

# How Emotions Are Made: The Secret Life of the Brain by Lisa Feldman Barrett

Post by “Godfrey” of April 15, 2021 at 8:28 PM

This book is about the “theory of constructed emotion,” which is based in experiments and research.

My goal in reading the book was to explore whether current neuroscience can add any clarity to the *prolepseis*, as there is so little remaining text concerning them. What I found is that it actually is relevant to the entire Canon. Though the subject of the book is emotions, it also covers sensations and feelings as well as what I think we can interpret as *prolepseis*. Note that although the author (LFB) says that construction dates back to ideas relating to Heraclitus’ “no man steps in the same river twice,” Epicurus or Epicurean thought is never mentioned in the book.

The book is very readable, with lots of illuminating examples and explanations. My aim here is to try to simplify (perhaps oversimplify) the information for comparison with the Canon, at least to the best of my ability.

Core ideas of constructed emotion:

- 1) Variation: an emotion does not have a “fingerprint” or a specific set of neurons.
- 2) Your particular perceived emotions are not an inevitable consequence of your genes but are built in because of the specific social context in which you grew up: for instance heart rate changes are inevitable but their emotional meaning is not.
- 3) Emotions are not, in principle, distinct from cognitions and perceptions.

In every instant that we are alive we are exposed to immense amounts of sensory information. If the brain processed all of this as bits of input, it would be so inefficient and metabolically expensive that we wouldn’t survive. Therefore the brain makes **predictions** to attempt to anticipate and explain every fragment of sensation that you will experience by combining pieces of your past and estimating how likely it is that each bit applies in your current situation. This is so fundamental that some scientists consider prediction to be the brain’s primary mode of operation.

Predictions are then tested against small bits of sensory input that are useful in the moment. Prediction errors are used to learn by way of **prediction loops** which occur at all levels from neurons interacting to brain regions and networks interacting. These continual prediction loops

then create the experienced sensations that make up your experience and dictate your actions.

Prediction loop: Predict----> Simulate----> Compare----> Resolve errors----> (and back to Predict)

**Simulation** is an invisible process in which your past experiences give meaning to your present sensations. Your brain uses your past experiences to construct a hypothesis (simulation) to compare to the flood of input from your senses and to select what is currently relevant. What we experience as our senses are simulations of the world, not reactions to it.

*“The balance between prediction and prediction error determines how much of your experience is rooted in the outside world versus inside your head. In many cases, the outside world is irrelevant to your experience. In as sense, your brain is wired for delusion: through continual prediction, you experience a world of your own creation that is held in check by the sensory world [my emphasis]. Once your predictions are correct enough, they not only create your perception and action but also explain the meaning of your sensations. This is your brain’s default mode.”*

So the Sensations are still true. But in this model, in a given instance, they are basically a reality check on the predictions and simulations.

**It is interesting to examine predictions as *prolepseis*, in the language of the Canon. LFB states that predictions and concepts are neurologically the same thing. While “predictions” and “concepts” are her words, to me these ideas read as a modern description and clarification of *prolepseis*.**

The brain uses **concepts** to group and separate things and to guess the meaning of sensory inputs, both external and internal. Without these you are experientially blind; with concepts your brain simulates so invisibly and automatically that your senses seem to be reflexes, not constructions.

*“Everything you perceive around you is represented by concepts in your brain.” “...concepts aren’t fixed definitions in your brain, and they’re not prototypes of the most typical or frequent instances.” “When your brain needs a concept, it constructs one on the fly, mixing and matching from a population of instances from your past experience, to best fit your goals in a particular situation.” Your brain hones “the probabilities until it settles on the best-fitting concept that will minimize prediction error.”*

The brain begins constructing concepts very early in life, perhaps even in utero. *“The newborn brain has the ability to learn patterns, a process called **statistical learning**. The moment that you burst into this strange new world as a baby, you were bombarded with noisy, ambiguous signals from the world and from your body. This barrage of sensory input was not random: it had some structure. Regularities. Your little brain began computing probabilities of which sights, sounds, smells, touches, tastes, and interoceptive sensations go together and which don’t.”*

Instances grouped as a concept are not stored as a group in the brain, they are represented in different patterns of neurons on each occasion and are created in the moment.

