

Welcome BrainToBeing

Post by "Cassius" of December 5, 2023 at 3:34 PM

Welcome [BrainToBeing](#) !

There is one last step to complete your registration:

All new registrants must post a response to this message here in this welcome thread (we do this in order to minimize spam registrations).

You must post your response within 72 hours, or your account will be subject to deletion.

Please say "Hello" by introducing yourself, tell us what prompted your interest in Epicureanism and which particular aspects of Epicureanism most interest you, and/or post a question.

This forum is the place for students of Epicurus to coordinate their studies and work together to promote the philosophy of Epicurus. Please remember that all posting here is subject to our [Community Standards / Rules of the Forum](#) our [Not Neo-Epicurean, But Epicurean](#) and our [Posting Policy](#) statements and [associated posts](#).

Please understand that the leaders of this forum are well aware that many fans of Epicurus may have sincerely-held views of what Epicurus taught that are incompatible with the purposes and standards of this forum. This forum is dedicated exclusively to the study and support of people who are committed to classical Epicurean views. As a result, this forum is not for people who seek to mix and match some Epicurean views with positions that are inherently inconsistent with the core teachings of Epicurus.

All of us who are here have arrived at our respect for Epicurus after long journeys through other philosophies, and we do not demand of others what we were not able to do ourselves. Epicurean philosophy is very different from other viewpoints, and it takes time to understand how deep those differences really are. That's why we have membership levels here at the forum which allow for new participants to discuss and develop their own learning, but it's also why we have standards that will lead in some cases to arguments being limited, and even participants being removed, when the purposes of the community require it. Epicurean philosophy is not inherently democratic, or committed to unlimited free speech, or devoted to any other form of organization other than the pursuit by our community of happy living through the principles of Epicurean philosophy.

One way you can be most assured of your time here being productive is to tell us a little about yourself and personal your background in reading Epicurean texts. It would also be helpful if you could tell us how you found this forum, and any particular areas of interest that you have

which would help us make sure that your questions and thoughts are addressed.

In that regard we have found over the years that there are a number of key texts and references which most all serious students of Epicurus will want to read and evaluate for themselves. Those include the following.

["Epicurus and His Philosophy"](#) by Norman DeWitt

[The Biography of Epicurus by Diogenes Laertius](#). This includes the surviving letters of Epicurus, including those to [Herodotus](#), [Pythocles](#), and [Menoceus](#).

["On The Nature of Things"](#) - by Lucretius (a poetic abridgement of Epicurus' "On Nature"

["Epicurus on Pleasure"](#) - By Boris [Nikolsky](#)

The chapters on Epicurus in [Gosling and Taylor's "The Greeks On Pleasure."](#)

[Cicero's "On Ends" - Torquatus Section](#)

[Cicero's "On The Nature of the Gods" - Velleius Section](#)

The Inscription of Diogenes of Oinoanda - [Martin Ferguson Smith translation](#)

[A Few Days In Athens" - Frances Wright](#)

Lucian Core Texts on Epicurus: (1) [Alexander the Oracle-Monger](#), (2) [Hermodotimus](#)

[Philodemus "On Methods of Inference"](#) (De Lacy version, including his appendix on relationship of Epicurean canon to Aristotle and other Greeks)

"The Greeks on Pleasure" -Gosling & Taylor Sections on Epicurus, especially the [section on katastematic and kinetic pleasure](#) which explains why ultimately this distinction was not of great significance to Epicurus.

It is by no means essential or required that you have read these texts before participating in the forum, but your understanding of Epicurus will be much enhanced the more of these you have read. Feel free to join in on one or more of our conversation threads under various topics found throughout the forum, where you can to ask questions or to add in any of your insights as you study the Epicurean philosophy.

And time has also indicated to us that if you can find the time to read one book which will best explain [classical Epicurean philosophy](#), as opposed to most modern "eclectic" interpretations of Epicurus, that book is Norman DeWitt's Epicurus And His Philosophy.

(If you have any questions regarding the usage of the forum or finding info, please post any questions in this thread).

