

ANSWERS TO _OTHERS_ QUESTIONS:

How do you know when you understand something?

Dear

I may seem very opinionated and idealistic here, but I am just going to "go for it".

Understanding:

You KNOW (and can impart it) because: True and good understanding allows more clearly right action and right discovery and continued or continuous discovery in an ever clearer/distinct area of study (and you can more reliably see necessary sequences, aka causes, of things -- certainly MUCH less personalized or idiosyncratic). You can tell when each and all of these co-related characteristics of your understanding are true -- for one thing: by a greater ability to conceptualize (which amounts to more now-usable free space in working memory ; it is all clearly related to discrimination, integration, and consolidation of concepts/skills in the Memories). Usually this free space in working memory rather soon let's you think more in ways needed about something (in the subject area you are devoted to) and find/decide-on/do what's needed. This way would be good to see good understanding and part of what's needed to impart to students (the other also-related part described in the last paragraph). And, what may or may not occur (which I bring up just since it shows , in some sense, some "outer limits"):

When you can in no way better 'see' things (benefiting less basically from help or from anything else to turn to or any other way to look at the relevant "things"), WHEN you cannot immediately or soon become better in some OR MOST of the ways in the 1st paragraph, above, then it is possible you could say you have/sensed a small quick temporary glimpse of "Enlightenment", seeing no more that is conditional IN THAT AREA of study -- but one must make sure you set things up so this cannot occur wrongfully/artificially (though I do not consider this last concern a likely problem). NOW, **to say all that again, speaking more naturalistically and more scientifically** (though perhaps not more meaningfully): This is basically a **relatively continuous free space** in the Memories (accessed via the episodic buffer and working memory) -- and **phenomenologically BEING working memory**, a free space which otherwise (typically) is rather quickly well-used to progress, as indicated in the paragraph

above: usually free space in working memory let's you think more in ways needed about something and THAT is what you do rather quickly or soon.

THE OTHER HALF OF THE "STORY" (in any case, with the "glimpse" or without that):

A teacher MODELS what is involved in all this by clearly having (and showing) she/he has personally evaluated (and in some best sense personally verified) all and everything she/he believes and presents to students. (**This is related to EVERYTHING in the paragraphs, above.**) This too is important to make clear or impart to students (perhaps maybe just by clear example).

Dear

First I would say that what I was mainly talking about before was some **central, key, reoccurring topics or set of topics** (to some extent, this way-it-is could well have a part of the instructor's own perspective) that an instructor must present and explain.

Another part of my answer to your new question would be: well-placed, previously-justified and later-justified, **PASSION**. I believe I have seen this passion and, in combination with evidence well-presented, well-shown, or well-exemplified/explicated, this seems to be truly inspirational (and not fleeting). And, I think the entire exposition of the information, **presentation and passion continue** to be shown by such an instructor -- so all aspects of the overall issue as I addressed it before (above, in the first answer I gave, and above, with the present elaboration) are "**abiding**", **continuing on**, and they **DO SHOW many of the aspects of the PROCESS**: discrimination, integration, and consolidation of concepts/skills, that went on in the instructor's thought, as/how she/he developed it (and perhaps the better/best instructors are helping the students themselves to move through these processes with the "material", and individually, as needed). AND, AS PRESENTED, all that showing the **individual's personal assessment/commitment** in the incorporation and/or development of her/his cogent, very more-and-more apparently-worthwhile view. To put it crudely: he/she "sells it" and "sells it" well and thoroughly somehow showing many or all the aspects of processing she/he has "put into" the topic and with the importance shown with passion (and the "end result" **including -- and this adds a new aspect to my answers so far: some well-developed FACILITY, this including a great ability to take and answer questions ***), and amongst the passions likely showing some **JOY**. This is nearly all I can think of to add to what I said before and possibly provide some answer to your new question.

But, also directly to your question :

WHATEVER REASONING ALL THAT TAKES, AND OBVIOUSLY IT IS UNFOLDING in some sense -- much of this which may be, especially in an old teacher, rather thoroughly well-known. This all may seem like an ultra-idealist view, but indeed this is exactly what you want (though most of the best may do less than the ideal, I suppose).

* FOOTNOTE: In this regard, I was never a good instructor, nor was I completely or even clearly good in some of the other ideal aspects. I, frankly, do not have the strength of mind to do a lot of the ideal, but I have seen many very good professors/instructors who do show these (at least in good part, though myself inferring some).

Effects of social media on the future of the humans

Dear

Effects of social media on the future of humans: clearly **devastating, both now and into the foreseeable future**: anything that has to do with humanities and a broad open liberal arts education AND (relatedly) much of what has to do with human-for-human creativity or creativity in the human behavioral sciences. I'm told that good normal functioning (which was the norm 25-30 yr. ago +) is

about at 10% of that normal. Nothing can make up for this. Students in higher education will be concrete-oriented (and perhaps quite money-oriented, as well). The results of social media have been far more damaging than helpful -- to the extent that many/most people today cannot help to further formal human studies (they are disabled).

[Some of this is opinion, but I see a lack of interest, in those things noted above, AND this is the only way I can see it. It is SEEMINGLY intentional self-distraction and perhaps related to our very social tendencies, which are ultra "tapped into" (BUT ALSO: some of this is furthered by malicious self-serving motives (and software construction), of the big tech companies that make and sell the stuff (and that do things on the web (Internet)). Basically I see people as pathetic addicted slaves : of little use to anything/anybody that does not directly "hit/slap them in the face". How else can you imagine to get their attention ?]

Dear

Let me try to get out of your "circle".

When you want an overall general answer about problems/challenges which occur in many situations/circumstances, you can expect a general/generalized answer (thus, I thought I did pretty good). Being more specific may even be seen as a strange reply (if one tried it). Also: I believe THE SUBJECTS' BEHAVIOR IS SOMEHOW CLEARLY THE FOUNDATION OF ALL DEFINITIONS. Related to this, I do not otherwise conjure up operational definitions. In reality in different circumstances : reality IS concrete as you say (but varied) ("abstraction" not needed or needed as much).

Ask for an answer on how things show in a specific situation and circumstances: fly me to the place, put me in a class with a great instructor, and pay me and I will apply/elaborate/specify particular behaviors as instances of the general (type-of-things) answers I gave. Otherwise the work is left to the reader; the idea of me giving "operational definitions" on such things as I describe does "not fly" with me, obviously. I do not do the conjuring, like an armchair philosopher -- those "guys" being the ruin of "modern" Psychology for its whole existence; and, there is no more "distilling the essence" here from me -- no contrived hypothetico-deductive system for me to apply for you (and if there was one, I likely would not use it, because it would seem wrong) (and yet I see no other way to answer your criticism otherwise). If I cannot see something more specific that could be accurately and reasonably seen across fields of teaching/learning (better descriptions OF PARTICULARS and yet still GENERALLY SEEN across circumstances, just as clearly or more clearly than with the descriptions I provided) then it appears I missed something, and my apologies -- I think I did my best.

Perhaps you will say I should "better operationalize" this very, present response; if so, perhaps you will have to send me the notes from your counselor (if you have one). ALSO:

Some "TYPES-of-things" may actually be seen as concrete (it may be from concrete things across instances and across situations and circumstances from which some "abstractions" are in-reality developed (by people, the organism, itself)); in short, they are as real for them as many other concepts that are seen as more concrete. Try to see this through an exercise: using your assessment/imagination about several particular instances with which you are familiar, try to see some "TYPES-of-things" that way. (I may not be so "abstract" as you think in a some REAL, though perhaps non-traditional way.) Maybe someone else will work on all this for you now.

P.S. Perhaps I should ask you to provide an operational truly empirically-founded-and-based definition of "abstract". (How else would it be clear to me where my deficiencies are?) Guess what: I am the ONLY person in the field of Psychology who has done that,

in part.

Anyone know of great research directions that are a part of the Deep Learning to Learn, reinforcement learning, etc?

Dear

Perhaps the main thing to keep in mind is that "learning" is not all one thing; it differs with qualitative stages of cognition, unfolding sequentially and hierarchically during ontogeny (mostly, to say the least, during child development).

It continues to mystify me that people use the word "learning" as if it is a ubiquitous KIND OF THING. The only thing that is ubiquitous is associative learning (a more or less constant ASPECT of learning BUT ONLY AN ASPECT): And, THAT changes in its contents and dimensions as OTHER guiding aspects of species-typical learning are going on and changing. Lacking awareness of this is lacking awareness of even the nature of development and of learning itself. It is important to know that this is where psychology "is" (actually, not even a science yet). [Psychology has several more ways of being empirical and being more empirical (related to clear, testable hypotheses and related to what I have just said), that they have not even tried. They seem to prefer nonsense concepts (e.g. embodiment) to discovery and to good empiricism SO THAT THEY SEE ALL AS "learning" -- but, again, in a real sense they don't even know what learning is, so biased are they in the position that "all is learning" **AS THEY "UNDERSTAND" IT** (this is a false assumption, aka presumption, which is NOT BIOLOGICALLY LIKELY nor likely to ever end the irrational totally ill-framed and useless/destructive dualist nature/nurture arguments). The science of Psychology has yet to begin.] See my stuff:

Ethogram Theory by Brad Jesness (stuff can be gotten through [researchgate.net](https://www.researchgate.net) : especially see:

<https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory>

See especially:

https://www.researchgate.net/publication/286920820_A_Human_Ethogram_Its_Scientific_Acceptability_and_Importance_now_NEW_because_new_technology_allows_investigation_of_the_hypotheses_an_early_MUST_READ

and

https://www.researchgate.net/publication/322818578_NOW_the_nearly_complete_collection_of_essays_RIGHT_HERE_BUT_STILL_ALSO_SEE_THE_Comments_1_for_a_copy_of_some_important_more_recent_posts_not_in_the_Collection_include_reading_the_2_Replies_to_the_Comm

AND

the Comments to (under) the second-to-the-newest Update on the Project page:

<https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory> (for

EVERYTHING but the larger papers and some smaller papers, those all easily found under my Projects and esp. under the Ethogram Theory Project).

Be sure to read all that is associated with the 2 recent Updates (Log Entries) to the Project,

<https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory> (there is a

couple of ways to get more to read THERE: 100s of pages). My other Projects are also related to my perspective and approach, and so more may be gleaned from those also.

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Can Knowledge development exist without Philosophy?

Dear

Again you show the fundamental mistaken-ness of philosophy. You speak of "fundamental problems concerning matters such as existence, knowledge, values, reason, mind". These are not fundamental problems, but rather a few are big issues (knowledge areas) -- not a place to start, but sometimes a place to end once great knowledge is acquired. [NOTE: a couple of those constructs mentioned will likely be good for little to nothing.]

When you realize that empiricists really just discover and never define, you (then as an empiricist and possible scientist) will know ALWAYS the importance of the Subject (and how little our guesses about anything(s) are, comparably). All except discoveries and knowledge (<-- found-organized, collective discoveries) are basically simple primitive guesses (even as "hypotheses") and dwarfed by discoveries, knowledge, and wisdom. The reason is : we simply cannot think about that much at one time. **and we can much less conceive or "define" good concepts.**

We must stop pretending to "see" in advance the way things are. This is all destructive, wrong-thinking, and ignorant (not to mention delusional). You can do very little just with your mind, without MUCH from the Subject [matter]. (See the strong research on the Memories, for the "bottom line" why.)

Dear

I would simply submit that Einstein had more [(Subject matter)] to go on than those who are much, much, much closer to the "armchair" philosophers. Part of this is that he (Einstein) was looking for patterns -- patterns that had been defined in reality elsewhere; he also knew where to look (for more possible applications) -- in empirical reality. Was much of this conceived of in his mind?; I'd say no (though he may well have done more than most WITH PATTERNS AND KNOWN OBSERVATIONS (aka facts)).

Why working memory?

Dear

Why the working memory theory was necessary : Aspects of our present environment and present thought and past/established representations and procedures DO OBVIOUSLY COME TOGETHER (demonstrably) for us to progress or move on in new thought or in action. On the other hand, there is not so much new there (vs A and S). Working Memory is just active STM and, since that is always active (in some real "forward-moving" sense), WM and STM are the same thing: the WM construct just correctly (explicitly) ties in that which in fact "ties in". Related to this: Importantly, WM is clearly related to other kinds of well-established Memories: especially: procedural, declarative, episodic, visual-spacial, rehearsal "loops" AND to the "episodic buffer"* (a good, but yet-to-be better defined "hypothetical") _AND_ WM is related to important aspects of the current context. STM should not be considered "just anything" or random -- it is guided, given content, and then (at a given time) does some processing of its own (affecting other Memories).

* FOOTNOTE : The Episodic Buffer was not in the old A and S model.

Can you see some [of it] , as it is/must be and as you can [really] see it?

That is the question, lover of life, lover of others, empiricist or scientist ; thus finding the actual sequences which are causation(s) (aka the proximate causes). Better and better 'seeing', less ignorance ... , less confusion. Said also to be with less wanting and/or greed and with less suffering, as well. And as more is found, more opens up. Could anything else be the case? [Such conclusions can come from checking the research on the Memories which, as they are (by definition), must be experience itself.]

Let me give an **example of what I speak of above** (an example in my field: the very important and most vital field of **developmental psychology** (very much 'including' ontogeny)). In Psychology what I am talking about is: proper perspective, properly viewing Psychology ("psychologizing" one's psychology, in a proper way, if you will) and THUS 'seeing' the ways there are of realistically (and rationally) AND thus **actually** having/doing conceptualizing and thinking (<-- those very things) as they really are (and of getting one's own and one's Subjects' real limits and abilities defined). In attempting this in Psychology (or in any science) one must "believe in" and **maximize empirical**

grounding (all that is possibly there and detectable), showing EVERY SORT OF BEHAVIOR, related clearly and in an important ways (at least at their inception), **TO directly observable particular overt behavior patterns** of the Subject *. AND, this is BY DOING IT (for the researchers and the Subjects) in the **REAL terms of the basic capacities of their species-typical Memories** (also knowing and considering the hierarchical relationship of more adult concepts and thinking, compared to that of children) -- KNOWING ALL THAT, and using ALL THAT, required before doing decent psychology that will lead to real, lasting, and progressive discoveries on the development of cognition (that being central to other major other behavior patterns that develop). [It may be hard, but you will get used to it; and, it is necessary; AND, actually, it is likely less hard to do than the 'theoretical,' unjustified "contortions" presently done today (which inevitably "dead-end") .]

If you can but only agree, please read my writings (most all -- 1000 pages worth -- available through ResearchGate). [NOTE: My writings include specific hypotheses for the direct observations of the overt behaviors central to thinking and concept development -- each of the major inceptions -- all found/put into the proper contexts (and "spelled out" as different and as alternatives from today's perspectives/'procedures' -- these latter also "spelled out", and shown in detail, as lacking and incorrect).]

* **FOOTNOTE:** This perspective and rightful attempt (approach) AT/for DISCOVERIES is exactly what I outline as clearly as possible in my writings ["as clearly AS POSSIBLE", that is, before the new, CLEARLY-PRESCRIBED, needed research, with clear testable hypotheses, is done (i.e. before having those hypotheses indeed tested)].

Please give this Discussion a chance, if you haven't already (and lately). I have (over the last 7 hours) provided an example to make things much more clear.

...

Is it worthwhile reading old and really old science articles?

Dear

It is also possible that the phenomenology hypothesized was not able to be investigated with the equipment at the time (e.g. w/o computer assisted analysis and eye tracking). This is the case for my

thirty-three year old paper, "A Human Ethogram ... ", a major paper in behavioral and cognitive science:
(
Article [A Human Ethogram: Its Scientific Acceptability and Importanc...](#)
)

That paper hypothesizes the importance of, and sufficiency of, perceptual shifts as the start of each new hierarchical stage of cognitive development (at the inception). IN RECENT WRITINGS OF THE LAST 2 YEARS, the wrongful nature of existing theories and the justification for the Ethogram Theory have been clearly laid out. PLUS, specific, clear concrete hypotheses of what one should see at key times in cognitive development have been stated; these hypotheses are very testable (verifiable/falsifiable) and state what should be able to be seen in direct observation of the overt behavior of the subject (and, these being clearly new behavior patterns). (Eye-tracking technology, etc. may well need to be involved). SEE:

Book [NOW the nearly complete collection of essays \(RIGHT HERE\) B...](#)

and the paper containing nearly all new essays on the topic (twice as long as the collection above):

https://www.researchgate.net/profile/Brad_Jesness2/project/Human-Ethology-and-Development-Ethogram-Theory/attachment/5b90a3603843b0067537fdac/AS:667524777664512@1536161717284/download/alICopyable.doc?context=ProjectUpdatesLog

Are there any connections between phenomenology and Buddhism?

There is nothing BUT connections between phenomenology and Buddhism.

Dear

While appreciating what you add (and, I think, agreeing), another way to have a really full and good understanding of Buddhism is to read a complete, comprehensive **summary** of **ALL the words of the historical Buddha**: <http://mynichecomp.com> (i.e. this is a summary of the **Pali Canon of Theravada Buddhism**). This will be more true as an overview than about anything. (It is < 100 pages.)

I guess I could note that [deciding] " what to do with the understanding " is something all we humans do anyway (so, such goes, even if unsaid).

Current trends in Animal Behaviour science

Dear

I would recommend my "A Human Ethogram ..." paper (

Article [A Human Ethogram: Its Scientific Acceptability and Importanc...](#)

and

the many recent essays written w/r to this perspective and approach :

Deleted research item The research item mentioned here has been deleted

[These papers seek to treat a human like any other animal (in terms of the biology of behavior -- and I do mean BEHAVIOR (behavior patterns)). And ecology will end up being central, as a matter of course. Whether this is any kind of "trend" is certainly debatable, though one could fully justify why it should be.]

Can science and religion unite?

To give you an answer, I would have you look at <http://mynichecomp.com> and find, via my Profile and Contributions, all of my related Questions and Answers (some most clearly related, very recent).

Because my Answer involves Buddhism, it is best to say "spirituality" instead of "religion" (though I am not fond of the former word much either).

For many reasons, I submit you will not find a better answer.

Is peer review broken?

Dear

I have never found the peer reviewing process anything very much positive (and certainly nothing attractive). In the social sciences, the "peers" are so incredibly steeped in the status quo (and, also: basically history, and simply honoring that "for its own sake") that they cannot, in any significant way, "think out of the box". This means that if you are not for the most part "in the box", they are not going to support you. They may not even find you intelligible despite clear, real, and strong empirical foundations and totally provable/disprovable hypotheses (e.g. see me, my writings -- all related and about 700 pages here on researchgate).

The nature of "the box" can be indicated by no focus on, interest in, OR knowledge of, or real perception/"sense" of, the 'assumptions' virtually always used (or at least framing questions), though the central ones (which ARE central, in their thought systems) are both UNPROVEN and LIKELY false. [They are not real, proper assumptions, properly established, but a product (often) of Western philosophy and its modi operandi -- which uses major false presumptions (as assumptions) and making/taking needless (unnecessary and inherently not empirical, aka insufficiently empirical) positions (premises/models). Their too-early (too-soon) systems of thought of their own making are way too divorced from the Subject .] These 'assumptions' support models that are highly just-"thought-up" and (relatedly) of a VERY hypotheco-deductive nature; THIS, even though there is obviously a lack of agreement on their basic correspondence(s) with phenomenology -- showing that good, most-basic findings have still not been found. As almost then a matter of course: This also leads to accepting very low (actually: false and artificial) standards for "empiricism" (with the strong need for both "success" and statistical analysis -- to [supposedly] see that any thing is any thing). [We must start realizing we are limited by our method, MAINLY AS WE ARE LIMITED BY/TO **rash "hypotheses" investigated experimentally**. IN CONTRAST: Fact is, you are not so time-and-setting limited (i.e. to your lab), if you are doing other major empirical work: observation, with inter-rater reliability.]

These problems with these "peers" is also reflected in ENDLESS STUPID (hopelessly ill-framed) never-ending, never-progressing questions (often ones that are too general and far from the "source", the Subject). A major one that comes to mind is: "What is the nature of consciousness?" (a question having, in fact, quite variable answers (multiple 'answers' in multiple 'settings', at different points in ontogeny)), BUT not answers that are confused (or too "complex"), unless YOU are effectively confused. [One might also note the actually silly endless (and actually totally unnecessary) nature/nurture debates -- **I can and have shown them (in my writings) unnecessary, AND "solved"** (though perhaps not in the 'thoughtful' manner you are familiar with -- but WITH THE BEST EMPIRICISM).]

The old-time philosophers would be proud of these "social scientists" (e.g. Psychology theorists and researchers), basically continuing in their (these philosophers') main veins of presumption and way to much deciding on things ("definitions") with manipulations OF THEIR crude REPRESENTATIONS in their mind -- the latter with WAY too little consideration of the Subject (which is obvious, to any reasonable well-grounded and founded empiricist).

Let me say more about the basic (ridiculous, ignorant, and stupid) situation:

In "learning theory", the basic types of learning are considered to show the same patterning (and much of the same core content) throughout development. This is outrageously implausible, AND this is not to mention basically pretending "someone" (**or some thing in that role**) is **"presenting" the "stimuli" and the "reinforcement", etc.** In fact, the organism most certainly is FINDING these things ("for itself"). The fact that we do not think in terms of learning type 1, type 2, etc., tells of problems (EVEN WITH THE SIMPLE, BASICALLY KNOWN, ASSOCIATIVE LEARNINGS WE ARE FAMILIAR WITH, which ARE ubiquitous [though the content and ways used are not]. So, even given this very last-mentioned position, **that ALONE saves us NOT.** The few learnings we do understand and see realistically ARE basically "not-everything" ENOUGH: learn about the nature of the Memories for a lot of good perspective: the Memories, AS DEFINED, are experience itself -- come to know those, and think of those with associative learnings; AND ALSO: allow for some likely, subtle, and empirically PROVABLE innate guidances with ontogeny to complete the basic "picture") The hypotheses I cite are testable (provable/disprovable). I have found a way, I believe, to be WAY more empirically-founded than others, and (I believe) SUFFICIENTLY EMPIRICAL, **i.e. clearly, expressly empirical as much as possible.**

(It is possible both you and the system are not free enough to ever examine it or be able to get into it, though it is as clear as anything (or more).)

THUS, yet (damn it), see my LIFE WORKS (the many hundreds of pages, referred to above, and much found via the links below): This **solves very many of the problems noted AND provides for well-founding** and progress: Of my writings, especially see:

<https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory>

THEN see especially:

https://www.researchgate.net/publication/286920820_A_Human_Ethogram_Its_Scientific_Acceptability_and_Importance_now_NEW_because_new_technology_allows_investigation_of_the_hypotheses_an_early_MUST_READ AND , very importantly (for the a first view of the fuller perspective) :

https://www.researchgate.net/publication/328201788_Essentially_all_Recent_Essays_on_Ethogram_Theory

[<-- I have made it easy for people to find nearly all the recent essays (since the foundational papers were written, also < 2 years old), by putting them all in a collection, the collection linked to last, above.]

AND also see

the Comments to (under) the second-to-the-newest Update on the Project page:

<https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory>

P.S. A quick way to see the nature of the empirical "targets" , which are major parts of this developmental theory, may possibly be indicated if you read:

https://www.researchgate.net/post/How_about_a_description_of_a_possible_hypothetical_inception_of_a_new_qualitative_stage_change_in_cognitive_processes_with_a_perceptual_shift P.S. As I (every day) look through a large list of questions and proposed research, I can ignore the vast majority of it because things are so ill-framed as to have no continuing promise.

How do you choose between two or more mutually exclusive hypotheses with equal explanatory power and scope?

Dear

There is no such thing as: "equal explanatory power and scope", unless you are referencing all bad "stuff". (I am able to say this with assuredness -- being as much an empiricist as possible -- and have such a view, without ignorance or delusion (believe it or not) : best to BELIEVE this, for it is more-than-doubtful you can know otherwise; and, knowing that, assume (try for) the affirmative. (Perhaps this affirmation makes up for the seemingly negative Discussion I began minutes ago.))

How many learning theories do you use in your work?

Dear

It has been argued that, at the base and in real phenomenology, all learning is of just the simple types we are familiar with (classical, operant, habituation, etc.). SEE:

Article [Mackintosh Lecture. Association and Cognition: Two Processes...](#)

and

Article [Causal Reasoning Versus Associative Learning: A Useful Dicho...](#)

and see my many writings here on researchgate.

I have a comprehensive, most-empirical, neo-Piagetian theory of human cognitive development (ontogeny) (completing a major incomplete aspect of Piaget) and, as far as "just learning" is concerned (that is: without considering basic, newly emergent, innately-guided perceptual and attention aspects admixed in with learnings at key times, aka "perceptual/attentional shifts"), the basic types of simple associative learning suffice.

What is worth reading or writing nowadays?

