

An Address to Hillsdale College, 2019

Behavior, Spirit, and Morality

**Toward a Theory of Knowledge and Wisdom
in the 21st Century**



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Three Domains; Three Core Concerns

What is
“objectively”
true about
the world?

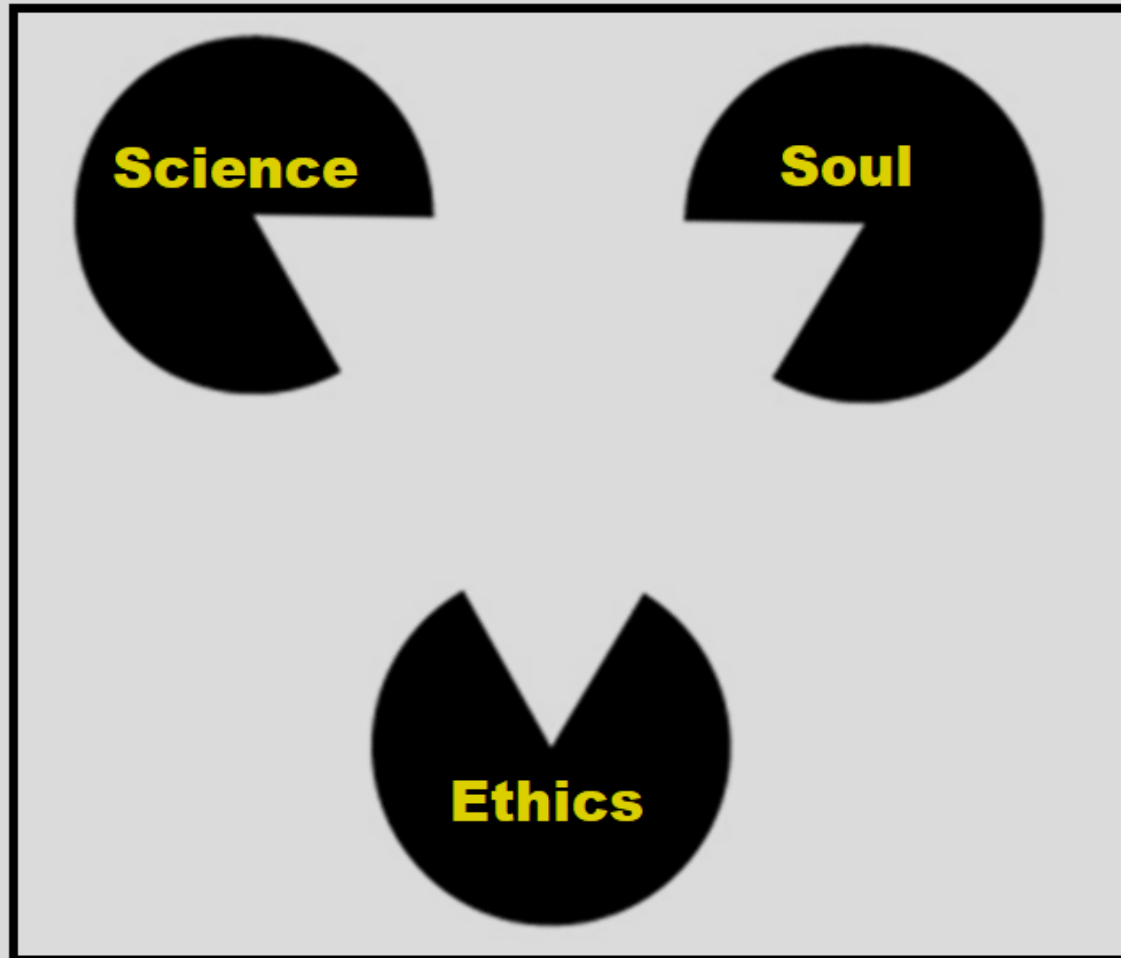


Who am “I”
as a person?
What is my
life about?

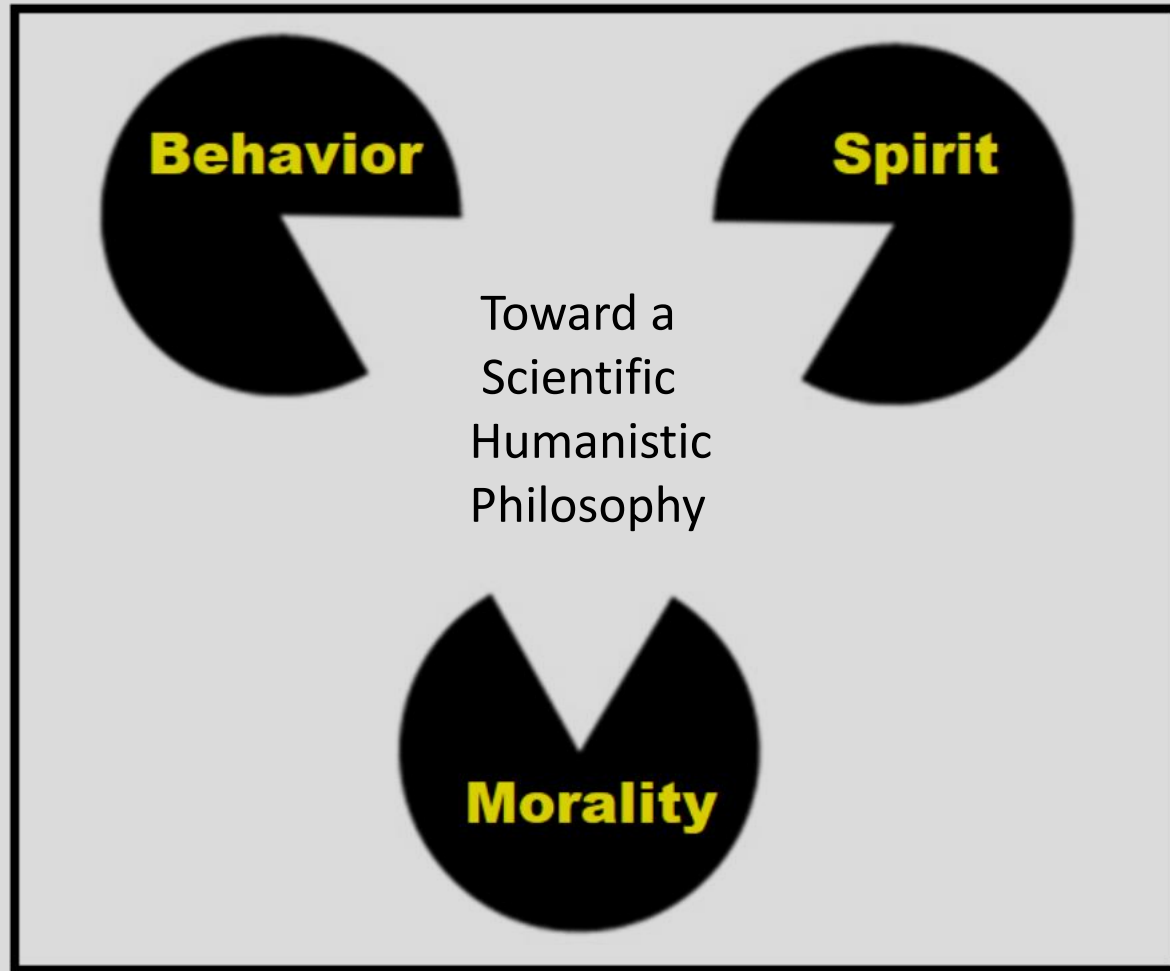


How do “we”
as a group
decide what is
good?

Three Domains; Three Core Concerns



Three Domains; Three Core Concerns



A Central Thesis:

*In the 20th Century,
a conception of “modern science” emerged that
was experienced to be at odds with foundational
“religious concerns” of “spirit” and “morality.”
Associated with this conflict has been the
“postmodern breakdown,” such that we no
longer have a shared understanding of what is
true and good.*

