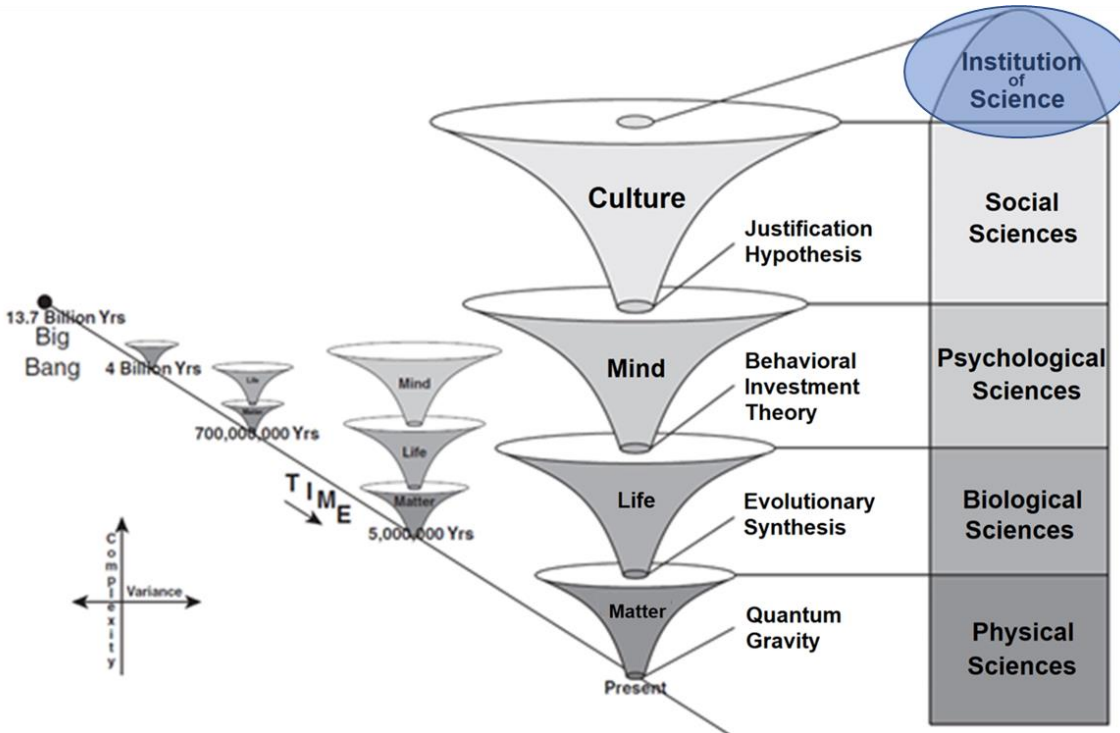


Dear Friends,

I am writing to share with you an insight that has been emerging regarding a slight, but perhaps important insight regarding an error on the standard ToK depiction. Here is the standard depiction with the error circled.



The error pertains to the term “institution”. I want to break this down and explain why it is wrong and misleading, which hopefully will help clarify a few deep points.

The “puzzle pieces” that I want to tie together to make the point include the following.

First, there is the distinction between “Culture” and society. This distinction will be made clear by how I interpret Joe’s social VORCE Field analysis. It will show with clarity why we should distinguish between science as a kind large-scale system of justification and science as an institution. This, BTW, is where the error is. I mean science as a large scale system of justification, which is different in some ways that the institution of science.

Second, there is the distinction between the way things are currently organized and the way things ought to be organized. Crucial to understanding the ToK is that things are NOT currently organized this way.