Dear

I give you something(s) worth reading (hundreds of pages of it):

I believe my detailed critiques of all major extant [basic, general] Psychology Theories and detailed critique of thier very-likely-false 'assumptions' (implicit, but ubiquitous and very impactful) AND the ramifications are important. My explication of the specific alternative more-likely-true assumptions and what (in MANY ways) they "help out" and result in is also available. Overall principles of empiricism and biology (OF BEHAVIOR -- the real, overt kind) is there in my essays also and important. (All is also consistent and usable by general artif. intell. people.) See, especially:

<https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory>

See especially:

https://www.researchgate.net/publication/286920820_A_Human_Ethogram_Its_Scientific_Acceptability_and_Importance_now_NEW_because_new_technology_allows_investigation_of_the_hypotheses_an_early_MUST_READ

and

<https://www.researchgate.net/publication/322818578> NOW the nearly complete collection of essays RIGHT HERE BUT STILL ALSO SEE THE Comments 1 for a copy of some important more recent posts not in the Collection include reading the 2 Replies to the Comm

Update, on recommended good reading:

I recommend reading about the history of the "science" of psychology, as presented by myself and as replaced with a realistic and rational perspective and approach that will lead to a real science here. My masterwork is now finished. SEE: <https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory> and see the first few Project Log (Updates) entries; also read all the Comments associated with the second-newest.

If you are into Psychology and/or the fullest possible empiricism for a perspective on, and approach to, behavioral science, I have (within the last week) put out a 510 page collection of very close to ALL the essays written in the last 2 years on Ethogram Theory: I made it easy for people to find this Collection of nearly all the recent essays (written since the foundational papers, the 2 longest papers under my Profile) -- by putting them all in a collection:

<https://www.researchgate.net/publication/328201788> Essentially all Recent Essays on Ethogram Theory

Dear Mario

You have asked: "What is worth reading or writing nowadays?" I have addressed the first part of the question ("worth reading"). Now, regarding the second part, "worth writing": I think that trying to write up a theory that is, in a sense (in some area) complete, and which is completely of the correct nature of a science (features and dimensions) -- a theory in some field especially lacking -- would be most-important writing. People do not have a good understanding of all that is really involved in "scientific methods" -- that is: all the needed methods to yield needed discoveries.

Develop a code that changes itself?

Dear

You ask: " Is it possible (OR will it be possible) that a code is able to change itself (at least a line of code)? "

My answer: Of course; all that is needed to impel change(s) is noteworthy aspects of the naturally

changing environment that will be encountered (and detected as changing) by the machine, as a matter "of course" (and similarly for humans). With clear impetus, code can be written to do anything in some sensible way -- even change itself.

All this should already be possible, but crude in its foundations (and thus, in any thorough analysis, it will be seen to be crude and clearly and greatly limited, until we learn more about human development (ontogeny)). Check out my AI Project for a forward-looking vision:

<https://www.researchgate.net/project/Developing-a-Usable-Empirically-Based-Outline-of-Human-Behavior-for-FULL-Artificial-Intelligence-and-for-Psychology>

P.S. There need NOT (and should NOT) be any "central executive". Do not "believe in" that OR believe any such thing is necessary. It is the **homunculus** and is bad (false and ruins things), in both theories of humans and in anything having to do with real AI.

What are the best ethical assets of a teacher (basically a University Professor) ?

Dear

I would say: personal, thorough, independent evaluation of everything important she/he teaches -- at least as much as possible (forget: "practical").

I would also "tip my hat" to Dhamodharan D for his answer.

Let me elaborate the opinion given in my last Answer, and add something.

"Do not believe in something because it is reported. Do not believe in something because it has been practiced by generations or becomes a tradition or part of a culture. Do not believe in something because a scripture says it is so. Do not believe in something believing a god has inspired it. Do not believe in something a teacher tells you to. Do not believe in something because the authorities say it is so. Do not believe in hearsay, rumor, speculative opinion, public opinion, or mere acceptance to logic and inference alone. Help yourself, accept as completely true only that which is praised by the wise and which you test for yourself and know to be good for yourself and others."

[To more likely in no way bias your response to this opinion, I will leave it to you to find the author of this quote. I do believe the quote, above, adds some good details.]

Behaving in such a way makes the teacher an excellent model. **And, to these characteristics of a great model, I would add what is known as "skillful means":** providing information in a true, timely and agreeable way and that is, for any and all other reasons, understandable by the receiver. (This addition is from the same source as the quote.)

(This addition seems to accord with some of the Answers, above.)

The main part of my last answer was:

I would say: personal, thorough, independent evaluation of everything important she/he teaches -- at least as much as possible (forget: "practical").

Please share an idea that can change the world according to you.

Dear

I have a perspective and approach on the "macro-level" (here, meaning: an inclusive, all-encapsulating "containing system") for Cognitive Developmental Psychology (i.e. for cognitive development, ontogeny; and, also, it is so concrete that it is also good for AI) . **Though encapsulating a lot (all that's most central and important)** this system for **discovery** and understanding has **MUCH more empirically grounded hypotheses than exists (or can/would be) the evidence for anything else of any major importance in any Psychology.** In fact, it is the **absolute highest level and best empirical evidence for a basis or foundation of/for major qualitative cognitive changes: Each being GROUNDED (at least at inception) IN DIRECTLY OBSERVABLE BEHAVIOR PATTERNS** (though these are subtle and the new eye-tracking technology, etc. would almost certainly be involved).

Read both of my major writings:

https://www.researchgate.net/publication/286920820_A_Human_Ethogram_Its_Scientific_Acceptability_and_Importance_now_NEW_because_new_technology_allows_investigation_of_the_hypotheses_an_early_MUST_READ

AND also the much, much more recent:

Book ["Essentially, all Recent Essays on Ethogram Theory"](#)

I am seriously trying to have a **perspective and approach which has all the features and dimensions a SCIENCE THEORY should <-- yes, that too!!** It is a demonstration of a way of science , here: **the key BEHAVIORAL biology of human development [showing what we have often hoped for: a science of behavior patterns (and environment aspects) per se -- needing nothing more for its essence (nothing more being absolutely essential)].** If this is as I believe it is, it will affect **ALL Psychology** and lead to real science and to progress in that whole field; it will greatly affect **AI and philosophy** as well. (The species may come to know itself better and better adapt and perhaps even be saved.)

Dear

I have shared an entire empirical system, with all-testable hypotheses for a true paradigm shift for behavioral sciences; it is also in concrete enough terms to greatly advance AI. (For either purpose, though, **new things must be looked for and NEW discoveries made.**) Here are the two main links (note that the second link has changed from previous postings).:

Article [A Human Ethogram: Its Scientific Acceptability and Importanc...](#)

AND

Book ["Essentially, all Recent Essays on Ethogram Theory"](#)

What is philosophically indisputable?

Dear

You speak of "distinguishing different senses of the same word". This is very little worthwhile and variable, both in value and meaningfulness -- but hardly ever greatly meaningful, except perhaps in real scientific thought. Words are as used and very frequently have different senses, and different different senses in different circumstances. (Words, AS they are used, so as they ARE: so what I am saying is kinda like "stupid is as stupid does", from Forrest Gump.) They (words), particular words, BY THEMSELVES very, very typically (always or almost always) never have a fixed OR clear meaning. If we thought in words or words were essential to thought, human beings would be extinct (I personally know that). So if you deal JUST in words by themselves, change your "professional" focus. [When all the world sees beauty as beauty, that in itself is ugliness.]

I am no sort of philosopher, **unless you want to consider me the ONLY PHILOSOPHER**: then, **I am the best**. I am the only unconfused/non-confused. But, YET, I am a philosopher, since I fulfill the best definition of that: one who believes his outlook is more often correct and/or important than all others (all other views). **There really are NO other decent definitions**, except based on false and unclear PRETENSE -- requiring some sort of near-religious belief.

P.S. I would never mention, much less credit, ANY PHILOSOPHER in ANY of my many hundreds of pages of essays and BOOKS OR as helping in any noteworthy way (enough to make up for their faults) with any work I have done in 47 years of adulthood. It would be distracting and misleading to do so (if just because it is so inherently unclear -- though I have noted more reasons). It would be mainly like shouting random words in a crowded theater, while the show/movie was on.

Dear

For your sensibilities: I changed "crap" to "garbage". "Gibberish" I meant nearly literally, so I left that. (Readers, please see my previous Answer.)

Ellis, you say: "People do not 'like to be confused,' most people do not 'enjoy confusion.'" Indeed, an

objective of philosophy is to dispel confusion. There are different tried and true methods to try in various circumstances. " (end quote)

Well, I would say one could make several easy cases showing where people seek confusion and/or enjoy it (so easy, I will not bother). About philosophy, I don't care that one of the "objectives" stated for philosophy is to dispel confusion. It is skewed and ultimately poorly done thought, typically/usually. IN philosophy, anything "tried and true" is completely dependent on that which is tried and true IN SOME OTHER DISCIPLINE which philosophy addresses or may be addressing (philosophy is never correct - if it is anywhere close to being "on its own"). SO: THERE ARE NO TRIED AND TRUE METHODS IN PHILOSOPHY PER SE ; logic is certainly part of what is needed, but this is not uniquely (or even mostly) the purview of philosophy (and, in any case, logic is NEVER just by itself sufficient, NEVER); the rest IN philosophy is almost always partial junk (partial in both senses), and enough to make it typically of no value.

You also say: "... have mental models, some mental models **can be** overtly expressed " (end quote). I say: Well, MODELS SHOULD NEVER PRECEDE FACTUAL, EMPIRICAL, essentially DIRECTLY OBSERVABLE, KEY CONNECTIONS TO PHENOMENON. All you are doing with your assertion is partly falsely "affirming" ("backing") some of what is really done wrong in poor pseudo-sciences (no doubt some "thanks to philosophy"). Hypothetico-deductive systems should be used ONLY when one is forced into trying them -- basically only out of desperation (which would rarely arise if the pseudo-scientists involved with their a priori models could get out of the time and space confines of their "laboratories") . Otherwise, systematic observation and inductive reasoning should just be followed by simple guesses (<-- aka good, well-fitting, clear testable hypotheses -- which are correct, when clearly proven correct).

Dear

If you are dealing with a "large", multifaceted, context(s), or what may be seen as a number of contexts, or several+ aspects of some-same context **and you do not** "SPELL OUT" ALL of the important aspects of the context(s) **_BY_ empirically grounding everything as much as possible, i.e. with SOME key clear relationship(s) with certain directly observable overt phenomena (phenomenology) , THEN:** any essay or "dissertation" or anything "thought" about such a subject(s) (and thought to be philosophy), and supposedly truly relating (in part) to ANY SUCH THINGS [(again, without providing such empirical foundations)], IS : AMBIGUOUS, **uncommunicable** AND UNSOLVABLE (**having basically the status of gibberish**).

Also, among the "things" in a context(s): those that are said to be "related" must be similarly strongly empirically [actually] grounded and founded: related minimally, via some key direct observations **_OR_ [THEN,] otherwise [(again)]:** any essay ... [**repeat the ending of the same above sentence already used, hereon**].

Science is very good communication (good enough to be truly agreed upon by all those knowledgeable and reasonable); all else is garbage. All this (in these 2-3 paragraphs) is basically indisputable except among those who like to be confused, seek to be confused, or enjoy confusion -- no doubt to interject their skewed viewpoint for some "agenda" (vested interest).

Putting words "in a box" is no accomplishment !!!

Is there any prefect example for fixed-action-patterns in human?

Dear

Humans, like other higher mammals and like animals in general, have fixed action patterns OR at least specie-specific action patterns or species-typical action patterns. All this is biologically **LIKELY**, philosophers **NOT WITHSTANDING**.

The notion that the "more advanced the organism, the less innate guidance" is simply an **unproven assertion (AND BIOLOGICALLY UNLIKELY)**. Nothing like that is proven and it is more likely the opposite is true; innate guidance factors are bound to be true in at least in some major ways, like that which guides the inception of the qualitatively different stages of cognitive development, in ontogeny. The reason the innate patterning in our major behavior patterns have not been discovered is because **we have not looked for them well; plus, to be fair, they are hard to look for**. (Still, In fact, the situation IN PSYCHOLOGY (generally) is so pathetic that many do not even imagine or hypothesize these, much less speak IN TERMS OF BEHAVIOR **PATTERNS** -- which is much akin to denying we are biological !!) Part of the problem is the "West" and Western philosophers: there is a LOT of dualism (related to things, not discovered, but "defined"); then there is the groundless, unwise desire to experiment as soon as possible; and models are made up in theorists' minds when, in fact, **if one was to be like a scientist (that is, a REAL EMPIRICIST) then models (and ALL noteworthy hypothetico-deductive thinking) would ONLY FOLLOW CLEAR RELIABLE, AGREED-UPON, direct observations** * of key behavior [patterns]. THEN some models may be temporarily useful.

It is really quite preposterous that given the setting and time and space limitations of the lab that people think they can **MAKE UP** experiments **there** **_AND_** "test" them there, "in the lab". This hasn't worked for 100 years and will not work for another 100, if you keep it up. (I am not saying there will NEVER be important experiments and even ones that can be done in "the lab", though -- so don't get me wrong.)

I am going to help you A LOT on all this, if you will listen. My major papers **describe** the nature of innately guided "perceptual shifts" that occur at the inception of each of the qualitatively different cognitive behavior patterns (this innate guidance is literally "in" (not separate from) new behavior patterning, no nature/nurture dualism, which we have known has been wrong (e.g. unworkable) for over 40 years).

In addition to the main treatise (still important -- and must be read), I MUCH more recently explicated and justified my view and approach in a large number of essays in the last 2 years, **AND THESE ESSAYS INCLUDE specific hypotheses that are completely verifiable/testable** and in the most empirical terms possible (**hypothesizing: the ability to directly observe key overt, though subtle, behavior patterns at the inception of each new (more "abstract") way of thinking** -- the subtle overt behavior patterns are "perceptual shifts" and will require OBSERVATION and the new eye-tracking technology, etc.).

ANYWAY, **HERE IS THE WAY TO NEW KNOWLEDGE and to real knowledge, CORRECTLY FOUND, AND RIGHTFULLY** to be EXPANDED ON, as appropriate. (If you do not look into this, you really logically have abdicated your 'right' to ask questions based on alternative false beliefs (pesudo-assumptions).) IT SEEMS, AGAIN, YOU WANT TO KNOW (so let me try to direct you again for the countless time):

Article [A Human Ethogram: Its Scientific Acceptability and Importanc...](#)

then definitely read :

Book ["Essentially, all Recent Essays on Ethogram Theory"](#)

You might want to start all this reading and new learning with

<https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory>

* FOOTNOTE: Check the other established, real sciences to see that this is true.

Can rational thought exist without language?

Rational thought (some important subset) can certainly occur, as when you do not talk to anybody about a set of related thoughts. This demonstrably happens a lot with animals.

(Looks again like the philosophically-inclined have license to waste tremendous amounts of time, uselessly -- that is the MAIN contribution of philosophy, by far. To think you can think well about anything out-of-context or without a clear set of scientific findings associated with it is preposterous.)

What is the significance of philosophy for the development of sciences in the 21st century

Dear

This Question seems little different from the long-running thread (of 3 years):

https://www.researchgate.net/post/Can_philosophy_help_to_innovate_and_develop_scientific_theory#view=5c4e84394921ee215f4ce44d

I encourage all to read my Answers there and some of others as well.

Do humans store knowledge as they store characteristics in their DNA?

Dear

We need to do MUCH more research on the Memories (the several types, working together, which have already been well-defined). While there are excellent findings there, researchers have barely begun to "scratch the surface" and we desperately need to know more.

But we can see this (THEM) as an answer to the question about knowledge storage. Indeed, the Memories (including much through working memory) do the lion's share of **contextualizing our experience**; **AND also**: when you look at the definitions of the various Memories, it becomes clear that the Memories are **also even more**: They are **EXPERIENCE ITSELF** (by their definitions). If all this is so, it follows that the **Memories are the most appropriate "places" for knowledge and ability storage (storage of ALL main parts of experience, actions, past behavior patterns, and developed skills [or the fractions of each that need to be stored]) -- since they are always "there" and operative constantly in our conscious life.** One might say that nothing needs memory more than the Memories.

Is Chalmers' so-called "hard problem" in consciousness real?

There is no "hard problem of consciousness". Because there really is **no unsolvable issue** regarding the "question of how physical processes in the brain give rise to subjective experience ... ". Part of the reason this "subjective experience" is no problem is that **"physical processes in the brain" --**

considered, either alone or without the experiential history of the Subject involved -- **DO NOT give rise to anything. (Processes in the brain are ALL in a sense CONDITIONED by interactions with the world (and quite a lot including human experience).)**

The second factor, that very likely will be involved in problems philosophers have in conceptualization, and which may lead to this [armchair] confusion is: It is **not possible to give one full particularized definition of consciousness** BECAUSE what consciousness is (AND WHERE IT CAN BE DEFINED) **VARIES** (or at least often varies) **A LOT from circumstance to circumstance, AND when considering ontogeny and development (and the Memories). Yet, this too is NOT A PROBLEM** because within any of the naturally defined sets of circumstances (very often defined by the Subject her/himself), THERE, it is **NOT hard to define consciousness, phenomenologically.**

Until you can extract these REAL factors (which is impossible) OR until you CONSIDER THESE REAL PROCESSES, there is no rational reason to believe in "the hard problem of "consciousness"" -- you are just failing in making empirical considerations and in empirical understanding. **In short, to believe in this "hard problem" is clearly an instance of being IRRATIONAL. Many things are "ineffable" to one who lacks experience and knowledge.**

Note to philosophers: while it may be nice to "think outside 'the box' ", it is not ever good to think you can think "outside of ANY/some 'box' " [and, **supposedly** simply/actually [just] consider 'real things' and analyze and 'put things together' in your mind]. Get to some real work, my friends. Your mind cannot "rise over much" and conclude (but FALSELY). ON THIS VERY POINT: All the empirical evidence on the Memories (which is substantial) supports my viewpoint and is in opposition to this other viewpoint (YOURS), just described -- so, right here, from "the start", I am empirically supported and you are not ! A notable amount of empiricism is involved in any good communication as well as in science.

For very relevant Answers from me about Chalmer's "hard problem of consciousness", see my last two "Answers" to :

https://www.researchgate.net/post/Models_and_Mechanisms_Dont_they_seem_to_have_the_same_problems_w_r_to_phenomenology_and_what_is_real

The "problem" (which is **NO problem for me**) is ALL due to bad science, done by bad Psychology and its researchers/theorists.

"Research involves deductive and inductive approaches". Elaborate?

Dear

You say: "Inductive approaches are typical in natural sciences. These sciences observe certain phenomena and, based on them, propose scientific theories and hypotheses that can be corroborated or falsified." (end quote) : all great, except some implied distinction between "natural" and other sciences.

There is NO valid distinction IN SCIENCE OR between sciences on the issues of induction and deduction, if you want to remain/continue DOING SCIENCE, anyway).

Thus I am adding (to what you say) that there is **no way to legitimately contrast "natural" and other sciences, on foundational basics of science procedure** (in particular, **with respect to inductive approaches and deductive approaches**). ANY science should be **RICH in verified sets of observations** (i.e. inter-observer reliabilities) **BEFORE** basically being forced to develop some **model which makes hypothetico-deductive predictions**. AND: **NO _MODEL_ SHOULD EVER, EVER, EVER precede the direct observation of KEY overt phenomenon which are its foundation -- and EVERY MODEL needs to be well-based (well-founded)**. There is absolutely **no exception to this**. If you try "an exception":, you are off-track and have failed to act in accordance with the most basic scientific procedures/methods -- **your claims CANNOT BE VERIFIED (yes, that is a consequence) and you are not doing science**. There is no way this is not true for ALL SCIENCES.

If Psychology seems to be an allowed exception, this is wrong and the wrong view (I.E. NO EXCEPTIONS ALLOWED). The **right view on too quickly-made hypothetico-deductive predictions, like for experiments** being done before the time is ripe (where everything has reasonably been done to understand the situation and come to good, full, agreed-upon observations), **IS THAT THAT IS WRONG** -- as is the case for prematurely formulating models. ANY CLAIM OF EXCEPTION is completely wrong and in violation of science. AGAIN: if you claim this exception, you simply are not doing any sort of science.

My delineation of a full Psychology -- perspective and approach (and ITS HYPOTHESES) -- is NOT in violation of such basic scientific principles. **BUT: Modern Psychology is largely (if not completely) simply comprised of examples of what NOT TO DO (filled with examples of them having made "exceptions")**. There is no legitimate way to give them "a break". ALL SHOULD FULLY UNDERSTAND THIS, for the good of ALL science, and especially Psychology.

So Psychology does NOT HAVE TO DO BAD PROCEDURE, it's just that many (to my knowledge: almost all) psychology 'theorists'/researchers DO NOT SEE A WAY HOW.

[I was a college Psychology instructor for 10 years+ and much of my other work was teaching science.]

Nowadays Biology is considered a natural science. Psychology should be the study of behavior PATTERNS [(behavior patterns PER SE (along with pertinent environmental factors involved) -- IF DONE RIGHTLY)]. Behavior is patterned by biological regulations/determinations ; there IS a "biology of behavior" (just behavior). If psychology (as the study of behavior patterns and key aspects of the environment -- and nothing else), it should be considered a study of a branch of Biology (and a NATURAL science). **By the way, there is a way of doing good, proper Psychology, as a science, and leaving nothing of major interest or importance in Psychology out.**

P.S. For a **good definition of science (ALL SCIENCE)**, look and find it in this thread:

https://www.researchgate.net/post/Is_there_an_OVERALL_good_thorough_definition_TRUE_OF_ALL_LEGITIMATE_SCIENCE This will always work, if you "work it" (as they say).

There is now a related topic and response on the thread (Question) :

https://www.researchgate.net/post/Is_psychology_suitable_for_experimental_research

Who is a scientist? Can he pass the simple test to show that he is a scientist?

Dear

With regard to general AI, what must be sought is a VERY active processing entity -- and one that basically has a biological nature (the makers of this entity must "channel" biology" *). I have done my best to help this out. See: <https://www.researchgate.net/project/Developing-a-Usable-Empirically-Based-Outline-of-Human-Behavior-for-FULL-Artificial-Intelligence-and-for-Psychology> and the (my) basically related Project on Ethogram Theory (<https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory>) .

If one is seeking the true "scientific method" for formulating a NEW science view (which clearly needs some discoveries that will be "just" verified OBSERVATIONS), THEN the "scientific method" is MUCH, MUCH, MUCH MORE THAN COMMONLY CONCEIVED.

* FOOTNOTE: And, by this, I mean the biology OF behavior: (PER SE): the systematic patterns of behavior and patterns of patterns. I may be one of the few non-concrete-minded (yet MORE concrete based) people that still "believes" in Psychology as originally defined: the science of BEHAVIOR (and, of course, the always-relevant corresponding aspects of the ENVIRONMENT). **This sort of perspective is most certainly the Psychology perspective needed by General AI.**

P.S. If "nobody 'cares'", it is because nobody (i.e. professors) LETS 'them' care. For example: The corrupt stifled system has let Psychology ROT for over a century (in what historically [eventually] will be seen as done in the same basic way for all of that century) -- yet the power and control of the status quo remains. Fortunately, General Artificial Intelligence basically has no reasonable choice but a perspective and approach such as mine (and, at present, that set includes: JUST MINE).

Dear

There should be a LOT of good verifiable OBSERVATION of phenomenon to contextualize what part of this any experiment is about and helps to show [at least aspects of] observations are correct as empirically conceived.

Decent and scientific models, [ideally] to be tested in-good-part experimentally, ONLY FOLLOW verified and agreed-upon OBSERVATIONS (with good inter-rater/inter-observer reliabilities) -- however those are obtained. OTHERWISE you are a priori asserting the nature of phenomenon. PERIOD. If people realize THIS, they would not so much discount all the other science work except experiments and they would NOT think only experiments are really important. One would not do anything remotely like that.

THUS: This idea that one should (or CAN) conjure up a model (perhaps based on informal observation(s)) and ONLY THEN look to verify it is absolutely un-empirical and unscientific.

OBSERVATIONS are as falsifiable as experiments -- it can be shown if they have OR lack high inter-observer reliabilities (P.S.: $p < .05$ has NO magic <-- but actually more like some NEGATIVE opposite). That all aspiring scientists do not know this is frankly disgraceful. Realize that science is just good, reliable, and shown-valid COMMUNICATION. Such reliabilities and validities are true of very good communication, for THEN it is basically science; that which is reliable and valid can most certainly be found in (and be true of) sets of observations. Good experiments (relatively rare) are such good communication; good observations are such good communication.

Good "guesses" only follow a large, well-based, verified (see above), cogent set of reliable good observations. IN CONTRAST: There are those who come up with obtuse models (dredged up by fools) from what they think they see; many of these cannot be well-communicated to anybody -- except some fans and close associates in "thinking". THAT most certainly is not science. **A good, reliable, understandable, agreed-upon observational BASIS MUST PRECEDE ANY MODEL.**

P.S. Ethogram Theory has concrete, clear, empirical (in the best possible sense), fully testable [(and verifiable : true or not)] hypotheses that follow from its perspective and approach. It also is likely the only general Psychology theory concrete enough to be relevant to General AI. SEE: <https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory> and see its associated papers.

