





Universal Cosmography

 Conservative estimate of 100 billion galaxies in the universe (Milky Way is one)



- Conservative estimate of 100 billion stars per galaxy.
 (~200 billion in Milky Way)
- 100 billion x 100 billion = 10 sextillion stars in universe (10-thousand billion billion) (International Astronomical Union estimates 70 sextillion stars)
- Conservative estimate of 1-in-a-million stars with orbiting planets; 1 planet per star system = 10-million billion planets.
- Conservative estimate of 1-in-a-million planets support life = 10 billion life populated planets in the universe.

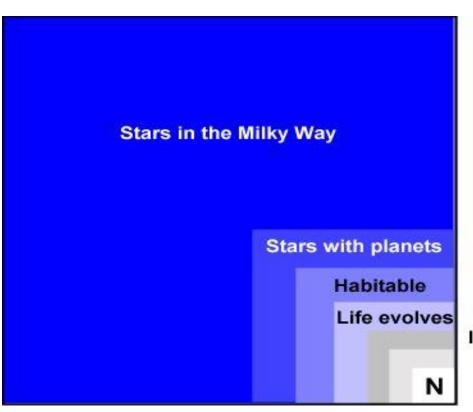
Drake Equation



$$N = R \times f_p \times n_e \times f_i \times f_i \times f_c \times L$$

N = number of Milky Way civilizations able to communicate by radio.

<u>Dr. Frank Drake</u> calculates N at 10,000.



Drake Update April 2024:

"Refine f-i factor with necessity of continents, oceans, and long-lasting plate tectonics"

scientific reports

Article

Intelligent life
Technology
Able to communicate

Astronomer Carl Sagan (1934 – 1996)



Dr. Sagan revised the Drake Equation and raised the estimate to a million alien worlds in the Milky Way Galaxy. Since the cosmos holds hundreds of millions of galaxies, by that analysis the total number of alien societies could be astronomical, one estimate putting the number at roughly 10 trillion.

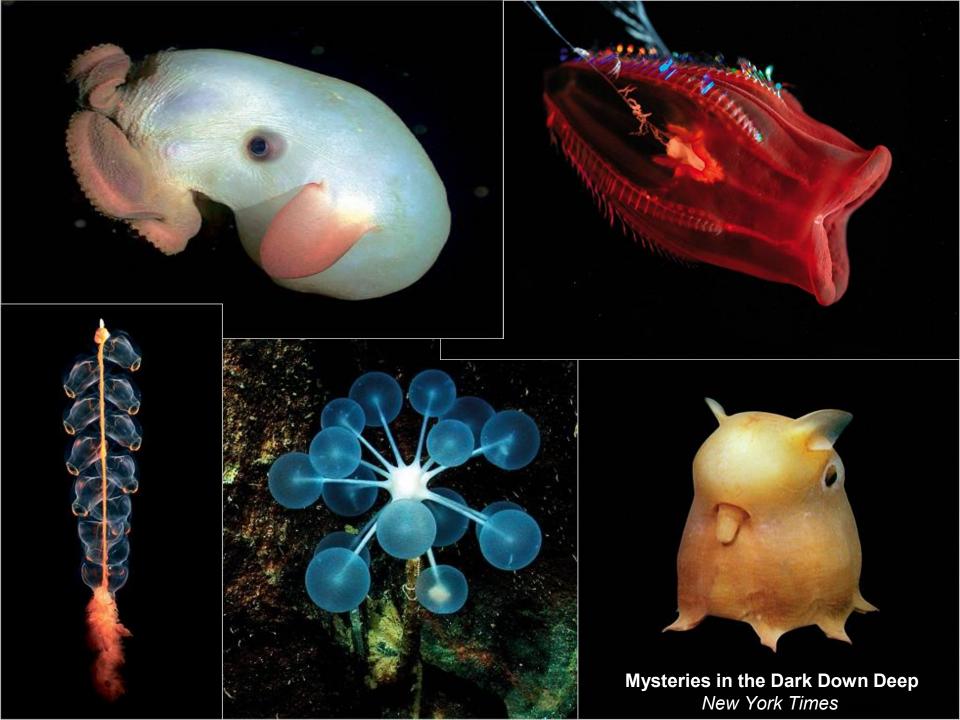
(New York Times)

Galactic Communication Problems

- First radio broadcast of human voice on earth Dec. 24, 1906.
- **SETI** (Search for Extra Terrestrial Intelligence) seeks space radio signals since 1960. (seti.org)



- Milky Way Galaxy 100,000 light years wide. (Light velocity: 300,000 km per second / 9.5 trillion km per year)
- 100,000 years for message traveling at speed of light to reach us from other side of galaxy.
- Nearest neighboring galaxy is Andromeda Spiral, 2-million light years away.