*“The human brain is a cultural artifact. We don’t load culture into a virgin brain like software loading into a computer; rather, culture helps to wire the brain. Brains then become carriers of culture, helping to create and perpetuate it.” “What’s innate is that humans use concepts to build social reality, and social reality, in turn, wires the brain.”*

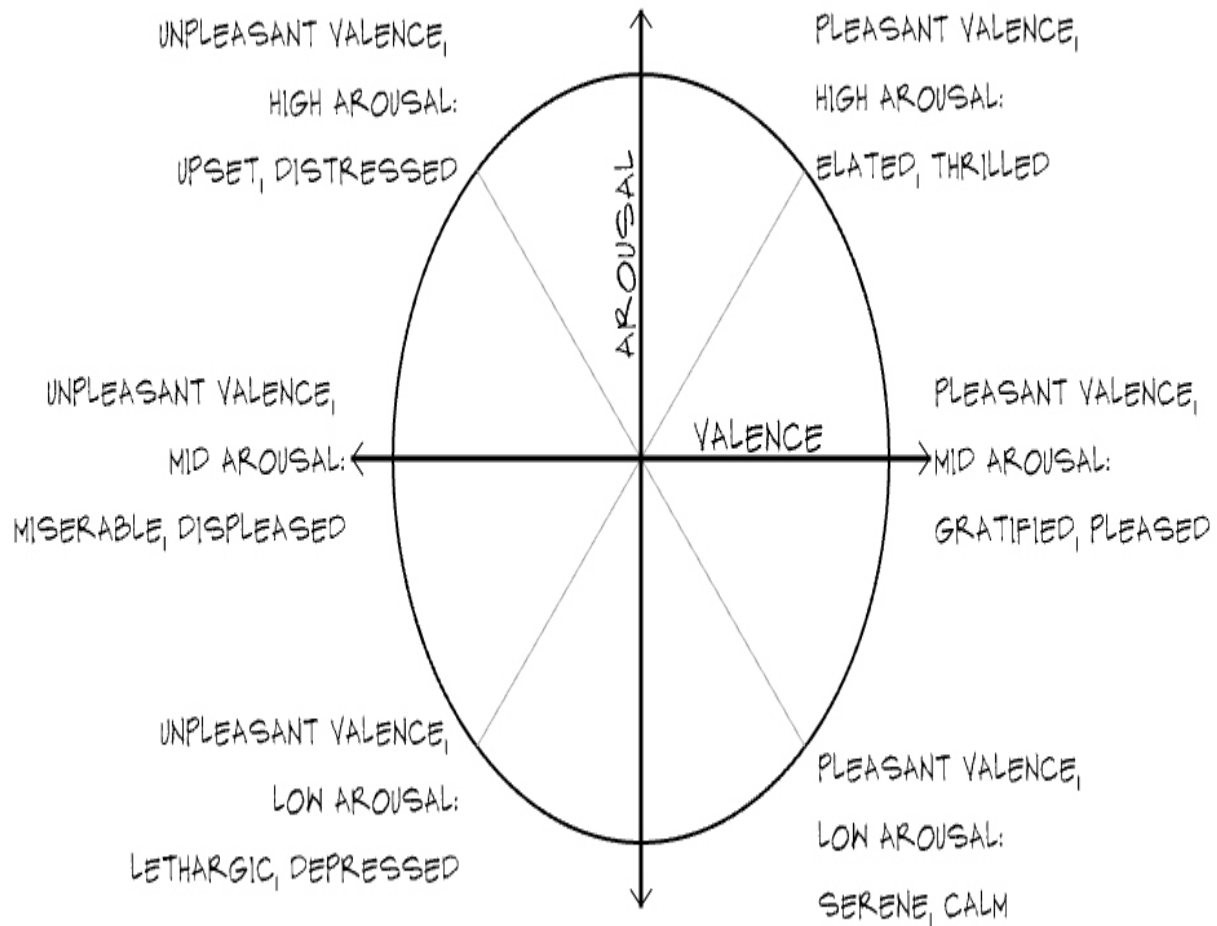
*“The concept of “Emotion” itself is an invention of the seventeenth century. Before that, scholars wrote about passions, sentiments, and other concepts that had somewhat different meanings.”*