Believe me: this is WAY better than nothing and WAY better than intuition.

The overall perspective and approach of the theory IS BASED ON OBSERVATION and could well be appropriately agreed-upon by both science and lay people (just a different set of more-likely base assumptions are required, and these must be seen as those most likely true in well-accounting for observations).

Recently someone here or in a similar thread said: If you do not do experiments, what you are doing is NOT science (<-- this is paraphrasing). This seems to be the simplistic (overly simplistic) attitude of many. Let's look at this contention more carefully:

About experimentation: Many of the best experiments occur naturally. For example: an aspect of Einstein's theory was proved when the image of a star (its light) viewed near the Sun was not where it normally would be expected to be: this occurred during a solar eclipse (so this star's light could be seen). No experimenter defined the independent variable; no experimenter defined the dependent variable; YET it was an experiment: one image of a particular star's light being bent, as its image (the light from it) was viewed near the Sun while other stars' lights, which were not passing near (by) the

Sun, did not show this effect. Under such clear circumstances, this is considered much more than a correlation; it is seen (as it properly should be) as an experiment, with 2 distinct different conditions [(and that is all)] and 2 distinct different results).

In fact, such natural experiments are far better than when the experimenter defines both the operative (the "operational definition") of the independent variable and the operative (the "operational definition") of the dependent variable to use: In fact, this latter kind of experiment is often very, very, very artificial, compared to what is supposedly to be proved (compared to the real situation and the variables there). These are very poor experiments and they are **WAY open to judgement whether they prove anything useful at all. Most Psychology is like this latter situation.**

Don't love lab experiments too much, especially lab experiments !

Also, recall there is nothing wrong with results (observations) that show high inter-observer (inter-rater) reliabilities: those are very good findings, especially in a natural environment, and may well be important.

Re: Psychology: It seems to me that when we better understand behavior patterns and systems of behavior patterns (patterns of patterns) as they develop during ontogeny, we will be able to do [(see)] some of the best natural experiments. Ethogram Theory allows for this and clearly specifies the new overt behavioral systems one should be able to [in key parts] directly observe (at key points in ontogeny ; and these pattern/patterning changes are necessarily related to the development of representation, memory, and cognition). AND, these are the most-empirical of hypotheses, making very clear empirical predictions about clear situations and clear results. (All these concrete findings would/will be VERY relevant to General AI -- perhaps so much so, that the the AI people should stop waiting for Psychology and try to participate in (or do) some of the needed behavioral studies themselves. [This is an area, as is true of **all good science, WHERE WE NEED altogether NEW DISCOVERIES.**])

I have very recently tried to provide a general (overall: for all sciences) definition of science:

The definition of science :

ALL science refers to the ability to replicate KEY OVERT OBSERVABLE circumstances and KEY OVERT OBSERVABLE phenomenon * THAT, obvious to ALL (in a fully agreed-upon way), are necessary for best understanding later replicable overt observable circumstances AND corresponding later proximately-related key overt, observable phenomenon * patterns (so both "sides of the equation" are taken care of, so to speak) -- BUT, ALSO **this may well imply some more-than-believable mechanism(s) for some linkage(s) which would be of some reasonable nature, but that may not be fully or clearly discovered YET (<-- BUT _HERE_ SOME CLEAR PRINCIPLES NEED TO BE UNDERSTOOD AND ALSO NEED TO BE INVOLVED).** [ALSO NOTE, in any case, that things on BOTH sides of "the equation", *cited as KEYSTONES of your science (necessary for your declared, well-grounded, and in-good-part established -- and thus widely agreed-upon -- view/approach), _MUST_ rely fully on now-present (or at the key time, present) variables that are overt and directly observable.*]

ALL THAT is **the minimal empiricism** for science and, I believe, PROVIDES A DEFINITION FOR

ALL (each and every) legitimate SCIENCE. This seems to be **a full definition** and yet, I think, is literally **THE BROADEST, MOST- LIBERAL, justifiable DEFINITION OF SCIENCE THERE IS !**

[I did not want to allow the "bending" of things further than we can keep track of OR further than what is really necessary (**in any case**) --- allowing for everything in legitimate, good science, **while not in any way sanctioning any poor or bad "science"**. Some parts of the definition are supposed to reasonably control other parts, while eliminating nothing that may be real, or that which may be related to **principled** "intermediaries" which have not yet been made clear and which may yet be largely undiscovered (this will largely occur on "the end" -- or with results investigations -- and are greatly discouraged on the beginning/early-predictive part of studies, where such would be at least less often necessary, and not necessary early on).]

*** FOOTNOTE: RECENT EDIT: I originally used the phrase "behavior patterns", meaning THE 'behavioral' patterning of ANYTHING, I.E. MEANING: "PHENOMENON".** This phrase has been replaced with the word "phenomenon" to make it clear that such a general thing is what I meant.

•

Is psychology suitable for experimental research?

Any science can have areas where it is suitable for experimental research *. One simply has to understand and obtain basically full agreement on the **important CONTEXT of the factor(s) manipulated**. This is because IT IS IN THAT/those CONTEXT(s) any finding is meaningful AND it is only with those **necessary and relevant context(s)** (clearly specified) **that a finding (as it really is, overall) is verifiable**. Verifiability is essential for science. Without it, you have no science. **For MOST PSYCHOLOGY, MOST AREAS: Good thorough OBSERVATIONAL RESEARCH is best NOW**, to define important contexts, **much more than has been done** (IN MANY AREAS, it is ridiculous IT HAS NOT YET BEEN DONE). [NOTE: inter-observer reliabilities (correlations) show strength as well or better than $p < .05$ or $p < .01$.]

For a **good definition of science (ALL SCIENCE)**, see it in this thread:

https://www.researchgate.net/post/Is_there_an_OVERALL_good_thorough_definition_TRUE_OF_ALL_LEGITIMATE_SCIENCE

and see: my Answer to the Question:

https://www.researchgate.net/post/Research_involves_deductive_and_inductive_approaches_Elaborate
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Yes, I agree: grossly inadequate **observational RESEARCH**. Yes, then (due to this): the premature poorly-founded (poorly-based) models and premature **experiments (without knowledge of true important pertinent contexts)**. <-- **So, experiments, both too early and too bogus.**

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One certainly should NOT simply propose "operational definitions" that all can agree on and see that as enough (sufficient) -- that would be a standard inconsistent with good science.

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I do appreciate how you seem to have provisions for every part of what has to be done. But, there still remains the matter of when each part is done -- the order and to what extent (and how). Some examples of bad order are (and there are many real-world examples of this, from serious researchers): "models FIRST" (based very little or too little on observation) -- not good. One must first face the true problem of observationally **defining the "problem space"** -- **and this must be thoroughly done with inter-observer reliabilities** (and perhaps using some well-established, known facts). **THEN** you are just **about** at the place you can design models. **BUT not yet: first, there should be SOME theory-building (or a good outline of one)** (some of this may even precede that important observational phase). **In any case, to some noteworthy extent, these nascent "theories" should be built before models as well; we do this theory building when one has clearly identified some key true phenomenon of the "problem space",** and we put their "story together" based on well-researched and defined set(s) of key established findings (facts) **AND** on the basis of **established relevant principles**. Surely, a good part of this TOO must be established before coming up with models. **THEN FINALLY NOW MAKE YOUR MODEL(S)**. And: **after models: hypotheses** may be stated (**with those "operational definitions"**, you talk about) and they are **tested either in further observation of behavior patterns (with inter-observer reliabilities) AND/OR by experiments** with good realistic operational definitions, and done in **reasonable contexts**.

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What is a scientific truth ?

Much (if not everything) has to do with how you proceed. Here is how a "way of science" 'goes' (and this is the only way to scientific truth) :

One must emphasize doing thorough **in-depth observational research (showing reliabilites) FIRST** . Then making any **model** **LARGELY** from this (and necessary principles) **before guessing (i.e. before systematically hypothesizing)** about what more may be found or what more may be found to be related. One certainly should NOT simply propose "operational definitions" that all can agree on and see that as enough (sufficient) -- that would be a standard inconsistent with good science.

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With doing all that one may well arrive at scientific truth.

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Is psychology suitable for experimental research?

Any science can have areas where it is suitable for experimental research *. One simply has to understand and obtain basically full agreement on the **important CONTEXT of the factor(s) manipulated**. This is because IT IS IN THAT/those CONTEXT(s) any finding is meaningful AND it is only with those **necessary and relevant context(s)** (clearly specified) **that a finding (as it really is, overall) is verifiable**. Verifiability is essential for science. Without it, you have no science.

For MOST PSYCHOLOGY, MOST AREAS: Good thorough OBSERVATIONAL RESEARCH is best NOW, to define important contexts, **much more than has been done** (IN MANY AREAS, it is ridiculous IT HAS NOT YET BEEN DONE). [NOTE: inter-observer reliabilities (correlations) show strength as well or better than $p < .05$ or $p < .01$.]

For a **good definition of science (ALL SCIENCE)**, see it in this thread:

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What makes educated scientists to believe in God?

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As a leap from the irrational, it seems to fit the definition of insanity, though an insanity of somewhat limited(?) scope **_BUT_ I WOULD NOT UNDERESTIMATE THE POTENTIAL FOR ENCOURAGING DOING-HARM** (as a distinct and noteworthy factor, itself). Western societies are plagued by rampant dualisms -- which are **VERY** destructive (e.g. nature vs. nurture, "natural" science vs. others, and a whole host of others, many based on categorical ways "Man" is said to be unique -- adhered to, though most are obviously incongruent with Biological principles **AND** many have been **PROVEN WRONG** (e.g. "man" and "tool use")). Many destructive dualisms (encouraging wrongs and/or irresponsibility to an unacceptable and, likely unsurvivable [(as a species)], extent) have to do with human "believers" ideas of God and Man.

Inexcusable. I am intolerant of it all (but show no prejudice with regard to this -- except in particular individual cases: distinct, definite cases of wrong-doing where the insanity clearly impinges). If you cannot tolerate what I just said, I would definitely worry about you. (<-- Do yourself a favor: and **STRIVE** mindfully for change: **mindfully** and **relentlessly, with wise attention**, and as you get closer to realizing **things as they ARE** and thereby develop some **wisdom**.)

Science and Spirituality – Could they go hand in hand or are they bound to contradiction?

I would just direct everyone to my Answer (of a day ago) to the Question :

https://www.researchgate.net/post/What_makes_educated_scientists_to_believe_in_God#view=5c6875a0d7141b575842a1b3

Who was greater: Freud or Wundt?

Dear

I took your main Question to be: "Who was **greater**: Freud or Wundt?" (which seems to be the case, looking at your follow-up question, which likely basically was meant to mean about the same, as the first). Hopefully, I am correct in what I assume you meant to ask by your first question; the revised question, I just stated (above), is what I answered in any case. "Greater" implies more than "influence".

Freud was a wonderful descriptive writer, even if just filtered to try to 'see' the phenomenology. His writings fill 24 volumes, and it's good reading. Freud influenced thinking (and language and concepts) in cultures and across cultures as a whole, as well as being more important in psychology than Wundt -- the latter just one of several/many "egg heads". Wundt is basically just a very early historical example of someone trying to do systematic psychology (in the lab) -- not very novel, as seen nowadays, but he was also more than dubiously speculative, in his "laboratory studies" (though still often, in a noteworthy sense, this is true of lab studies today). He supposedly wanted to disconnect psychology from philosophy, but failed to do so, judging by his friendly, way-over-generous quotes about philosophy, not to mention his engaging in philosophy itself.

Though I praise Freud for some very noteworthy things, I and many modern psychologists, do not "believe in" (i.e. see as conceptually necessary) anything like Freud's unconscious; sub-conscious, things that can be brought into consciousness with the right, sufficient cues/environmental aspects, SUFFICE for understanding -- with no need for Freud's "unconscious".

And, you ask: "why psychologists today like to do experimental research" to which I would answer, simply: they have labs and must look like they are getting something done ("learning" and sharing, after having an "experimental" group and a "control" group involved -- making for some kind of thought-to-be-impressive "dog and pony" show). [Most often: they like making things up in their

heads and then trying to provide what might look like evidence (or, actually, at least trends ($p < .05$)).
PHOOEY.]

Dear

You say: " For the 20th century, the top influencers are Freud, Piaget, Skinner, and Bandura. ". I literally at most only half agree (I could very likely agree with your first two). But, Skinner's ways of thinking and trying to find "laws of learning" are pretty much regarded as silly today. [After Pavlov and Thorndike, there is little mention of anything "gained" from Skinner -- whose caricature of 'science' I have always found loathsome (even as he was alive and working)].

I studied 6 years of Psychology in college and grad school (and decades on my own) and could never find any coherent theory associated with Bandura. As far as I can tell he just made the term "social learning" big and did some experiments that seemed to indicate that such 'learning' per se existed. (When I think of Bandura, only Bobo comes to mind.) The main difference between Bandura and Skinner is that : while Skinner may actually have been destructive (actually having held up any progress of Psychology towards science), Bandura (in any big science regard) was "nothing."

Can artificial intelligence become self aware?

I think a major part of a good Answer to the Question is: WHEN does a human need to be self-aware? It can be argued that this is very largely in social situations OR when one has social concerns (e.g. communication). Otherwise, one may not have (AND BEST NOT HAVE) "self"-awareness as any key or deliberate (or conscious) aspect of interacting with aspects of the environment, regardless of the "level" (stage) of representation and cognition one may have achieved. (I am referring to stages/levels, which unfold during ontogeny, similar to Piaget's view.) (At higher levels, it is true, you often DO have social concerns, but it may well, at times, be best if you do not -- why waste precious resources (of working memory) on anything that is irrelevant?) (And, of course, in response to basically the same content one can at times NOT have self-awareness, but then alternate that with times when you DO (again, e.g. for communication).)

This characterization, which I see largely as a truism, would be quite important for AI. And not recognizing the considerations, above, could lead to a less-effective and partially off-task (and "self-centered") robot -- and you do not want that. (There are ways to seek continuous self-improvement that involve NOT personalizing things and realizing that (MUCH) in the world with NO SELF (e.g. Buddhism)).

Dear

Do people even need to be _SELF_-aware? (and always? -- very likely not, but only socially). In any case, now then, in what real sense is "self-awareness" necessary for Gen. AI . Then, if we know what sense in which something like this must be so, THEN is the time to answer the question. I would like to recommend:

[https://www.researchgate.net/post/Generalized AI has no human brain they must be aware of all pertinent external behavior pattern markers related effective environmental aspects](https://www.researchgate.net/post/Generalized_AI_has_no_human_brain_they_must_be_aware_of_all_pertinent_external_behavior_pattern_markers_related_effective_environmental_aspects)

Why do we need research and design strategy or process?

Dear

"OR": NO, NOT "OR". You (in-reality; alone) should be "constructing" nothing. **THE SUBJECT GIVES THE SCIENTIST ALL SHE/HE NEEDS.**

I guess I should apologize for becoming beyond frank with dualists (but I can't help it; it is so damned easy; and, I think it may be amongst what you need most -- so it is not just a "mean streak" on my part, rather see it as tough love).

"The judgement of anything is a part of its perception", What is your opinion?

Dear

The statement "The judgement of anything is a part of its perception" is typically incorrect (maybe always) WHEN you consider any scientific outlook on perception OR what "perception" is typically considered. I guess perception may well be related to past "judgement" -- that depends on how broadly you use the word "judgement" (but I think you would have to go over-"broad"). I cannot imagine how that perspective would be useful (or seem to be congruent with phenomenology) to say that "The judgement of anything is a part of its perception" -- thus I would be careful to agree with that statement

to any extent. Perhaps you should ask: how would one see phenomenon that way and is that "way" something you can do or something a scientist would do?

Dear

I apologize for perhaps seeming disrespectful; I know I am sometimes quite harsh in the effort to be frank (frankness which often seems necessary in responding to things that are concepts or views/approaches in Psychology) -- and it is all about ideas/statements and not about people (or a person).

In this case, it appears I did not read the title of your post the way you meant. I read the title of your post a common/likely way one would read it: [for part of the response to a situation:] judgement --> perception; this was my reading of it WHEN it rather appears you meant to say: perception is part of judgement (in part, perception --> judgement (which for the most part I do not even disagree with)). For the record: I believe the way I read your title would be the much more common way to read it, but with your recent response here you make it clear you meant: (quoting): " The **Perception** of what we are judging is a **part** of this **Judgement** ". In any case, please accept my apology. [(The following may be relevant, and in part yielding the need for my apology: I am fortunate enough to have to know just one language, and I do know only one language. Others are not so "fortunate", which may yield non-standard expressions in English.)]

About my judging: To take appropriate responsibility in this world: certain topics and concepts one feels quite or very knowledgeable of (BUT no capital "K"), one must feel free to express an opinion on, which not infrequently involves some judging. But, again, since I did not interpret what you said as what you actually meant: **I do apologize (and perhaps I should apologize anyway for being so often harsh)**.

P.S. I believe it is likely that any individual (at most) can realize just some small "sliver" of Reality (capital "R") and basically (and in-effect) just momentarily. Thus, your standard for one to rightly judge is too high (or there would be no "judging" at all).

What is logic? Why need we logic?

Dear

And because of what you last said, which indeed is true: Should we be asking "why we have something" that, if we did not have it, we would be extinct? It might make sense in the sense of "why" for discovering its development, no doubt parts at a time (as Yaozhi Jiang says: it develops -- though (I believe) it is never, in notable significant ways, ever absent). ALSO notice we all are automatically "translating" Yaozhi Jiang's Question because:

"Logic" is just a FORM (kind of like: rectangle). If you have invalid premises, it yields garbage; certain things can well be rectangular, others not. We all automatically know "logic" is not what he meant.

Overall conclusion: The actual Question, therefore, which Yaozhi Jiang tried to ask, would have to be translated into "why do we have sound thought?" (which is really the Question I and several have been responding to all along) . But, even with that translation, it is true that, if we did not have it, we would be extinct and thus asking "why", as if we could figure that KIND of thing out as some kind of distinct whole concept, all-at-once, and IN GENERAL, is (again, as so many similar instances) an un-true way to think about things, basically by "biting off more than one can chew" (that is to say: trying to/pretending-to (irrationally) "stuff" more in working memory than will fit) -- which is the fundamental error of philosophy (making most of it worthless **or worse**); this practice necessitates and leads to incorrect, serious over-generalization.

"Sound thinking" is also just a type of thing (a "form") -- one cannot investigate "types" of behavior patterns UNLESS they are distinctly true and real types * (basically: biologically)(our actual Memories need that sort-of/degree-of "help") and, even then, the answer is not going to come in one "fell swoop". Everyone must move to love true empiricism more (with an "eye to" some key directly observable, overt phenomenon always) -- otherwise, at best, people do not know what you are talking about (and maybe you don't). Agree?

* FOOTNOTE: This is something Psychology, it seems, cannot learn; on fundamentally NO legitimate bases, they have models (conjured up hypothetico-deductive systems -- with "conjured" being very much the correct word). Perhaps it is best to view Psychology as one of philosophy's worst examples (or worst systems) (rather than pretend philosophy is not involved) -- its "concepts" have been "hammered on" and, at times, slightly shifted over and over and over, with basically no improvement (almost always bad, much like philosophy; similarly a product of "the minde" -- armchair "drifting" 'thought'). I have dedicated my life of 65 years (or at least 50 years) to Psychology, yet see most of it as, at least largely, of either little good (relative to what may become the real thing _and_ become of that) or of no good. Basically, the same in nature for its 100 yr+ history. (My favorite areas, the Memories and Development, are only slightly researched and wrongly concluded about; there is a "kernel" of good "hidden" in each of these areas, though -- i.e. even some likely good findings, which I have been able to locate.)

Dear

Why do we need the environment? Why do we need our Memories? Why do we need water? Why do we ask questions such as this one you asked? BIG CLUE: modern thinking IS outrageously and unjustifiably DUALISTIC: There is this and there is THAT, so why not allow ourselves to ask about either (this or that)?(and then, basically, "ask" about anything, no matter how far off the so-called "level of analysis" is). (I believe my response may be one of the better overall responses to your question, though some philosophers may be able to conjure "more".)

You also make some statements that are incorrect or gross over-statements:

You say: " Subjective world only has subjective information. " Try to explain and justify THAT. Much of what we should know to be more rational ourselves may be subjective knowledge of some people RIGHT NOW.

You said: " ... objective logic? Obviously is cause-effect law that produces all events or things or matters in objective world " Really? And, that's it? (How about simply knowledge of important properties of things, and why they are important? -- often in ways not seen as cause-and-effect, in any

clear or reasonable sense. Here is an example: Food is often good tasting, so ("therefore", if you like) we are inclined to eat it.)

If you want to say something wild, like " Human beings holds the objective logic via subjective logic only. ": Why not try RATHER: we come to know actual (ultimate) Realities only by way of our conventional realities. A good correction, I think, for you to make. Plus, "ditch" the dualism(s) -- it fails.

Can philosophy help to innovate and develop scientific theory?

(a VERY small sample of my responses to this are found below):

It is myself, a science **person IN A SCIENCE AREA** (seeking to be no philosopher -- though likely **MUST** be considered one, for 'them' to try to vainly defend the self-interests OF philosophy/philosophers), who **may have done all conceivable major analysis on the faults of general Psychology theories ***. Analytic ****** philosophers should prove me incorrect, acknowledge me, try to elaborate upon me (or more clearly explain), significantly "tweak" me, **OR admit NO ONE OUTSIDE A SCIENCE IS likely NEEDED** nor much active (and their criticisms are minor, trivial, or **relatively worthless AND/OR LIKELY UNNECESSARY**) -- **YET another way to evaluate the "relationship" between philosophy and science.**

* FOOTNOTE: For just a taste of my evaluations, see:

https://www.researchgate.net/post/Are_many_most_interdisciplinary_studies_BAD_science

** FOOTNOTE: "analytical" -- if you want to continue the strange tendency to add an "al" to lots of modifier words (adjectives) where it is not needed, if not just plain incorrect (hey: those dumb enough to do this could possibly be good for WHAT??)

Have a good day.

Re: Psychology and Math

I just looked at an Article where , in part, there is a mathematical formula, which some measures together (here, mainly, SOME combination of "psychometric tests") follow very well; the instances of "results" in a particular study fit or are predicted by a mathematical formula, though in some different circumstances this involves changing the value of a constant(C), in the formula, and that is part of the "story" . No one knows where the sometimes-changing constant(C) "comes from" or how it relates to

anything, YET it is clear differences in circumstances is where the value of C must be changed . This seems problematic, but there are several cases of constants, just being what they are, and having a certain value for no known reasons; but it may be problematic that you change the constant to keep it consistent with different sets of results -- and where you have NOT identified the real basis of this need to change of C from circumstance-to-circumstance, i.e. you do not know the ways the circumstances are different, one to another.

BUT, WHAT I SEE AS A DEFINITE AND REAL PROBLEM is: a great deal of the variability in results were partialled out, meaning specifically: some of the test results (of particular test(s)) **which had been part of their view and understanding of the behavior [patterns] of interest are "taken out"** , in particular: **results of those tests' measurements causing variability of overall measurement results eliminated from consideration -- from having ANY role** (this done through correlation-statistics mathematical procedures partialling out "unwanted variability", i.e. WHAT was causing that variability.). **After that**, what you have **no longer includes the unwanted variability (of what were the combined "test" scores, which had included those measures [taken out], showing most of the variability in results);** these math "achievements" were yielded by taking out some of what was seen as important test results TO/IN what was necessary to explain their new **KEY concept** (the very most central goal or the Article). The problem is "what is left" (the combination of "test" measures of the tests showing NO unruly variability and still counting as each Subject "scores") is no longer understandable in terms behavior patterns of any kind (if is ever was, which TOO is doubtful) (and no clear relationship to behavior patterns in any pertinent environment). **_AND_, it is extremely likely that even the researchers themselves could not understand that "what's left" means in _ANY considerable way_ (yet, see below) So:**

NOW, the real point is: if you find some math which totally gives a predictable value of all the instances of such a "what's left" for Subject responses to some measurements, it is really meaningless, even though it fits with math very well; the existence of a way to get some resultant "thing" to be able to be described well with some **math formula, is actually meaningless IF THE VALUES OF the 'FACTORS ALLOWED TO REMAIN' THEMSELVES are not understandable or interpretable.** This sort of "impressive" math is basically a **TRICK** that none of us should "fall for". And, this is partially-out of some part of the measure [of your concept], works BY actually taking away some of what was/is your view of the construct; and thus, in effect , taking away some of the **MEANING** of the construct, is **something many researchers could do (even when not using psychometric tests).**

Thusly, **math itself is not really impressive at all in such cases but, rather meaningless** (except about indicating some consistency among the subset of measures you allow to remain, truly meaning, otherwise: "nobody knows" (or cares)(see end of the second-to-the-last paragraph, above)).