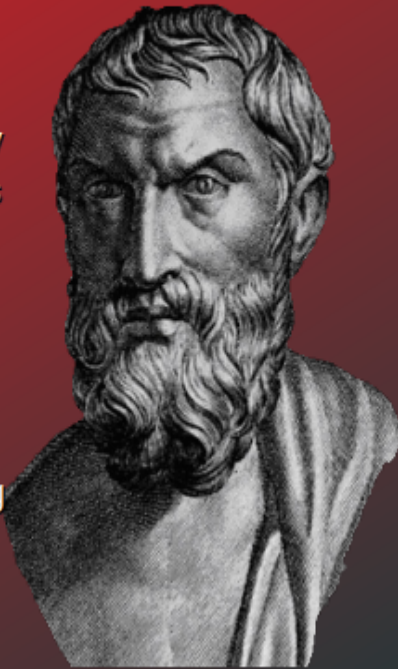
Not Neo-Epicurean, But Epicurean

1. Not "flourishing," "human potential," "self-actualization," or "meaningfulness," but happiness grounded in the feeling of pleasure.
2. Not "absence of pain" as a full statement of the goal of life, but "the Feelings are two, pleasure and pain" and "Pleasure is the beginning and the end of a happy life."
3. Not virtue for the sake of virtue, but virtue as instrumental for the attainment of pleasure.
4. Not "the greatest good for the greatest number," but "Every desire must be confronted with this question: What will happen to me if the object of my desire is accomplished and what if it is not?"
5. Not "humanism," "transhumanism," "individualism," "collectivism," "egoism," "altruism," "social progress," "Marxism," "democracy," "tyranny," or any "one size fits all" political ideal of any kind, but social structure based on friendship which "is formed and maintained by means of a community of life among those who have reached the fullness of pleasure."
6. Not "hard determinism," but "some things happen from necessity, some from chance, and others through our own choice."
7. Not "supernaturalism," but "materialism."
8. Not "supernatural gods," or "life after death," but confidence in a fully material universe and "for those men for whom wisdom is possible, and who do seek it, such men may truly live as gods."
9. Not only "short term hedonism," but "it is to continuous pleasures that I invite you."
10. Not "rationalism," but "all reason is dependent upon sensations."
11. Not fearful of death nor careless of losing life, but valuing life for the opportunity of pleasure it brings.

Our Posting Policy At EpicureanFriends.com:

"No Partisan Politics," "No Supernatural Religion," and "No Absolute Virtue"

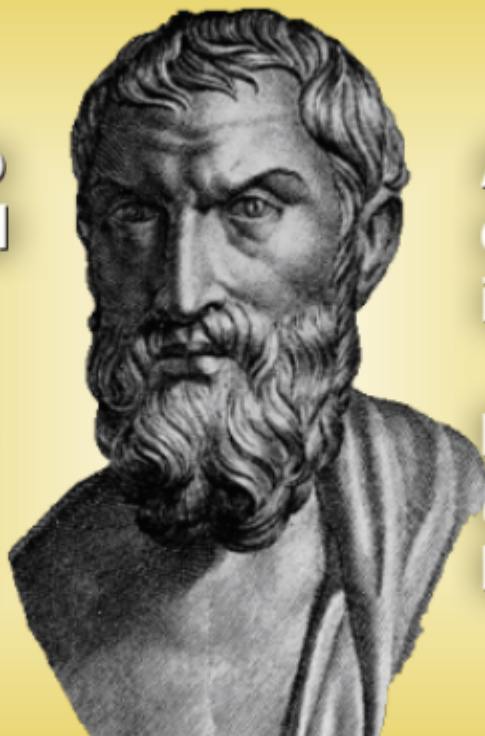
This forum is dedicated to promoting the philosophy of Epicurus, and not to any partisan political positions whether "left," "right," or "center." The task of rediscovering Epicurean philosophy requires that such discussions be held elsewhere. Posts violating this rule are subject to removal.



Epicurean philosophy firmly rejects the viewpoint that there are any supernatural forces or absolute virtues or Platonic ideals of any kind. Argument which is based on supernatural claims, or "absolute" virtues or ideals of any kind, are in violation of this rule and subject to removal.

There are no supernatural gods.

There is no life after death.



All good and evil consists in sensation.

Pleasure is the guide of life.

Post by “BrainToBeing” of December 7, 2023 at 10:16 AM

Hi, I'm responding to the above "Welcome" and request for a post. So, let me start this way:

Decades ago I came across the following quote from Lucretius:

"But when the mind is excited by some more vehement apprehension, we see the whole soul feel in unison through all the limbs, sweats and paleness spread over the whole body, the tongue falter, the voice die away, a mist cover the eyes, the ears ring, the limbs sink under one; in short we often see men drop down from terror of mind; so that anybody may easily perceive from this that the soul is closely united with the mind, and, when it has been smitten by the influence of the mind, forthwith pushes and strikes the body." As a neurologist, I thought: "That is the most insightful description of stress biology I've ever seen, and it was penned 2000 years ago!" I referenced the quote a number of times. (It did not reference the complex relationship between stress and pain; but, pain was not a popular discussion then as it is now.) Then I lost it. Only a short time ago I found it again - regaining a lost friend. And, recently I found your website with it.