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### **Post by “Godfrey” of April 15, 2021 at 8:29 PM**

**Affect** is the general sense of feeling that you experience throughout each day. It is not emotion but a combination of *valence* (pleasant/unpleasant) and *arousal* (calm/agitation).

An affective circumplex describes the relationship between valence and arousal. The horizontal axis represents valence, the vertical axis represents arousal. Distance from the intersection of the two axes represents intensity:



So arousal does not correspond to intensity, distance from the intersection of the two axes does. Also, if I'm not mistaken, LFB uses the word "pain" to describe an interoceptive sensation. She describes aspects of valence as "pleasure/displeasure" or pleasant/unpleasant."

*“...interoception is not a mechanism dedicated to manufacturing affect. Interoception is a fundamental feature of the human nervous system, and why you experience these sensations as affect is one of the great mysteries of science. Interoception did not evolve for you to have feelings but to regulate your **body budget**.... Your affective feelings of pleasure and displeasure, and calmness and agitation, are simple summaries of your budgetary state.... Are you overdrawn? Do you need a deposit, and if so, how desperately?*

*“When your budget is unbalanced, your affect doesn’t instruct you how to act in any specific way, but it prompts your brain to search for explanations. Your brain constantly uses past experience to predict which objects and events will impact your body budget, changing your affect. These objects and events are collectively your affective niche.... Your affective niche includes everything that has any relevance to your body budget in the present moment. Right now, this book is within your affective niche, as are the letters of the alphabet, the ideas you’re reading about, any memories that my words bring to mind, the air temperature around you, and any objects, people, and events from your past that impacted your body budget in a similar situation. Anything outside your affective niche is just noise: your brain issues no predictions about it, and you do not notice it.”*

*“...In short, you feel what your brain believes. Affect primarily comes from prediction.”*

**Interoception** is the sense of the internal state of the body and is a continuous process inside you. *Pleasure and displeasure are universal feelings and come from interoception. They are components of emotion but are not the complete emotional experience. “Any healthy human can experience low-arousal, unpleasant affect. But you cannot experience sadness with all of its cultural meaning, appropriate actions, and other functions of emotion unless you have the concept ‘Sadness.’”* Affect does not tell you what sensations mean or what to do about them. You must make them meaningful, and one way to do this is to construct an instance of emotion.

*“...the human brain is anatomically structured so that no decision or action can be free of interoception and affect, no matter what fiction people tell themselves about how rational they are. Your bodily feeling right now will project forward to influence what you will feel and do in the future.”*

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## **Post by “Godfrey” of April 15, 2021 at 8:30 PM**

**What does this mean for the pursuit of pleasure?** LFB explains that this information can be used to design a “recipe for living,” by working with your body budget and your concepts. People with a balanced body budget are apt to have better health, sharper mental abilities for longer, and a more meaningful and fulfilling life. (To me this sounds very Epicurean: pleasure

equates to health, displeasure [or pain] to disease.)