More about science and philosophy: **science VS philosophy:** (frankly I see this as the final "nail in the coffin", if you see my points -- thus bringing, for those who are reasonable, the end of this three-year-old thread, so much filled with that which is/has been irrelevant or nonsense):

My perspective and approach and the related thinking, I believe, dwarfs Popper. It is because I am a good science person and have come to fully realize the nature of good empiricism and continuing **THAT** good empiricism in my field (and seeing that to an extent in other sciences). I certainly agree with his requirement of testability and falsifiability , **PART** of what's needed for a knowledge of good empirical science and one must conform to that **BUT**, given I am a science person **IN A SCIENCE FIELD**, I can say **MUCH** more about what good empiricism must be. Another thing I like about Popper

(but, again, did NOT get from him, but rather, with certainty, from studying good empiricism in science (esp. behavioral science) MYSELF, with my own eyes and brain): I am now referring his good view (again, though shared by me, my understanding and view being much more rich and detailed and dimension-ed): I am referring to the necessary perspective that **deductive** reasoning arguments in the sciences have to rely on **induction** for our premises and so science is [he'd say] is "lumbered" with the problem of induction. Actually, effectively, in science, induction means good reliable, and shown well-agreed-upon (with very high inter-observer reliabilities) sets of OBSERVATIONS. (I see no "lumbering" here but a rich, essential necessary and wonderful and extensive first step for reliability and validity in any science.)

I have most certainly never striven to be a philosopher (nor even imagined or thought about it), but I guess I very well may be one (and perhaps a damned good one). But to label me one or to label myself one would likely be unproductive and actually, a grave distraction (e.g. with people looking for other philosophers I am "like" -- that always not really being true and never the whole story, not to mention the very common serious errors of irrational generalization I see with most philosophers; they are, at best, a partial help (some without serious grave errors), BUT all totally unnecessary sources of "help"). It is unbelievable that any/all decent scientists in any science field would not come to the same necessary conclusions themselves (for one: inductions and then eventually deductions, ALL that needing verifiability (replicability) and always with the possibility to be falsified or shown incorrect).

I may find some philosophers very agreeable (e.g. Popper), but never any of them providing a full, rich view of any science which is necessary for others to have gotten from THEM.

I never credit Popper with ANY PART OF MY PERSPECTIVE OR THINKING or ANY other philosopher (I have read several books on Philosophy, but this was well after my thinking was developed). AND: I do not think anything that was conveyed by others (e.g. professors) who were Popper-ian etc. had any certain influence on me THAT WAS DISTINCTLY FROM POPPER (etc.), because I in-my-science, on my own, definitely independently verified (and made real-in-context) a view like his, but I also necessarily had to go FAR beyond that in essential and absolutely necessary ways of being truly a very good empiricist.

In conclusion, I would like to say that I am absolutely unwilling to quote or even MENTION ANY philosopher in any of my writings, because I basically consider that a bad and false distraction from a much more developed scientific view -- if you have been a decent scientist (empiricist) IN YOUR OWN SCIENCE FIELD.

Persons may disagree with me but, then, I confidently believe that they are not in a science field or are very poor 'scientists' (very poor empiricists).

-

Imagine "No Box" rather "Thinking outside the

box''

Dear

I always think we have a "box"/"boxes", I mean: we rather quickly develop a "box" in areas of study (and, perhaps, to some extent: in-general). I think this is clearly indicated by the limits of working memory -- and therefore they are necessary. BUT, on the other hand:

You can be very mindful of the development of your "box" (as it develops) and thus recognize errors, if you have been literally, properly, and thoroughly [as much as seemingly possible] **mindful all along**. I do not think of this as the result of just thinking; some things, clear considerations about situations and/or circumstances are always involved; I do, thus, think no one needs to be "locked" in their box(es) -- at least those most important to them. Also, situations or circumstances, even if you have not been properly mindful, may lead you (when you are later more mindful, or properly so) to at least somewhat correct or amend your "box(es)" -- BUT maybe not to the extent they should if you have not well-developed mindfulness. Also, developing mindfulness can lead you to "go back" and look again at situations and circumstances and thus through striving and will you may also (fortunately) alter "boxes".

We all are "blessed" to have "boxes"; it is quite possible that some cannot appropriately alter the involved views/perspectives/approaches and get out of some of their boxes. AGAIN: To be properly and thoroughly mindful is to some extent a skill one must also develop -- for your present thought and "retroactively" (see what I said indicating this above). [For good thorough, right mindfulness you need wholesome behavior in thought, word, and actions AND to have eliminated intrusions or distractions or impediments from any unwholesome thought, words, or actions (this is the ideal to have right concentration with right attention and leading to more right view).]

We ALL have "boxes", but we can have ones that are quite good. I always seem to be able to properly elaborate and/or amend some of my "boxes" and I feel for the most part: "all is well" -- at least in the important areas I care most about. This indeed can make you more free and creative (and all this implies few limits) , even with "boxes".

Is anger a mental illness?

Dear

Anger is one of our BASIC emotional responses, somewhat automatic, given the correct circumstances in situations. (It is one of just about 6-8 such semi-auto responses, i.e. basic emotional responses.) That it still exists (given evolution), it can be presumed to be (when operating correctly) adaptive. Also, phenomenologically: There is a reason that certain blocks or frustrations or assaults (or assaults on others) should trigger some added response (vs being seen as a neutral phenomenon -- to just be otherwise assessed) -- so we are clearly inclined to "put more" into some overall response.

I certainly agree some who, earlier in this thread, basically said it is a problem if it is too "out of control" (not balanced and moderated by other mental cognitive factors -- which it, and other emotions, clearly can be).

Buddhists believe that all anger is a problem. But there is no way I have ever been able to see that, except as too much of an extreme view. YET: When appropriately controlled, many situations that make us angry can be seen more neutrally, less personally, giving us better overall balance (and validity) in our views (equanimity).

What would be the first step to create a common language for different disciplines?

Dear

With regard to putting or piecing findings from different disciplines together: There is only one correct way and that is to **discover findings providing a concrete, TRULY-EMPIRICAL "bridge" between them, phenomenon where each of the 2 disciplines together or both have distinct empirical contributions which apply** (see below for the only decent definition of empiricism, just referred to **twice**). This is the best one can hope for, and often that will not or cannot happen (either, perhaps for unclear reasons). But if you are "stuck" like this you may well have to get out of that morass as part of reasonably continuing -- though great discoveries can "speak for themselves"). [(More on the "positive side": sometimes, in some cases, such a "bridge" can be found in naturally occurring phenomenon/findings.)]

Just as importantly: Any "other way" of connecting the findings of different disciplines is going to be involving human intuition, in ways that are "beyond" mere reasonable, testable, verifiable hypotheses (the latter, the **ONLY** way human "guesses" ultimately are appropriate) and these other sorts of guesses are not only **VERY** likely to be incorrect but to be **MAJOR** dead-ends and/or distractions (maybe long-term or long-standing), and damaging to scientific progress. (I know of a field pretending to be a science that has been in such a bad situation, just described, for its entire history, and that is Psychology.)

All good [or real] progress, allowing for continuing or continuous progress, I believe involves **true empiricism**: where each and every construct is, at least in **KEY** ways, and at some time, in a way(s) (verified/agreed upon) clearly and notably founded/based/grounded in directly observable overt **phenomenon -- patterns of phenomenon. ONLY** such gives you the other hallmark characteristic **OF good science (aka good empiricism)** and that **IS** what was just mentioned: allowing for continuing or continuous progress (if you do not yield **THAT** at least your "last step" was wrong or incorrect).

What is your opinion about the advantages and disadvantages of the use of Vygotsky's cultural historical approach in educational research?

Vygotsky, to me, is a "mess", in comparison to Piaget. Why I see his work this way is partly expressed in a recent Answer I gave to:

https://www.researchgate.net/post/What_would_be_the_first_step_to_create_a_common_language_for_different_disciplines . I think there are MAJOR problems in integrating inter-disciplinary views; almost all the time one should work within a discipline -- and certainly the discipline should always be clearly central.

Vygotsky, with his personal (social and cultural) stuff, is operating at the level of "overall perspective", and this as done in an interdisciplinary fashion FOR PSYCHOLOGY (and, in particular, developmental psychology) is not a view that would facilitate good continuing and progressing research, or any decent (real) **science AT ALL**, if you have a **reasonable and necessary standard for empiricism**.

I find that those who like such perspectives like them to bolster their reliance of untestable/unverifiable and distinctly non-central **"social" factors (or "social/cultural" factors)** -- not true variables (because they are undefinable/unsupportable with good empirical data; I address what real empiricism is in the Answer I just referred to, above).

Psychologists look for things that bolster their terrible ultra-focus on "the social" as a crutch, this including **"social learning"** 'concepts' themselves; and THIS is all done for the furtherance of **terribly ill-defined 'learning' (supposedly always of a quite similar nature) as the ONLY accepted aspect of behavior change after toddler-hood** (based on what are really just beliefs that are ultimately based on **absolutely unproven, unsupported, unsupportable, and unjustified presumptions about "just learning"**, these **falsely seen as "assumptions"** * (with **no critical examination of these EVER done**) -- and with HUGE consequences and ramifications for all 'understandings' in Psychology (and **the reason it has yet to even BE a science**)) **. Tip: Learning changes qualitatively over several levels of development, ages 2-18 (NOT "just-learning" over this time of ontogeny); the qualitative changes that occur (recognized by ANY with common, decent reasoning and reasonability) must **of course result in qualitative changes in the nature of "learning" too !!**

* FOOTNOTE: This stilted unscientific view also explains the unprovable and unsupportable (untestable) notions of "sensori-motor" bases to all thinking (in the **"embodied learning" 'theories'**), **EVEN AFTER** toddler-hood (actually, again, founded on mere notions and mere beliefs and based on the same pseudo-assumptions referred to above); "Embodied learning" 'theories', with their concepts

(pseudo-constructs) reviewed and critiqued by respected peers as **forever untestable "variables"** (by their nature), are centrally involved here.

**** FOOTNOTE:** All this is explained in detail in my other writings (all available on RG). All my criticism HERE is justified and explicated and elaborated there, in these writings.

Dear

Thanks for the addition and support that your first paragraph provides.

Regarding the rest: I do not see that (THAT that potentiates) being defined in a real solid empirical way, that is, **CLEARLY** based/founded on some directly observable overt behavior patterns **FROM THE OUTSET** of ANY concept/construct in a model -- those behavior patterns **CLEARLY LITERALLY FORMATIVE** , and directly observable as overt behavior patterns (or important aspects thereof), at least at some **KEY** times, e.g. the inception of a new qualitative way of thinking clearly starting to be used. No aspect of a model should precede this **OR** what you are doing is like armchair philosophy conjuring up a **hypothetico-deductive** system -- ill-founded, oddly committed-to, and falsely directing one's research; I am **DONE** with "considerations" of such "models"; the **SUBJECT DEFINES ALL** , each and every concept or construct, **WITH DIRECTLY OBSERVABLE OVERT BEHAVIOR PATTERNS as a clear basis** -- and, with new technologies, we do not have to settle for less, **OR GIVE UP** because things-about-behavior that have **SEEMED** to be hard/impossible to conceptualize in the good empirical way indicated, without now considering **REAL NEW WAYS OF OBSERVATION**, to gain decent empirical bases, e.g. eye-tracking. Behavior researchers/theorists should **ALSO CONSIDER** the almost-always-"missed" real **OBSERVATIONAL PHASE** of their science research and concept development -- missing that is another thing that clearly shows a lack of science in a supposed science. Missing everything and doing basically everything wrong is not atypical of Psychology (e.g. **ALL** of the "Embodiment" and enhancement "theories"). (Failing to do some of the good discovery for foundations/bases has not been done **EVEN IN WAYS THEY COULD HAVE FOR DECADES** (or a century).)

Foundations of concept/constructs, clearly defined **WITH DIRECTLY OBSERVABLE OVERT** phenomenon is a [basic, minimum, required] standard of empiricism for all sciences, no exceptions. **OR**, it's not science. [(Even if you do not want to do all the right things directly yourself, it is possible to reason this point-of-view out (on minimum standards for empiricism).)]

P.S. Researchers/theorists also are not to define the following, just based on their deductive thinking: "environmental data ([that] has to be described), goal and context". For "what the relevant environmental factors are", **AGAIN ONE SHOULD CLEARLY BE RELYING ONLY ON WHAT THE SUBJECT SHOWS** for the main determinations here. If you are not clearly going from that one has the same set of problems described above. **NO** researchers' thoughts-defined "environment", "relevant behavior" (**WHICH SHOULD ONLY BE SEEN AS PATTERNS**, in a biological organism), **OR** what is a "reinforcement" or "reward" (or "punishment" and such ...).

How do you know when you understand

something?

Dear

I may seem very opinionated and idealistic here, but I am just going to "go for it".

Understanding:

You KNOW (and can impart it) because: True and good understanding allows more clearly right action and right discovery and continued or continuous discovery in an ever clearer/distinct area of study (and you can more reliably see necessary sequences, aka causes, of things -- certainly MUCH less personalized or idiosyncratic). You can tell when each and all of these co-related characteristics of your understanding are true -- for one thing: by a greater ability to conceptualize (which amounts to more now-usable free space in working memory ; it is all clearly related to discrimination, integration, and consolidation of concepts/skills in the Memories). Usually this free space in working memory rather soon let's you think more in ways needed about something (in the subject area you are devoted to) and find/decide-on/do what's needed. This way would be good to see good understanding and part of what's needed to impart to students (the other also-related part described in the last paragraph). And, what may or may not occur (which I bring up just since it shows , in some sense, some "outer limits"):

When you can in no way better 'see' things (benefiting less basically from help or from anything else to turn to or any other way to look at the relevant "things"), WHEN you cannot immediately or soon become better in some OR MOST of the ways in the 1st paragraph, above, then it is possible you could say you have/sensed a small quick temporary glimpse of "Enlightenment", seeing no more that is conditional IN THAT AREA of study -- but one must make sure you set things up so this cannot occur wrongfully/artificially (though I do not consider this last concern a likely problem). NOW, **to say all that again, speaking more naturalistically and more scientifically** (though perhaps not more meaningfully): This is basically a **relatively continuous free space** in the Memories (accessed via the episodic buffer and working memory) -- and **phenomenologically BEING working memory**, a free space which otherwise (typically) is rather quickly well-used to progress, as indicated in the paragraph above: usually free space in working memory let's you think more in ways needed about something and THAT is what you do rather quickly or soon.

THE OTHER HALF OF THE "STORY" (in any case, with the "glimpse" or without that):

A teacher MODELS what is involved in all this by clearly having (and showing) she/he has personally evaluated (and in some best sense personally verified) all and everything she/he believes and presents to students. (**This is related to EVERYTHING in the paragraphs, above.**) This too is important to make clear or impart to students (perhaps maybe just by clear example).

Dear

First I would say that what I was mainly talking about before was some **central, key, reoccurring topics or set of topics** (to some extent, this way-it-is could well have a part of the instructor's own perspective) that an instructor must present and explain.

Another part of my answer to your new question would be: well-placed, previously-justified and later-justified, **PASSION**. I believe I have seen this passion and, in combination with evidence well-presented, well-shown, or well-exemplified/explicated, this seems to be truly inspirational (and not fleeting). And, I think the entire exposition of the information, **presentation and passion continue** to be shown by such an instructor -- so all aspects of the overall issue as I addressed it before (above, in the first answer I gave, and above, with the present elaboration) are "**abiding**", **continuing on**, and they **DO SHOW many of the aspects of the PROCESS**: discrimination, integration, and consolidation of concepts/skills, that went on in the instructor's thought, as/how she/he developed it (and perhaps the better/best instructors are helping the students themselves to move through these processes with the "material", and individually, as needed). AND, AS PRESENTED, all that showing the **individual's personal assessment/commitment** in the incorporation and/or development of her/his cogent, very more-and-more apparently-worthwhile view. To put it crudely: he/she "sells it" and "sells it" well and thoroughly somehow showing many or all the aspects of processing she/he has "put into" the topic and with the importance shown with passion (and the "end result" **including -- and this adds a new aspect to my answers so far: some well-developed FACILITY, this including a great ability to take and answer questions ***), and amongst the passions likely showing some **JOY**. This is nearly all I can think of to add to what I said before and possibly provide some answer to your new question. But, also directly to your question :

WHATEVER REASONING ALL THAT TAKES, AND OBVIOUSLY IT IS UNFOLDING in some sense -- much of this which may be, especially in an old teacher, rather thoroughly well-known. This all may seem like an ultra-idealist view, but indeed this is exactly what you want (though most of the best may do less than the ideal, I suppose).

* FOOTNOTE: In this regard, I was never a good instructor, nor was I completely or even clearly good in some of the other ideal aspects. I, frankly, do not have the strength of mind to do a lot of the ideal, but I have seen many very good professors/instructors who do show these (at least in good part, though myself inferring some).

Dear

Let me try to get out of your "circle".

When you want an overall general answer about problems/challenges which occur in many situations/circumstances, you can expect a general/generalized answer (thus, I thought I did pretty good). Being more specific may even be seen as a strange reply (if one tried it). Also: I believe **THE SUBJECTS' BEHAVIOR IS SOMEHOW CLEARLY THE FOUNDATION OF ALL DEFINITIONS**. Related to this, I do not otherwise conjure up operational definitions. In reality in different circumstances : reality IS concrete as you say (but varied) ("abstraction" not needed or needed as much).

Ask for an answer on how things show in a specific situation and circumstances: fly me to the place, put me in a class with a great instructor, and pay me and I will apply/elaborate/specify particular behaviors as instances of the general (type-of-things) answers I gave. Otherwise the work is left to the reader; the idea of me giving "operational definitions" on such things as I describe does "not fly" with me, obviously. I do not do the conjuring, like an armchair philosopher -- those "guys" being the ruin of "modern" Psychology for its whole existence; and, there is no more "distilling the essence" here from me -- no contrived hypothetico-deductive system for me to apply for you (and if there was one, I likely would not use it, because it would seem wrong) (and yet I see no other way to answer your criticism otherwise). If I cannot see something more specific that could be accurately and reasonably seen across fields of teaching/learning (better descriptions OF PARTICULARS and yet still GENERALLY SEEN across circumstances, just as clearly or more clearly than with the descriptions I provided) then it appears I missed something, and my apologies -- I think I did my best.

Perhaps you will say I should "better operationalize" this very, present response; if so, perhaps you will have to send me the notes from your counselor (if you have one). ALSO:

Some "TYPES-of-things" may actually be seen as concrete (it may be _from_ concrete things across instances and across situations and circumstances from which some "abstractions" are in-reality developed (by people, the organism, itself)); in short, they are as real for them as many other concepts that are seen as more concrete. Try to see this through an exercise: using your assessment/imagination about several particular instances with which you are familiar, try to see some "TYPES-of-things" that way. (I may not be so "abstract" as you think in a some REAL, though perhaps non-traditional way.)

Maybe someone else will work on all this for you now.

P.S. Perhaps I should ask you to provide an operational **truly empirically-founded-and-based definition of "abstract"**. (How else would it be clear to me where my deficiencies are?) **Guess what: I am the ONLY person in the field of Psychology who has done that, in part.**

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Dear

Thanks for the addition and support that your first paragraph provides.

Regarding the rest: I do not see that (THAT that potentiates) being defined in a real solid empirical way, that is, **CLEARLY** based/founded on some directly observable overt behavior patterns **FROM THE OUTSET** of ANY concept/construct in a model -- those behavior patterns **CLEARLY LITERALLY FORMATIVE** , and directly observable as overt behavior patterns (or important aspects thereof), at least at some **KEY** times, e.g. the inception of a new qualitative way of thinking clearly starting to be used. No aspect of a model should precede this **OR** what you are doing is like armchair philosophy conjuring up a **hypothetico-deductive** system -- ill-founded, oddly committed-to, and

falsely directing one's research; I am DONE with "considerations" of such "models"; the SUBJECT DEFINES ALL , each and every concept or construct, WITH **DIRECTLY OBSERVABLE OVERT BEHAVIOR PATTERNS as a clear basis** -- and, with new technologies, we do not have to settle for less, OR GIVE UP because things-about-behavior that have SEEMED to be hard/impossible to conceptualize in the good empirical way indicated, without now considering REAL NEW WAYS OF OBSERVATION, to gain decent empirical bases, e.g. eye-tracking. Behavior researchers/theorists should ALSO CONSIDER the almost-always-"missed" real OBSERVATIONAL PHASE of their science research and concept development -- missing that is another thing that clearly shows a lack of science in a supposed science. Missing everything and doing basically everything wrong is not atypical of Psychology (e.g. ALL of the "Embodiment" and enhancement "theories"). (Failing to do some of the good discovery for foundations/bases has not been done EVEN IN WAYS THEY COULD HAVE FOR DECADES (or a century).)

Foundations of concept/constructs, clearly defined WITH DIRECTLY OBSERVABLE OVERT phenomenon is a [basic, minimum, required] standard of empiricism for all sciences, no exceptions. OR, it's not science. [(Even if you do not want to do all the right things directly yourself, it is possible to reason this point-of-view out (on minimum standards for empiricism).)]

P.S. Researchers/theorists also are not to define the following, just based on their deductive thinking: "environmental data ([that] has to be described), goal and context". For "what the relevant environmental factors are", AGAIN ONE SHOULD CLEARLY BE RELYING ONLY ON WHAT THE SUBJECT SHOWS for the main determinations here. If you are not clearly going from that one has the same set of problems described above. NO researchers' thoughts-defined "environment", "relevant behavior" (WHICH SHOULD ONLY BE SEEN AS PATTERNS, in a biological organism), OR what is a "reinforcement" or "reward" (or "punishment" and such ...).

Dear

One is left wondering about WHY/HOW you fully agree with the theory.

I can state my standard:

A standard I use for ALL science is follows, below; (this standard is used for each and every single concept and construct in a theory, and for how such things are related the theory):

ALL science refers to the ability to replicate KEY OVERT OBSERVABLE circumstances and KEY OVERT OBSERVABLE phenomenon * THAT, obvious to ALL (in a fully agreed-upon way), are necessary for best understanding later replicable overt observable circumstances AND corresponding later proximately-related key overt, observable phenomenon * patterns (so both "sides of the **equation**" are taken care of, so to speak) -- BUT, ALSO **this may well imply some more-than-believable mechanism(s) for some linkage(s) which would be of some reasonable nature, but that**

may not be fully or clearly discovered YET (<-- BUT HERE SOME CLEAR PRINCIPLES NEED TO BE UNDERSTOOD AND ALSO NEED TO BE INVOLVED). [ALSO NOTE, in any case, that things on BOTH sides of "the equation", *cited as KEYSTONES of your science (necessary for your declared, well-grounded, and in-good-part established -- and thus widely agreed-upon -- view/approach)*, MUST rely fully on now-present (or at the key time, present) variables that are overt and directly observable.]

ALL THAT is **the minimal empiricism** for science and, I believe, PROVIDES A DEFINITION FOR ALL (each and every) legitimate SCIENCE. This seems to be a **full definition** and yet, I think, is literally THE **BROADEST, MOST- LIBERAL, justifiable** DEFINITION OF SCIENCE THERE IS !

MY QUESTIONS and my ANSWERS:

Can you see some [of it] , as it is/must be and as you can [really] see it?

That is the question, lover of life, lover of others, empiricist or scientist ; thus finding the actual sequences which are causation(s) (aka the proximate causes). Better and better 'seeing', less ignorance ... , less confusion. Said also to be with less wanting and/or greed and with less suffering, as well. And as more is found, more opens up. Could anything else be the case? [Such conclusions can come from checking the research on the Memories which, as they are (by definition), must be experience itself.]

Let me give an **example of what I speak of above** (an example in my field: the very important and most vital field of **developmental psychology** (very much 'including' ontogeny)). In Psychology what I am talking about is: proper perspective, properly viewing Psychology ("psychologizing" one's psychology, in a proper way, if you will) and **THUS** 'seeing' the ways there are of realistically (and rationally) **AND** thus **actually** having/doing conceptualizing and thinking (<-- those very things) as they really are (and of getting one's own and one's Subjects' real limits and abilities defined). In attempting this in Psychology (or in any science) one must "believe in" and **maximize empirical grounding** (all that is possibly there and detectable), showing EVERY SORT OF BEHAVIOR, related clearly and in an important ways (at least at their inception), **TO directly observable particular overt behavior patterns** of the Subject *. **AND**, this is **BY DOING IT** (for the researchers and the Subjects) in the **REAL terms of the basic capacities of their species-typical Memories** (also knowing and considering the hierarchical relationship of more adult concepts and thinking, compared to that of children) -- **KNOWING ALL THAT**, and using **ALL THAT**, required before doing decent psychology that will lead to real, lasting, and progressive discoveries on the development of cognition (that being central to other major other behavior patterns that develop). [It may be hard, but you will get used to it; and, it is necessary; **AND**, actually, it is likely less hard to do than the 'theoretical,' unjustified "contortions" presently done today (which inevitably "dead-end") .]