While our technology has evolved dramatically, our philosophy has not kept pace. And, it amazing (to me at least) how insightful the early philosophers were. Certainly, we can see that with the dramatic expansion of our knowledge some of the perspectives of these brilliant, "elder statesmen" minds have not stood up to new wisdoms. Yet, that does not detract from their insights. Rather, in my opinion, it gives us insight into what may be concluded based on the information they had, versus what can be concluded based on the information we have. And, it puts into focus the importance of education which is focused on perspectives rather than just small facts.

Anyway, thanks for the invitation to say something. I'll be interested to see what the rest of you say!

Regards,

John

Post by “Don” of December 7, 2023 at 10:41 AM

Wonderful post and insights. Welcome aboard!

Post by “Cassius” of December 7, 2023 at 10:52 AM

As Don said, great first post and thanks for taking time to talk with us.

[Quote from BrainToBeing](#)

Rather, in my opinion, it gives us insight into what may be concluded based on the information they had, versus what can be concluded based on the information we have. And, it puts into focus the importance of education which is focused on perspectives rather than just small facts.

Yes it's amazing to follow their thought processes and realize that they were able to reach so many good conclusions based on the limited information that they had.

To me Epicurean philosophy is particularly interesting due to its "materialist" perspective that looks for answers in understandable phenomena rather than abstracted "logic" that frequently gets divorced from the reality of the biological organism. One example we've been discussing recently is the question of the relationship of the "senses" to the feeling of pleasure and pain (as well as to the mechanism of prolepsis/anticipations that Epicurus also considered). Cicero attacked Epicurus alleging that Epicurus was relying solely on the senses to conclude that "pleasure" is the goal of life, but given that the Epicurean standard of what is true and real includes not only the five senses but also the faculty of pleasure/pain and the faculty of anticipations, it seems like there was much more to Epicurus' analysis than the simple contention that eyes or ears themselves - without further connections - judge what is pleasurable or painful.

Anyway that's just one recent discussion. Thank you for dropping in, and though our community isn't huge we have good number of sincere people who are interested in these discussions, so feel free to post whenever you see or think of something interesting.

Post by “Pacatus” of December 7, 2023 at 1:21 PM

[Quote from BrainToBeing](#)

While our technology has evolved dramatically, our philosophy has not kept pace.

“We are being destroyed by our knowledge, which has made us drunk with our power. And we shall not be saved without wisdom.” Will Durant (1885–1981)

Post by “BrainToBeing” of December 7, 2023 at 1:36 PM

Thank you! As a neurologist I've spent my career looking at behavior from an "organic" (biological) perspective. I can actually have a lot to say on the subject, if we (collectively) are interested.

A problem in healthcare has been the tendency to react to symptoms without adequate effort to discover the root causes of symptoms. This tendency derives from the fact that it is far simpler to react to symptoms than to understand how we get them. Yet, a purely symptom-oriented approach only works if the basic illness will take care of itself - recovering or healing on its own. In simple illnesses (e.g. a bump or bruise) this may work. In complex illness it doesn't. This bears on why we need to dig below the surface - thus advocating a "materialist" perspective.

However, when looking "at the structure of things" I do not seek to remove the romance from life, nor deny our individual experiences of it. So, in medicine I have been very aware of biological substrates for behavior and experience while simultaneously holding "space" for psychological and social elements of our life experiences. This invites, in our current context here, a consideration of sensation, and its implications.

Regards.

Post by “Godfrey” of December 7, 2023 at 4:17 PM

Quote from BrainToBeing

As a neurologist I've spent my career looking at behavior from an "organic" (biological) perspective. I can actually have a lot to say on the subject, if we (collectively) are interested.

I for one am interested, as this seems very pertinent to the Epicurean Canonic.

Post by “Don” of December 7, 2023 at 5:11 PM

I agree with [Godfrey](#) ! At the risk of speaking for him, the intersection between Epicurean philosophy and modern neuroscience is an area that both he and I have expressed interest in for some time.

I've brought up the work of Dr. Lisa Feldman Barrett, Dr. Anna Lembke, and others in bringing neuroscience research to a lay audience. They don't provide an Epicurean perspective, but I've brought up their work in light of the implications (I think) it has for understanding Epicurus's psychology (for lack of a better term) through a modern lens.

I would greatly enjoy reading your thoughts, [BrainToBeing](#) (John)!

Post by “Godfrey” of December 7, 2023 at 5:14 PM

Quote from Don

I agree with Godfrey ! At the risk of speaking for him

No risk there! I almost spoke for you when I posted 😊

Post by “BrainToBeing” of December 7, 2023 at 7:34 PM

Thanks all. There is a lot we could all talk about from many, many perspectives - depending upon where the interests are.