*This is the
modern meaning crisis.*

**WHAT DID
YOU LEARN
AT COLLEGE?**

**When you boil it
down, I am just
a bunch of
chemicals**



PART I

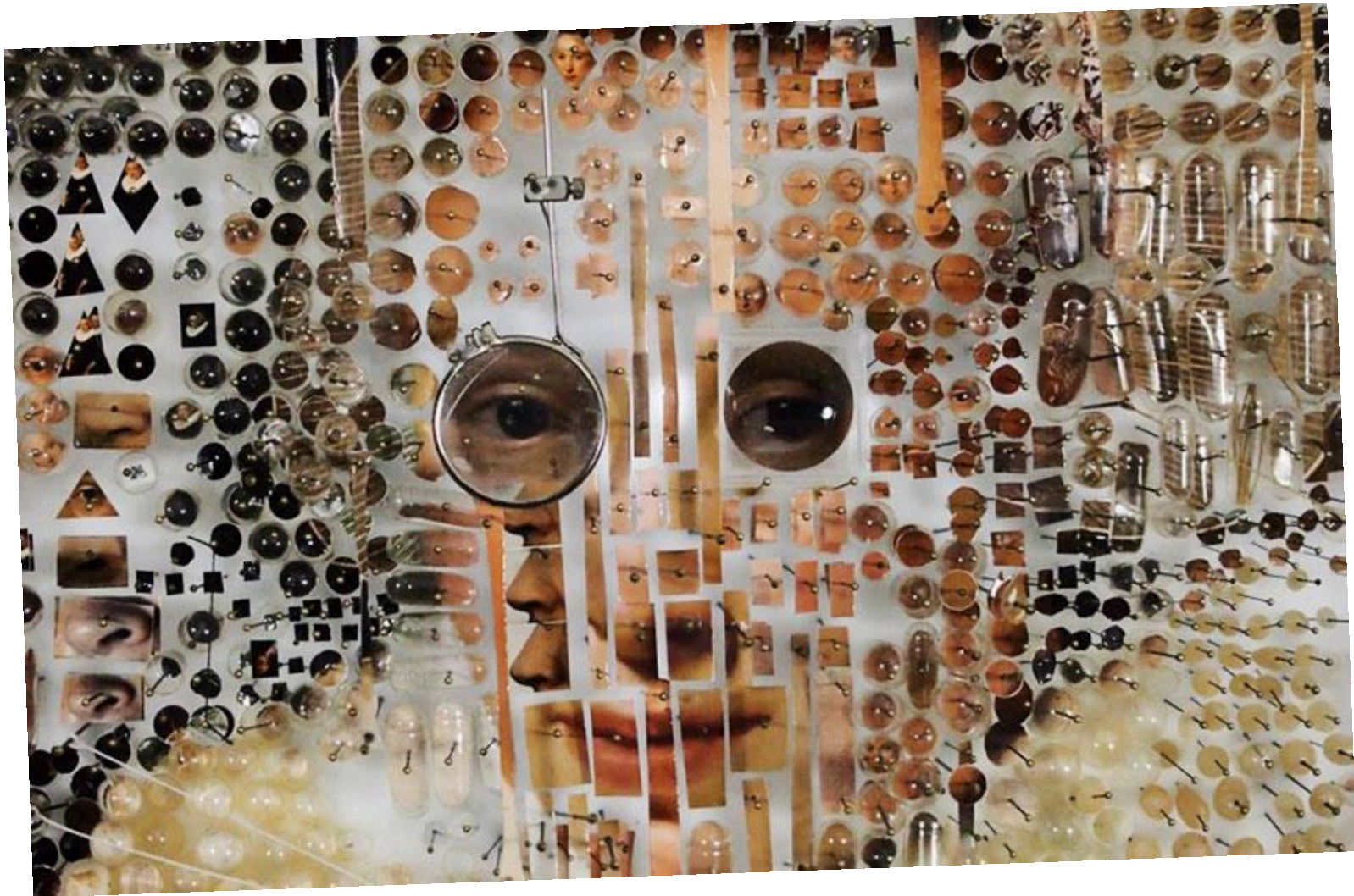
**WHAT IS THE STATE
OF OUR
KNOWLEDGE?**

**WHAT IS THE STATE
OF THE ACADEMY?**



Raphael, The School of Athens

**WHAT DOES THE
FACE OF THE
ACADEMY LOOK
LIKE NOW?**





A Fragmentated Pluralism



Or even worse?



Higher Education Is Drowning in BS
And it's mortally corrosive to society

By Christian Smith JANUARY 09, 2018

From Smith

The manure has piled up so deep in the hallways, classrooms, and administration buildings of American higher education that I am not sure how much longer I can wade through it and retain my sanity and integrity.

Even worse, the accumulated effects of all the academic BS are contributing to this country's disastrous political condition and, ultimately, putting at risk the very viability and character of decent civilization. What do I mean by BS?

BS is the university's loss of capacity to grapple with life's Big Questions, because of our crisis of faith in truth, reality, reason, evidence, argument, civility, and our common humanity.

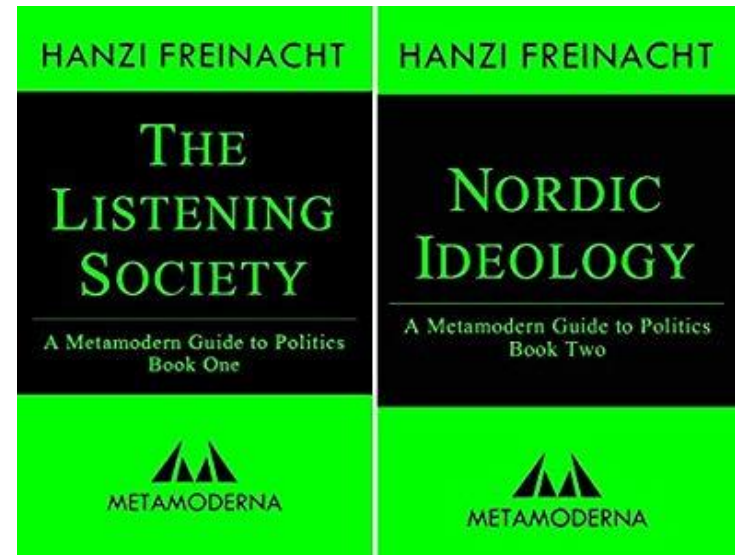
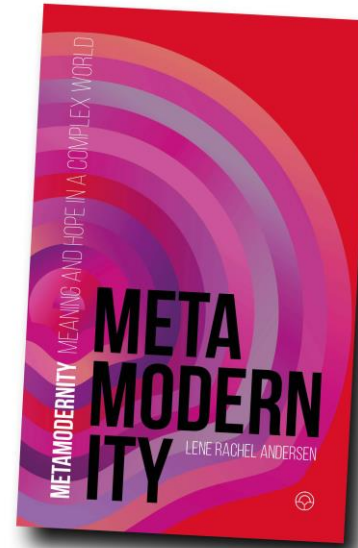
BS is the farce of what are actually "fragmentversities" claiming to be universities, of hyperspecialization and academic disciplines unable to talk with each other about obvious shared concerns...



What is my hoped for face of the future?

A “Metamodern” Integrated
Pluralism that fosters a
Scientific Humanistic
Worldview that connects “is”
and “ought” with what *can be*
for individuals and societies

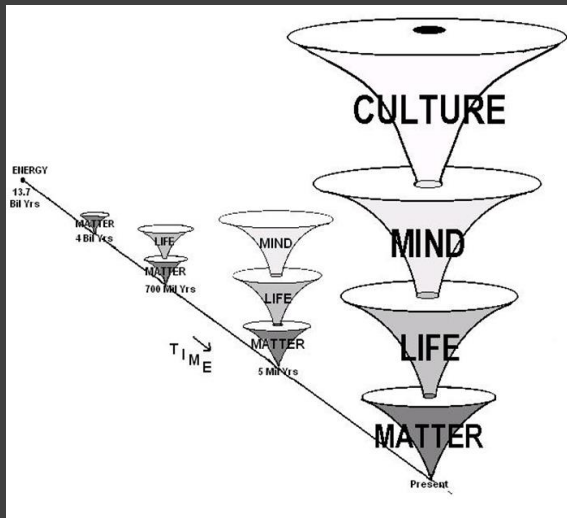
Metamodernism:
A Sensible
Synthesis between
Modernism and
Postmodernism



The Tree of Knowledge is Grounded in a Metamodern Sensibility

“Metamodernism seeks to cultivate a kind of ‘meta-cultural consciousness’ that allows for a moral tapestry that weaves together intimacy, spirituality, practical religion, science and self-exploration at the same time. In short, it is about developing a new system of understanding that will function as integrated pluralistic justification system that scales from the individual to the globe.”

Henriques, Andersen, Michalski; September, 2019



Religion versus Science

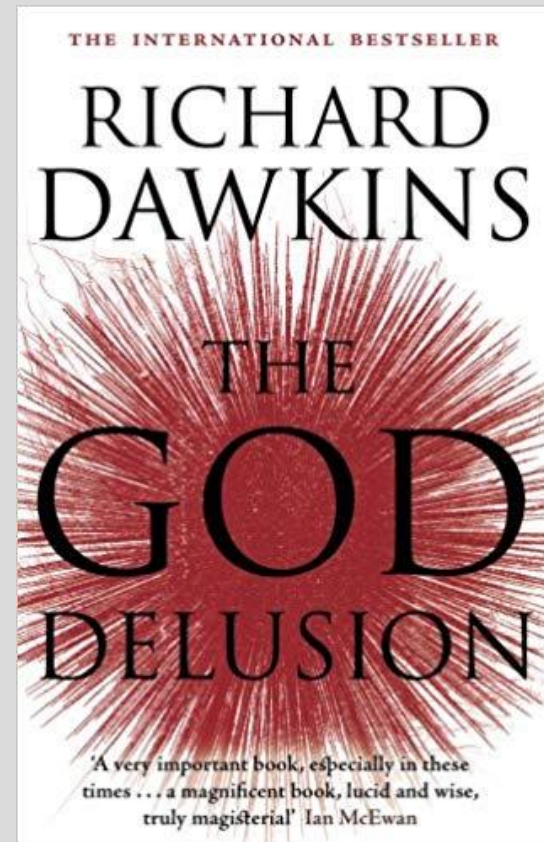
(Pre-Modern Formal)

(Modern)



Pierre-Simon Laplace

*I have no need for that
“hypothesis”*



Sciences versus Humanities

(Modernism)

(Postmodernism)



1959 Rede Lecture: “The Two Cultures”

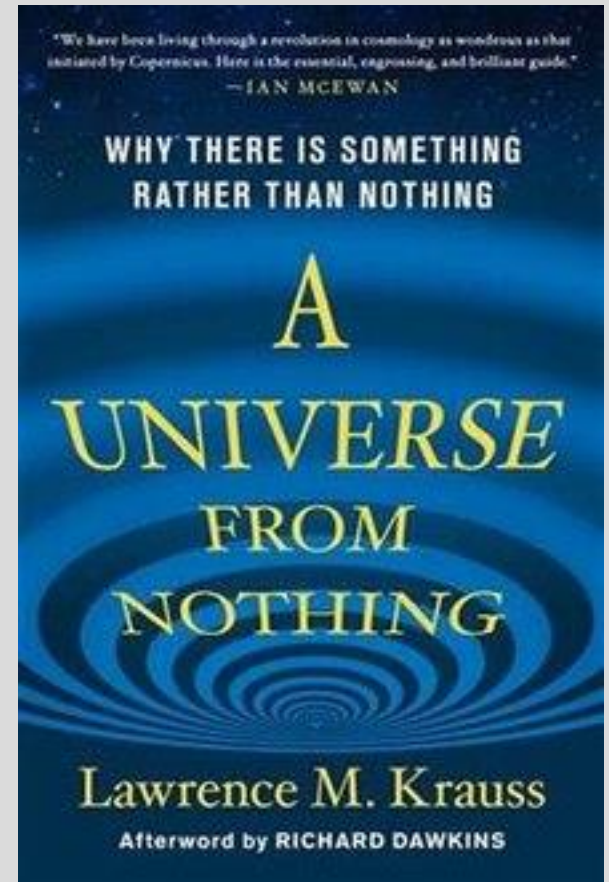
I believe the intellectual life of the whole of western society is increasingly being split into two polar groups. ...Literary intellectuals at one pole—at the other scientists, and as the most representative, the physical scientists. Between the two a gulf of mutual incomprehension—sometimes (particularly among the young) hostility and dislike, but most of all lack of understanding.

Physicist Lawrence Krauss' Update on C. P. Snow's "Two Cultures"

"Snow's vision has gone unrealized....

"Until we are willing to accept the world the way it is, without miracles that all empirical evidence argues against, without myths that distort our comprehension of nature, we are unlikely to bridge the divide between science and culture and, more important, we are unlikely to be fully ready to address the urgent technical challenges facing humanity."