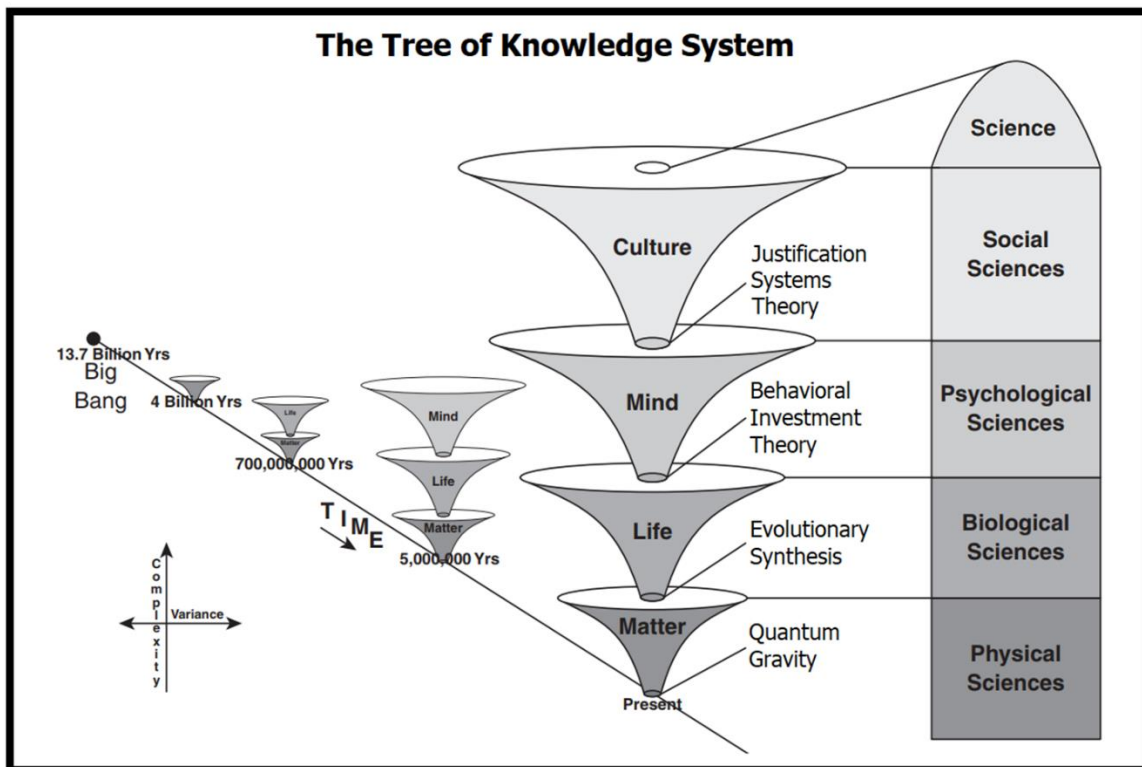
The third piece of information pertains to (a) the Periodic Table of Behavior; (b) how the ToK/PTB solves the problem of psychology; and (c) John Torday’s challenge to me to empirically show the value of the PTB in a way that was analogous to the way Mendeleev’s Periodic Table of the Elements allowed chemists to locate atoms that were missing.

The fourth piece of the puzzle was the blog I did today on using the unified theory to explain gender differences. A related puzzle piece is found in our ToK Big History paper, where we correspond the BH thresholds to the ToK and show the mental dimension of analysis is completely missing.

In a nutshell, let me put this together. The standard ToK diagram suggests that the institution of science (meaning both the justification systems and the organizational/institutional structures ARE arranged in a clear way across the physical, biological, psychological and social dimensions.

This is WRONG on several accounts. First, the circle on the diagram does not represent the organizational institutional structure of science. Let's go to Joe's VORCE fields, which I interpret as the "Vertical" dimension of relating, defined by power and resources, the Organizational (and institutional) structures that support social life (and would include technologies, like buildings), Relational (which includes affiliation and connection, versus hostility and distance), Culture, which I define as the network of justification systems and is directly aligned with C on the ToK, and finally Energy flow, which powers change.

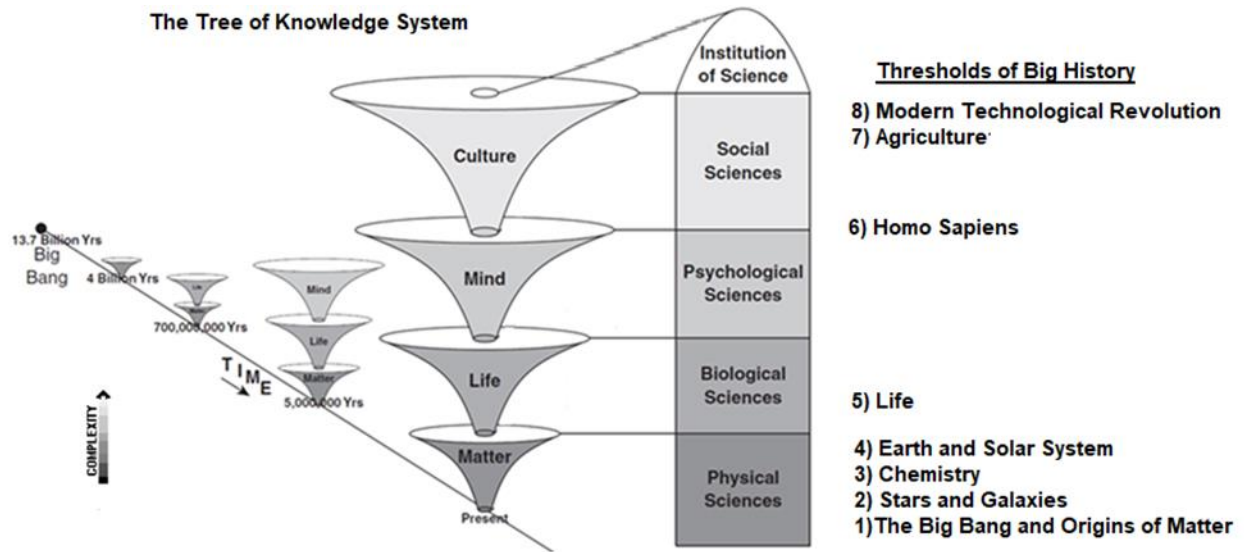
So, to be precise in my language, it is the Culture of science, or science as a system of justification rather than "institution". Institution is a part of society, and I differentiate Culture as the complex adaptive plane of justification, which is different from society at large. Now, the fix is pretty easy. I can just remove the word Institution. So here is my up-to-date diagram (also having changed JH to JUST)