The Tardigrade (Water Bear): Extreme Survivors

- Complex creatures with braincluster of neurons
- Live just about everywhere on Earth: tops of mountains to the bottoms of oceans to the polar regions to the hot climates.
- Survive exposure to outer space for 10 days.
- Survive extreme temperatures ... even degree above absolute zero for a few minutes.
- Survive dehydration for 10 years.
- Survive extreme pressures greater than the at the deepest depths of the ocean.
- Tardigrades can cease aging





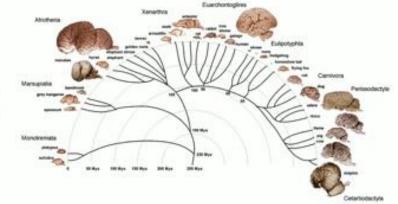
- Survive radiation 1000 times greater than other animals.
- Each Tardigrade adult (0.5 mm) has the same number of cells
- "Tardigrades hug" NdG Tyson

Animal Minds

Our neurons identical to those of crayfish







Crawfish given microshocks develops anxiety and retreats to burrow

Give them human anti-anxiety drugs, crayfish relaxes and comes back out



Article: Animals are Conscious

What Are Animals
Thinking & Feeling?
Carl Safina / TED

Exobiological & Exosocial Evolution

- Wilson: Physical and social traits develop according to their survival value.
- Montagu: The guiding mechanism of development is one of intelligence, or a matter of brain over biology.
- Rogers: Evident in all organic life is the urge to develop, to expand, to mature.
- Maslow: We strive for the selfactualized oceanic feeling beyond space and time, that transforms all aspects of life.











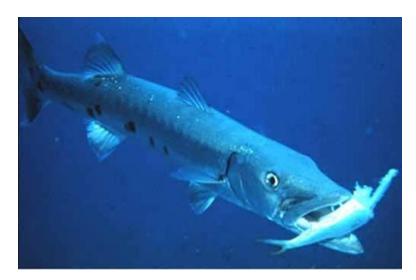


Convergent Evolution



They may look similar, but it's not because they're close relatives. Instead, they've evolved similar adaptations because they occupy similar niches -- dining on ants, hunting in the high grass, or swimming in the dark -- although their evolutionary origins are quite different. (PBS)

Convergent Evolution:





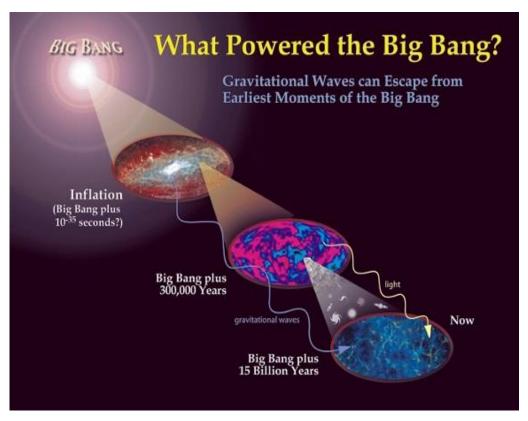
Dolphins and barracudas look similar in silhouette, even though they evolved from very different forebears. Their adapted hydrodynamic shapes are the result of convergent evolution.

- The frequency with which convergent evolution has occurred on Earth supports the idea that certain basic anatomical structures and physiological mechanisms might be common among life-forms throughout the Universe.
 - The Encyclopedia of Astrobiology, Astronomy, and Spaceflight
- It's a bit extreme to maintain that we are the best design ... An extra set of arms might be useful, as would an eye in the back of our heads. A double spine might allow faster and easier walking, and a few extra digits on each hand could make for better piano playing.
 - Dr. Seth Shostak, Senior Astronomer, SETI Institute

It All Started with a Big Bang

- Astrophysics: The universe sprung in an instant in a massive explosion from a void the size of an atom
- "But what need have you to know this huge variety of forms. Know only that I exist, and that one atom of myself sustains the universe."