Some ingredients of the recipe:

- Keep your body budget in good shape. *“...your interoceptive network labors day and night, issuing predictions to maintain a healthy budget, and this process is the origin of your affective feelings (pleasantness, unpleasantness, arousal, and calmness). If you want to feel good, then your brain’s predictions about your heart rate, breathing, blood pressure, temperature, hormones, metabolism, and so on, must be calibrated to your body’s actual needs. If they aren’t, and your body budget gets out of whack, then you’re going to feel crappy no matter what self-help tips you follow.”*
- The foundation for regulating your predictions and body budget begins with the basics: healthy eating, exercising, getting enough sleep.
- To build on that, improve your physical comfort and your physical surroundings. Get a massage, spend time in nature and natural light. Regular lunch dates with a friend, taking turns treating each other has benefits in terms of giving, gratitude and friendship. Get a pet. Research your hobbies to see if they’re beneficial for stress.
- Improve your emotional intelligence: increase your “emotional granularity.” Becoming more specific in identifying emotions improves your brain’s ability to construct more specific and useful emotion concepts in any given situation. Take trips, read books, watch movies, try new foods, experience different perspectives. Learn new words as these contribute to your store of concepts. Invent new emotion concepts for specific situations and learn emotion concepts from other languages.
- Track your positive experiences; keep a gratitude journal. Reinforcing positive concepts makes them easier for your brain to re-create.
- Learn to deconstruct your affective feelings into their basic physical sensations. Avoid letting those sensations color how you see the world. (Separate “pain” and “suffering”) *“When you feel bad, treat yourself like you have a virus, rather than assuming that your unpleasant feelings mean something personal.”*
- Recategorize your physical feelings from negative to positive. For instance from harmful anxiety to helpful anticipation; or categorize discomfort as helpful as when exercising: “pain is weakness leaving the body.”
- Try mindfulness meditation.
- Cultivate and experience awe.

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**Post by “Godfrey” of April 15, 2021 at 8:31 PM**

<https://www.epicureanfriends.com/thread/1951-how-emotions-are-made-the-secret-life-of-the-brain-by-lisa-feldman-barrett/>

An extra tidbit pertinent to discussions on the forums"

### **Essentialism vs Construction**

"The belief in essences is called *essentialism*." Similar to Platonic Forms, idealism, etc, and integral to the classical view. LFB explores this in terms of emotions, Darwin, and natural selection, but I am taking the liberty of applying it to philosophy.

Why is essentialism so persistent?

- It's intuitive and easy to believe.

- It's difficult to disprove: since essences are unobservable, one can always believe in them even if they can't be found. If an experiment fails to detect an essence, it can be blamed on a failed experiment. *"Essentialism inoculates itself against counterevidence."*

- If a scientist believes in essences he will design experiments to finding them.

- William James: "Whenever we have made a word. . . to denote a certain group of phenomena, we are prone to suppose a substantive entity existing beyond the phenomena, of which the word shall be the name."

- *"So, essentialism is intuitive, logically impossible to disprove, part of our psychological and neural makeup, and a self-perpetuating scourge in science. It is also the basis for the classical view's most fundamental idea, that emotions have universal fingerprints. No wonder the classical view has such stamina—it's powered by a virtually unkillable belief."*

- *"It's hard to give up the classical view when it represents deeply held beliefs about what it means to be human. Nevertheless, the facts remain that no one has found even a single reliable, broadly replicable, objectively measurable essence of emotion. When mountains of contrary data don't force people to give up their ideas, then they are no longer following the scientific method. They are following an ideology."*

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### **Post by "Cassius" of April 15, 2021 at 8:55 PM**

1 - Godfrey those last quotes about essentialism are from LFB?

2. - Thank you for all the effort in those posts!

3. - I am going to have to reflect for a while on what you wrote, but as usual I have this starting point:

It looks to me like we are going to run into the usual danger here: Are we talking about "concepts" and "conceptual thinking" or are we talking about "preconcepts"?