Krauss, L. (2009) Scientific American



My Questions in Reply to Krauss..

- But what “is the way the world is”?
- What if myths help us make sense of the world and give us purpose and connection?
- What about the fact that the coherence of science breaks down at the *problem of psychology*? Does physics have the answers?
- What if the most urgent challenges are “spiritual” in the sense of meaning making (versus nihilism and alienation)? What if the idea that we “just” material machines is part of the problem?
- More broadly, what exactly *is* the current situation we find ourselves in and what *ought* to we do about it?

The Global Context: Welcome to the Age of Confusion



**Digital
Identity
Problem**

Age of Confusion...(2015)

Daily mass shootings, an epidemic of affluent kids killing themselves, skyrocketing rates of depression and anxiety treated with pills and myths about brain diseases, dramatic increases in working class white mortality rates due to drugs and suicide, massively uncertain economic patterns, a crumbling national infrastructure, a deeply troubled educational system, deep-seated culture wars with entrenched and diametrically opposed views on guns, God, abortion, climate change, inequality, and the role of government, a broken political system fueled by hyper-partisanship, gerrymandered districts, and a damaging 24/7 news cycle and social media sound bites.

The Digital Identity Problem Consists of Four Great Crises in the 21st Century

1. The Techno-Environmental Crisis

- Climate change, resource depletion and mass extinction, and weapons of mass destruction

2. The Digital-Globalization Crisis

- The digital world is changing everything

3. The Mental Health Crisis

- We are seeing increases in mental health problems, especially in our youth

4. The Meaning Crisis

- We are deeply confused and conflicted about what is real and good

PART II

The Problem of Psychology and the Tree of Knowledge System

My Professional Background and Dilemma

- I considered psychology a science and thus, as a scientist, I needed to be grounded in a scientific understanding.
- As a clinician, I was a healer, working with real people with real problems. I had a clear ethical goal to reduce mental suffering and improve well-being.
- Driven by a need for coherence, I longed for a scientific worldview that could ground my professional practice.
- The problem of psychology meant there was no such thing.
- Ultimately this led to Tree of Knowledge System

The Problem of Psychology

Unlike physics, which is the science of energy and matter, and biology, which is the science of life, psychology exists as a fragmented “collection of studies”.



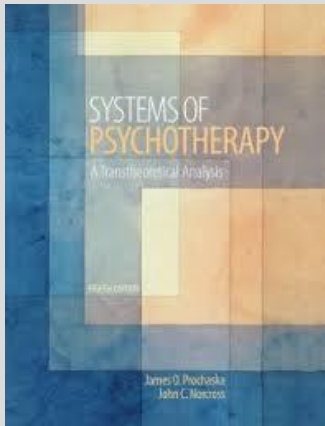
The Field of Psychology is a Jungle Place

Psychology

- Lacks a clear definition
- Lacks a clearly defined subject matter
- Struggles with its fundamentally identity (natural versus social science; science versus profession)
- Consists of many overlapping, competing mid-level paradigms that, when put together, generate a buzzing mass of confusion



As is the domain of Psychotherapy:



- The field of psychotherapy is enormously fragmented and staggered by over-choice.
- In 1959, 36 distinct systems
- In 1976, 130
- Today, over 500 (Prochaska & Norcross, 2014)



Scientific vs Humanistic Tensions

- Scientific

- Objective
- Material
- Tough Minded
- Descriptive-Explanatory
- Analytical
- Data Driven

Problems

- Scientistic, Simplistic, Weak on Idiographic Responsivity; Authoritarian

- Humanistic

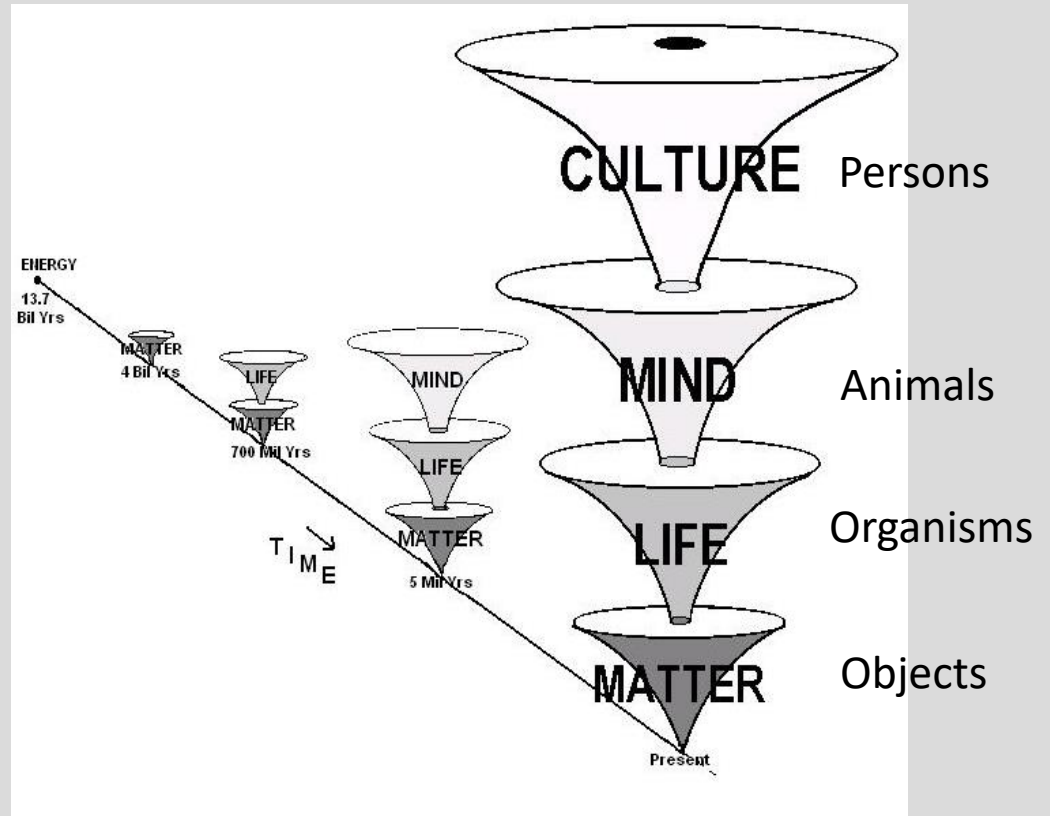
- Subjective
- Phenomenological
- Tender Minded
- Creative-Expressive
- Moral
- Experience Driven

Problems

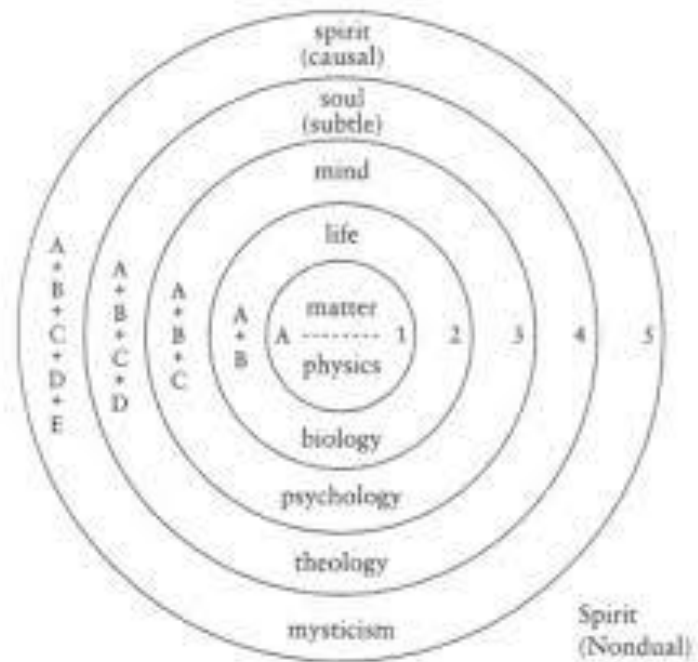
- Fuzzy, chaotic, unfalsifiable, soft, 'anything goes'

Enter the Tree of Knowledge System

A New
Map of the
Evolution of
“Behavior”
as Four
Separable
Dimensions



Although new,
 the Tree of
 Knowledge
 also lines up
 with many
 ancient systems.



*The Great Chain
 of Being*

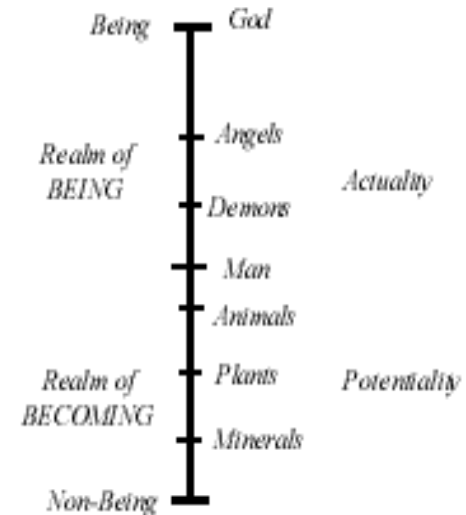
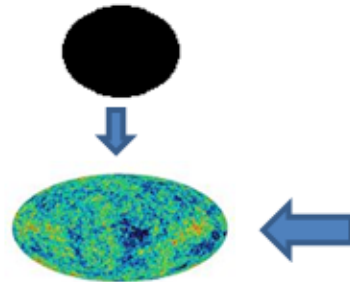


Fig. 1

Tree of Knowledge

The BIG BANG is
the FIRST
CAUSE...