Here is one reference that has interesting implications, and might be a topic of discussion - if you have not already discussed it to your sufficiency: "all good and all evil come to us through sensation". While there is a lot of wisdom in this statement, it needs consideration in this era - or at least definition. If "sensation" is a proxy for "thinking" then perhaps the statement still holds (though the bounty of nature would still stand as challenge vis a vis "good" coming from the planet). Alternatively, if "sensation" is held to be derivatives of sensing then we have problems.

For example, we now know about genetics. And, the old theory of "tabula rasa" is clearly wrong, as we may evidently appreciate in behavioral genetics. Thus, some good and some evil come to us through genetics and our behaviors derived thereof. This is particularly relevant in this era

because it is our behaviors derived from dispositions as an apex predator that now perplex our future. Only if "sensation" is taken to include evolutionary concepts does the Epicurean perspective hold in light of today's knowledge. Going a step further, both good and evil come from thinking beyond sensation (what Daniel Kahneman would call "type 2 thinking").

So, while the quotation of Epicurus reveals important insight, new information requires amplification of the discussion. Or, so it seems to me.

I don't know if any of this is of interest to any of you. It is to me because I'm very interested in the course of the planet under our tutelage, and it is our behaviors which will determine that.

Best to you all.

Post by “Godfrey” of December 7, 2023 at 9:31 PM

[Quote from BrainToBeing](#)

"all good and all evil come to us through sensation".

Let's begin with context. If I'm not mistaken, this quote comes from Locke. This passage from the letter to Menoikeus is, I think, the closest equivalent in Epicurean philosophy.

"Second, train yourself to hold that [death is nothing to us](#), because good and evil consist in sensation, and death is the removal of sensation. A correct understanding that [death is nothing to us](#) makes the mortality of life enjoyable — not because it gives you an unbounded span of time, but because it removes the desire for immortality. There is nothing terrifying in life to someone who truly understands that there is nothing terrifying in the absence of life."

There is a difference in nuance between these two quotations which shows some further points of discussion. Epicurus' quote is in the context of discussing why we shouldn't fear death; I'm not aware of the context of Locke's quote.

Post by “Don” of December 7, 2023 at 10:04 PM

[Quote from BrainToBeing](#)

"all good and all evil come to us through sensation". While there is a lot of wisdom in this statement, it needs consideration in this era - or at least definition. If "sensation" is a proxy for "thinking" then perhaps the statement still holds (though the bounty of nature would still stand as challenge vis a vis "good" coming from the planet). Alternatively, if "sensation" is held to be derivatives of sensing then we have problems.

I agree with [Godfrey](#) . Plus there's also Principle Doctrine 2:

"[Death is nothing to us](#), for that which is dissolved into its elements is without consciousness, and that which is without consciousness is nothing to us."

That seems fairly uncontroversial to me.

ἀναίσθητος = conveys "unconscious, insensate, unfeeling; senseless"

I would also add that, as I understand it, "good" and "evil" only have relevance in Epicurean philosophy as "that which brings pleasure" and "that with brings pain," respectively.

As to the "tabula rasa," I completely agree that notion is outdated. I think the Epicurus's idea of prolepses addresses this, predispositions at pattern recognition are inborn. Many of us go back to the psychology experiments with babies, toddlers, and animals in awe and fairness, for example.

Post by “Godfrey” of December 8, 2023 at 12:08 AM

There aren't many extant texts regarding the *prolépseis*. I'm really curious if and how these may relate to current neurology. As [Don](#) mentioned, some of us have been reading "popular" neuroscience books and, to us, there seems to be a connection. There are various threads in the forums discussing this.

Post by “Martin” of December 8, 2023 at 6:09 AM

Welcome John!

Post by “BrainToBeing” of December 8, 2023 at 9:21 AM

This is much fun!

While I can read and understand current concepts of prolepsis, I do not have any deep insight into how Epicurus conceptualized it. Can you all help me to understand his framework for the concept. When I have a deeper understanding of how you all are considering the word/concept then maybe I can provide a little neurological reflection.

Post by “Don” of December 8, 2023 at 11:34 AM

LOL! "his framework for the concept." You'll get a wide range of answers to that request from a multitude of scholars, academics, and interested laypeople.

Some of us here have settled(?) on the idea of prolepseis as being the ability of the human mind to recognize patterns of significance in the flood of sense data that pours in. That's the very basic idea we've hit upon.

Post by “Cassius” of December 8, 2023 at 11:35 AM

[Quote from BrainToBeing](#)

This is much fun!

And that is among our top goals, and something we've been discussing recently so that expectations are proper for all of us. No cult-building or religion-building here; the best we can provide is friendship and help to those interested in Epicurus.

Our aim isn't to out-scholar the scholars but to provide a community where people interested in Epicurus can interact. Hopefully in the future there will be enough people for live local meetings and other engagement, In the meantime we can use technology to emulate in virtual space what an ancient Epicurean community might have provided in terms of friendship and engagement with like-minded people who are working in parallel on a similar path.