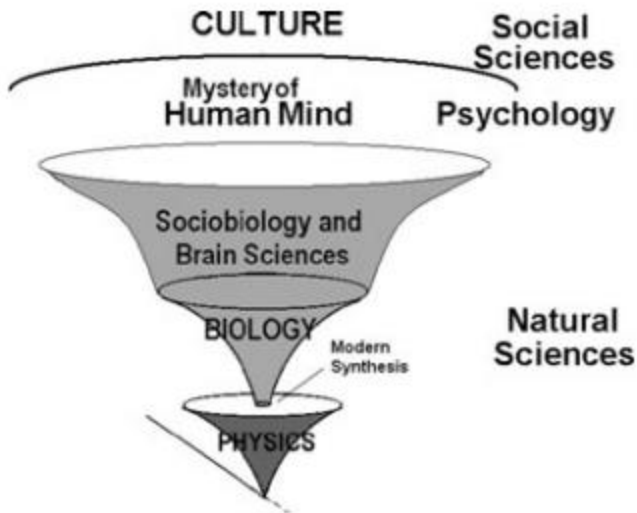
The other piece that is important here is that one of the main points of the ToK/PTB is directly analogous to the Periodic Table of the Elements. Specifically, it provides a framework that says: the current sciences can be arranged much more clearly than is currently the case. Most notably, the science of psychology is NOT coherently defined at all. Rather, it has many different subject matters.

Most notably, it refers to (a) animal behavior in general; (b) a neuro-cognitive functionalist view of the mind as what the brain does; (c) a map of human behavior at the individual level from an exterior view and (d) a first person view of human phenomenology.

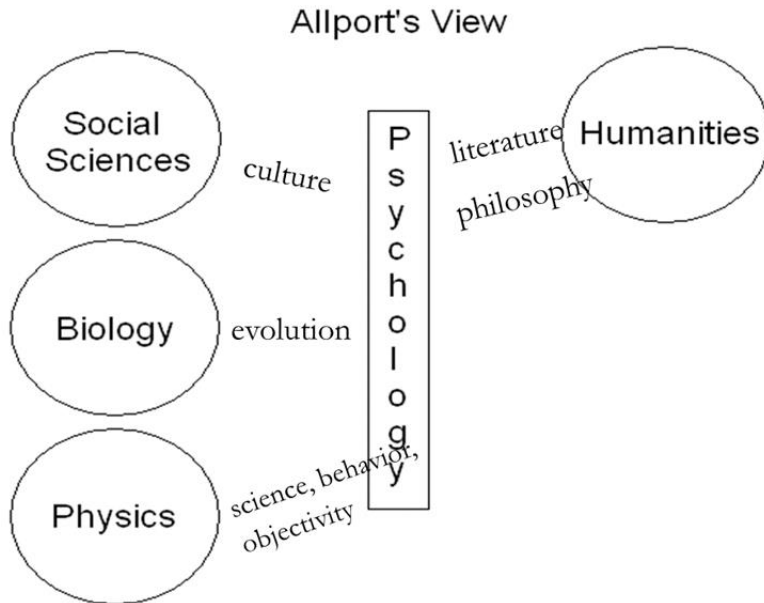
The reason that psychology is all confused is because we have lacked a conceptual taxonomy for understanding the mental dimension. And this is clear in noting its absence in the BH formulation