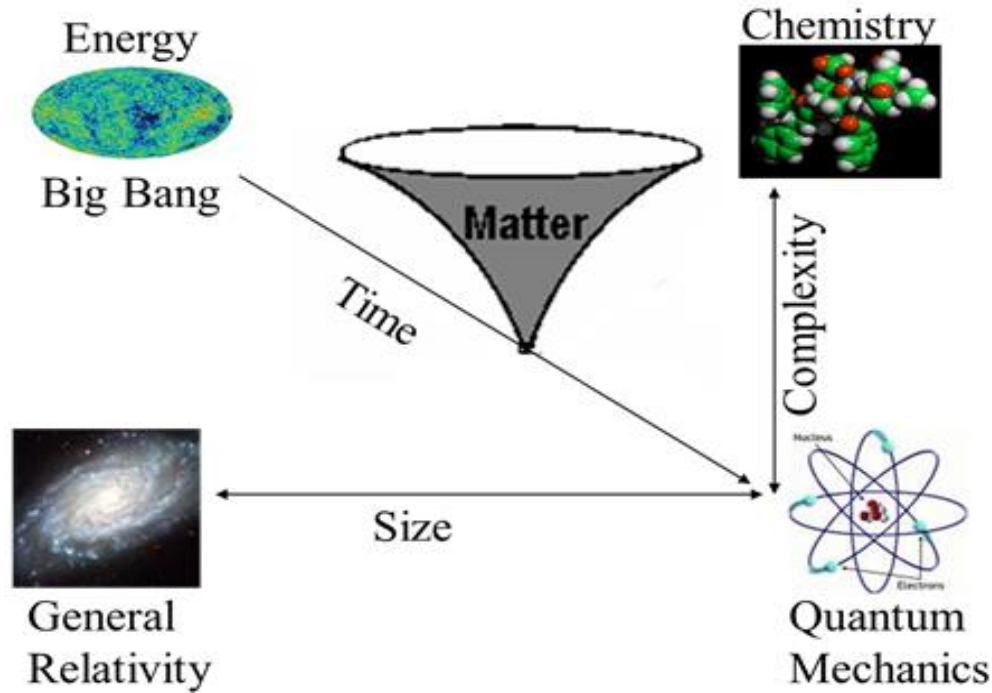
In the begining there was a
pure energy singularity...



Cosmic Microwave
Background Radiation
from the Big Bang

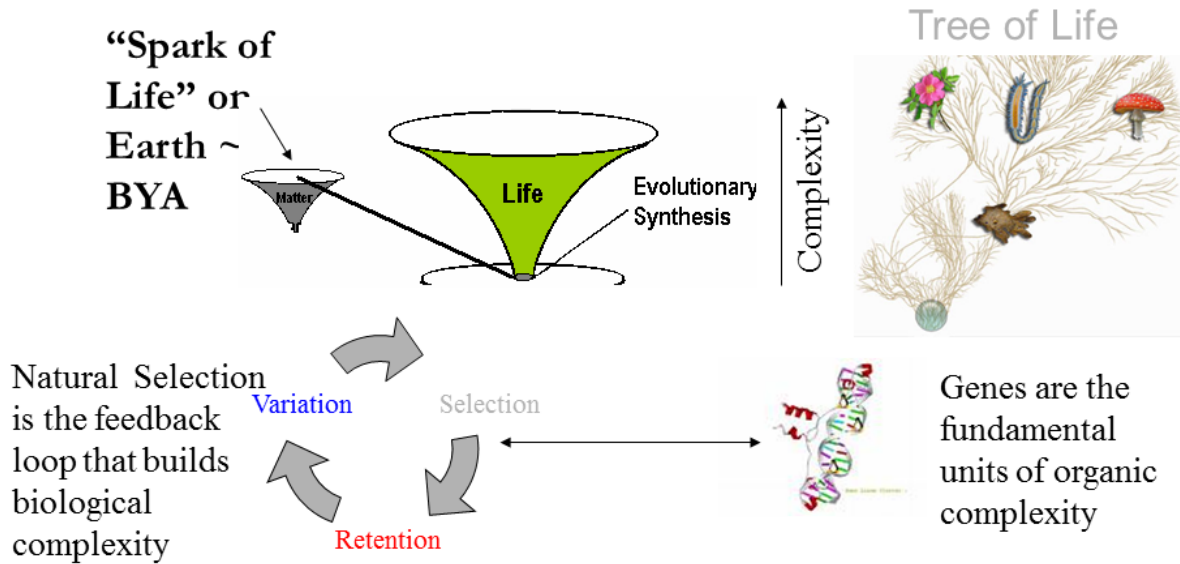
The Big Bang gives rise
to the first dimension of
complexity...

Energy, the Primordial “Atom”, and
the “Big Beginning” ...



Matter:
The First Dimension of Existence
(or Behavioral Complexity)

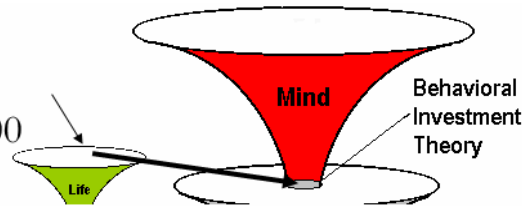
LIFE



Life:
The Second Dimension of Existence/
Behavioral Complexity

MIND

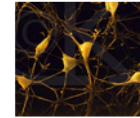
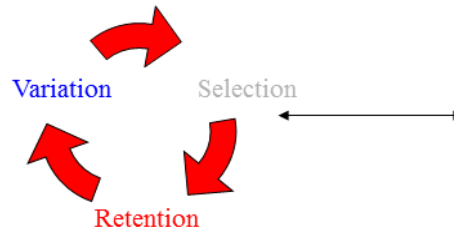
The Nervous System first emerges ~ 600 MYA



Complexity



Behavioral Selection is the feedback loop that builds mental complexity.

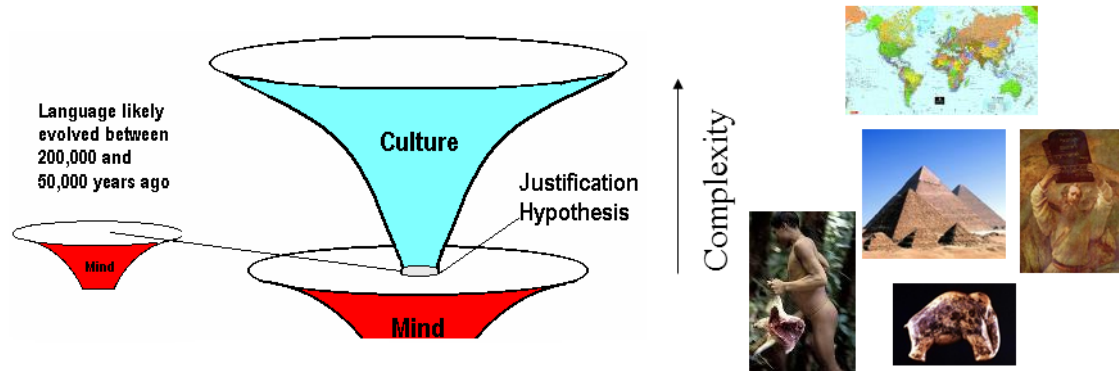


Information exchanged in neural networks are the fundamental units of mental complexity

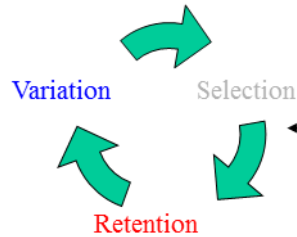
Basic Psychology

“Mind”:
The Third Dimension of Existence/
Behavioral Complexity

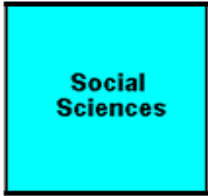
CULTURE



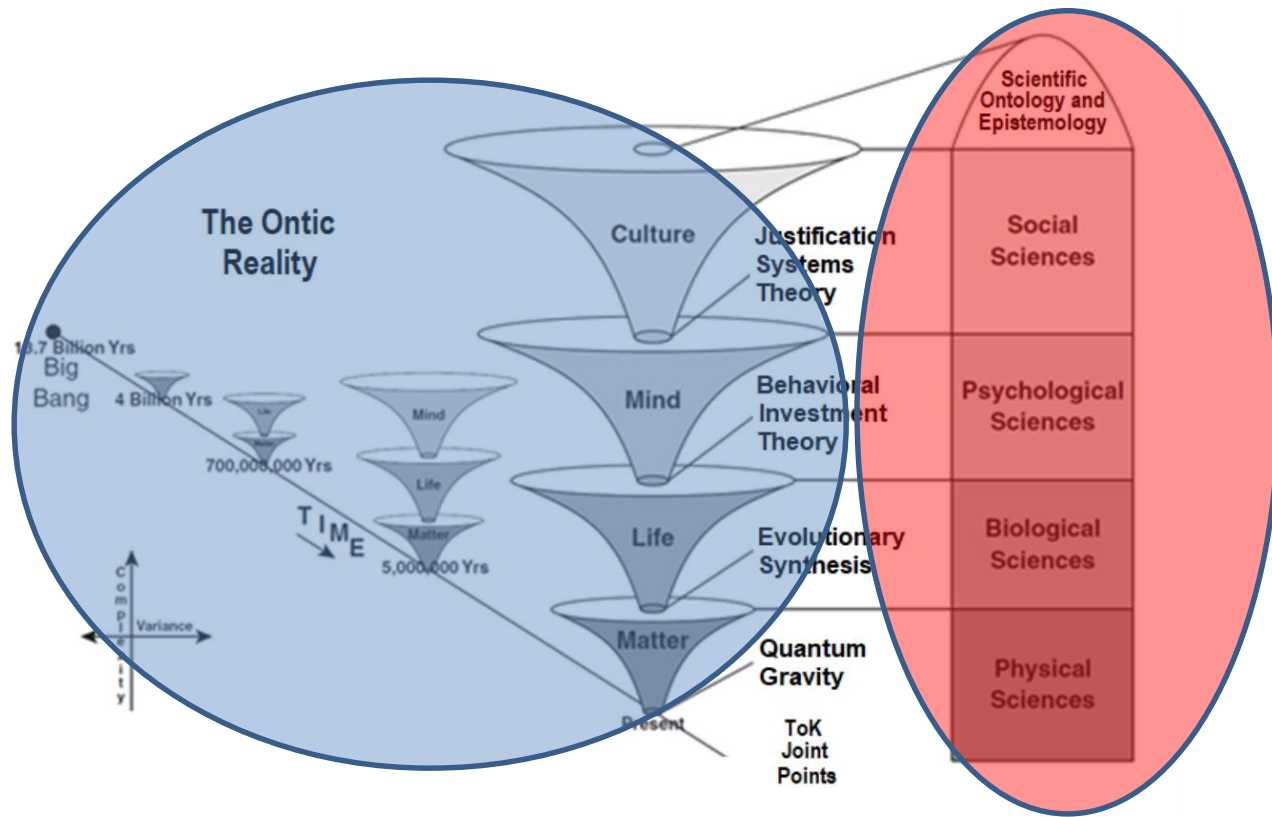
The evolution of justification systems is the feedback loop that builds cultural complexity.