Post by “Cassius” of December 8, 2023 at 11:40 AM

[Quote from Don](#)

Some of us here have settled(?) on the idea of prolepseis as being the ability of the human mind to recognize patterns of significance in the flood of sense data that pours in. That's the very basic idea we've hit upon.

Prolepsis / Anticipations was the focus of our interview with Dr. David Glidden .

The Lucretius Today Podcast Interviews:

Dr. David Glidden
author of
"Epicurean Prolepsis"



Blog Article

[Lucretius Today Interviews Dr. David Glidden on Epicurean Prolepsis](#)

In Episode 166 the Lucretius Today podcasters interviewed Dr. David Glidden, professor emeritus from the University of California - Riverside, about his articles "Epicurean Prolepsis" and "Epicurean Thinking."

The podcast version and discussion is here:

[Episode 166 - The Lucretius Today Podcast Interviews Dr. David Glidden on "Epicurean Prolepsis"](#) And the episode can be played on Youtube here:

youtu.be/xz201PEnNQc



Cassius

March 23, 2023 at 5:28 PM

One of the big issues in debates about what Epicurus meant was whether prolepsis refers to a logical process of "concept-formation after repeated exposure to certain things," or whether (as seems more likely) Epicurus was constructing a theory of how what we refer to as concepts are developed "intuitively" with less reliance on logical syllogisms and the like.

You'll find that some of the most interesting debates about Epicurus revolve around his attitude toward "logic" -- and how he at the same time both elevated "reasoning" while deprecating syllogistic logic. Prolepsis seems to be at least in part the mechanism by which he was approaching how humans learn and think without being reliant on syllogistic logic.

Post by "BrainToBeing" of December 8, 2023 at 12:00 PM

Oh, this is fun!

[Don](#): I appreciate hearing what users here think, in general, as a practical definition of prolepsis. Of course, the "working definition" you provide is significantly different from the published versions by Webster's, Oxford, or even per generative AI. So, this group must have a shared insight leading to the important differences in perspective. If anyone can offer those, particularly with reference to quotes by Epicurus, I'd be interested to hear.

The relevance of this to me, and any contribution to the discussion I might be able to make, is that from my background and perspective that all behavior has biological substrates. We understand quite a bit about those, but we don't understand important pieces. So, discussions of biological substrates of behavior are necessarily based on limited biological information.

If we are going to discuss concept structures (such as prolepsis) then we need to understand at least how we circumscribe the concept (aka "define it"). So, without some consensus on such things the discussion becomes somewhat a Tower of Babel (or "tower of babble" if we are being amusing).

Anyway, I can jump in on discussing neurobiology of prolepsis if we can agree, more or less, on its definition (or a definition we would use for such discussion).

Post by “Don” of December 8, 2023 at 12:52 PM

fwiw...

[Henry George Liddell, Robert Scott, A Greek-English Lexicon, πρό-ληψις](#)

Post by “BrainToBeing” of December 8, 2023 at 1:31 PM

Wow, that's cool! Specifically: "preconception, mental picture or scheme into which experience is fitted". That's a major construct/perspective with heavy neurobiological implications. While it can mean "yeah, that seems right", it quickly devolves into the whole realm of perspectives such as "conditioning", "bias", "prejudice", "addiction to ideas", "can't teach old dogs new tricks", Pavlovian dogs, and a variety of other issues based on "fitting" information to prior beliefs, values, expectations, attitudes, goals, habits, or preferences.

Unquestionably, as an evolved species, we are born with "bootstrap" behavioral programs, then use the juvenile stage of life to build our life-centric behavioral programs, then largely just use the previously-developed behavioral programs during the adult life phase. We learn new information as adults, but we have a strong tendency to maintain our "ways of being" as they have developed during the juvenile period. (This is not absolute, but a strong tendency). This is basically what all animals do.

The brightest folks keep behavioral programs "open" to modification or replacement for longer periods than the less bright folks. (One neurobiological perspective of intelligence.)

Anyway, this opens yet another door to more paths of discussion of the prolepsis topic. If we all land on one or another point of common interest then I can throw more neurobiological perspectives into the ring.

Cheers!

Post by “Godfrey” of December 8, 2023 at 4:11 PM

<https://www.epicureanfriends.com/thread/3573-welcome-braintobeing/>

[Quote from BrainToBeing](#)

Unquestionably, as an evolved species, we are born with "bootstrap" behavioral programs

This is one of the key areas to pursue, in my opinion. What are examples of "bootstrap" behavioral programs?

In previous threads we've discussed instinct in animals and how that could perhaps provide some clarity. Maybe that's a useful place to begin?