In other words, in the broader discussion everyone seems to agree that there is such a thing as "conceptual thinking." Whether we call that "logic" or some form of "abstract reasoning" or whatever, there is a human process wherein we define terms (eg "capitalism" or "communism") and then we use those terms as markers by which to evaluate the objects of our concern at a particular moment. I would argue that this covers as well the examples of Diogenes Laertius, in that we form a concept of a cow, and use that to judge new animals that we see, and we form a concept of Socrates, and use that to determine if the person we meet is in fact Socrates. These examples are "conceptual reasoning" and no one - surely not Epicurus - would deny that they exist.

But is this process of conceptual reasoning the same thing that is referred to as "PRECONCEPTIONS" or "ANTICIPATIONS" in Epicurean theory? I tend to think that it is NOT the same thing, and that we are talking about two distinct mechanisms and products of that mechanism.

It does not seem likely to me that Epicurus would have held that CONCEPTIONS (the product of definition and logical analysis) would be considered to be a criteria of truth, for the reason that the process of logical reasoning and definition which forms conceptions is inherently a matter of "opinion" and not something that occurs by nature WITHOUT opinion, which appears to be a criteria of something being considered a part of the canon of truth.

So in our discussion I think we need to be careful to be clear that the part of the canon of truth that we would like to examine is the "preconceptions / anticipations" and that these are not simply the mind's definition of a certain number of objects to which it has been exposed in the past.

Everyone is of course free to agree or disagree with the comments I have made here, but I think for maximum clarity we ought to be evaluating modern research in light of this distinction so that we can be sure we are talking about the canon of truth vs something very different.

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### **Post by "Godfrey" of April 15, 2021 at 9:06 PM**

1. Yes
2. My pleasure!
3. So am I 😊

## Post by "Cassius" of April 15, 2021 at 9:08 PM

Sorry Godfrey when you posted I had not finished my item three -- it is finished now! 😊

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## Post by "Godfrey" of April 16, 2021 at 1:41 AM

The most confusing issue seems to be the word "concepts." When LFB writes "concepts" in the brain she is referring to what we would call "preconceptions."

### Quote

The brain uses **concepts** to group and separate things and to guess the meaning of sensory inputs, both external and internal. Without these you are experientially blind; with concepts your brain simulates so invisibly and automatically that your senses seem to be reflexes, not constructions.

However I think when she refers to culture, concepts can also come from "conceptual thinking" that is shared among people and passed down to subsequent generations. So she's using the same word in different ways and it becomes our task to translate it into proper Epicurean verbiage.

We do have rational "conceptualizing," but she points out that our rational thought is never purely rational but is always influenced by body budget and affect.

Something like "the gods" or "justice," as I understand this, is a preconception not because it is innate but because we are exposed to it so early in life that we don't remember ever not knowing it. But that brings up the point that a sense of fairness is often observed in very young children: is this a preconception of justice? I would posit that it is an example of a prediction loop involved in the process of keeping the child's body budget balanced.

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## Post by "Cassius" of April 16, 2021 at 1:48 AM

For ease of reference here is the section on anticipations from DeWitt If someone needs the rest and doesn't have it, let me know. This doesn't necessary help with understanding LFB's

points at all, but it will help with the higher-level issue of whether the mechanisms she is talking about are the same category of phenomena as what Epicurus was talking about, or a separate category of phenomena.

As I see it, the crux of the issue is in this paragraph as circled - are we talking about something that is truly prior to any experience with instances of a thing (DeWitt's position focusing on Velleius) or or we talking about the manipulation of concepts after experience with one of more instances of a thing (the majority modern commentator view). Again, whichever position you take doesn't necessarily mean that LFB is right or wrong, because they could be talking about entirely separate things.