Symbols are the fundamental units of cultural complexity



Culture:
The Fourth Dimension of Existence/
Behavioral Complexity



The ToK System also depicts how **science** exists in the dimension of culture.

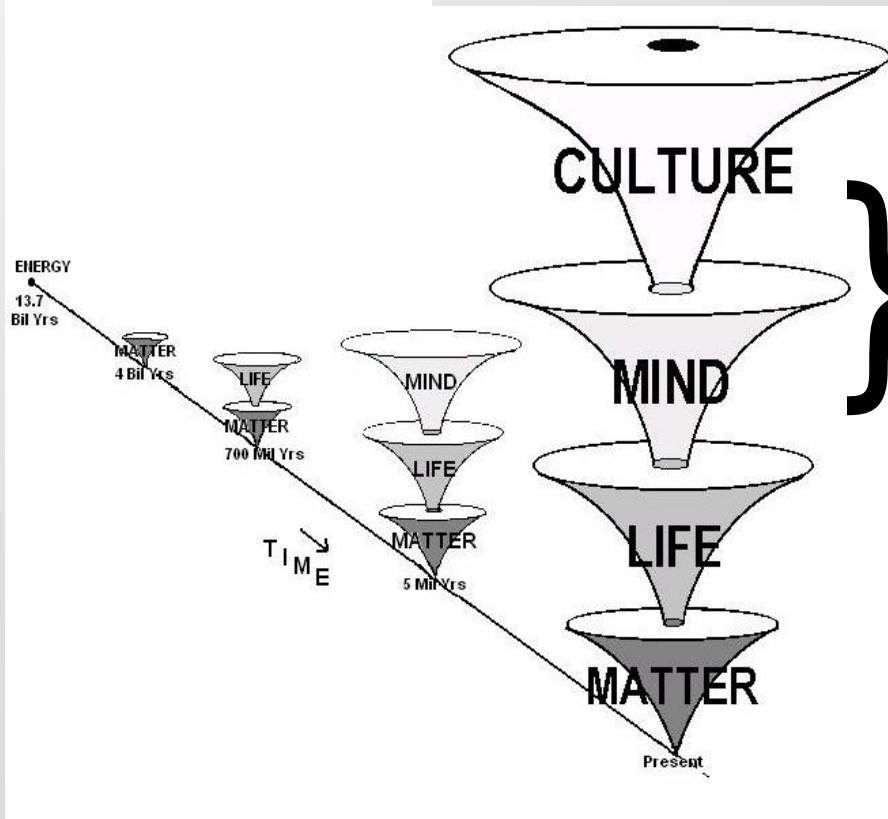
And it shows how scientific theory emerges out of culture and functions to map the four dimensions of reality as different domains of behavioral complexity.

“Psychology’s Puzzle”:

It has two different subject matters (dimension of animal mind and cultured person), but is only one science.

Psychology Defined

▼
Gregg R. Henriques
James Madison University



Social Science

Human persons,
society, culture,
language, self-
consciousness, etc.

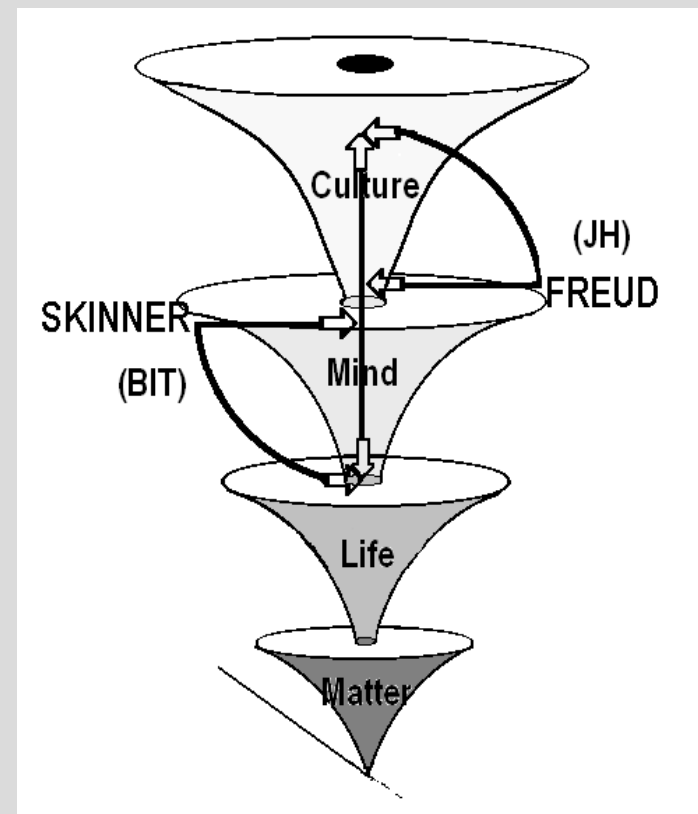
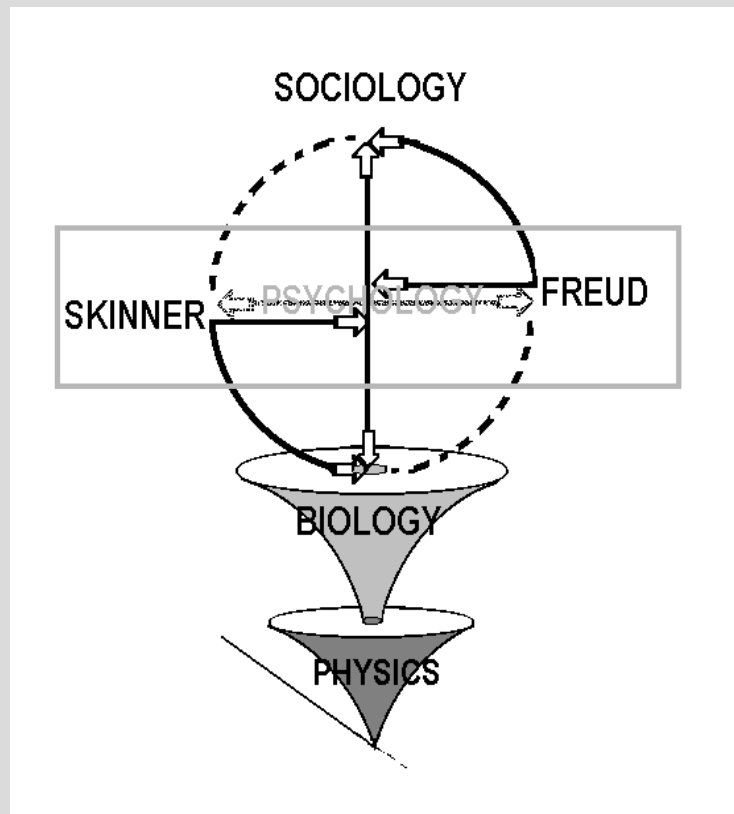
**HUMAN
PSYCHOLOGY**

Natural Science

Animal learning,
brain-behavior
relationships,
perception,
memory, etc.

**BASIC
PSYCHOLOGY**

The ToK System showed how it can solve “the Skinner-Freud Problem” and give rise to a clear vision of the field.