Krishna, Bhagavad Gita



Our Universe Begins ...

■ Genesis: The world was without form, and the Lord said, "Let there be light."

(Bhagavad-Gita, p. 132)

- Baghavad Gita: The universe is an eternal process alternating between phases of potentiality and expression ('the day of Brahma' and 'the night of Brahma')
- *Taoism:* Original undifferentiated reality from which the universe evolved (p. 37)

Multiversality

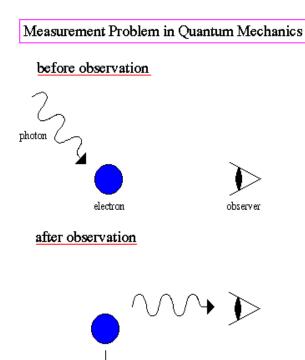
Bubbles of space-time that may account for accelerating cosmic inflation

Space.com Article

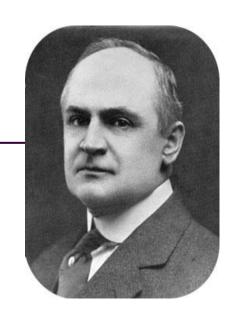


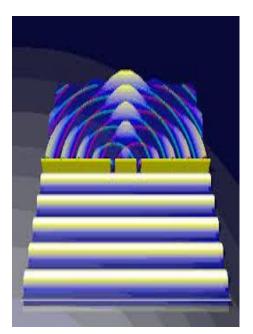
Consciousness & Physics

- Yogi Ramacharaka:
 - Those who think matter created consciousness have it all upside down.
- Quantum
 physicists say it's
 consciousness
 that impacts
 matter or a
 particle from a
 pulse of energy.



the act of observing effects the position and energy of electron





Communication Modes



- Jung's Archetypes:
 Myth of creation, rebirth, heroes in battle, transcendence.
- Campbell's Themes: Mystery of death, procuring food, transformation of children, relationship to the group.
- Loizos: Static pictures may fail to work transculturally.
- Vakoch: Use a vocabulary of gestures and pointing.
- **Deliver a package:** 10²² bits of data packed in a 1-kilogram cube of nanotechnology the entire sum of all written and electronic knowledge on Earth at 100-million times less energy than radio transmission.

'Pan-Cultural' Facial Expressions







Joy, Anger, Disgust, Sadness, Fear, Surprise

Ekman et al. (1969) Watson (2004)

Geert Hofstede's Cultural Dimensions

CULTURES and ORGANIZATIONS Software of the Mind



INTERCULTURAL
COOPERATION

and its
IMPORTANCE

for SURVIVAL

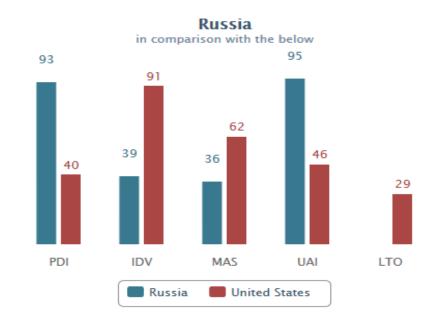
GEERT HOFSTEDE

- Power Distance (Breadth of social distances)
- Individualism (Individual or collective focus)
- Masculinity (Aggressive or nurturing)
- Uncertainty Avoidance (Fear of the unknown)
- Long-Term Orientation (Short or long-term perspective)
- Other Models: Hall, Trompenaars, etc.

Background in Eastern Europe



Moscow TV Bureau Chief



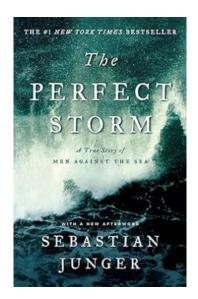
Russians and Americans are cultural polar opposites

Origin of Cultural Differences?