**THE ELEMENT OF ANTICIPATION**

The core of the problem is to be recognized in the element of anticipation. It is positively stated by Cicero that the use of the term *prolepsis* was an innovation on the part of Epicurus.<sup>33</sup> It is agreed that this term *prolepsis* also denotes some sort of concept or idea. No one denies that its proper signification is "anticipation." Therefore, if an idea precedes or anticipates something, this can hardly be anything but experience. The said idea must therefore be innate. Quite correctly, therefore, Cicero wrote with studied precision when reporting on the gods of Epicurus,<sup>34</sup> "implanted or rather inborn conceptions of them." Nevertheless it has been deemed unnecessary to believe that Epicurus held such an opinion and it is even declared that "the notion of 'innate ideas' would be wholly repugnant to Epicureanism."<sup>35</sup> Yet there is compelling evidence for believing the precise opposite, that he thought of all infant behavior as anticipatory of later experience.

**ANTICIPATIONS**

The second criterion of such is the *Prolepsis* or Anticipation, such as the innate sense of justice. Between Sensation and Anticipation there is an obvious bridge of association. The innate capacity to distinguish colors is an anticipation of experience no less than the innate capacity to distinguish between justice and injustice. The difference is that the outcome is part of the individual's prearranging for life in his physical environment and emerges in early childhood, while the sense

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of justice is part of the prearranging for life in the social environment and emerges later, developing in part with education, instruction, and reflection. How the Anticipation functions as a criterion may be seen in the case of the gods: it is impossible to think of them as in need of anything, for example, because according to the idea intrinsic among men their happiness is perfect.

Unfortunately the traditional accounts of the Anticipation have gone far astray. These accounts cannot be cited for their abstractness here, in the grand confusion of Epicurus the topic was covered by advanced students and carefully edited from both the Little and the Big Epistles; consequently Lucretius has to help us out; second, Lucretius includes the concepts of such abstract things as justice, but becomes confused with the general concepts of such concrete things as honor and fame; third, modern scholars have become victims of the confusion of the systems and on their own account have committed the error of mingling the Anticipation with the Sensation.

It is highly probable that Epicurus allowed even to certain students, especially students, the possession of these embryonic anticipations of social virtues. The stability of the city was to have occasion in the study of historical episodes in order to learn the teachings of Nature. It should be recalled too that not only was Epicurus very eager to have information of Pythagoras, who had been in India, but also that the writings of Alexander's students, Aristarchus, Theophrastus, and Theophrastus were

erasing India were available in his hands, and the same is true of the descriptions of India by Megasthenes at the time of Seleucus. The older Philo, who quotes three of the above writers, notified to elephants "a sort of divination of justice,"<sup>36</sup> as an Indian equivalent of the Epicurean Anticipation. Philo also notifies to elephants the possession of pride, honor, pleasure, equity, and even religion.<sup>37</sup> All of these fall squarely into the category of abstract notions, where the Anticipation belongs.

The term *prolepsis* was correctly rendered by Cicero as *anticipatio* or *praesensio*<sup>38</sup> and less precisely, though intelligibly, by the older Philo as *divination*. It is wrongly rendered as "concept" by those who confuse the general concept of such a thing as an on with the abstract idea of justice. One would prefer "preconception," but perhaps "pre-concept" would be preferable. It seems most advantageous, however, to adhere to "Anticipation" because this is the meaning of the Greek word *prolepsis*.

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The explicit accounts of the term have fortunately survived from antiquity, the first from Cicero and the second from Diogenes Laertius. Unfortunately there is virtual unanimity among modern scholars that the authority of Cicero is to be rejected and that of Laertius accepted. This would mean that the word of a single compiler weighs more with us than that of the gifted Cicero. It means also that we, who possess almost seventy pages of the text of Epicurus, are in a better position to form a judgment than Cicero himself, who knew all the outstanding Epicureans of his time, whether Greek or Roman, and enjoyed access to all the original texts.

**THE ACCOUNT OF LAETIUS**

The account of Laetius would not deserve more than brief mention were it not approved by eminent scholars. It is a body of knowledge of Epicurus and his terminology and doctrine. The essential part of the text may be rendered as follows: "By a *prolepsis* they mean, as to say, an

may be rendered as follows: "By a protipis they mean, so to say, an apprehension or right opinion or notion or general idea stored away in the soul, that is, a recollection of something that has often been possessed from without."<sup>18</sup> In his exposition he mentions general concepts of a man, a horse, or an ox.