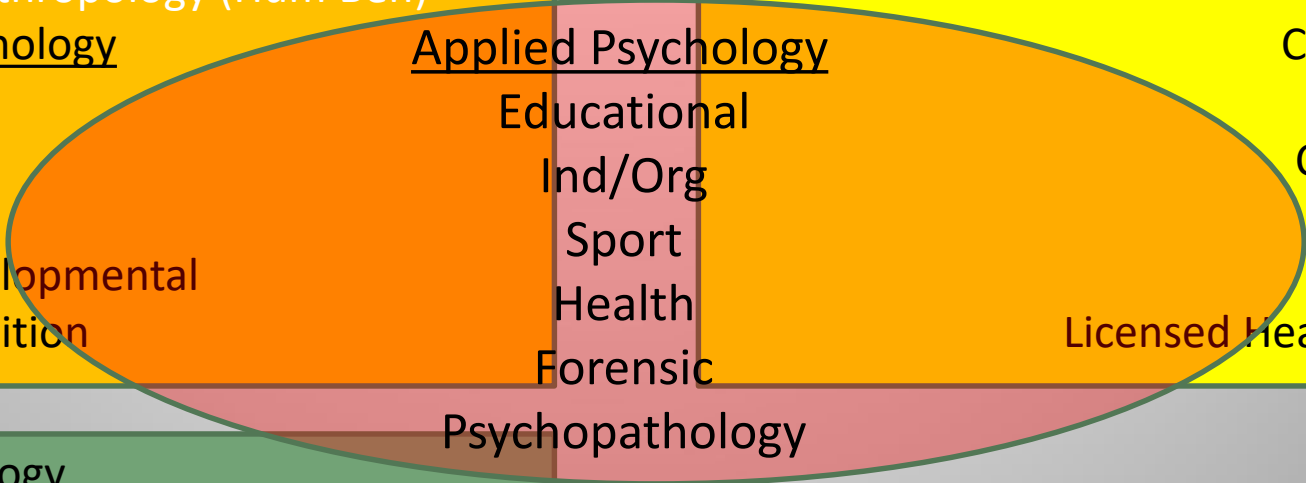


A New Map of Psychology

Human Indiv/Relational

Sociology(Above) (Social Science)
 ~~~~~~ Anthropology (Hum Beh)  
Human Psychology  
 Cultural  
 Social  
 Personality  
 Human Developmental  
 Human Cognition

Professional Psychology  
 Clinical  
 Counseling  
 School  
 Combined  
 Licensed Health Pract.



Psychopathology

Brain, Mind, Behavior

Basic Psychology  
 (Basic) Cognitive/Comp. Science  
 Comparative Psychology  
 Behavioral Science  
 Psychophysiology/Psychophysics  
 Behavioral Genetics  
 ~Ethology /Sociobiology (Ani Beh)  
 Neuroscience (Below)  
 (Natural Science)



Ethics, Consultation,  
 Advocacy, Education,  
 Scientific Worldview

Research Methods  
 Stats, Measurement,  
 Research Design

Research Skills

Practice Skills

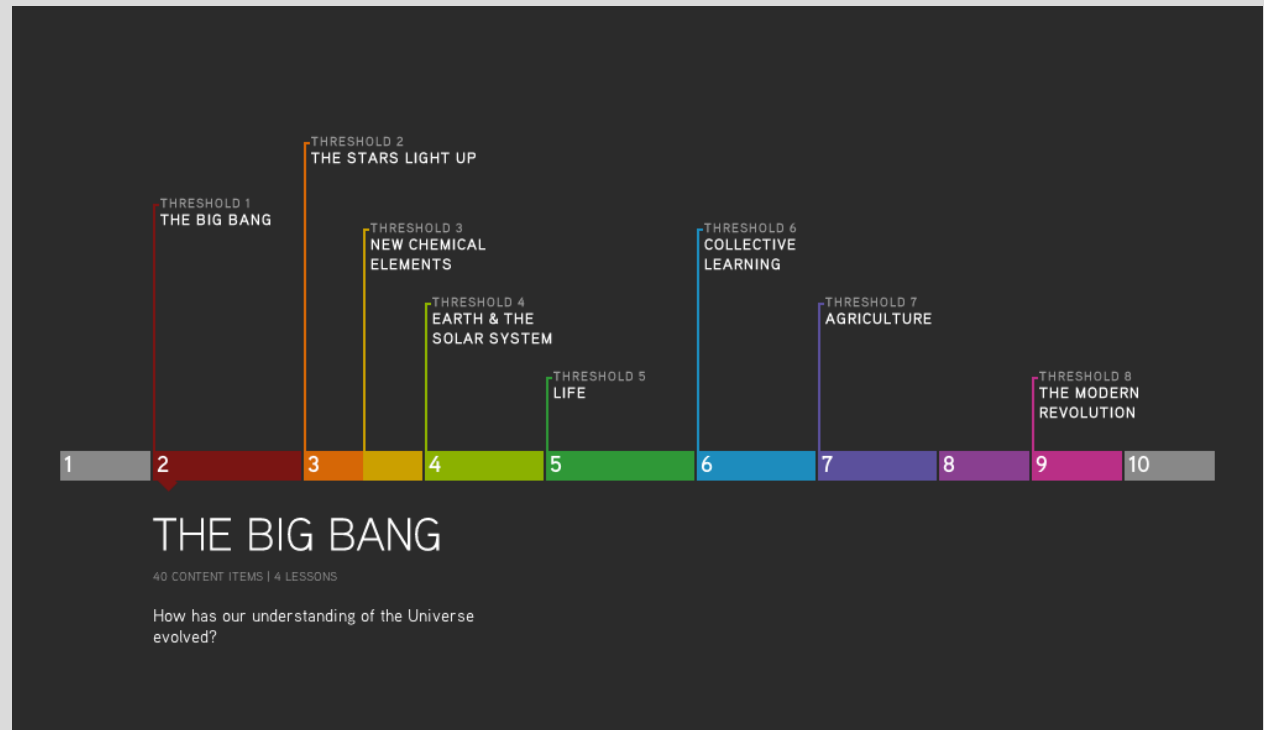




## **PART III**

# **The ToK System: A Big History Map of Science as Mapping Different Behaviors**

# Big History Traces the big picture on the dimensions of time and complexity



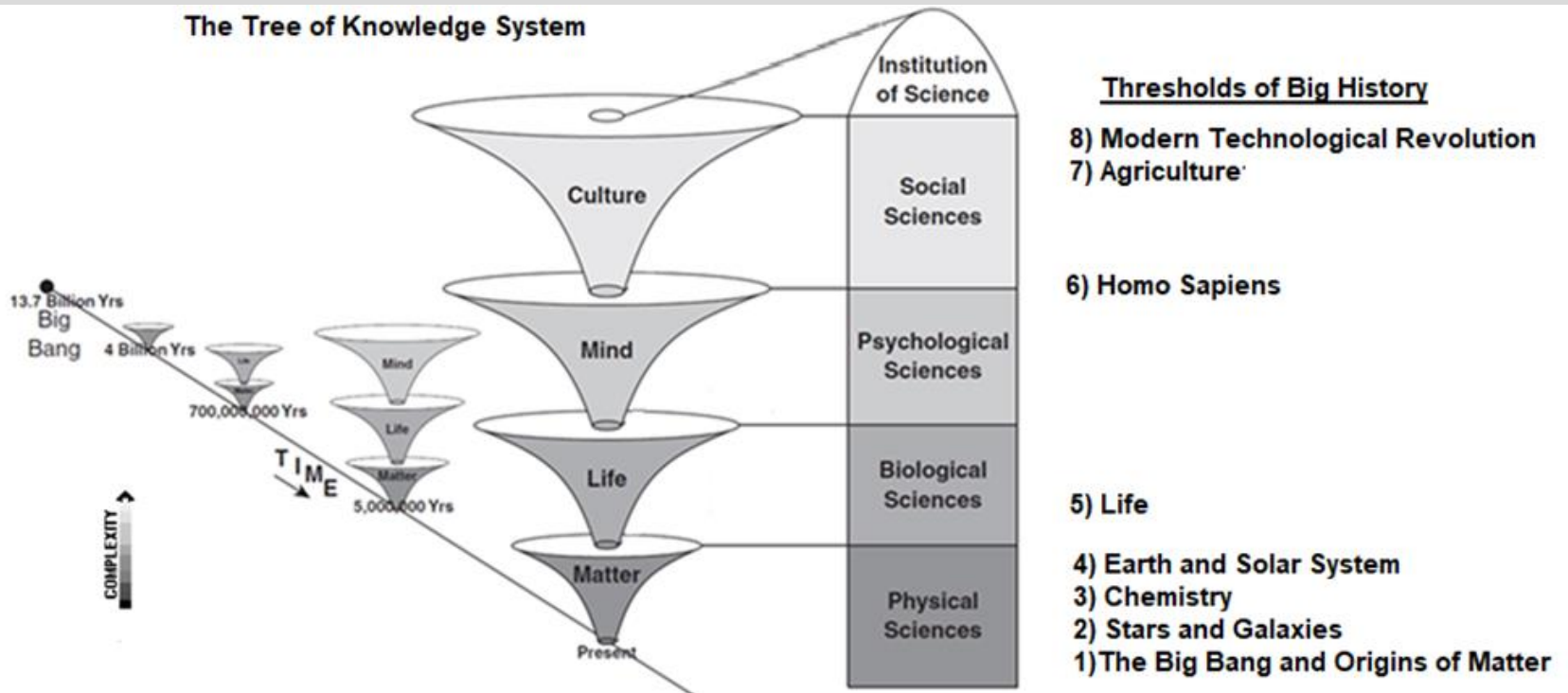
<https://www.youtube.com/watch?v=aSG5Ao9rS4I>

# The Tree of Knowledge System: A New Map for Big History

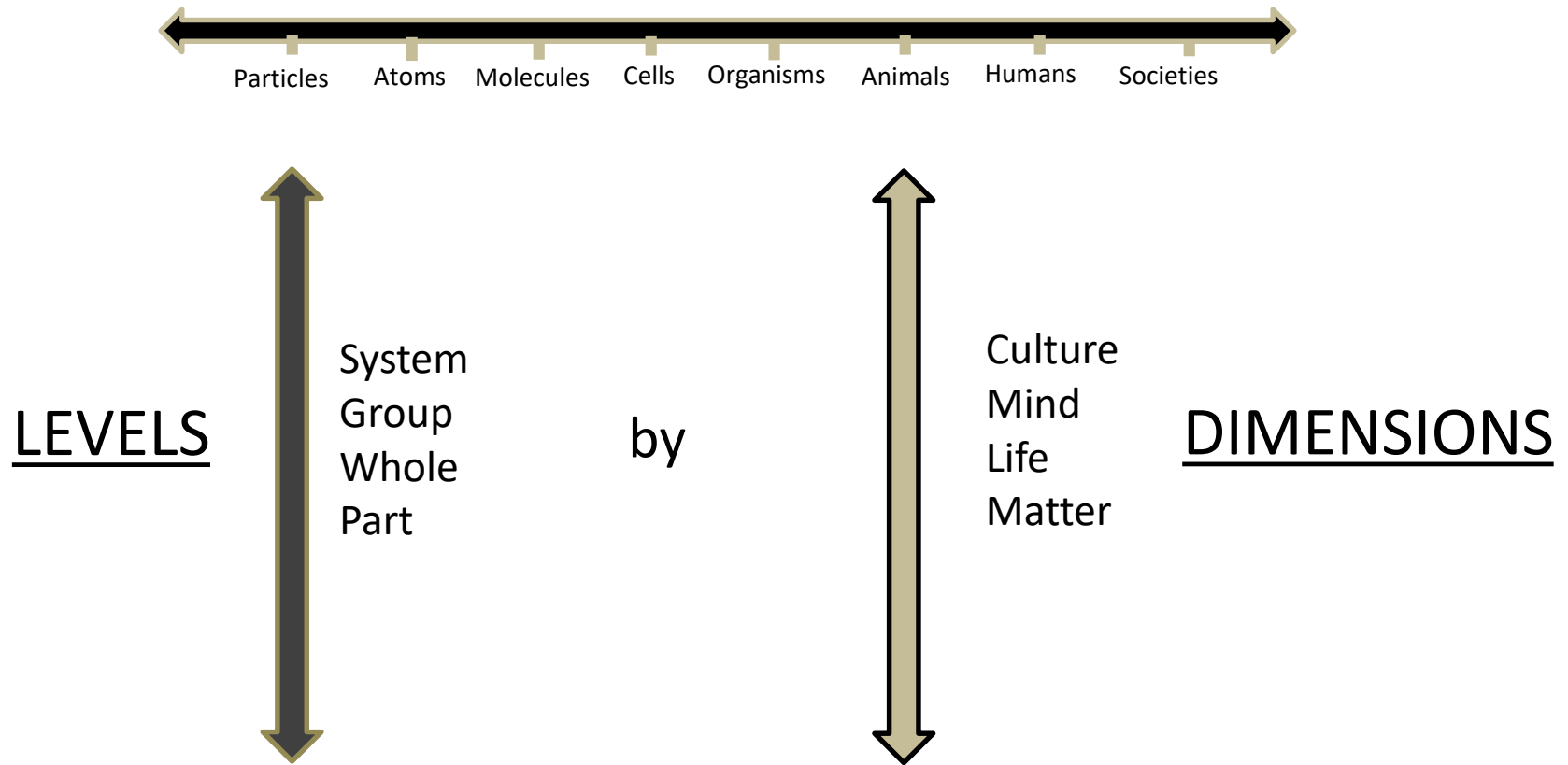
Gregg Henriques  
James Madison University  
Joseph Michalski  
King's University College

Steven Quackenbush  
University of Maine at Farmington  
Waldemar Schmidt  
Oregon Health & Sciences University

The Tree of Knowledge System



From the standard single axis of complexity model...



In addition to considering levels of analysis, the ToK also points out that there are different dimensions of behavioral complexity. The ToK gives rise to a Levels by Dimensions view of Behavior, charted in the Periodic Table of Behavior.

Why, according to the ToK, are there ***dimensions*** in addition to ***levels***? And why are there four of them instead of three or five?

Following Matter, new ***dimensions of behavioral complexity*** emerge because they are associated with a novel information processing system

Life.....genetic system

Mind.....nervous system

Culture.....human language

This conception gives rise to a...

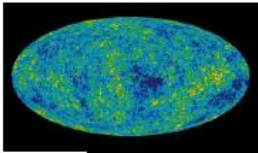
To a new, dual axes map of a Levels by Dimensions view...

## The Periodic Table of Behavior

|                                                                | Dimensions of Complexity |          |                  |                   |                           |
|----------------------------------------------------------------|--------------------------|----------|------------------|-------------------|---------------------------|
|                                                                |                          | MATTER   | LIFE             | MIND              | CULTURE                   |
|                                                                |                          | Physical | Biological       | Psychological     | Social                    |
| Object-Field Relations                                         | Context of Behavior      | Field    | Ecology          | Environment       | Society                   |
|                                                                | Behavioral Entity        | Object   | Organism         | Animal            | Human Person              |
| Three Primary Levels of Object Complexity (Part, Whole, Group) | Groups of Wholes         | Molecule | Multicell/Colony | Family-Group      | Family-Community-Nation   |