If you can but only agree, please read my writings (most all -- 1000 pages worth -- available through ResearchGate). [NOTE: My writings include specific hypotheses for the direct observations of the overt behaviors central to thinking and concept development -- each of the major inceptions -- all found/put into the proper contexts (and "spelled out" as different and as alternatives from today's perspectives/'procedures' -- these latter also "spelled out", and shown in detail, as lacking and incorrect).]

*** FOOTNOTE:** This perspective and rightful attempt (approach) AT/for DISCOVERIES is exactly what I outline as clearly as possible in my writings ["as clearly AS POSSIBLE", that is, before the new, CLEARLY-PRESCRIBED, needed research, with clear testable hypotheses, is done (i.e. before having those hypotheses indeed tested)].

Please give this Discussion a chance, if you haven't already (and lately). I have (over the last 7 hours) provided an example to make things much more clear.

NOW: Editing (actually: **adding**) for further clarity has now continued up to 10:40 a.m. US Mountain time, on Sept. 24 '18. I am sure I must be getting close to a clear expression of the outline for what's needed (in this introduction to Discussion). [The seemingly more obtuse first paragraph is simply to allow generalization to all areas to be understood; please do not let that deter you.]

...

Final "poetic" clarity (I think) was finally attained with a couple extra words, on Sept. 25th. (It is a challenge to be brief, succinct, and clear -- and yet appropriately open, and citing just what needs to be cited in a most-brief statement.) Final "poetic" clarity (I think) was finally attained with a couple extra words, on Sept. 25th. (It is a challenge to be brief, succinct, and clear -- and yet appropriately open, and citing just what needs to be cited in a most-brief statement.)

Models and Mechanisms: Don't they seem to

have the same problems w/r to phenomenology and what is real?

Models and [non-concrete *] Mechanisms: Don't they seem to have the same problems with respect to actual phenomenology and what is real?

Maybe they are temporarily necessary, but should be avoided and should be bettered (AND REPLACED) as good research progresses. If this betterment does not happen, you are not doing at least some of the essential research (likely observational). PERIOD.

Isn't it possible that the best understanding is just the knowledge of, and understanding of, SEQUENCES? (Of course these can be "made sense" of, within the "whole picture", i.e. the greater overall understanding -- and there is "purpose" or direction to each behavior pattern [in the sequences].)

{ ALL this increases the key role (and sufficiency) of all the simple [basically known] sorts of associative learning ALONG WITH OUR SEVERAL SORTS OF MEMORIES. "Outside" of innate guidance WITH PERCEPTION/ATTENTION (including innate guidance in later stages/periods of development, with behavioral ontogeny) (and this innate guidance being **WITH** the simple learnings and Memories) AND their consequences with behavior patterns: the well-understood simple learnings may ultimately provide "the 'glue' for 'the whole story'", otherwise -- i.e. other than the key "driven" directly observable sequences **.

AND NOTE: NO need whatsoever for special sorts of theorist/researcher-defined types of learning, e.g. "social learning", etc.. NO need for ANY of the "metas", presently a major homunculus. This perspective "conveniently" has the advantage of be conceptualizable and is able to be clearly communicated -- requirements of ANY good science. It is within our abilities (as adults, at least at particular times) to actually 'see', i.e. to have and to provide REAL UNDERSTANDINGS. In my view, the other "choices" seem not to have these distinct characteristics (so, the perspective above is either true OR we all may well be "screwed").

* FOOTNOTE: "Concrete" meaning: with clear, completely observable correspondents; AND, likewise for models, with any promise (of progress and replacement).

** FOOTNOTE: "Directly observable" meaning: can be seen (and agreed upon AS SEEN) IN OVERT BEHAVIOR PATTERNS (AT LEAST AT KEY TIMES, e.g. with the inception of new significant behavior patterns).

P.S. This (above essay) may seem "self-serving", since I have a theory putting all of the positions/views above TOGETHER cogently and with **clear testable/verifiable(refutable) HYPOTHESES** (using modern technologies, eye-tracking and computer-assisted analysis). See:

<https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory>

See especially:

https://www.researchgate.net/publication/286920820_A_Human_Ethogram_Its_Scientific_Acceptability_and_Importance_now_NEW_because_new_technology_allows_investigation_of_the_hypotheses_an_early_MUST_READ and

https://www.researchgate.net/publication/322818578_NOW_the_nearly_complete_collection_of_essays_RIGHT_HERE_BUT_STILL_ALSO_SEE_THE_Comments_1_for_a_copy_of_some_important_more_recent_posts_not_in_the_Collection_include_reading_the_2_Replies_to_the_Comm

AND

the Comments to (under) the second-to-the-newest Update on the Project page:

<https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory> (for EVERYTHING)

Dear

A key feature of my view is that innate guidances of perception/attention (more basic and, in time, general than ANY "affordances") CONTINUE TO EMERGE PERIODICALLY throughout ontogeny, esp. having major effects on cognitive abilities of all sorts; these emerge at key times WITH other behavior patterns in at least 5 stages/periods between birth and 18-21 yr. old ; and, these have overt observable direct behavioral accompaniments (**at least at the inception, the beginning phenomenon, which are key to what will develop as new cognitive abilities**). I have outlined clearly directly testable hypotheses of the phenomenology here. I have also outlined the possible nature of the PHASES of each of the beginnings of new period/stages -- all VERY **clearly of the nature of Biology**. (Also, such developments may well occur more than once, occurring basically/essentially again and again, in several different domains.) All this occurs in the context of past such developments and in the context of our **Memories** (<--- well-researched **types**, and NEVER to be neglected, as **they are part of experience itself**); each of the later emergent developments are related hierarchically to that which has already been established.

If you are basing your opinion on likely-false assumptions, such as: "all that is innate is present at birth or in infancy" and "the more advanced the organism, the less innate guidance there is", this will critically and wrongfully affect your views to an extent that such reasoning, as I have just presented, will not be accepted or allowed to "make sense" (BUT for no valid reason). By the way: Both of these pseudo-assumptions/presumptions noted are NOT established as true (at all, in any way) and are more likely FALSE than their direct opposites, which are MUCH more congruent and consistent with the nature of biological processes (which all species-typical developments ARE, including behavior patterns -- that including cognitive processes).

Everything is NOT "in terms of conscious experience"; but, there are key times of directly important developments that may START (though not stay) that way (p.s. this is NOT to say there are not associated directly observable overt behavior patterns, clearly indicating or related to these -- and I assert this new view). Do not fail to know that perceptions are distinct from sensations (and are of different sorts of perception throughout development, varying in how conscious we initially are of them and varying in types, and differentially influenced BY conscious processes also).

I see the standard conceptualization of "affordances" as readily allowing for dualisms which do not exist (i.e. innate vs learned -- which, rather than 2 "things", in the most important developmental circumstances OCCUR LITERALLY TOGETHER ("admixed", if you like)).

To put my main point most simply: **models** should (actually **MUST**) **be fully based on discoveries**, NOT VICE VERSA. Same for systems or systems of mechanisms. No theory, or anything, should ever be just based intuition, and then "researched". AND:

Your thinking is WAY OFF if you do not think this (as I said) is necessary or that this is not possible (though what I just indicated is the wrong way has been the "**way**" of **most past and modern psychology**). **YOU ARE MISSING SOMETHING !**

I DO have the answer : [basically, it prominently includes the way to see/discover present conditions (aspects of each current environment) as a major set of proximate causes * -- something modern psychology has even "drifted" farther away from] :

SEE:

<https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory>

And, see especially:

https://www.researchgate.net/publication/286920820_A_Human_Ethogram_Its_Scientific_Acceptability_and_Importance_now_NEW_because_new_technology_allows_investigation_of_the_hypotheses_an_early_MUST_READ and

https://www.researchgate.net/publication/328201788_Essentially_all_Recent_Essays_on_Ethogram_Theory (which includes:

https://www.researchgate.net/publication/322818578_NOW_the_nearly_complete_collection_of_essays_RIGHT_HERE_BUT_STILL_ALSO_SEE_THE_Comments_1_for_a_copy_of_some_important_more_recent_posts_not_in_the_Collection_include_reading_the_2_Replies_to_the_Comm
)

Outside of <https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory> (there is a couple of ways to get more to read): My other Projects are also related to my perspective and approach, and so more may be gleaned from those also.

* FOOTNOTE: This does MUCH to address Chalmer's "hard problem of consciousness" , in fact, to the extent that I see no such problem; **THE PROBLEM is simply that of Psychology failing to even try to keep track of the real biology-of-behavior -- as always involving embeddedness with the environment** (of course including the functioning of the Memories, based A LOT on past experience).

If you want to come to better know the very uncertain meaning of today's "mechanisms" (and related models), particularly those in Psychology, see:

Article [Laws and Mechanisms in The Human Sciences](#)

(Reread my last response (Answer) to note some new additions there.)

Who else has basically their entire life's work here, available on Researchgate?

I do; but: any others?

[My "life's work" does not include the 20 years I taught science, did programming, and taught programming ; I want to mislead no one, but I am 65 (and 65 minus up to 20 -- for schooling -- and minus the other 20 years, just described, STILL LEAVES 25 YEARS (but with this sensibly INCLUDING the decade+ I taught college Psychology). And the "side work" which really was/is my life's work was nearly full time and non-paid (I am a real "non-profit") for all of the 25 years. If you think this is likely of no use, go ahead and ignore it -- many of your "peers" and professors (and philosophers) will not mind if you ignore it !!]

My wholly rational, reality-based, **EMPIRICAL major criticisms** amount to a multi-dimensional defeat of modern Psychology approaches and perspective. Actually, this defeat is even clearly "over-determined", as the say (many of several, well-based, well-founded lines of argument supply a wholesale reason to reject the perspectives and approaches -- **EACH**). * **Thus, one can find modern and historical Psychology shown to be invalid (and not improving) in several ways. PLUS, I provide SOLUTIONS, along with KEY, central, empirical, testable HYPOTHESES.**

Research, work, science, empiricism, theory and method. Psychology, Development (ontogeny), memory, associative learning, and "learning"; real human cognitive ethology (of the sort done classically, but now apparently "gone")

* FOOTNOTE: An example, presented briefly:

https://www.researchgate.net/post/Have_you_seen_that_Psychology_ignores_or_is_contrary_to_what_we_KNOW_about_the_Memories

Have you seen that Psychology ignores (or is contrary to) what we KNOW about the Memories?

To think about this, just realize that by the definitions (found) of the Memories they, operating together, ARE **EXPERIENCE ITSELF**.

Now, look at the psychology research (much or most of it) and see it IGNORING THE NATURE OF

THE MEMORIES __OR__ HAVING THINGS CONCEPTUAL COUNTER TO WHAT WE KNOW ABOUT THE MEMORIES.

Why did the evolved "we" even BOTHER to have the elaborate (& working & proven) Memory systems we have -YOU MUST answer that; where are the Memories??

Among the strongest findings in all of Psychology are on the Memories (the Memory systems and their inter-workings), yet you do not address them AT ALL (_AND_ are wrongly contrary to these findings). There is no chance of you finding any key observable (pivotal) evidence related to a view such as yours -- making your view, again, scientifically unacceptable (see "The Poverty of Embodied Cognition", Article [The poverty of embodied cognition](#)

--

-- also easy to find the FULL TEXT).

It is clear that you are a 'victim' of very inappropriate dualism: here (for one just thing, particularly): the idea of "memory as a separate thing" (just an aspect OF experience).

MOREOVER: I have also clearly shown in my writings that your beliefs are based on central ("founding") 'assumptions'; THESE ARE UNPROVEN AND LIKELY FALSE BASIC ASSUMPTIONS (read ME and learn).

As one first step to properly seeing your "idea system", just realize that by the definitions (found through research) on/of the Memories (those operating together): They comprise OUR **EXPERIENCE ITSELF**.

This nonsense of yours and some others has got to stop.

I can rarely go a hour listening, etc to people (who speak English) without hearing/seeing DELUSION. [Likely true of humans in general.]

I must now, at least for a moment, speak more generally:

FIRST: _YES_, I said DELUSION and meant it in its typical and serious meaning.

We must curb clearly (when examined realistically and rationally -- and all based on REAL actual experience, as it is) wrongful behavior (HERE: action), speech, and thought, _OR_ I profoundly 'feel' the clear sense of misery and extinction. I, myself, and with and for those I know well, 'see' all this with certainty, too -- though it is possible not all of these people 'sense' doom, admittedly. **I do** (for what that might be worth).

I say **most-active efforts** must **personally** be made **to curb _ALL_ of this**, no matter how benign it may SEEM to be (for reasons YOU can understand as well) -- THAT IS my view. (What may seem like "a little" may beget A LOT.) (Thus-changing MAY or may not be possible; it IS clearly unlikely, looking at "theory" (esp. Psychology; and, its research), philosophy, and history: but this should make us really try, not give up.) [Before extinction: many, many terrible troubles may precede this (of course). Not wanting to be so thoroughly unpleasant, let me say: Have a nice day. Reading all my "stuff" would help, this day and henceforth. (WE must stop playing in the 'fields' of our Earth.)

P.S. I posted a very positive and affirmative (pro-adaptation) answer to:

[https://www.researchgate.net/post/How do you choose between two or more mutually exclusive hypotheses with equal explanatory power and scope](https://www.researchgate.net/post/How_do_you_choose_between_two_or_more_mutually_exclusive_hypotheses_with_equal_explanatory_power_and_scope) . Perhaps this will help you know the whole "me" and not be negative or skeptical. And: I am consistent.]

A "proposition" is TRUE or FALSE <-- _THAT_ IS FALSE, you boneheaded dualists.

Our thinking/representations can take and do take (and basically all, in effect, at once, phenomenologically) considerations of 4 truth-values:

1. A, 2. not A, 3. A and not A, 4. not A and not not A.

Not to think like this is to misrepresent that which is IN (that which IS) major elemental aspects of thinking (true most-major parts of real thinking; important thinking in reality).

NOTE:

This is not to preclude some statements for some purposes being TRUE or FALSE.

For those of you who are mathematically oriented and for a detailed explanation in math: see:

Chapter [Category Theory and the Ontology of Sunyata](#)

Psychology and Science

Sciences seek discoveries, **NEW DISCOVERIES**.

Psychology tries to "put a round peg into a square hole".

When fully explicated **and explained** (with many current, relevant examples given and particular current concepts discussed/debunked AND WITH A **BETTER ALTERNATIVE JUSTIFIED AND PROVIDED**), any and all who may be concerned respond (basically) with a : hmmmmmm

(including the "big shots" we are to count on). Well, I am done; I HAVE done my part.

Dear

"put a round peg into a square hole" :

It means to mold observations (partial phenomenology) to fit [into] a poorly developed model.

Thanks for asking.

My major works:

Article [A Human Ethogram: Its Scientific Acceptability and Importanc...](#)

AND

Book ["Essentially, all Recent Essays on Ethogram Theory"](#)

(the latter a bit Updated, so new version uploaded; old version deleted)

Psychology: If you start with unconnected (unclear) reasoning, you start wrong.

Everything must be clearly, and at the very least : in important ways tied to that which is real
empiricism: DIRECT observation of most-relevant and major OVERT behavior **patterns** (including the observable concrete shifts in behavior patterns, i.e. further patterning).

This empiricism is true of all science and would/will be in Psychology, IFF Psychology is to be a science -- which it clearly is NOT yet. (Learn the nature of other science WHICH PROGRESSES -- and really IS science -- to learn the Reality [(truth)] of this.)

"NEVER 'Models first ...' "

P.S. I have tried to provide a full outline of such a science of Psychology (and because it is truly understandable [(essentially: concrete)], it is good for AI too). If you have not been motivated to "check me out", you lack good critical abilities (and are hopelessly deluded, if you think you have a SCIENCE -- this is fact/Reality, not an opinion).

It is my hope that you will read both of my major writings:

Not only

https://www.researchgate.net/publication/286920820_A_Human_Ethogram_Its_Scientific_Acceptability_and_Importance_now_NEW_because_new_technology_allows_investigation_of_the_hypotheses_an_early_MUST_READ

but also the much, much more recent:

https://www.researchgate.net/publication/329428629_Essentially_all_Recent_Essays_on_Ethogram_Theory

I am seriously trying to have a perspective and approach which has all the features and dimensions a science theory should .

" ... let no limited deed [(incl. thought or concept)] remain there [(as it is)] and persist "

"Redeemed from hate and from despair, and rid of greed, from envy free, the tamed [(disciplined)] ones have discarded hate ..."

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If a very high % of higher ed. students think: "open my brain & just pour the knowledge in" we may be doomed in discovering things for bad science

If a very high % of higher ed. students think: "open my brain and just pour the knowledge in" we may be doomed in discovering things for bad sciences (with no one willing to look at whole systems of understanding -- though they do not work).

There has always been a disturbing % of students (including ones who have become professors) that had this basic attitude and approach. Now, in this iPhone, etc age, it seems the % may have reached "critical mass" for hopelessness.

The good news: one or a few people could process a whole new system and investigate it (these students being among some very rare subset). These students (several) could make entire good careers out of such work. They may well occupy some seats on a plane to Oslo some day too. AND:

Frankly: analytic professors OWE THE WHOLE WORLD SUCH ANALYSIS for penance for their false persuading assertions that have messed up behavioral science FOR 100 YEARS !!

For an example of something to work on : a new system (a replacement system) for Psychology, see:
https://www.researchgate.net/post/Is_it_really_possible_that_some_do_not_know_that_Ethogram_Theory_is_MAINLY_about_the_setting-up_emergence_then_development_of_abstract_thinking

Is it really possible that some do not know that Ethogram Theory is MAINLY about the setting-up & emergence (& then development) of abstract thinking?

In the extensive essays on Ethogram Theory there is noting [in a sense] of the sufficiency of the simple types of associative learnings, for progress in what is known (for learning in-general); there is also a briefly outlined a proposal for using the language of classical ethology for the proper classification of real types of [species-specific and species-typical] behavior patterns and patterns that develop DURING ONTOGENY (child development). But, all this is a **tiny fraction** of what Ethogram Theory involves. The **two by far most-major aspects of Ethogram Theory are: (it is a cognitive-developmental Psychology theory):**

(1) The very likely **empirical and concrete inceptions (directly observable overt behavior patterns and pattern changes of the organism) to BEGIN what amounts to greater abstract thinking:** these I refer to as "perceptual/attentional shifts" (not under what anyone would or could consider conscious control NOR in any significant way determined in their key basic nature by any conscious activity). Inherently-related things DO though become conscious in the third or fourth phases of the "unfolding" of the new behavior patterns, which may occur relatively quickly -- but, **this is innately guided behavior influencing real behavior patterns, WITHIN the new aspects of all new behavioral patterning.** Further development will occur before these new-found things are a part of new abstract thought.

To speak, using good metaphors, what happens during ontogeny is there are key points in cognitive development where previous key learnings have been consolidated and generalized enough and one's memory system (including working memory) has some "free space". This is "space" that will be used for looking for, then looking at more, and finding more, of those real and present aspects of circumstances that can be SEEN (by the organism) to allow for larger or better understandings of some key TYPES (that is, YES: concrete types) of situations (filling the "free space" of the Memories systems) -- **that is the beginning of a new abstract thinking ability itself.** The "gaps" available (which are, and for a while, been usefully present in key circumstances) are somehow "noticed" and, in the relevant type of circumstance(s), the additional aspect(s) **OF THE SITUATION** (including the contextualized situation, as part of the real "situation" -- that from the now-active past memories of your Memories system) are there; these new developments are an acquisition of seeing some **new**

aspects, THINGS real (concrete), in your now-existing time-and-space. This results in the ability to think of more and to think better (more adaptively), and **THIS IS THE PIVOTAL BEGINNING (THE INCEPTION) of a new level of abstract** thought and abilities (to be "flushed-out" and generalized, etc., and consolidated) These "gaps" and this "gap filling" may occur frequently (for assured reliabilities within a domain and also somewhat independently occur across domains -- so this "[time]/spacial area watching" to find something new may occur many times as one is going into a new qualitative different arena (right before one, before one's eyes) for abstract thought (a new stage or level, as neo-Piagetians and sensible others say) **THAT WAY**. (Though the new concrete aspect(s) may, **in at least some of the instances of the major circumstances**, be found and fairly quickly attended to, **in the first 2 phases of such a development not intentional or, at least nothing conscious is involved.**)

(2) The other main aspect of Ethogram Theory is the rather well-established and well-researched types of Memories in our Memories system. The way these memories and the Memories (types) system is defined, **it can be nothing less that EXPERIENCE ITSELF [(or almost all that, not counting the emerging gazes and saccades related to looking for something(s) in the experiential gaps)]**. The Memories greatly contextualize the environment and are **very much, in real effect concrete aspects, very major aspects of the current KEY environments themselves**. In the third and fourth phases of the early development of these new behavioral patterns (which will eventually become new abstract thought), things will become very much intentional and conscious.

Concrete, testable (verifiable/falsifiable), **most-empirical hypotheses have been developed awaiting good appropriate observation**. BUT: Things and the process are subtle enough that discovering the new patterns (mentioned above) will **VERY likely require eye-tracking and associated technologies** (even though, when talking about these new things, we ARE talking about things that ARE concrete aspects and directly observable behavior PATTERNS [(no doubt within other previously developed and sophisticated behavior patterns [(MUCH including memories)] -- showing earlier development of earlier abstract abilities, as well, of course. These latter in some ways will become mere elements, succeeded by/with new thinking, though somehow included with the "higher" abstract thinking elements (their complex)).

This way cognitive development is conceptualized eliminates any contentious nature/nurture debates -- that itself being a major accomplishment.

It is my hope that you will read both of my major writings:

Not only

https://www.researchgate.net/publication/286920820_A_Human_Ethogram_Its_Scientific_Acceptability_and_Importance_now_NEW_because_new_technology_allows_investigation_of_the_hypotheses_an_early_MUST_READ

but also the much, much more recent:

https://www.researchgate.net/publication/329428629_Essentially_all_Recent_Essays_on_Ethogram_Theory

I am seriously trying to have a perspective and approach which has all the features and dimensions a science theory should .

New Note for Analytic Philosophers on the biology-of-behavior per se (behavioral science).

Re: New Note for Analytic Philosophers about what may be the NECESSARY NATURE of the correct perspective on the biology-of-behavior [patterns and systems] per se (behavioral science).

This is included in a new paragraph amended to the 12-15-18 Update to the project,
<https://www.researchgate.net/project/Seeing-if-Analytic-Philosophers-can-help-with-bringing-attention-to-Core-Problems-in-Psychology-and-to-Specific-Core-Proposals-for-a-new-Approach>

What do you think?

RG is equating science with experiments (dumb)

Yep. RG is equating science with experiments. There may be those who like this, but experimentation is NOT THE ENTIRE SCIENTIFIC METHOD (and I would argue that experimentation is THE LEAST OF IT -- especially if one is developing a new perspective and approach). RG appears to have no appreciation for "just" verified observations -- even though that may be exactly what really new discovery looks like. Those observations may, in time (but not right away), be followed by experimentation. Verified observations by themselves may be very important and all we have for some time (in some new areas/kinds of investigation).

The outrageous bias of RG is so great that they now hide the Project Updates (of the Log) with multiple queries about one's experiments and hypotheses -- as if all good, clear hypotheses could be put "in a nut shell" (in a small "blank", with little context) AND that experiments are all that matter (or at least all that deserves several special headings). How about a heading for: "Verified Observations"?

I would ask: What experiments did Einstein do to lead and come up with his understanding of the universe? Did he start with experiments? NO!! He started with observation and MATH (which is basically verified observation). True, eventually some experiments were done to VERIFY HIS IMPORTANT OBSERVATIONS -- but all this did NOT begin with experiments..

And, all of this is not to mention major swathes of Biology. Come on, give us a break

Dear

Certainly. IF AND WHEN POSSIBLE. Look at the lab; look at your setting there; look at the time frame; then, ask what is and is not possible to experiment on.

Dear

You say: " There's a lot involved surrounding science. That's for sure. There's theory development, which is kind of a design thinking process. There's also the development of narrative, **which helps us understand and explain our models.** " (end quote).

THEN you seem to discount all that and "honor" only experimentation. I think I know why. **You have the empirical order of something out of place, indicated by "helps us understand and explain our models"**. Look: Decent and scientific **models ONLY FOLLOW verified and agreed-upon OBSERVATIONS** (with good inter-rater/inter-observer reliabilities) -- however those are obtained: OTHERWISE you are a priori asserting the nature of phenomenon. PERIOD. If you realize THIS, you would not so much discount all the other except experiments and you would NOT think only experiments are really important. You would not do anything remotely like that.