Contributors to Cultural Divergence:

- Linguistic Divergence / Carrier of Culture
- Social Structures / Religion / Economics
- Historical Events / Conquests
- Environmental Adaptations
- Migration Patterns





The Formation of Waves:

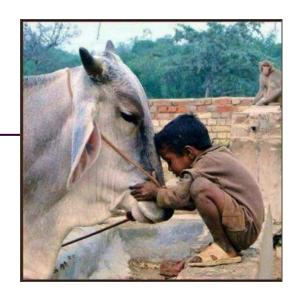
- Glassy Water
- Breeze Creates Ripple
- Haphazard Winds Nip and Empower Responsive Ripple
- Ripple Becomes Sustaining Wave of Pulsing Power Apart from Medium

Book

Transcultural Themes & Images



- Babies & Children
- Pets & Animals
- Sports
- Love, Marriage,Relationship Conflicts
- Self-image
- The Birth-Life-Death Cycle
- Water







UNESCO Journal "Prospects"

Van Hook, S.R. (2012, June)

Hopes and hazards of transculturalism

Article

Transculturally Dissonant Messages:

What Doesn't Work Well

- Humor
- Sex
- Religion
- Politics



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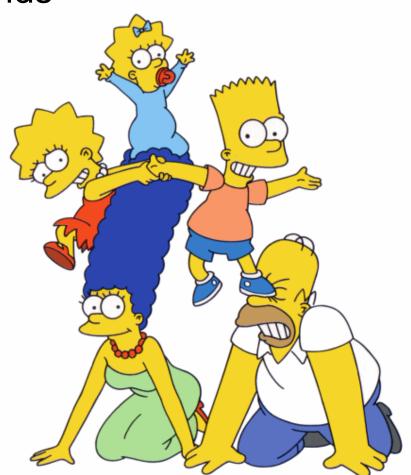
- Reproducing & Preserving Life
- Family Bonds
- Models & Methods of Social Interaction
- Religion / Philosophy of Life
- Environmental Awareness
- Governance
- Economic Systems
- Self Defense
- Altruism



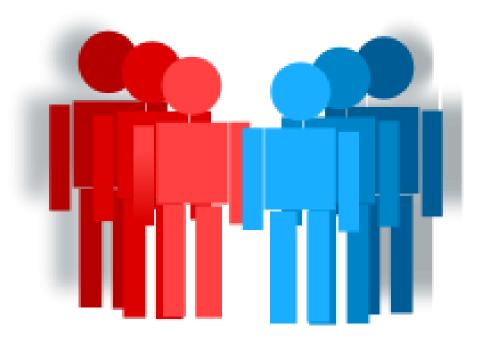
■ Reproducing & Preserving Life



Family Bonds



Models & Methods of Social Interaction



Transitions & Upheavals as Change Evolutions



"Ahh, change is good." - Rafiki



Agricultural Evolution:

Nomadic to communities
Learning to walk



Industrial Evolution:

<> From fields to cities<> Puberty and findingnew roles



Digital Evolution:

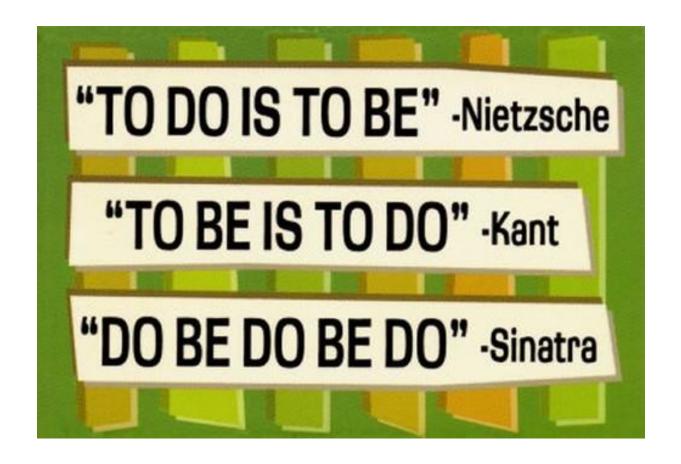
<> From defined roles to exploration and interconnection <> Young independent adults



Al Evolution:

<> From work to reflection
<> Older and wiser holistic minds

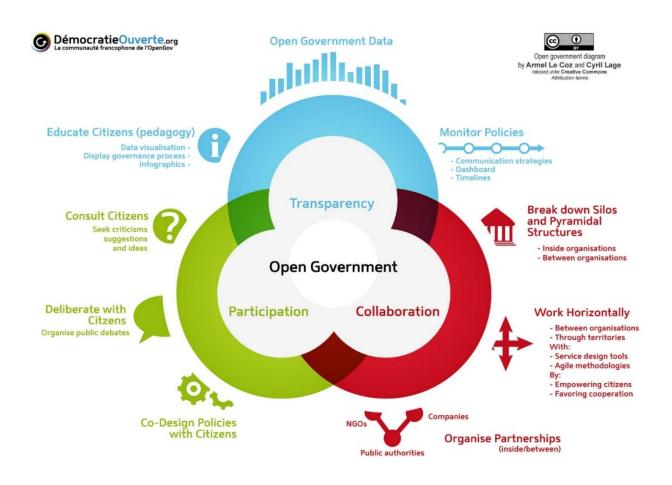
Religion / Philosophy of Life



Environmental Awareness

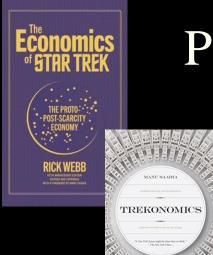


Governance



Economic Systems





Post-Scarcity World



'The right work can be satisfying for other reasons besides compensation ... this is still the part that newcomers always have the hardest time adapting to. It was thought if you don't have a job, you starve ... it used to be that way on Earth until the invention of the matter synthesizer. It was the single most transformative moment in our history.

"When all your material needs are provided for at no cost, it changes the entire game. So why don't people just lay around all day and do nothing? Well ... it's sort of frowned upon socially. But more important than that, it's no fun.

"On your planet, the currency is money. In the Union, it's reputation. So if you do something, anything, that befits our society, and you work hard at it, you're rich. And that could be anything from being a great scientist, or a great doctor, a great chef, or a great waiter. It's all valued. Or maybe you want to study a field of research.

"Learn all you can about history, physics, literature, or art. Just for your own pleasure. That's a respected life too. The only life considered poor is one that's wasted on apathy."

Kelly, The Orville





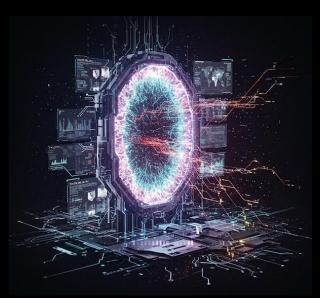


AI Portals

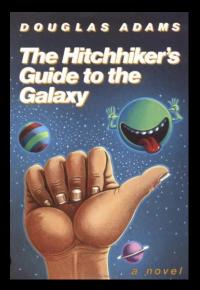


Dr. Know – Al Artificial Intelligence

Fantastic Planet Headset



Gemini 2.5 Self-Portrait



Galactic Encyclopedia

Self Defense



Altruism



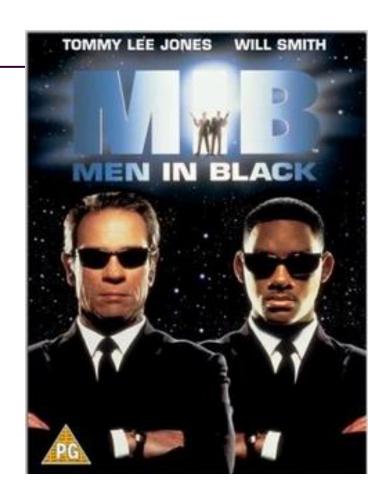
Reciprocal altruism in monkeys

- Reproducing & Preserving Life
- Family Bonds
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Why the Secret?

- Edwards: "Why the big secret? People are smart. They can handle it."
- K: "A person is smart. People are dumb, panicky dangerous animals and you know it."







Questions? Comments?

Steven R. Van Hook / Kip Roffo

- University of California
 Language, Culture
 & Business Programs
- Educare Research inc Nonprofit International Educational Resources
- Second Life: Educare Learning Centers
- http://wwmr.us
- steven@wwmr.us



Educare Landmarks & Virtual World Primer