|                                                                | Fundamental Whole        | Atom     | Cell             | Mind-Brain System | Self-Consciousness System |
|                                                                | Fundamental Part         | Particle | Gene             | Neural Network    | Symbolic Justification    |

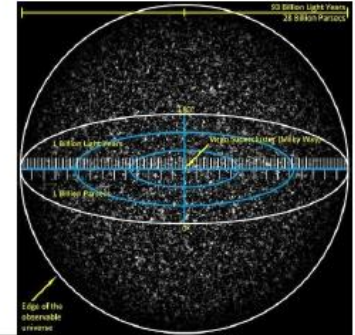


Big Bang



# Physical Sciences

Visible Universe



**The Periodic Table of Behavior**

|                                                                |                     | Dimensions of Complexity |                  |                   |                           |
|----------------------------------------------------------------|---------------------|--------------------------|------------------|-------------------|---------------------------|
|                                                                |                     | MATTER                   | LIFE             | MIND              | CULTURE                   |
|                                                                |                     | Physical                 | Biological       | Psychological     | Social                    |
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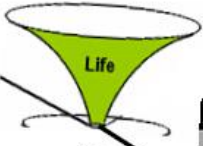
Time  
13.8 billion  
Scale



Quantum



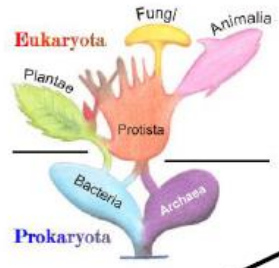
# Biological Sciences



**The Periodic Table of Behavior**

|                                                                |                     | Dimensions of Complexity |                  |                   |                           |
|----------------------------------------------------------------|---------------------|--------------------------|------------------|-------------------|---------------------------|
|                                                                |                     | MATTER                   | LIFE             | MIND              | CULTURE                   |
|                                                                |                     | Physical                 | Biological       | Psychological     | Social                    |
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|                                                                | Fundamental Part    | Particle                 | Gene             | Neural Network    | Symbolic Justification    |

Ecology



Microbiology



Physiology and Anatomy

# Mind, Brain, Animal Behavior Sciences



**The Periodic Table of Behavior**

|                                                                |                     | Dimensions of Complexity |                  |                   |                           |
|----------------------------------------------------------------|---------------------|--------------------------|------------------|-------------------|---------------------------|
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Behavioral Ecology



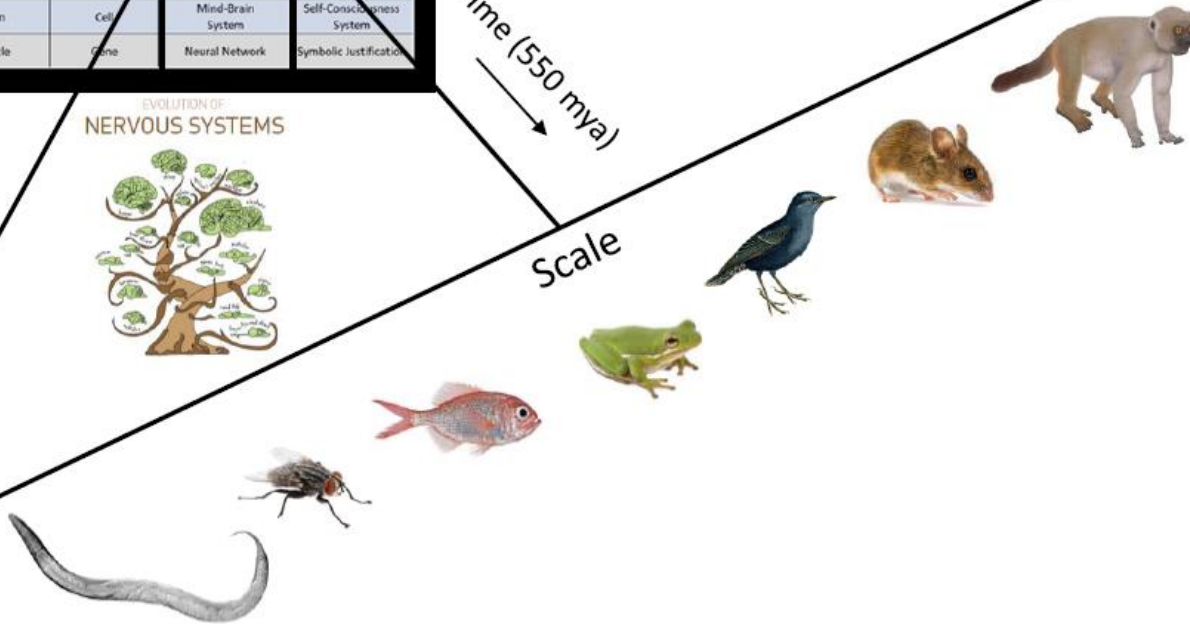
Time (550 mya)

Scale

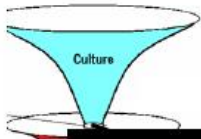
EVOLUTION OF NERVOUS SYSTEMS



Neuroscience



# Human Social Sciences



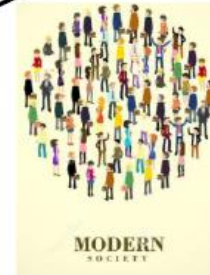
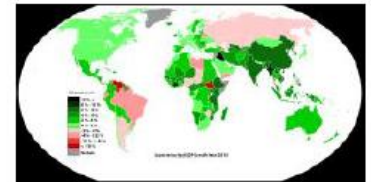