This idea that one should (or CAN) **conjure up a model** (perhaps based on informal observation(s)) **and ONLY THEN** look to verify it is **absolutely un-empirical and unscientific (frankly, it is needlessly desperate, as well as un-empirical and unscientific)**. You can look at any of the established sciences to verify models "come second", to the content, to see convincingly for yourself, or for anyone else.

[Philosophers used to do this kind of wrongful thinking -- sitting in their arm-chairs -- but **ALL science and aspiring science should have left ANYTHING LIKE THAT BEHIND _AND_ UNUSED .**]

AND:

OBSERVATIONS are as falsifiable as experiments -- it can be shown if they have OR lack high inter-observer reliabilities (P.S.: $p < .05$ has NO magic <-- but actually more like some NEGATIVE opposite). That all aspiring scientists do not know this is frankly disgraceful. Realize that science is just good, reliable, and shown-valid COMMUNICATION. Such reliabilities and validities are **true of very good communication, for THEN it is basically science**; that which is reliable and valid can **most certainly be found in (and be true of) sets of observations**. Good experiments (**relatively rare**) are such good communication; good observations are such good communication. **DO NOT TRY TO PUT "MAGIC" IN TO ONE OF THOSE.**

TELL ME WHEN WAS THE FIRST EXPERIMENT DONE TO VERIFY JUST PART OF EINSTEIN'S THEORIES?? Right away, right at the beginning: NO. And some has yet to be proven, but is related to reliable observations, so is well-regarded (it's also consistent with the rest) and shows

us what is probably best to try to prove

Any Biologist could give you similar examples in Biology.

If you happen to be a research psychologist: look at your lab; look at the available settings; look at the clock. Then, realize the extreme limitations. Primitive (to the extent of ridiculousness). The "scientific method" as often understood (AS experimentation) is so primitive I believe it could be taught to a 5-7 year old child. If this is all that counts, science could begin early (BUT, of course, there are also those obtuse models, dredged up by fools from what they think they see; many of these cannot be well-communicated to anybody -- except some fans and close associates in "thinking").

Dear

After many days, I have decided to address something you said in your last post, where you said: Quoting you: "**Now, onto falsification:** an observation is an observation. We compare observations against models in an attempt to falsify them ... " (end quote). This IS wrong in more than one major way, one basically being failing to appreciate that high inter-observer reliabilities are as strong a science finding as any $p < .05$ or $p > .01$, etc. , i.e. experimental JUNK. (An observation is NOT in any way demeaned by "just being an observation" -- there is no "just" about it; in fact, REPLICABLE, reliable observations (just as they are) are THEMSELVES the bedrock and the foundation of all science. [Go back and look at some classic science, like Newton -- and, by the way, the use of math gives no special status except showing the precision of observation (nothing else, no magic).]

Now, to address more details of the your extremely "off" views (which, unless rectified, seriously compromise any science views/understanding you have):

To compare observations against models is most certainly NOT the way to falsify OBSERVATIONS. **(In fact, it is the other way around because legitimate models are well-based ON observations (well established principles may also be involved; otherwise, they are non-science). One might well first falsify a model and then PERHAPS the observations they were made on.)**

Now, then, how are observations falsified? **There are 2 ways, in 2 circumstances:**

The first is VERY easy: falsification is simply **failure to show inter-observer reliabilities when observations are re-done**. This very truly and basically, failure of replication (with no different standing than in the case of experiments).

The other circumstance where observations may be falsified is **when/where they make predictions (which turn out not to be true)**. Even if the original (starting point) observations are reliable (replicable), if this one set of observations [(including the very KEY parts as directly observable overt behaviors)], are supposed to be VERY REGULARLY FOLLOWED BY a second set of observations [(these, to be just as empirically defined in the KEY features to be seen as the first set)], **finding this second set may not occur OR may not be found reliable/replicable -- again, perhaps "just" by failing to show good inter-observer reliability (OR, perhaps by an experiment, if doable, and its failure to show "significance")**.

That's it. This is the empirical position, the empirical, communicable, scientific reality.

Until we recognize the importance and centrality of observations, whatever "science" fails to do so is hopeless off track and also doomed to stagnation (for example, the entire 100-yr history of Psychology).

Why isn't Psychology moving towards a grand theory that allows for finding natural experiments vs. clearly skewed, experimenter-defined experiments?

This genuinely old, now-addled mind would like to put forth perhaps a final provocative, but hopefully useful, question. First, let me restate the question, "throwing in" some more of my view, in the following paragraph:

Why isn't Psychology moving towards a grand theory that allows for finding good natural experiments (vs the esoteric or skewed experimenter-defined experiments)? I am talking about: A grand, comprehensive, mostly-all-embracing, YET most-empirical (as empirical as possible), EXTREMELY validly-PRINCIPLED theory, which has many clear descriptive testable hypotheses that should have testable instances widely found (and clearly found), here-and-there in actual phenomenology?

[I would submit that **you do not get this kind of thing piecemeal ('correcting' your "model" as you go along), or by varied findings magically and clearly fitting together as standard research progress**; I submit one has to develop (by discovery or verified by discovery) a clear (testable) OUTLINE of such an entire system and then fill in the many, many specific details (somewhat+ altering the grand theory as good findings accrue). If you do not have any such thing, then try Ethogram Theory, <https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory>]

NOW, first (or finally), **something so you might know what I am talking about**, before the **question is elaborated after that**: This is a science example:

About experimentation: Many of the best experiments occur naturally -- in established science. For example: an aspect of Einstein's theory was proved when the image of a star (its light) viewed near the Sun was not where it normally would be expected to be: this occurred during a solar eclipse (so this star's light could be seen). No experimenter defined the independent variable; no experimenter defined the dependent variable; YET it was an experiment: one image of a particular star's light being bent, as its image (the light from it) was viewed near the Sun while other stars' lights, which were not passing near (by) the Sun, did not show this effect. Under such clear circumstances, this is considered much

more than a correlation; it is seen (as it properly should be) as an experiment, with 2 distinct different conditions [(and that is all)] and 2 distinct different results).

In fact, such natural experiments are far better than when the experimenter defines both the operative (the "operational definition") of the independent variable and the operative (the "operational definition") of the dependent variable to use (likely related to his own conjured-up "model"): In fact, this latter kind of experiment is often very, very, very artificial, compared to what is supposedly to be proved (compared to the real situation and the variables there). These are very **poor experiments and they are WAY open to judgement whether they prove anything useful at all; and, these are most likely not amenable to agreement -- yet such agreement being a "must" for real science. Most Psychology is like this latter situation (just described in this paragraph as a whole).**

Why is it that psychology does not appear to be SEEKING WHAT IS NEEDED: a grand, comprehensive, mostly-all-embracing, YET **EXTREMELY and validly PRINCIPLED theory**, so that we could find such natural experiments (similar to the example, above)? [And, FYI: Things do NOT have to be mathematical to be self-consistent, consistent with reality, and "tight", all based/founded on **clear ALL most-empirically-based principles, and widely applicable enough, for all to find (see) such** very good (if not the very best kind of) experiments -- like the one testing one of Einstein's assertions, above.]

Better than a physical/physics "theory of everything" would be a theory of "everything" [how] understood [by the organism].

AND: Ethogram Theory is THE way to put time and put space into the very nascent foundation of the beginning of higher-level concepts when/as needed.

ONLY Ethogram Theory realistically incorporates time and space into the core foundations of [abstract] concepts

Ethogram Theory is the only way to understand personal phenomenological time and space as part(s) of major concepts * -- because, at its base, this theory relies on the Memories AS THEY ARE (including visual-spacial memory, as a BIG one).

(All this unfolding with ontogeny, of course, and innately guided.)

SEE: <https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory>

Is anything else (that does not do this) even remotely acceptable?

* FOOTNOTE: as and when needed

P.S. **Hey, dualists:** we gotcha. How else are YOU going to realistically get time and space into concepts?: Step 1, **for you** : Realize that (by definition) the Memories (types of memory, now well-studied) **ARE EXPERIENCE ITSELF (thus always part of 'the' here-and-now)**. If Memories were something else, or separate, then what is/would be time and space [in individuals' concepts] ? (Forget anything just sensori-motor-based OR raw "brain activity" without intimate external referents [(think especially of abstract concepts working across many circumstances, thanks in good part to the Memories providing a lot of context)] . Modern psychologists' 'ideas' of 'evolution' are NOTWITHSTANDING. So, finally has a primary fatal stupidity of yours been identified (and "nailed")?)

Particularly with respect to General AI: There are indications that the Red Chinese may well be taking more interest in Ethogram Theory than others. (I thought I should make note of this.)

**What psychologists have not yet realized: eye-tracking technology, etc. ALLOWS FOR AN
__OVERALL__ MORE EMPIRICAL
APPROACH !!**

I'll start by repeating the title, above: What psychologists have not yet realized is that eye-tracking technology, etc. ALLOWS FOR AN **_OVERALL_ MORE EMPIRICAL APPROACH !!**

The new technologies are not just a tool for the "empiricism" they already do!

I have described and formalized into **concrete, now-testable hypotheses** that which would establish the **most empirical grounding** for "abstract" concepts. **More empirically grounded and founded than anything heretofore, without a doubt -- and the view/approach is biologically LIKELY and this approach to research (on some new CONTENT it is good for) has not yet been tried. It involves "believing" nothing (actually believing MUCH less "on faith"); it really involves simply more empiricism, more direct observation [specifically: discovering the DIRECTLY OBSERVABLE OVERT behavioral foundations for the qualitatively different levels/stages of cognitive development -- and HOW __LEARNING__ ITSELF (presently often ill-defined) CHANGES WITH THIS NEWLY OBSERVABLE PHENOMENON, and the consequences, ALSO]**.

I have tried to clearly outline (including **ending with most-empirical and testable hypotheses**): the **inception of abstract concepts with "perceptual shifts"** (and thus providing them a **concrete in-the-world foundation**). Again, the theory has to do with "perceptual shifts", **NOW -- presently (at this point in history) -- able to be SEEN with new technologies: SEEING what subtle overt behaviors** likely occur at the inception of each higher level of thinking during ontogeny. The outlook and approach is a cognitive-developmental theory -- i.e. of human child development -- and for finding of **more major parts of who we all are**).

You might well want to take a look:

The perspective and approach especially and specifically has to do with: perception and quickly/soon after that: attentional and gazing changes which likely occur at the inception of new qualitative cognitive developments (with ontogeny) (and literally, sensibly, set them off).

The following theory, with its **most-empirical and testable hypotheses**, indicates (clearly, with as good and totally empirical "guesses" as are now possible) the **nature of these perceptual/attentional shifts** accompanying (actually: "starting off") major qualitative changes in cognition:

Here it is : Minimally, read both of the major writings: Not only

Article [A Human Ethogram: Its Scientific Acceptability and Importanc...](#)

BUT ALSO the much, much more recent:

Book ["Essentially, all Recent Essays on Ethogram Theory"](#)

(these much later, recent essays filling in some of the aspects of the treatise not originally provided, as stated directly in "A Human Ethogram ... " itself).

This theory does a LOT else correctly (unlike other theories) in abiding by necessarily applicable principles and seriously trying to have a perspective and approach which has **ALL the features and dimensions a science theory should have** . It is parsimonious. It uses the well-developed vocabulary of CLASSIC ethology (not the bastardized 'ethology' of today).

Psychologists may ignore this, but that would be just ignoring a **most-empirical** way of study (and ignoring some of the most-empirical, **most-testable** hypotheses). In short, it is **scientifically WRONGFUL for psychologists to ignore this**.

P.S. ALSO: Because all of this is so much more concrete, this theory of development and changes in learning **should be THE theory of most interest to those trying general artificial intelligence.**

Is it a DUTY of persons of a science (here, psychology) to investigate the possibilities of important new tools and possible discoveries ?

I am thinking of Psychology researchers and theorists. Is it their duty to science to investigate the possibilities of important new tools and possible discoveries that involve empiricism at its best: attempting direct observation of possible/likely important overt behaviors, heretofore not seen? For example, IN PARTICULAR:

https://www.researchgate.net/post/What_psychologists_have_not_yet_realized_eye-tracking_technology_etc **ALLOWS FOR AN OVERALL MORE EMPIRICAL APPROACH2**

A good quote for the proponents of non-representational explanations of human/animal behavior -- these "folks" are NOT scientists

First the quote (from Riccardo Manzotti and Sabina Jeschke, 2015-2016 *):

[An] "explanatory strategy (some form of eliminativism [to get rid of the concept/idea of consciousness]) would be unwise because (1) human beings seem to have something more than either sheer computation or sheer behaviour and (2) no purely computational agent or purely behaviour-based agent seems to have the degree of autonomy and adaptability that human and animal beings show. It seems undeniable that human beings cope with the most unexpected events by means of conscious reflection. Finally, they are extremely sensitive to anything remotely resembling feelings in other agents. In sum, consciousness appears to be a non-negotiable aspect of highly developed autonomous agents." (end quote)

Many, many fully agreed-upon circumstances and corresponding behaviors (act. behavior PATTERNS) could be cited as instances of this (and these would be **fully agreed-upon** "circumstances and corresponding behaviors" -- which is not only the nature of science, but IS SCIENCE). [NOTE: I am referring to circumstances and corresponding behaviors THAT ARE ENTIRELY OVERT, AND OBSERVABLE -- otherwise there could be a counter-argument.]

It is ridiculous and embarrassing that any "psychologist" take the typical extreme positions of the "embodiment" 'theorists' or those of the enactivist persuasion. The easiest way to explain this foolishness is simply to point out THE **UNFOUNDED AND UNPROVEN pseudo-'assumptions' by which this thinking is constricted -- demonstrably explanatory here**. Such positions are simply due to wrongfully holding "assumptions" that there is no significant innate guidance for behavior patterns (that, themselves, have significant effects) in later childhood. Rather, "all is 'learning' here", is another way to put it. This view is simply an assertion (in reality, or a "belief", if you like) **AND BASED ON NOTHING VALID, much less proven**. Moreover, this belief is **BIOLOGICALLY UNLIKELY, thus it is LIKELY FALSE**.

Where are the "analytic" philosophers who should be "taking care of" these fools ??? Do I have to do their job for them too (even when it is so easy I could "do it in my sleep, while walking backwards and chewing gum").

P.S. These foolish people like to see themselves as taking Piaget as their hero. These "embodiment/enactment" folks are ALWAYS TALKING ABOUT sensori-motor this and sensori-motor that (in effect: always seeing such as the basis of "memory" -- and, by the way, thus ignoring all the strong findings on the Memories (their definitions and their natures). PLUS , their hero, Piaget NEVER MENTIONED, NOTED, OR TALKED ABOUT ANY [NEW] SENSORI-MOTOR BASES FOR BEHAVIOR ANY TIME AFTER TODDLER-HOOD. Thus the term never came up when he spoke/wrote about later childhood -- and thus they grossly misunderstand and misrepresent Piaget !!

In truth, these unscientific fools DESERVE CENSORSHIP -- for basing supposedly scientific views ON MERE BELIEFS (assertions). THIS IS UNACCEPTABLE.

* FOOTNOTE: <https://www.researchgate.net/publication/309524464> "A Causal Foundation for Consciousness in Biological and Artificial Agents" Chapter October 2016

For a related Q-and-A thread, see:

https://www.researchgate.net/post/Why_are_the_unscientific_explanations_of_embodiment_theorists

[and enactment theorists not censored for being clearly based on NON-science#view=5c49525636d2354b09605784](https://www.researchgate.net/post/A_good_quote_for_the_proponents_of_non-representational_explanations_of_human_animal_behavior)

(THERE I give a definition of ALL OF SCIENCE, having used only a subset of science in the examples referred to, above.)

Why are the unscientific explanations of 'embodiment' 'theorists' and enactment 'theorists' not censored for being clearly based on NON-science?

See:

https://www.researchgate.net/post/A_good_quote_for_the_proponents_of_non-representational_explanations_of_human_animal_behavior -- these_folks are_NOT_scientists

I have "had it" with these people. (Also see: "The Poverty of Embodied Cognition" -- very easy to find the whole article as a pdf on-line; this article clearly shows the lack of empiricism AND **UNPROVABILITY** of holders of these 'theories' -- the latter being the death knell for any position pretending to be "science".) Be gone; "out spot !"

P.S. After you read the essay linked to at the top of this post, and after reading this post: For all those crying, gnashing their teeth, etc. because there seems to be so little "on the other side" : There are 700 pages of writing, INCLUDING testable (i.e. provable/disprovable) hypotheses BY ME, right here on RG

Dear

With "...which is not only the nature of science, but IS SCIENCE", you quote just a tiny part of my post at https://www.researchgate.net/post/A_good_quote_for_the_proponents_of_non-representational_explanations_of_human_animal_behavior--these_folksare_NOT_scientists . And people must read more THERE FOR THE CONTEXT. But let me summarize what they will see and then correct your "misunderstandings": In fact:

I am actually using the most understandable subset of science (which is especially not hard to define or defend, and is ALL I needed to define THERE): THE type of examples indicated there would be a subset of a complete definition of science, which would [otherwise] have something like the phrase: " [IN A WAY] NECESSARY and [IN A WAY] ONLY those characteristics that are NECESSARY for replicable findings (i.e. required by science, generally)". BUT, again, one needs to NOTE that I did not have to address the "[IN A WAY]" parts BECAUSE **only A NOTABLY SMALLER SUBSET OF the AGREED-UPON OBSERVATIONS, of the OVERT agreed-upon observations (which IS science, AS part of science), was necessary THERE to make and contemplate and to understand the points in that essay. (I DID NOT SAY _THAT_ WAS ALL OF SCIENCE, being addressed _THERE_ .)**

But for one to have ALL science in mind, a good overall definition: one has to understand the "[in a way]" parts, that is: to be addressing all good or justifiable science. So more needs be said ON THAT (coming up).

Once "[IN A WAY]" is explained (coming up, below) THAT will be a full definition of ALL science -- and will be literally THE MOST BROAD, LIBERAL, justifiable DEFINITION OF SCIENCE THERE IS !

With the "[IN A WAY]" parts of a complete definition of science THEN (as I said), THAT would be ALL science.

ALL science refers to the ability to replicate KEY OVERT OBSERVABLE circumstances and KEY OVERT OBSERVABLE behavior patterns THAT, obviously to ALL (in a fully agreed-upon way), are necessary for best understanding later replicable overt observable circumstances AND corresponding later proximately-related key overt, observable behavior patterns (so both "sides of the **equation**" are taken care of, so to speak) -- BUT, **ALSO this may well imply some more-than-believable mechanism(s) for the linkage(s) which would be of some reasonable nature, but that may not be fully or clearly discovered YET (<-- BUT SOME CLEAR PRINCIPLES NEED TO BE UNDERSTOOD AND ALSO NEED TO BE INVOLVED). [ALSO NOTE that things on both sides of "the equation", cited as KEYSTONES of your science (necessary for your declared, well-grounded, and in-good-part established -- and thus widely agreed-upon -- view/approach), MUST rely fully on now-present variables that are overt and directly observable.]**

ALL THAT is the minimal empiricism for science and PROVIDES A DEFINITION FOR ALL SCIENCE. This will be a full definition of ALL science -- and will be literally be THE BROADEST, MOST- LIBERAL, justifiable DEFINITION OF SCIENCE THERE IS ! ALL THAT is the **minimal empiricism** for science and PROVIDES A DEFINITION FOR ALL SCIENCE. This will be a **full definition of ALL science -- and will be literally be THE BROADEST, MOST- LIBERAL, justifiable DEFINITION OF SCIENCE THERE IS !**

My own theory requires this less- than-immediately-obvious, indirect linkage of 2 sets of agreed upon observable overt sets -- SUCH is in the explicit statement of my theory (Ethogram Theory) itself. See: Not only

Article [A Human Ethogram: Its Scientific Acceptability and Importanc...](#)

but also the much, much more recent:

Book ["Essentially, all Recent Essays on Ethogram Theory"](#)

... to "check that out". I aimed to present a FULL example of good science, with new, good theory as part of it (a full example of psychological science).

Thijs Willems , I wonder why you thought I was talking about ALL science on that linked page; perhaps you were just "pretending" that was what was to be understood THERE , that way to reduce the credibility of my statements there; AGAIN, nothing THERE indicated I was talking about ALL science (only weird, biased, or befuddled reading or a reading biased by ill-will would lead one to think that is what I say there).

But, now, you may now be assured that : Outside of THIS MOST BROAD, LIBERAL DEFINITION OF SCIENCE (just given), everything else is junk.

Anything else is muddled up, of an incurable vaguer nature, AND **not able to be agreed upon**, because it is required that science and empiricism BE **BASED ON clear, KEY** proximate OVERT DIRECTLY OBSERVABLES, and in-some-way other KEY related THINGS (E.G. later KEY observable behavior patterns and proximate environmental aspects).

Now, if you want to do some "armchair" thinking or analysis, that may well be wrong AND NOT SCIENCE: Included in what you seem to want to do is to think in terms of "**ontology**", which is **metaphysics, and ALL metaphysics IS NOT SCIENCE**.

And, there is **no such thing as "embodiment-scholar"** .

P.S. Your early-on phrase/statement, "if you hold such a narrow and limited view on what science is as the one you bring forward in your 'essay', then it becomes quite easy to argue for these concepts being non-science and thus disregard them", is a **non-sequitur** .

How can what ALL would acknowledge as part of science be non-science??

(And: all else you "think" and express in that post in that other thread FOLLOWS FROM THIS.)

Dear

I still did a bit more editing of my main response during the time you posted this last post of yours, directly above. To respond to my last Answer: why don't you reveal how "embodiment" 'theorists' like you DO NOT SATISFY THIS GOOD DEFINITION and, yet, YOU DON'T CARE ?!

And, Thijs Willems , if you want something easier and simpler, just memorize more of what professors tell you. Of course, that would not be real learning -- but you may have a lot of such already, as so many students do (so you may have a "hole" to work yourself out of).

We need psychology students who constantly personally evaluate what they are told and NEVER simply accept that.

[True, it is quite hard to do all the verifications one must do, when one will find ALL of the current theories in Psychology need to be replaced entirely -- because they are pervaded with clear elements of non-science, seriously affecting their perspectives and approaches. It turns out you must learn how to

be a theory builder, starting from scratch, BUT incorporating all good findings into that AND also showing how you are seeking important discoveries.]

I have aimed to present a FULL example of good science, with new, good theory as part of it (a full example of psychological science).

See: Not only

Article A Human Ethogram: Its Scientific Acceptability and Importanc...

Article [A Human Ethogram: Its Scientific Acceptability and Importanc...](#)

but also the much, much more recent:

Book "Essentially, all Recent Essays on Ethogram Theory"

Book ["Essentially, all Recent Essays on Ethogram Theory"](#)

... to "check that out".

Is there an OVERALL good thorough definition TRUE OF ALL LEGITIMATE SCIENCE?

Here is my proposal for an OVERALL, good, thorough definition which holds TRUE OF ALL LEGITIMATE SCIENCE:

ALL science refers to the ability to replicate KEY OVERT OBSERVABLE circumstances and KEY OVERT OBSERVABLE behavior patterns * THAT, obvious to ALL (in a fully agreed-upon way), are necessary for best understanding later replicable overt observable circumstances AND corresponding later proximately-related key overt, observable behavior patterns * (so both "sides of the **equation**" are taken care of, so to speak) -- BUT, ALSO **this may well imply some more-than-believable mechanism(s) for some linkage(s) which would be of some reasonable nature, but that may not be fully or clearly discovered YET (<-- BUT _HERE_ SOME CLEAR PRINCIPLES NEED TO BE UNDERSTOOD AND ALSO NEED TO BE INVOLVED).** [ALSO NOTE, in any case, that things on BOTH sides of "the equation", *cited as KEYSTONES of your science (necessary for your declared, well-grounded, and in-good-part established -- and thus widely agreed-upon -- view/approach)*, **_MUST_** rely fully on now-present (or at the key time, present) variables that are overt and directly observable.]

ALL THAT is **the minimal empiricism** for science and, I believe, PROVIDES A DEFINITION FOR ALL (each and every) legitimate SCIENCE. This seems to be a **full definition** and yet, I think, is literally THE **BROADEST, MOST- LIBERAL, justifiable** DEFINITION OF SCIENCE THERE IS !

* FOOTNOTE: "Behavior patterns", meaning THE 'behavioral' patterning of ANYTHING, I.E. MEANING: "PHENOMENON".