Post by "Cassius" of December 8, 2023 at 5:19 PM

[Quote from Godfrey](#)

What are examples of "bootstrap" behavioral programs?

Sounds like almost a computer reference as well, an allusion to bootloaders and other more basic software (maybe the kernel) that are loaded prior to the full operating system, which is itself loaded before the "application programs" and any data which has been fed into those.

Post by "BrainToBeing" of December 8, 2023 at 5:34 PM

There are piles of bootstrap programs in us. There are various reflex behaviors that reveal early integrations of circuits in babies, such as here:
<https://www.youtube.com/watch?v=8UhAanlThUE>

There are many normal behaviors we take for granted: swallowing, eating itself, sneezing, sleeping, etc, etc.

There are later normal behaviors such as covering ears with loud sounds, balancing behaviors, handedness, pain behaviors.

There are learning behaviors such as many elements of remembering behaviors, "modeling" (copying a trusted source), data integration behaviors, formations of beliefs, values, expectations.

There are way more "bootstrap" behaviors than most people realize - because we take them for granted. But, all of them require that the nervous system knows how to integrate data, and which forms of integration to initiate at which time.

Most of what we learn "how" to do are refinements of processes we are already equipped to do. No one teaches us which muscle to use, in what order, or how long to activate each and every muscle when we learn to walk or run. Rather, the core foundations for the behaviors are already there and what we do is learn to apply those foundations to actual life experience.

Is that enough?

Post by "Cassius" of December 8, 2023 at 6:42 PM

[Quote from BrainToBeing](#)

Is that enough?

Very helpful on that big philosophical issue of whether we're born "blank slate!"

Post by "Godfrey" of December 8, 2023 at 9:38 PM

[Quote from BrainToBeing](#)

There are learning behaviors such as many elements of remembering behaviors, "modeling" (copying a trusted source), data integration behaviors, formations of beliefs, values, expectations

[BrainToBeing](#) do you have any similar sources regarding learning behaviors? Specifically data integration, forming beliefs, values, expectations... the sorts of things involved in concept formation.

In Diogenes Laertius and in Cicero (I don't have the specific cites at hand), two examples are given to illustrate *prolépseis*, and there is some scholarly disagreement as to their correctness.

The interview with Dr. Glidden, previously posted in this thread, is a good discussion of that as I recall. One of the examples is that we learn to recognize a cow, or a horse, through repeated exposure to cows or horses. The other example, which is really just a mention, is that justice is a *prolépseis*. In your experience, is there a common thread between these examples? If not, how might the differences be described neurologically?

Post by “BrainToBeing” of December 8, 2023 at 11:09 PM

Thank you. Great questions Godfrey. I haven't gotten through the interview with Dr. Glidden yet, too busy with other things. Hopefully tomorrow. But, what I've heard so far I've liked.

As for the learning behaviors, I'll come to that in a minute.

In my view we should not be surprised that we don't specifically recognize a cow or horse at birth. I think we need to remember that the goal of "bootstrap programs" is not to give all the details of operational experience. Rather, it is to equip the system with programs that allow development of operational functional capacities. And, if we came preprogrammed with recognition of all the things we will meet in life two problems would arise: 1) we would require much greater genetic transmission which means more vulnerability to coding problems, 2) we would be biased at birth to expect certain characteristics of things when those may not be either relevant or accurate.

We need to remember that one of the characteristics that sets us apart is our adaptability. And, this depends on relevant learning, not pre-programmed biases. We don't even come programmed to differentiate "self" versus "other", but that is useful. It means we will learn our particular characteristics of "self" and also the characteristics of "other". This means we learn what is relevant to our particular journey.

Evolution has taught us (among many other things) to look at other species in order to find out relevant information about ourselves. So, here's an interesting piece: do you know that in the long migration of the monarch butterfly it takes 3-4 generations to make one circuit. What that means is that the information on the behaviors necessary to complete the circuit must be embedded in the monarch genes. It cannot be learned by experience or from parents.

Last, return to the question about the details of encoding learning behaviors and complex abstractions such as beliefs, values and expectations. We have about 86 billion brain neurons (roughly ten times the world's population of humans). And, each neuron may connect up to about 1000 other neurons. Even in this era we have no way of determining the state, activations, or "learning changes" that occur with each of those neurons. (There also may be 10 times that number of cells, currently labeled as supporting cells, which factually may play more

active roles, particularly in learned integrations.) So, while we know "quite a bit" about brain function, we do not know nearly what we need to know about the specific processes of behavioral cellular integrations (into reaction patterns and thinking patterns). There is active research but if knew the details of the problems of such research you would appreciate that it is very, very difficult to do meaningfully.

So, these are a few thoughts. I will look to see if I can find recent research on precisely how complex abstractions are actually formed at the cellular level; however, I suspect the findings will be pretty limited.