**The Periodic Table of Behavior**

|                                                                |                     | Dimensions of Complexity |                  |                   |                           |
|----------------------------------------------------------------|---------------------|--------------------------|------------------|-------------------|---------------------------|
|                                                                |                     | MATTER                   | LIFE             | MIND              | CULTURE                   |
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|                                                                | Fundamental Part    | Particle                 | Gene             | Neural Network    | Symbolic Justification    |



Time  
200,000

Scale



Branches of linguistics

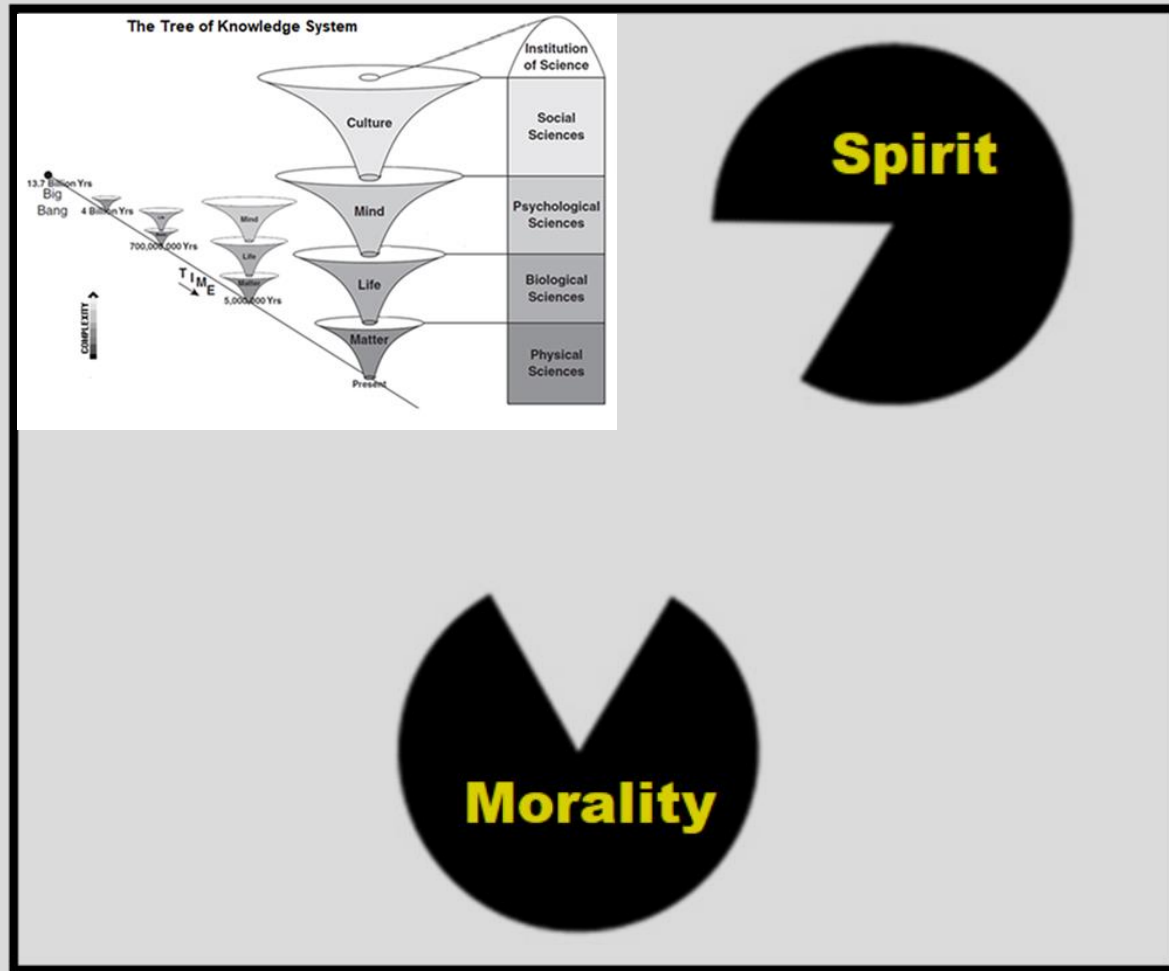




## **PART IV**

**By Effectively Mapping  
the domain of  
Science/Behavior,  
We Can Now Identify the  
“Extra-Scientific” Domains  
of “Spirit” and “Morality”**

# The ToK offers a new map of Science and Behavior





# The “Language Game” of Science

- Third Person, “Exterior” view
- Objective, accuracy based
- Key concept is behavior
- Nomothetic and generalizable
- Based on quantitative data gathering and experimentation
- Theory of reality
- Strives to factor out subjective and moral values



# The (Naturalistic) Language Game of the Soul/Spirit

- First person, interior epistemological perspective
- Subjective
- Key concept is “phenomenology”
- The form of your “unique and particular” life; your “idiographic” experience of being
- Based on qualitative experience
- Defined by “lived, actual reality”
- Your soul is your everyday “lifeworld”; your spirit is your “transcendental calling” to engage in your “ultimate concern”, your “lifequest”

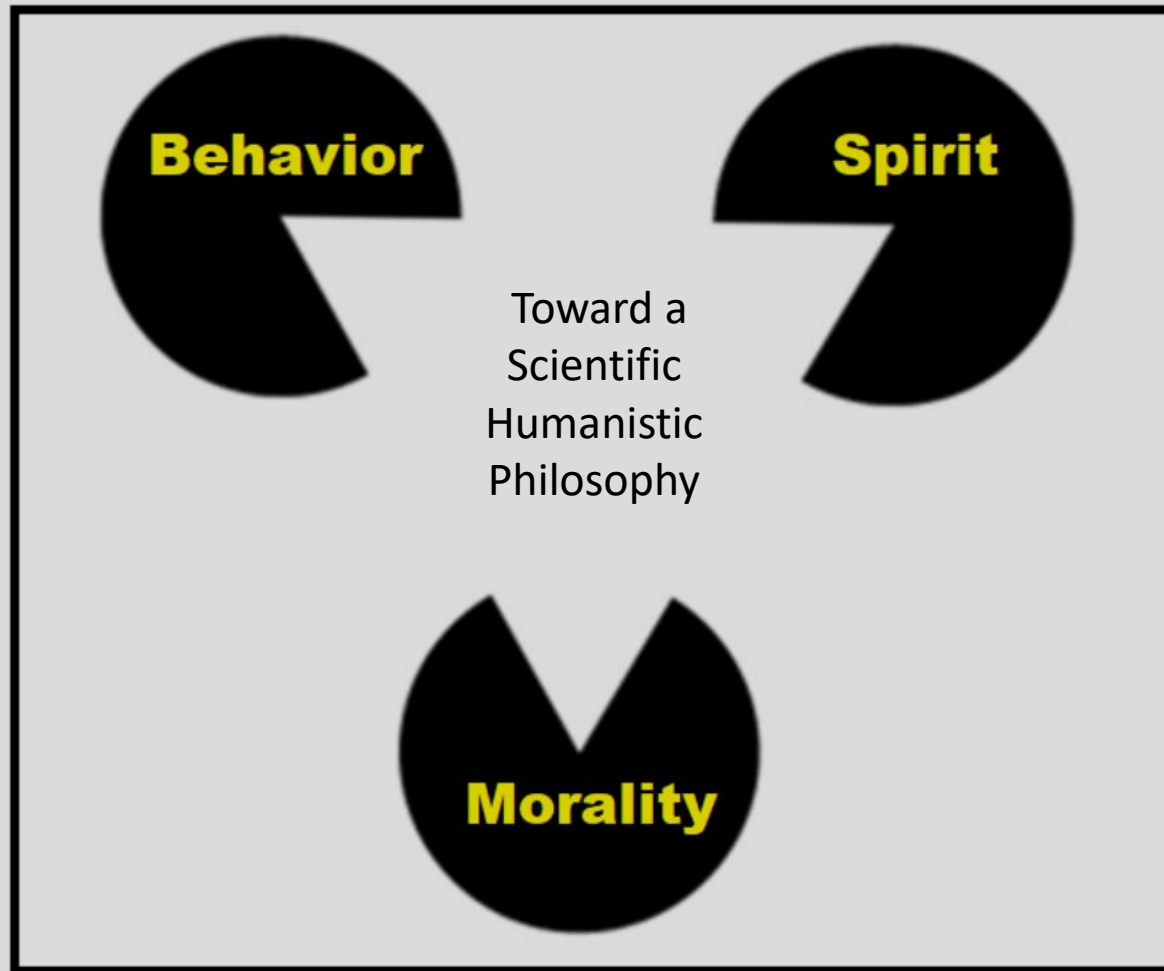



# The Language Game of Morality

- Second person, socially constructed epistemological perspective
- Intersubjective
- Key concept is morality or ethics
- The shared sense of right and wrong
- Based on relationships and notions of “ultimate good”
- A universalist relational conception of humanistic values



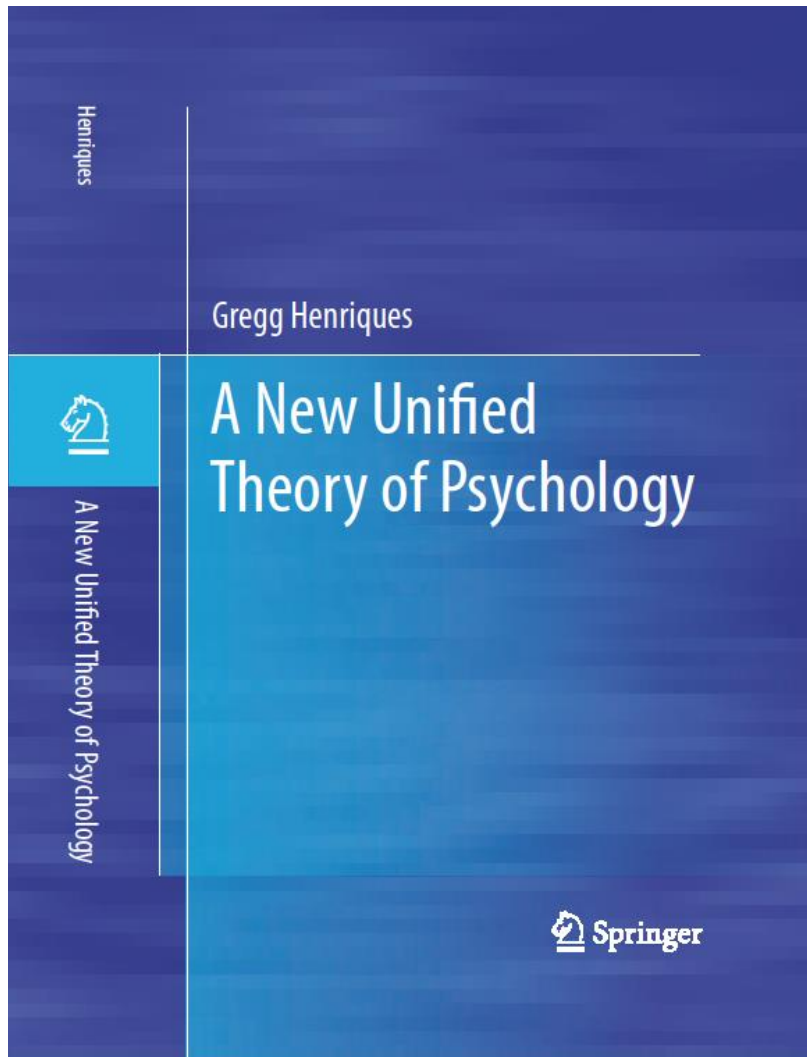
# Developing Commensurate Language Systems Across the Three Domains





**WHAT DID  
YOU LEARN  
AT COLLEGE?**

**I AM A UNIQUE  
SOUL ON A QUEST  
TO CONTRIBUTE  
TO THE ULTIMATE  
MORAL GOOD**



## The Ending

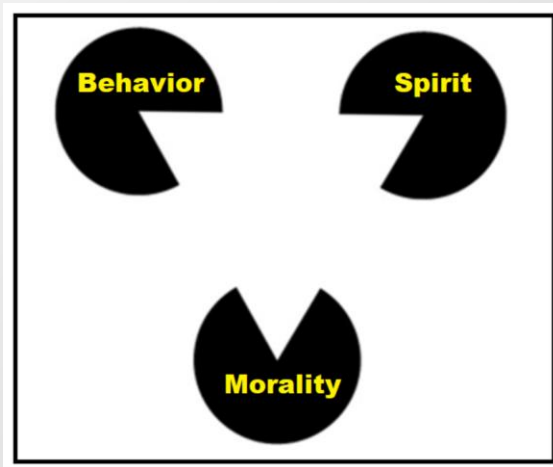
*I strive to be that which enhances dignity and well-being with integrity. I have found that whether I am teaching, being with my family, challenging those who do not see the world as I do, working on the unified theory, conducting psychotherapy, or even struggling with my own issues, I can use this ultimate justification as a guide. I can even conceive of it in a fairly objective, scientific way. To put it in social engineering terms: Can we construct societies that tend to enhance dignity and well-being with integrity? This hypothetical moral imperative is offered here at the end of the outline of the unified theory to clarify the foundational grounding of my scientific humanistic worldview so that the nature of the fifth joint point as I envision it might be understood.*

**LET'S WORK TOGETHER TO FOSTER  
WELL-BEING AND MINDFUL  
SOLUTIONS IN THE 21<sup>ST</sup> CENTURY**



**THANK YOU FOR YOUR ATTENTION**





# Questions?