Now, BELOW, the definition amended for understandability by all (and THEN I say more):

Because of the importance of a general definition of science, I shall restate mine (SO ALL UNDERSTAND): ["Behavior patterns", I thought obviously, was meant to refer to the "behavior" pattern of anything, i.e. "phenomenon" -- but now I make that explicit:]

ALL science refers to the ability to replicate KEY OVERT OBSERVABLE circumstances and KEY OVERT OBSERVABLE PHENOMENON THAT, obvious to ALL (in a fully agreed-upon way), are necessary for best understanding later replicable overt observable circumstances AND corresponding later proximately-related key overt, observable PHENOMENON patterns (so both "sides of the equation" are taken care of, so to speak) -- BUT, ALSO **this may well imply some more-than-believable mechanism(s) for some linkage(s) which would be of some reasonable nature, but that may not be fully or clearly discovered YET (<-- BUT _HERE_ SOME CLEAR PRINCIPLES NEED TO BE UNDERSTOOD AND ALSO NEED TO BE INVOLVED).** [ALSO NOTE, in any case, that things on BOTH sides of "the equation", *cited as KEYSTONES of your science (necessary for your declared, well-grounded, and in-good-part established -- and thus widely agreed-upon -- view/approach), _MUST_ rely fully on now-present (or at the key time, present) variables that are overt and directly observable.]*

ALL THAT is **the minimal empiricism** for science and, I believe, PROVIDES A DEFINITION FOR ALL (each and every) legitimate SCIENCE. This seems to be a **full definition** and yet, I think, is literally THE **BROADEST, MOST- LIBERAL, justifiable** DEFINITION OF SCIENCE THERE IS !

NOW, CONTINUING:

I would say: violations of this definition will be untrue, non-legitimate pseudo-science: because they are destined to be forever untestable on KEY aspects and thus are not provable or disprovable AND will be impossible to be agreed upon as "science", by other scientists in the given field. ALL 'THEORIES' AND RELATED 'definitions' and "FINDINGS" IN SOME SUPPOSED SCIENCE AREAS TODAY (and historically, even for a long time, e.g. Psychology) are of this latter, just-described nature. Any and all saying otherwise (i.e. that they "are science") will have no cogent or convincing arguments (e.g. addressing the obviously good and necessary characteristics described above) ; such problems in making an argument is something that is never true, or at least close-to-never true, of good (and actual) science.

[My perspective and approach, described in all my writings here on RG, is in accordance with the science definition just given.]

Oh, _____, great pretender, as you yourself already likely knew: I **used "behavior patterns" in a broad sense, really meaning 'phenomenon'.** [This fixes that issue you supposedly had ; and, it could go without fixing, if you just started with a broad conceptualization of "behavior patterns" (which is not uncommon, and which then means "phenomenon"). It is clearly ridiculous to think I meant just 'behavior' in some Psychology sense; you would think an intelligent reader of good-will would have to know this, rather than pretend to believe that this science teacher was not also thinking of Physics or any and all other sciences .] Perhaps you would like to attempt a useful and legitimate critique. Now, addressing your new post: You say: " In science we need empirical observations but also theory, epistemology " , as if theory or epistemology were in some significant way separated or divorced from

observation, and thus divorced from science. THIS IS NOT THE CASE. Now, you must show how, or your argument is done.

Let me continue on now and further address your post, your "new" topic, also including math and logic :

Logic and mathematics hinge on observables. They are just great abstractions.

"Abstract" never, or in an real sense, implies or indicates (logically or mathematically, even) that they are not founded on concrete real, observables (or perhaps their negation but still, then ...[as I said]) ... and no one could show they weren't.

For your information **Ethogram Theory IN BEHAVIORAL SCIENCE** seeks to show (when the research is done) **THAT ALL concepts/thinking (and addressed by Psychology) are minimally, and/or at their inception, BASED or FOUNDED on directly observable overt phenomenon *** (in the case of psychology, behavior patterns) -- this includes all the most abstract concepts and thinking a human is capable of.

*** FOOTNOTE: This is just basic empiricism and must be assumed unless proven otherwise (which, really, is irrational).**

Because of the importance of a general definition of science, I shall restate mine (SO ALL UNDERSTAND): (The phrase, "behavior patterns" replaced -- AS WAS MEANT in the first place -- by: "phenomenon"; I now make that explicit) :

ALL science refers to the ability to replicate KEY OVERT OBSERVABLE circumstances and KEY OVERT OBSERVABLE PHENOMENON THAT, obvious to ALL (in a fully agreed-upon way), are necessary for best understanding later replicable overt observable circumstances AND corresponding later proximately-related key overt, observable PHENOMENON patterns (so both "sides of the equation" are taken care of, so to speak) -- BUT, ALSO this may well imply some more-than-believable mechanism(s) for some linkage(s) which would be of some reasonable nature, but that may not be fully or clearly discovered YET (<-- BUT _HERE_ SOME CLEAR PRINCIPLES NEED TO BE UNDERSTOOD AND ALSO NEED TO BE INVOLVED). [ALSO NOTE, in any case, that things on BOTH sides of "the equation", cited as *KEYSTONES of your science (necessary for your declared, well-grounded, and in-good-part established -- and thus widely agreed-upon -- view/approach)*, _MUST_ rely fully on now-present (or at the key time, present) variables that are overt and directly observable.]

ALL THAT is the minimal empiricism for science and, I believe, PROVIDES A DEFINITION FOR ALL (each and every) legitimate SCIENCE. This seems to be a full definition and yet, I think, is literally THE **BROADEST, MOST- LIBERAL, justifiable** DEFINITION OF SCIENCE THERE IS ! Done.

Dear

[I should accept your apology, in the last part of your post, and I should apologize for being so defensive and harsh. Consider those things done.] Moving on:

You say: "Number are conceptual constructions and hence they are nor [(not?)] observables. " (end quote) **Non sequitur.** A heck of a lot of conceptual constructions are clearly and obviously concrete or concretely based AND it is simply by not being an empiricist AND BY using insufficient imagination one can fail to imagine (or, as an empiricist, assume) that ALL concepts and thinking, AT LEAST AT THEIR INCEPTION, are based on concrete situations or circumstances. The problem: There simply seems to be a falsely conceptualized limit on/in what many people can believe can be "brought forth" from the Memories and through working memory; it is enough for one circumstance, as actually processed, to be, in effect, like it is two or three, etc. , and with these possibly seeming to be very different: BUT IT IS JUST --> ONE CIRCUMSTANCE (ANY new parts being CONCRETE *) <-- , CONTEXTUALIZED BY the well-developed Memories

(phenomenologically). **THIS is about ALL that is involved to believe as I do and THE REST IS BEING AN EMPIRICIST AND DOING THE NEEDED RESEARCH.** [I do happen to also think **qualitative shifts** in concepts and thinking during development (ontogeny) necessarily **involve** "the innate" expressing itself in "**perceptual shifts**", that **directly effect what we learn (at that moment and time)** -- **perhaps that, too, is needed to believe as I believe.** (These "shifts" are about "half" of Ethogram Theory; the rest based on the Memories and what they do and how they can and do develop (and this is why AI should love me as providing a Psychology that can be understood and modeled -- and psychology people should love this to). Anything else about the theory is Biological consistency and parsimony, e.g. the latter with respect to the continuing common characteristics/aspects of 'learning', kind of ironically.)]

Still: THE REST IS BEING AN EMPIRICIST AND DOING THE NEEDED RESEARCH.

* FOOTNOTE: This being true at "each turn" (as they say).

P.S. If we cannot "keep track of" all the contents of the Memories, which contextualize a given type of situation, then how would we be able to find, in at least some of these circumstances: the new observable "concretes" which are part-and-partial of/at the inception of a qualitatively new way of thinking? Yet WE DO this (as a species) VERY RELIABLY. My answer to how this can occur, is that at KEY times (during development) basic processes directing learning (e.g. perception then attention) necessarily involve "the innate" expressing itself in "perceptual shifts" * that, in effect, directly effects what we learn (at that moment and time). Thus, these "perceptual shifts" are necessary for Ethogram Theory , seeking to be a full general theory of human cognitive development; also these "perceptual/attentional shifts" which all humans (and likely several animals) will LITERALLY SHOW , THEY BEING OVERT (though also subtle); these CAN be observed with the new eye-tracking technology (and computer-assisted analysis). THESE are the very **directly observable overt phenomenon that are **PREDICTED BY** the clear **empirical HYPOTHESES** of Ethogram Theory. (Thus these are very empirical and completely testable hypotheses.)**

* FOOTNOTE: The "perceptual shifts", innately-guided, are **simultaneous with the learning processes involved**. No nature/nurture problems in Ethogram Theory -- **a matter otherwise NOT reasonably settled with respect to behavior patterns (per se)**

See also my posts in https://www.researchgate.net/post/What_is_a_scientific_truth and https://www.researchgate.net/post/Is_psychology_suitable_for_experimental_research for more of the full outlook on science.

Why does no theory/view/perspective/approach make me think "it is amazing all the ways we

are connected with so many aspects of our environment"?

Why does no theory/view/perspective/approach make me think "it is amazing all the ways we are connected with so many aspects of our environment"?

I think this does not happen because there are **no good prevalent Psychology theories**. We have "**embodied**" 'theories', that ARE MOST CERTAINLY NOT THEORIES THAT **EMBED** US WITH OUR ENVIRONMENT (quite the opposite: these are MUCH more of the nature of unfounded **human-centric fictional story-telling**).

I do know of one theory that is **most-empirical** and that is **well-founded** in the way I would like to see (**totally environmentally-anchored, it ALL its aspects**) and that is **Ethogram Theory** : see the related Projects **under my Profile** and for each Project, see the Project Log (**ALL THE UPDATES**).

What view of the environment do modern Psychology theories and research give us?

What view of the environment do modern Psychology theories and research give us?

I see it as very **superficial** (often **vague** ; more related to terminology or to concepts or to models THAN TO REAL ASPECTS OF ENVIRONMENTS/empiricism/phenomenology). The research is also **disjointed**, and oftentimes: made-up **story-telling** with absolutely no real research supporting its central suppositions.

In any case it **does not show** a detailed, realistic, **multi-faceted or progressive embeddedness** with our environment AND NO PROGRESS IS REALLY BEING MADE. The fact that Psychology has basically been this way "forever" (for its entire 100 yr. history) does NOT make the present performance "ok".

I see this as a real problem (a big one), and as an indicator of the causes as well: [unfortunately VERY LIKELY] other major problems, with the researchers' approaches and theories (problems due do

deficiencies I see them as having IN COMMON). Thus, we have some real problems, AND YET I see nothing noteworthy leading to any good (real) solution.

Isn't that what you see, and what most people see?

See:

https://www.researchgate.net/post/Why_does_no_theory_view_perspective_approach_make_me_think_it_is_amazing_all_the_ways_we_are_connected_with_so_many_aspects_of_our_environment also

(I have a Project and papers, available through RG, that address the problems -- see my Profile (and under Project, under Project Log, see all Updates).)

[By the definitions, the Memories comprise EXPERIENCE ITSELF: why not more research?](#)

By the definitions *, the Memories comprise **EXPERIENCE ITSELF: why not more research?**

I believe it is **because of the prevalence of DUALISM** in our societies: this leads to "it" (the Memories) being **considered a "separate faculty" !**

*** FOOTNOTE: The definitions are quite well-established already, through empirical research -- certainly some of the best in all Psychology.**

I made this a Discussion, rather than a Question, because I am not really asking a Question; just looking for your thoughts (philosophers need not apply). I seek to help change this disgraceful and irrational problem situation. In my view it would be stupid and ridiculous, if it was not so very neglectful and damaging (of our understanding(s)).

If I had/have to make a Question, I guess it would be to ask for further information on **what is wrong with Psychology people. Dualism is a silly philosophy, not a life-style.**

It seems like to these "academics" , etc. LIFE IS LITERALLY JUST A GAME .

Dear

I may not be fully aware of the extent of the research, because I am just going by all I can get through researchgate -- which is not a lot. I have access to little else. But, there is also an **issue of how "Memory" is handled**, which makes some of the research not helpful in any general way (**and NOT about the real nature of the Memories**, thus, in a sense, "not about the Memories"). If they start out viewing "Memory" as merely a separate faculty, then typically the findings they report are of VERY

little value to me.

It seems clear I do still make a point about the dualist idea that the Memories are just another, separate faculty -- and **that is a wrong view**. No one seems to be arguing with me about that, but rather offering some support. (The definitions of the Memories, again, make them comprise EXPERIENCE ITSELF -- and it is in this sort of perspective/approach by/from which I would like to see them addressed; they should typically **NOT be considered a separate faculty, even in most of the research involving them**, but this happens A LOT, inappropriately.)

The research on the Memories I have access to is *not enough to clarify their roles fully (or how they relate)*: THAT IS MAINLY WHY I WANT MORE RESEARCH (and indicates the nature of that needed research). Again: it is possible to see more "research on memory" than I acknowledge and **this is partly how they approach the topic in their research: that is: as dualists** (and seeing "it" as just a separate thing).

P.S. Dear Orlando M Lourenço: I would rather have you see me as a "Psychology killer" . This is because I **have well-argued at great length on a most-excellent basis that THERE IS NO GOOD PSYCHOLOGY THEORY** (today, or in the entire history of Psychology); correspondingly, I see all psychology research as disjointed, trivial, or facile. Please, Orlando, if you must refer to me as a "killer", make it a "Psychology killer". **Can you do that for me?** [(By the way (contrary to your attitude/outlook about me): **If you want to see what a real paradigm shift, then see my extensive papers and writings.**)]

It is MUCH MORE TRUE THAT **PSYCHOLOGY IS an "intellectual killer"** ; just look at how psychology theorists/researchers do not find behavior patterns of a biological nature (showing biological patterning); even more telling is that the **VERY RARELY even use the phrase "behavior PATTERNS"** -- which absolutely **MUST be the way it is**. THIS ALONE MAKES THE CASE OF THE CLOSED-OFF AND ARTIFICIAL NATURE OF PSYCHOLOGY AND HOW IT IS NOT A SCIENCE. Orlando: If you do not recognize this, YOU are an "intellectual killer" because you insufficiently support good, real science.

P.S. Dear Richard Traub : the link your provided to Barsalou's stuff offers stuff that is often of less than limited value, because he is a basically an "embodied" 'theorist' -- **a position that in no sense is justified and is bad, in even more basic ways**: because it **takes positions that can NEVER SHOW ANY KEY DIRECTLY OBSERVABLE OVERT EVIDENCE IN FAVOR OF THEM** (in a well-founded direct OR indirect way) ; AND, to get to the "bottom line" : it can be clearly seen as completely **UNfalsifiable/verifiable: this is BELOW my standard for minimal empiricism**. See the Article: "The Poverty of Embodied Cognition" -- the full pdf easily found with an Internet search. This fully argues for the view, just expressed.

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If Psychology continues (even thoughtlessly) with its baseless, unproven core assumptions, won't just a lot of very poor research be done & none good?

If Psychology continues (even thoughtlessly) with its baseless, unproven, and (actually) UNLIKELY-true (i.e. likely false) core assumptions, won't just a lot of very **poor research** be done **and none good**? Here is something so you can just see the "tip of the iceberg":

Psychology theorists/researchers do not find behavior patterns of a biological nature (showing biological patterning); even more telling is that the **VERY RARELY even use the phrase "behavior PATTERNS"** -- which absolutely **MUST be the way it is**. THIS ALONE MAKES THE CASE OF THE CLOSED-OFF AND ARTIFICIAL NATURE OF PSYCHOLOGY AND HOW IT IS NOT A SCIENCE.

[(By the way : **If you want to see what a real paradigm shift looks like -- THE paradigm shift -- then see the papers and writings on Ethogram Theory (under my Profile). (Beyond Kuhn.)**)]

[(As Psychology continues its **extreme negligence**, I can provide equally extreme **well-founded criticism (and put it all down in writing, with all the reasoning and justification -- much better assumptions and arguments than they can mount)**. I guess its a "standoff": but its me vs [who-knows-who, the heck, or their numbers] -- they certainly might be characterized as cowards, at least in "these parts" (MT).)]

I shall lead you to more than the promised-land: **biological consistency** WITHIN BEHAVIOR ITSELF; new discoveries we must look for, not just attempting to verify some same old junk theories, BUT RATHER, LIKE OTHER SCIENCES, **LOOKING FOR NEW IMPORTANT DISCOVERIES**; & I offer better, completely-good empiricism (**ALL founded on key directly observable overt phenomenon (here: behavior patterns)**). See:

Article [A Human Ethogram: Its Scientific Acceptability and Importanc...](#)

Also the much, much more recent:

Book ["Essentially, all Recent Essays on Ethogram Theory"](#)

I am seriously trying to have a perspective and approach which has all the features and dimensions a science theory should . (I have recently provided a good definition for ALL science -- see my recent posts: **my Profile -> Research --> Questions and Answers** -- via the left-hand column).

This is the **TRUE PSYCHOLOGY 2.0**

Dear

For something clear and brief to start, try: (this is only 2 pages long):

Article [Is psychology now a good science, and if not, how might it become one?](#)

<-- These are the nature of the **BIG ASSUMPTION CHANGES NEEDED** and will indicate this is a REAL PSYCHOLOGY 2.0 . The other writings and works in the Ethogram Theory Project (References) do a lot of **detailed justification** and **detail likely phenomenology**, related to a **specific type of hypotheses -- that are finally stated as empirically as possible** (founded on the **direct observation of overt behavior patterns**) and thus, correspondingly, stated in a way that these **hypotheses are truly testable** and can be verified or shown false. AND: **the hypotheses are central to the new full-blown perspective and approach (aka theory)**.

Does this all sound okay to you now?? (Indeed, I am asking for your answer.)

P.S. As far as **your assertion** that my stuff (totaling 700 pages of writing -- all related, each essay uniquely helpful to understand the perspective) **IS "advertisement"**: I gain **NOTHING** from this in any sense, **no money, no status, no adoration**. In fact I have worked on this **for free and by myself minimally for 5 years** [(or 35 years, depending how you look at it) (but **5 years** just combining the **express work (writing)** from the early 80s and the last 3 years of work **writing**)]. I am the truest sort of non-profit.

Let the 700 pages of substance make up for any bad writing style or any bad impression I make. How much have you read, Christopher? About 2 pages?? Christopher A Varnon owes me an apology and should do the reading he needs to, to know that, and then make some sort of apology (or amends) here (rather than perhaps being a science progress disruptor).

P.P.S. for Everyone: I am 65 years old and retired AND have no resources (no ability to do the needed research); and I am tired (and not what I used to be). If I ever get anything from all this, it could only be a share of some Nobel Prize (that would be nice; but the deserving researcher(s) will likely get it all): [(The N.P. under "Physiology or Medicine" -- the category under which Tinbergen and Lorenz's work for classic ethology was awarded.)].

These last statements of this P.P.S. are more for YOU, than for me; these statements might answer your (the reader's) question, "what might be in it for me"; my answer is as much as I can imagine might really be "in it" for you (so I didn't hold back).

Regarding Ethogram Theory: I guess I do believe it could be "wrong" but ONLY to an extent (e.g. the

exact specific hypotheses); NO big questions are in my mind here: A lot of it, when you adopt the more biologically-likely assumptions (or "more likely assumptions", for short), **THEN** : much of the Theory (certainly its general nature, e.g. the stages/levels idea involving basic perception, periodically innately guided, _and_ simultaneous with the affected behavior patterns for learning) **FOLLOWS FROM THAT**, at least so well that I cannot imagine other reasonable well-founded empirical alternatives.

Dear

Seems to me you need to read more of me than 2 pages. How about reading how I say science should be?: (**AND then have an opportunity to read a good example**) : First these 2: Read:

https://www.researchgate.net/post/Is_there_an_OVERALL_good_thorough_definition_TRUE_OF_AL_L_LEGITIMATE_SCIENCE (especially the first post of the thread, the Question, but some of my Answers may be helpful as well).

and read:

https://www.researchgate.net/post/What_is_a_scientific_truth
(see my Answers there -- look hard, there is more than one)

THEN see a **good example of a good example**. To AT LEAST start reading an early part of THE **START OF A GOOD EXAMPLE**, SEE:

Article [A Human Ethogram: Its Scientific Acceptability and Importanc...](#)

And **for the rest of my rather complete example**, you will also have to read:

Book ["Essentially, all Recent Essays on Ethogram Theory"](#)

If you care about science, read more. There is nothing more I can do for you. You seem "trapped" and defensive to me. It may well be hard to start doing things more correctly. Another professor gave me a list of unfounded, untrue "definitions" and said he would talk with me only in those terms; I refused to use a language of nonsense (I read the long nonsensical paper he recommended -- thus cooperating, as I ask of you now.)

Your criticism has not been constructive at all; I see you as attempting to stifle me and stifle progress (at least in some indirect way). Both of your responses were essentially empty; you are just demanding I "fall into form" -- and that is not going to happen.

If you don't want to challenge yourself and be more constructive, you just as well leave the thread. You are just offering criticism of my personal style. If THAT can totally "knock you off", I propose you say "goodbye". Otherwise, let's see you criticize the perspective and approach I take (BUT you must READ).

If you cannot bother to process the shorter (top two links) you might as well put your head back "in the sand".

Psychology is terrible today, for the most part; I try to help and YOU should too. You may say I am "mean" (basically), but I say you are insulting for failing to reasonably look into what I offer. My disgust with much of Psychology's failure to do or try science does anger me -- perhaps this leads to the style or meanness you see (it might look mean if one is rather thoroughly disgusted with the lack of science).

I feel I am wasting my time interacting with you; I just as well confront a man on the street about science, or so it seems to me.

P.S. AND: Are you contending that I have spent 35 years setting up to irritate you (plural) AND WRITING OVER 700 pages (all basically on the same thing and internally consistent) -- just to be an irritant?

Generalized AI has no human brain: they must be aware of all pertinent "external" behavior pattern markers & related effective environmental aspects

Since Generalized AI has no human brain, they must be aware of all pertinent "external" behavior patterns and behavior pattern markers AND effective environmental aspects: Ethogram Theory with its body of 500+ pages of recent supporting essays (following some early, courser, yet must-read, foundational papers) provides just this, focusing only on clear behavior patterns and environmental aspects AND AS THEY UNFOLD WITH ONTOGENY -- **ALL** with "external" (**directly observable overt**) aspects **AND** environmental contingencies (**including** sophisticated Memories, for context; YET: ALL aspects, in good part, at-least-one-time-seen or clearly indicated **OVERTLY**).

This is why AI people should look at my Ethogram Theory , etc. AND the related General AI Project: <https://www.researchgate.net/project/Developing-a-Usable-Empirically-Based-Outline-of-Human-Behavior-for-FULL-Artificial-Intelligence-and-for-Psychology>

But also see the Ethogram Theory Project and all its References and Updates (in the Project Log): <https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory>

For General AI to use Psychology, this is the only choice. It is also a clear and parsimonious choice and fully empirically based/founded/grounded (and **complete for having/providing for the full basic foundation/base "containing" cognitive-developmental hierarchical system**).

ALSO: This is also completely **good for Psychology** as well, for a good perspective, approach, and good hypotheses -- **BETTER THAN THIS FIELD HAS NOW. I now turn to AI because Psychology is not sufficiently empirically based or "driven" to be this way. (I turn to others who must understand and 'see' behavior patterns correctly and have good empirical testable hypotheses, such as I provide ; perhaps, again, Psychology will find itself FOLLOWING information-processing.)**

Are many/most "interdisciplinary" studies BAD 'science'?

Are many/most "interdisciplinary" studies BAD 'science'?

I think, perhaps, because their findings are not **integratable** except on basically the basis of **intuition** * (MUCH neuroscience/Psychology included) -- **OFTEN no real connections (which are/can be clearly shown and true)** can be made.

I also see this largely as a MAJOR crutch for Psychology (again: MUCH, much neuroscience included) and it's an impediment to science. **All real science can be seen as connected (<-- I mean concretely, really, empirically) TO a particular discipline.**

* **FOOTNOTE: ALSO: there are more (other) fundamentally related problems:** There is a new "paradigm" based solely on just being more inter-disciplinary AND USING much MORE unfounded or unjustified intuition to make connections: the hodgepodge **Relational Developmental Systems** 'Theories' (including the '**Bioecological Approach**' and **socio-cultural 'theory'**) -- which have no clear system and represent subjective researcher intuition (the 'researchers' are the "relaters").

Also clearly included: the "sensori-motor bases" of all the **Embodied Cognition Theories and the similar so-called "Enhancement" Theories** (but the problem "assumptions"/presumptions go deeper than that). **There will NEVER be any directly observable OVERT behavioral evidence that clearly (or likely) links any of these 'theories' ' supposed covert phenomenon TO REAL BEHAVIOR**
_____ **P A T T E R N S** (oh, yeah: clue: behavior is in patterns, like the rest of biological functioning). Pretenders to science hurt science more than they help.

About the only things goofier are the "quantum" 'theories' of this or that. **THERE MUST AT LEAST BE clear EMPIRICAL "BRIDGES"** before trying to relate disparate things, anyone's "all-powerful, unlimited mind" [(pure delusion to the point of insanity)] NOTWITHSTANDING. Disgusting stupidity -- ALL OF IT (above) AND IT IS DUE TO A COMPLETE **UNWILLINGNESS** to examine one's **foundational assumptions**, on which one's **most basic views and approaches RELY** (and it goes deeper than the notion of "sensori-motor" bases, in the case of the last-addressed theories; it is presumed unproven pseudo-assumptions , actually: literally JUST BELIEFS -- that sort of presumptions) **. I have rather fully addressed exactly what I mean in my writings (available on RG); I can also teach you the nature of a new paradigm !