Interesting stuff. Again, good questions. Sorry I don't have all the answers.

Post by "Don" of December 9, 2023 at 12:14 AM

Great stuff, [BrainToBeing](#) !! Glad to have you aboard our little boat here.

I really like your "bootstrap" contribution to the discussion. From my perspective, that dovetails in many ways with what we've (I've) been trying to articulate here on the forum for awhile. If I understand where you're coming from...

To go with a computer metaphor: We have innate, inborn "operating systems" and some basic software that can be applied to make sense of novel situations in our experience? We use those basics as the foundation for more complex behaviors and beliefs as we grow? We get thrown into a world, bombarded by sensory input, and our operating system and basic "programs" begin to sift, sort, organize, and construct our understanding of reality.

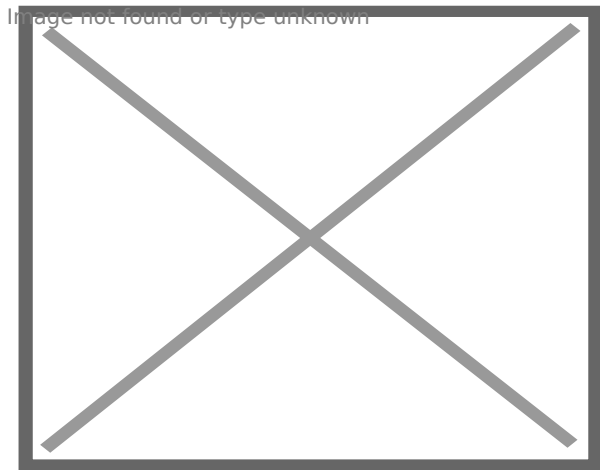
This reminds me of the work of Dr. Lisa Feldman Barrett (and others...I'm just more familiar with her name) who talks about our brains being "prediction engines." According to her work, our brains are constantly using past experience to predict what the flood of sensory data coming in "means," and therefore how to react to it. If we, in fact, DID only react to incoming stimuli after it came in...we'd end up dead. We can't "react" fast enough in real time. Our brains are constantly predicting what actions should follow and act on that. Which, as I understand, is why we jump away from a "snake" on the trail only to "see" later that it was actually just a stick. Our brains do a prediction THEN an observation like: "We're in the woods. What things do we expect to see in the woods? We need to be aware of dangers in the woods. We've seen long slender things before that are snakes. Snakes are dangers. Long slender thing on trail.. SNAKE! JUMP! Take a second observation.... Oh! Just a stick."***

For my part, I see those predictions as prolepses against which incoming sense data is compared. BUT I can also see some of the bootstrapping to be connected as well.

I should also state explicitly that, as obvious as it is, Epicurus did NOT have access to the latest research in psychology, neuroscience, physiology, etc. He was working on observation and intuition and trying to make sense of his world with the tools he had. However, he came up with (or, at least, refined) the idea of atoms - tiny particles that make up the universe - LONG before we had observational evidence... So, I think he was doing pretty well with those tools that he had.

***PS: Note - My example is an over-simplification of the process. For more detail, see the following:

[The brain is a prediction machine: It knows how well we are doing something before we even try — Department of Experimental Psychology](#)



[Interceptive predictions in the brain](#)

Intuition suggests that perception follows sensation and therefore bodily feelings originate in the body. However, recent evidence goes against this logic:...