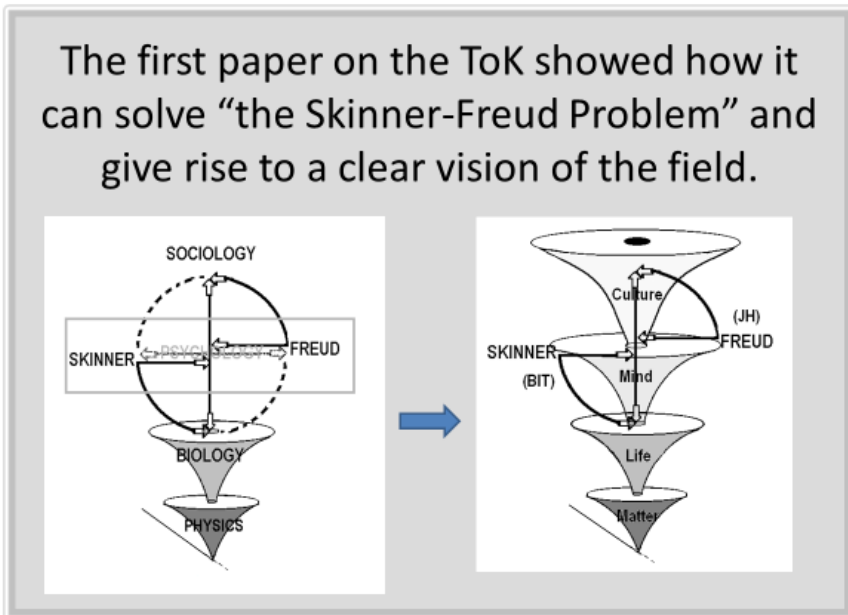
As it is clearly missing in E. O. Wilson's view of consilience



The confusion is also seen in the map of the sciences afforded by Allport



In other words, the MENTAL dimension of complexity is missing. Of course, the whole point of the ToK/UT is that this is the case and, via the ToK metaphysical language system and BIT and JUST, we can now “see” the mental dimension “pop”.



Moreover, with the Periodic Table of Behavior and the full UTUA Framework we have a consistent meta-language system that can unified objective science, lifeworld phenomenology and human morality.

Of course, the whole point here is that this IS NOT WHERE the current institution of science is, but where it OUGHT to go.

A Functional Behavioral Phenomenological View

A Third Person Scientific View



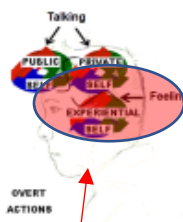
| The Periodic Table of Behavior | | | | | |
|--|---------------------|--------------------------|------------------|-------------------|---------------------------|
| | | Dimensions of Complexity | | | |
| | | MATTER | LIFE | MIND | CULTURE |
| | | Physical | Biological | Psychological | Social |
| 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 |
| | Fundamental Whole | Atom | Cell | Mind-Brain System | Nation |
| | Fundamental Part | Particle | Gene | Neural Network | Self-Consciousness System |

Energy Singularity

The Path of Emergence

The ToK moves across Wilber's epistemological quadrants

| | |
|---|---|
| I - Why I do How I experience, feel, think, believe, value, grow. | IT - What I do Behaviors, products, measurables |
| ME - Why we do Relationships, shared values, cultures, norms | ITS - How we do System dynamics, social systems, policy |
| First Person | Third Person |



A First Person Phenomenological View

A coherent psychology must make sense of the animal-mind-brain-behavior system, the human behavior at the individual person level and human phenomenology

Here is the bottom line. The ToK/PTB organizes the subject matter of the sciences. Because psychology is completely confused and chaotic, it means that psychology provides the ToK with a great predictive empirical test that, if it could pass, would immediately make it the most viable big picture view of science ever offered. That task is the problem of psychology.

It is documented beyond ANY doubt that no system has solved the problem of psychology and the modern institution of psychology is completely chaotic. If psychology can be effectively organized and

placed in the pantheon of the sciences, that remains to be seen. The whole point is THAT the ToK could solve the problem that makes it such a compelling system.

It is for all these reasons that labeling the “institution” of science is hugely misleading. The current institution is completely confused. I am proposing that clarity could be achieved if we defined psychology the way I am arguing we should. But as is crystal clear, the institution has hardly followed my suggestion. Rather, the institution has basically shrugged and said, who needs to define the field, it is already agreed that it is impossible.

For a concrete example of how the science of psychology is super confused about the mental dimension and how the ToK can offer a needed correction, [see the blog I just did on gender differences](#).

The bottom line...the ToK/PTB allows us to see clearly, for the first time, the mental dimension and how it is both related to and also separable from the biological and social dimensions of existence.

Best,
G