Can you'all handle the truth? ----- NOPE !!!

But there are "no alternative(s) there" *, many highly-controlled rather unprincipled non-thinkers will say. BULL !! I myself offer a legitimate alternative view and approach (and it is more biologically likely, from the TRUE ASSUMPTIONS ON UP) -- EVEN IF YOU DO NOT LIKE IT, IT WILL SHOW YOU _HOW_ TO DO BETTER (its only 700 pages here on RG; you can read that much, can't you?).**

Psychology, the field I have dedicated my life to, disgusts me -- even in the sub-area of the Memories (one of my favorite areas), where much of the data and findings are good, BUT the RIDICULOUS dualists see it/them as just a separate faculty (for us "to use"), WHEN (in fact, and BY their own definitions) the Memories are EXPERIENCE ITSELF. Such dualism is STUPIDITY. Abject stupidity.

**** FOOTNOTE:** Old-time philosophers did all the "thinking" for you and you never "looked back" (or thought about it). You have your "Man is so unique" ideas as constants -- it all shows that easily. And, then (in contrast -- and in-line with necessary reasoning), when one considers biology and biological likelihoods, it "blows you all 'out of the water' ".

***** FOOTNOTE:** Similar to the UN-empirical notion that one can/should have "models" BEFORE THEY ARE BASED ON CLEAR EMPIRICAL FINDINGS -- which I saw most-recently proposed by a group of memory researchers (BECAUSE THEY SIMPLY CANNOT TRY TO APPLY EMPIRICISM to human "abstract thinking ").

[As long as students continue to serve their professors, they will not serve science NOR themselves.]

If you are in one of its sub-fields & view Psychology (in general, usually) as a "jumble": how & why is this, in your view, and how can it be fixed?

If you are in one of its fields & your view is that Psychology (in general (largely), usually, or [subjectively] "on-average") is a "jumble": how and why is this, in your view, and how can it be fixed? If you have developed and well-established views on both aspects of the Question, please tell us.

No Answer from me, to this starting Question, here. All likely know I see Psychology largely as a "jumble" and I have done my best to provide answers to this Question already (I do believe there is some major generalities to the "problem" views, perspectives, and approaches, so to some extent part of answers about the problems are in-common (i.e. the same). You may or may not share this aspect of my

perspective.

I will give others an opportunity to correct and direct the prevalent practices (e.g in modeling , in research approaches, in conceptualizations, theorizing) in several/many/most of Psychology's sub-areas, as I already have. I will say no more in response to this Question. I predict no Answers to this Question.

Dear

Your "counter" about " nice and well performed experiments " does not make any kind of reasonable counter to my perspective. Good experiments alone will never naturally develop into a good Psychological science (come together into good theory).

AND, truthfully: I fear you do NOT really know that Psychology could be a better science (or even how it could actually be a science at all, in many cases). I have explained MAJOR things wrong with it (Psychology, its general bases) and apparently you cannot process this information:

**** (1) The completely unproven, baseless and unjustified foundational assumptions** (basically leading to the attitude that all after infancy or toddlerhood is "learning"; And, this leading to/requiring "embodiment" 'theories' -- assessed by a respected group of peers as UNPROVABLE, ever, of a nature where NO directly-related evidence could ever be found) . Related to all this, just stated: I have detailed about 5 unproven and likely false assumptions that are behind all major Psychology perspectives and approaches **_AND_ where there are biologically more likely (so more likely true) assumptions to replace these** travesties. Many of the travesties seem to come from philosophy (e.g. "only man ...")..

**** (2) Psychologists very many times, and likely MOST often, do not appreciate what REAL empiricism is. It REQUIRES that every concept/construct be related TO directly observable overt phenomenon (and this being able to be agreed upon -- basically verified -- by any and all others in the field).** PERIOD; no exceptions for ANY science. Sometimes the connection to directly observable overt phenomenon may SEEM to be indirect , looking at my view, but I submit it is NOT: the distinct and continuing influences of KEY directly observable overt phenomenon MUST BE and ARE always there [(e.g. major stages AT THEIR INCEPTION , being related like this (directly) at key "times" (and with clear types of circumstances) in ontogeny, and, as indicated: with clear continuing effects -- continuing to be a foundation or basis for related **behavior PATTERNS** and concepts about those (and at least such as this can always be found and thus suffice for a real science). I have admitted that these overt bases may be very subtle and hard to see ("perceptual shifts", requiring eye-tracking technology, etc.) -- and so, in fact, are the way I 'see' them. Quick P.S. for this segment: BY accepted biological principle and necessarily: **BEHAVIOR MUST BE IN PATTERNS; each time you see a reference to "a behavior", that in-itself is a clear indication of science problems.**

**** (3) Models whenever possible should, in each aspect, be empirically based (see above). And, this should be possible most of the time for that which is common to people (the subject of Psychology).** Hypothetico-deductive systems (e.g. models) should ONLY IN DESPERATION turn to theorist/researcher intuition TO ANY DEGREE -- and I see this as likely unnecessary . I see **hypothetico-deductive systems in Psychology as extremely similar to armchair philosophy.** [I have actually seen one set of psychologists say they think they should start with a model first, and then look for evidence. This came up in their process of trying to explain abstractions (abstract thought) -- in my view, such **abstraction is no problem for empiricism (as well-defined above), but may HELP**

(being very level/stage related).]

**** (4) 'Learning' is not only considered ubiquitous, but very much always of the same nature. This is preposterous, as some psychologists have recognized, but they have been unable to come up with a clear persuasive basis for that outlook. If people in the field believe in qualitatively different levels (for some: stages) in child development (ontogeny) -- which ALL WITH ANY SENSE CAN FIND AND SEE -- then, obviously the qualitative nature of what now comes under 'learning' would also qualitatively change.**

**** (5) Psychology has NEVER had a respect for, or a reasonable set of OBSERVATIONS. They basically skipped this basic step (basic in ANY science) and went into their LABS (it is not hard to wonder why and conclude how this was motivated and that this is NOT correct). A meaningful, rather large SET of good verifiable observations should precede MOST experiments, considering their subject matter. I have been writing here about: agreed upon (aka verifiable) observations, often it is called inter-observer reliability, and there is NOTHING WRONG WITH THAT.**

[Please note that I have provided some kind or example, or an indication of PROOF, for all the 5 points above ((1)-(5)).]

Hereon especially for Orlando M Lourenço , himself (in particular) : I find you pig-headed, unfair and insulting; how few of the 700 pages of my writing (all related; all here on RG) have you read????
Come on; you keep criticizing me for the same thing(s) over and over, without trying to find and see and read any details -- this is what your behavior seems to distinctly show.

It is also damned insulting to continue to consider me a "mental case". Maybe you are, to the extent that you always and rather fully defend the status quo and with just what you choose to look into -- inadequate as a scientist, and certainly for one who wants to both insult another (me) and defend the status quo. Operating inadequately on old learning or selective learning and never fairly or reasonably looking "into things". You are Trump-ian: you believe what you want, now, on any individually (subjectively) chosen basis. If you consider that a "mental case", then RATHER take a good look at yourself, than towards me. I find you unacceptable. **Read me at length or please do not address me.** I have had it with you. To me, you are like a broken record of static, i.e. interference and, in addition, you are at least deceptive and an enemy of real science, at worst. I think I have seen enough to see you as both unfair and deceptive (all-knowing, when NOT) _AND_ an enemy of science (not just of progress, but of science itself) as that is clearly the result.

Learn to address ME (and my concepts, perspective, and approach) OR **** the **** UP. **This thread is NOT for such as you, defending the status quo, anyway; so your post is inappropriate. You must specify clear likely-effective improvements for psychology -- there is no evidence you have that ability.**

Psyc. People: Me: All "executive functions" & all the "meta's" unjustified & unnecessary

constructs; related phenomena can be answered otherwise. OK?

Psyc. People: Me: All "executive functions" AND all the "meta's" are unjustified AND unnecessary constructs; related phenomena can be answered otherwise (and in a potentially much more well-justified and empirical way).

Prove this or part of this wrong with evidence & description.

Why I am relentless (& probably seem to many like an oftentimes mean guy): I believe Psychology to be science, must begin & Psychology must start over

Basic General Psychology must start over because, in every area/sub-area of study, theorizing, and research one must **START with being truly empirical and then (always after that start) STAY truly empirical**. It is the WAY, and at least most Psychology has not met this **required, necessary standard of good, real empiricism (defined-further/elaborated below)** AS the groundings and foundations for their work and the verification and refinement of assumptions: FOR their approaches, their perspectives, for their core grounded outlook, and for standards of "good findings". As long as this situation has NOT always held (w/r to real empiricism), THEN the situation can **easily be argued as simply unsalvageable** (for the purpose of "continuing on"). This would be understandable to most, I believe, if one just understands the **essential nature and requirement of empiricism**. Know the **essential characteristics of empiricism** and realize one must start that way and always (as one continues) BE that way OR, if that is not the case, fully and continuously throughout your view and approach, the "working" conceptualizations of/in your work are easily seen as NOT good at all for moving forward. I am simply, with the kind of **empiricism I say is necessarily true**, just **defining science (any and all science)**: (**_NOTE_**) : there ARE many existing findings that will be able to be incorporated into this "new view"):

Quoting a part of another post, for a good, **general definition of science**:

ALL science refers to the ability to replicate KEY OVERT OBSERVABLE circumstances and KEY OVERT OBSERVABLE PHENOMENON THAT, obvious to ALL (in a fully agreed-upon way), are necessary for best understanding later replicable overt observable circumstances AND corresponding later proximately-related key overt, observable PHENOMENON patterns (so both "sides of the equation" are taken care of, so to speak) -- BUT, ALSO this may well imply some more-than-

believable mechanism(s) for some linkage(s) which would be of some reasonable nature, but that may not be fully or clearly discovered YET (<-- BUT _HERE_ SOME CLEAR PRINCIPLES NEED TO BE UNDERSTOOD AND ALSO NEED TO BE INVOLVED). [ALSO NOTE, in any case, that things on BOTH sides of "the equation", cited as *KEYSTONES of your science* (necessary for your declared, well-grounded, and in-good-part established -- and thus widely agreed-upon -- view/approach), _MUST_ rely fully on now-present (or at the key time, were-present) variables that are overt and directly observable.]

ALL THAT is **the minimal empiricism** for science. NO exceptions (no exceptions needed).

The situation for models is basic: one must present a large body of related good empirical findings & show relationships BEFORE one puts forth a model

[I will not restate or elaborate on the Title of this discussion here; just re-read it if necessary. I will say that, then after doing what is required, models should be in terms of behavior PATTERNS, and THOSE "setting up", contextualizing, and basically much-defining other subsequent behavior patterns -- all using NO intuitive constructs, but rather just continuing with good empiricism. Behavior (behavior patterns) are biological, and behavior MUST show patterning and related patterning AS A MATTER OF BASIC ESTABLISHED PRINCIPLE. (Thus, clearly, I believe it is impossible to rationally argue against this principle -- thus one should NEVER operate in any ways inconsistent with this AND abundance with this biological principle should always "show"; I used to always say: good psychology IS ethology -- which can be seen if you know and have read good classic [real] ethology -- providing examples of real and good empiricism).]

I just finished adding to & editing a long, recent

review of Article, "Abstract concepts, language and sociability: From acquisition to inner speech"

I just finished adding to & editing a long, recent review of this Article : See my **Comment under** "Abstract concepts, language and sociability: From acquisition to inner speech" :

Article [Abstract concepts, language and sociality: From acquisition ...](#)

See my Comment (the long review) under that Article.

What do we mean when we say a concept is "abstract" ?; is there a way to proceed that would begin operationalizing the 'abstract' concept itself?

What do we mean when say a concept/construct is "abstract"; is there a way to proceed that would begin operationalizing the 'abstract' concept itself? The answer:

Yes, but ONLY my perspective and approach provides a clear empirical beginning -- it actually does, and in the most-empirical terms (THAT "empirical" which is absolutely the level/standard REQUIRED for ANY science). (I have a post providing a general definition true of ALL science, and the good or best empiricism is defined in there.) (THIS empiricism must also be used for each and every concept/construct IN ANY MODEL.) (I present a quote of this definition of good [real] science/empiricism, at the bottom of this page.)

(When reading my writings: Clue: my "perceptual shifts" (with hypotheses that are testable/verifiable (or falsifiable) mark the very beginning of EACH level/stage of human cognitive ontogeny; look for THAT perspective in the works below.) See especially:

<https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory> and its Project Log (Updates).

and read:

Article [A Human Ethogram: Its Scientific Acceptability and Importanc...](#)

AND

Book ["Essentially, all Recent Essays on Ethogram Theory"](#)

ALL other Psychology researchers/theories cannot provide ANY clear beginning for a good (operational) definition of this concept ("abstract") -- THEY are flailing (which can be quite readily seen, of you look at their work on how to view "the abstract").

Now, as promised:

Here is my proposal for an OVERALL, good, thorough definition which holds TRUE OF ALL LEGITIMATE SCIENCE:

ALL science refers to the ability to replicate KEY OVERT OBSERVABLE circumstances and KEY OVERT OBSERVABLE phenomenon patterns * THAT, obvious to ALL (in a fully agreed-upon way), are necessary for best understanding later replicable overt observable circumstances AND corresponding later proximately-related key overt, observable phenomenon patterns * (so both "sides of the **equation**" are taken care of, so to speak) -- BUT, ALSO **this may well imply some more-than-believable mechanism(s) for some linkage(s) which would be of some reasonable nature, but that may not be fully or clearly discovered YET (<-- BUT _HERE_ SOME CLEAR PRINCIPLES NEED TO BE UNDERSTOOD AND ALSO NEED TO BE INVOLVED).** [ALSO NOTE, in any case, that things on BOTH sides of "the equation", *cited as KEYSTONES of your science (necessary for your declared, well-grounded, and in-good-part established -- and thus widely agreed-upon -- view/approach), _MUST_ rely fully on now-present (or at the key time, present) variables that are overt and directly observable.]*

ALL THAT is the **minimal empiricism** for science and, I believe, PROVIDES A DEFINITION FOR ALL (each and every) legitimate SCIENCE. This seems to be a **full definition** and yet, I think, is literally THE **BROADEST, MOST- LIBERAL, justifiable** DEFINITION OF SCIENCE THERE IS !

Why Generalized AI needs to establish a concrete foundation of developmental levels/stages

Why Generalized AI needs to establish a concrete foundation of developmental levels/stages: [If you are a psychology researcher/theorist, read this as basic developmental and general PSYCHOLOGY -- it surely is: (and, again, what is clear for one field is clear for another intimately related field):]

RE: Cumulative Learning With Causal-Relational Models by Kristinn R. Thórisson and Arthur Talbot

What I think my perspective could add is the **nature and bases of hierarchical, stage-wise cognitive development** -- and related to changes IN THE NATURE OF LEARNING itself too -- ALL of the changes seen by us naturally as it is/must be: qualitative change -- in addition to other changes via the

"old" and before-current nature of "learnings" (which also still could be a big part of the current processing and reactions to some major aspects of a given environment). (ALL this, what I refer to as "IT" below ("IT" in the sense of being the most-notable qualitative changes) -- all these major changes with clear empirically-related "things", clearly surrounding or being directly observable in overt behavior pattern(s) change.) [The observable changes in behavior patterns may be so subtle that eye-tracking technology, etc may be required to observe the change in these behavior patterns; hopefully some descriptions below will indicate why the is.]

If you believe this is a good idea, or something to look into (which I definitely think you should): I do IT (including change in the nature of major "learning") roughly in terms of the Memories (actual memories of a human nature) and when IT occurs: what the nature of changes in the particular phenomenology AND behavior patterns are, this of course related to different aspects of some "old" environment, which previously showed reliable behavior patterns related to SOME of the environmental aspects BEFORE, but now with new additions: major CHANGES in some certain behavior patterns and in response to NEW environmental aspects "SEEN".

To just describe it very briefly: IT occurs when systems of understanding built through kind of what you describe a very recent good paper, "Cumulative Learning With Causal-Relational Models" but translated into changes (or changes also) in terms of the human Memories, their development via "learning" AND (plus), occurring occasionally (in human ontogeny, about 5 times): major changes via level-change-causing (stage-causing) NEW "perceptual shifts" and soon, NEW perceptual/attentional shifts, both based on NEW environmental aspects that the organism can look at ("see"), (INCLUDING, in later emerging stages: real "abstract" but concrete **TYPES/sets** of environmental aspects -- these later ones actually being the very real BASES of abstract thinking, and looking often "seen" ACROSS environmental situations (recall: we DO have our Memories) (that is where "TYPES" comes in, BUT CONCRETE-BASED)). The changes in what the organism CAN/does look at or 'see' is partly, BUT VERY NOTABLY, because more primitive OR established responses have well-developed (i.e. discriminations, integrations, and consolidations -- when those get "done"). All the BIG change mentioned may be seen (at least at some time early on) in overtly in directly observable behavior patterns. **THIS IS WHAT WE CAN LOOK FOR IN HUMAN BEHAVIORS AS EMPIRICAL ANCHORS** of major behavioral changes, which AI should conceptualize and model [(these changes developing in/for each significantly different domain, but some of the learning in previous domains (where development has occurred) generalizing (maybe even "by analogy" at times -- but established REAL human-seen and viable analogies))]. Some more details (which I am pretty sure are needed):

At the KEY times: the case in working memory which will rather quickly indirectly show overtly/concretely , at least subtly at SOME KEY time(s) **around** THE INCEPTION(s) of this new type of way of looking at things, with later, but soon-matching working-memory-using new overt, observable behavior patterns (**IN** some existing behavior patterns; no nature/nurture dualism or conflicts here) (again: some of this is basically perhaps well-showing ONLY at the inception). What also is true of this situation: it will at first be available room-in-working-memory, founded (and allowed for or set-up) on all the ways the Memories for-use have developed, those developments and the new working memory situation (with "viewing space") allowing the organism more "viewing space" of the environment -- effects (via what could be called allowances / affordances) of this "space", which may not right away be directly shown in behavior NOR be conscious (in the Subject) until the sub-stage of the perceptual/attentional change.

P.S.

I am hoping that you can appreciate the reasons for hierarchical learning. The "units" at each stage, being some EARLIER environmental aspects responded to (earlier responsiveness ; and, including aspects attained or refined by way of associative learning) _AND_ related patterning in behaviors. THESE "units" MUST BE in a "READY-STATE" BEFORE THE NEXT LEVEL/STAGE. At stage-change points: All learnings cannot be tested (used at) one time, even IF somehow they WERE all "tested" all-at-one-time previously and all used OR not -- in ways YOU decided: "yay or nay", on other bases -- and even if that works/worked well THERE, previously. These learning-ways would not make good units to be used as such by the next level/stage. Not only have behavior (response) patterns generalized with some more important than others, but there has also been discriminations (e.g. where to use some or where to use all these learning-ways); and, there have similarly (via associative learnings with the relevant environmental aspects) been some, at least NOW at KEY TIMES, abbreviations of the patterns used. So, NOW, with level/stage shift: not a simple refining, but using ONLY select, key parts of these earlier behavior patterns (which have been appropriately generalized and otherwise refined) _AND_ AN ADDING INTO some of THEM. (Perhaps this "pruning" involved (as preparation) will be largely pruning via changes in recall of episodic memories; there could be related semantic and procedural memory changes, as well.)

Anyhow, you should have some such appreciation for hierarchical learning or the AI robot responses will be both incorrect and incomplete. "STAGES" ARE NOT JUST DEFINED FOR SOME SORT OF 'CONVENIENT SUMMARY' -- hopefully that idea is dead now, along with Skinner. They are "shifts" via perceptual shifts and using earlier "units" [, generalized, refined and abbreviated] as they are now ready and proper, while those ways-of-thinking/responding, themselves providing more efficient/accurate contextualizing to 'see' more and to make room for tests of/with with the new-ways, altered behavior patterns. [I must tell you: All this is consistent with Piaget's view that his theory had yet to explain the "just-with-maturation" aspects of qualitative behavioral change (a major type of Equilibration (re: a balance between stages (change or not)) ; my perspective and approach is simply just a way to complete Piaget's Developmental Theory. This may make this all more easy for you to accept.]

I describe to some extent in the last note how what is responded to changes; now I hope you can see what this is for, and how this is allowed for. It occurs for more than one reason (not only somehow expanding and changing response patterns (or "shifting" attentions)), but having specifically refined "units" to use when the new response (again, actually, shift in some behavior patterns) occurs.

All "shifting" occurs within existing behavior patterns (patterning it further, you might say).

I am of the view that Generalized AI will not work and will fail without a process of emerging stages/levels , during its ontogeny (yes, the robot, itself, should "develop") . Humans with innate guidance (shown in the "shifts" in perception) add-in new ways of seeing and responding, just some amount at one time (very well contextualized through what's-now-in working memory). And this should not be seen as a human weakness, but a very sensible strength ; Gen. AI, for reasons indicated, should not in any way try simple translations NOR try short-cuts or "replacements" , but somehow simulate these human aspects -- all concrete based (based in directly observable overt phenomena) -- of behavioral development . (It is too bad that Psychology is so materialistic and dualistic THAT THERE ARE AT YET NO FINDINGS ON THE BASES OF THIS QUALITATIVE CHANGE (of: levels/stages) -- and I haven't yet convinced them to really look and on how to look). But, I have tried to inform you.

For MUCH more (about 700-pages-worth): See:

https://www.researchgate.net/publication/286920820_A_Human_Ethogram_Its_Scientific_Acceptability_and_Importance_now_NEW_because_new_technology_allows_investigation_of_the_hypotheses_an_early_MUST_READ

and

https://www.researchgate.net/publication/329428629_Essentially_all_Recent_Essays_on_Ethogram_Theory

and

<https://www.researchgate.net/project/Human-Ethology-and-Development-Ethogram-Theory>
(see the Project Log of this Project to see many important Updates)

Does an advanced view for General AI also provide a needed FULL, REAL paradigm shift for Psychology?

Does an advanced view for General AI also provide a needed FULL, REAL paradigm shift for Psychology?

SEE:

https://www.researchgate.net/post/Why_Generalized_AI_needs_to_establish_a_concrete_foundation_of_developmental_levels_stages

Does a FULL, NEEDED, REAL _ paradigm shift _ FOR PSYCHOLOGY also provide an advanced view for General AI?

This newly and more appropriately stated question can still provide you with a way to get into the new perspective and approach , using the same links provided before (with the "old" version), ESPECIALLY GIVEN THE REFERENCE LINKS PROVIDED:

Perhaps I should have titled my PREVIOUS Question: "**Does a FULL, NEEDED, REAL paradigm shift for Psychology also provide an advanced view for General AI?**" INDEED!; I should have. This way of stating it would be **more true** for **I most certainly "came out of" Psychology and NOT Gen. AI !!!** So, the Question is **MAINLY FOR PSYCHOLOGISTS**. Even if you do not "believe in" the **new base of assumptions**; even if you do not **have high hopes for new observations** (some just possible now, with new technological advances); **even if you do not see it necessary to define ALL EMPIRICAL WORK** (all empiricism) **very strictly** (and never show have ANY exceptions -- even

at a concept/construct level) <-- though I would find this a key basic mistake that forever will keep Psychology off the science track, if you do not accept this empiricism; **even if you do not believe the specific sort of clear testable hypotheses would work** or turn up the important results I see, **STILL (in any case) THIS IS A VERY GOOD and IMPORTANT WAY TO EXPLORE WHAT A PARADIGM SHIFT IN PSYCHOLOGY WOULD LOOK LIKE** (to explore **what a paradigm shift IS** (insufficiently described by Kuhn). IT SHOWS A **FULL EXAMPLE OF A PARADIGM SHIFT** -- WHETHER YOU LIKE the specifics OR NOT (it will **still allow you to investigate the full set of characteristics and features a paradigm shift has/would have and how it affects things "top to bottom"**). *

This new outlook on this newly and more appropriately stated question still provides you with a way to get into the new perspective and approach , using what was provided before (with the "old" version), ESPECIALLY GIVEN THE REFERENCE LINKS PROVIDED:

https://www.researchgate.net/post/Why_Generalized_AI_needs_to_establish_a_concrete_foundation_of_developmental_levels_stages

* FOOTNOTE: The paradigm shift provides: (1) **new, better-justified (more-likely-true) ASSUMPTIONS**; (2) **NEW OBSERVATIONS SOUGHT** (to be made) AND (3) **NEW WAYS to make them**; (4) **new standards for good, real empiricism** and (5) **new, unique (and wonderful-if-true) testable (verifiable/falsifiable) HYPOTHESES -- of GREAT consequence if true**