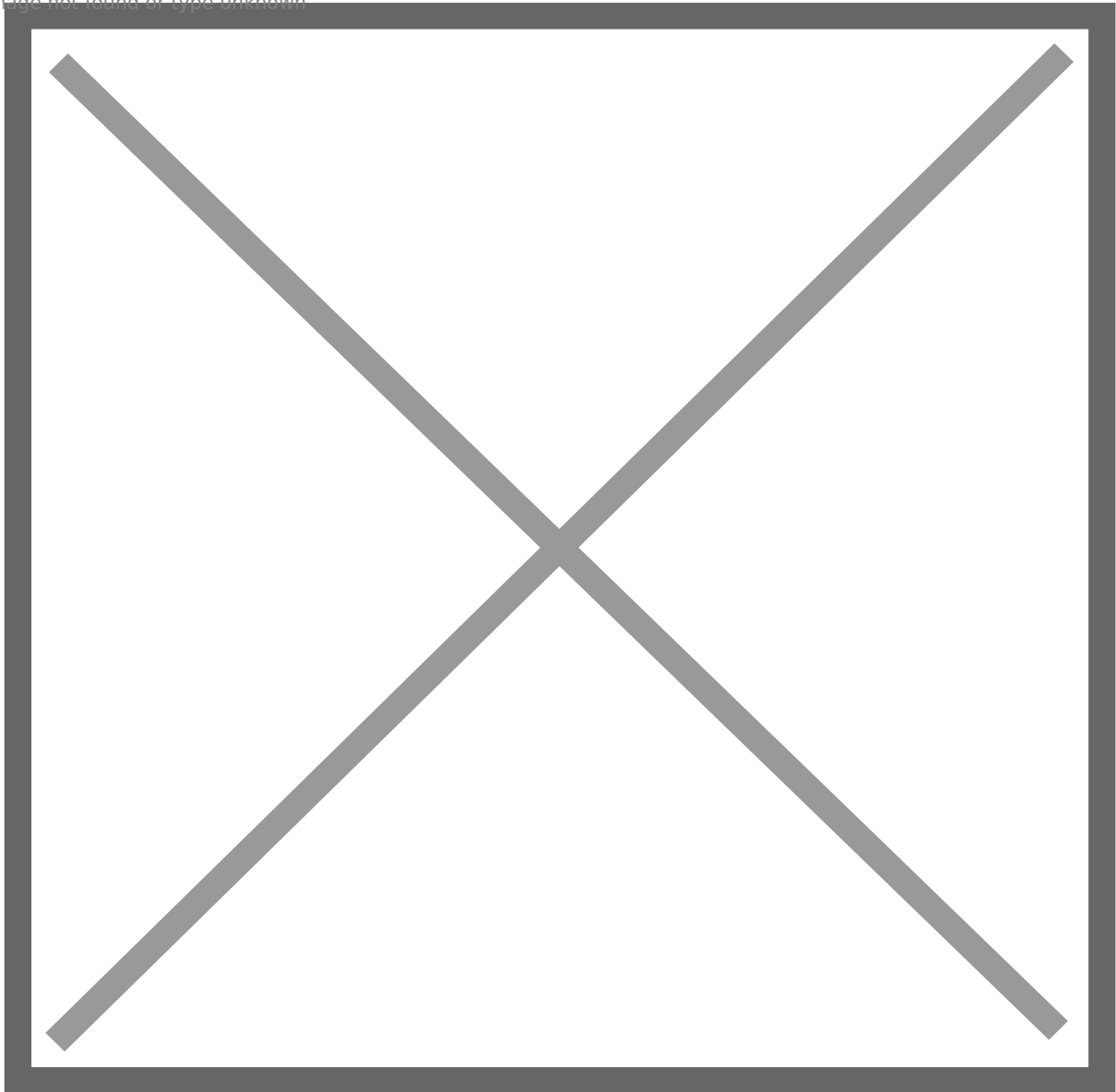
www.ncbi.nlm.nih.gov

Quote

the brain forms neural representations that are constructed from previous experience. These function as a generative model of how stimuli in the environment cause sensations. Rather than neurons simply lying dormant until information arrives via the external sensors of the body (that is, the eyes, ears and taste receptors, among others), the brain anticipates incoming sensory inputs, which it implements as predictions that cascade throughout the cortex.

See also

Image not found or type unknown



[How your brain creates reality, explained by a neuroscientist](#)

Your 'social reality' isn't an absolute reality. A leading neuroscientist explains why.
bigthink.com

Post by “BrainToBeing” of December 9, 2023 at 11:46 AM

All totally excellent, Don! Yes! Right on!

<https://www.epicureanfriends.com/thread/3573-welcome-braintobeing/>

I'm very much enjoying being here: smart people, fun things to think about, interesting conjectures/discussion/debate. Much fun!

Your use of the computer metaphor is right. And, Dr. Barrett is right also. Another person who has opined on this is the psychologist, Nobel Laureate in Economics, Daniel Kahneman. His book, "Thinking, Fast and Slow" is an exploration of our two basic systems (broad generalization) for processing incoming data. The version which is evolutionarily older, expedient, and intent on "fast" is our system of reactions. The version which is evolutionarily newer, inventive, and "slow" by obligation is our analytical system. A core element of what makes us, us, is the interplay of these two systems. You have alluded to this.

Also helpful is your comment: "For my part, I see those predictions as prolepseis against which incoming sense data is compared." This is helpful because it offers a "working definition" of prolepseis. And, that is partly how I started my engagement with all of you: by seeking to understand how you all use that word. So, I need to ask, for all of you is "prolepesis" the same as "prolepsis"? These might have varied definitions.

Again, much fun. Thank you for letting me participate with you in this interesting adventure.

Post by "Don" of December 9, 2023 at 12:08 PM

[Quote from BrainToBeing](#)

is "prolepesis" the same as "prolepsis"?

Prolepsis is the singular. Prolepseis is just the plural.

Post by "BrainToBeing" of December 9, 2023 at 12:10 PM

Thank you!