The objections to this are both numerous and rapid. In the first place, the statement is false to the facts. General concepts are formed naturally, as it will be known.<sup>19</sup> A little child who has only once seen an elephant will be able to recognize an elephant under any circumstances. In the second place, we know from Epicurus himself that the term protipis was applied to the concepts of the divine nature.<sup>20</sup> Does it not follow, then, if the general concept of a horse is the result of having seen many horses, that the concept of the divine nature must be the result of having seen many gods? This is absurd.

Again, we learn from the text of Epicurus himself that the term protipis applies to the general concept of justice.<sup>21</sup> If, then, the definition of Lucretius is adopted, it follows that the general concepts of such basic things as horses and men are to be placed in the same logical category with that of justice.

The following objections may also occur to the mind of the reader: if the formation of the general concepts occurs upon acts of sensation, then all elements of anticipation are sensory in origin, if it is founded on the recollection of acts of sensation, this is a sort of inductive process and

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as a result of a natural process one could be a primary criterion of truth, which Epicurus declared the protipis to be. Still again, if the general concepts in the case of a series of sensations, then the protipis is mingled with sensation, and the second criterion of Epicurus disappears. This, in turn, would mean that Epicurus possessed no criterion of truth on the abstract level of thought. Such a conclusion is hardly to be tolerated.

SEE EXAMEN ON ANTICIPATIONS

#### THE ELEMENT OF ANTICIPATION

The core of the problem is to be recognized in the elements of anticipation. It is pointed out by Cicero that the use of the term protipis was an innovation on the part of Epicurus.<sup>22</sup> It is agreed that this term protipis also denotes some sort of concept or idea. No one denies that in proper significance it is "anticipation." Therefore, if an idea precedes or anticipates something, this can hardly be anything but experience. The author does not hesitate to admit, quite correctly, however, that Cicero went with unbridled precision when reporting on the gods of Epicurus: "unplanned or rather without conscious intention." Nevertheless he has been deemed unnecessary to believe that Epicurus held such an opinion and it is even declared that "the notion of 'sensus divini' would be wholly repugnant to Epicureanism."<sup>23</sup> Yet there is something evidence for believing the precise opposite, that he thought of all inferior behavior as anticipatory of later experience.

Let the habit of Lucretius be called as the witness stand. Among his more striking and lesser remembered passages is one that emphasizes the protipis or anticipatory behavior of all living creatures, including animals.<sup>24</sup> Their five senses anticipate the activities of their world. Children pain with the finger before they can talk. Cakes burn before they have been. The cubs of lions and panthers fight with tooth and claw almost before they have teeth and claws. Young birds go through the motions of flying before their wings are fit for flight. Obviously all living things are pre-conditioned for life in their essential environments. In it, then, there, sometimes with this observed fact to assume that humans beings are pre-conditioned for life in their social environments!

Let Epicurus himself be allowed to testify. Basic to his hedonism is the observed fact that all living creatures, human or human, however young and helpless, reach out for pleasure and shirk from pain. Even before the first sense have begun to perform their parts, living before

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the dawn of conscious motivation, and long before the development of

understanding, pleasure seems to be a good and pain an evil thing.<sup>25</sup> This initial behavior, like the subsequent gestures of play, is at one and the same time prompted by intense propensities and anticipatory of which experience. In the growth of the living being and the unfolding of the faculties the sensation of Epicurus is manifestly focused upon this principle, the priority of Nature over reason.

Another aspect of this priority is the speed of learning, especially as displayed by gifted children. This topic had received attention before the time of Epicurus. Plato, who believed in the immortality of the soul and in its reminiscences, expressed his judgment of it by the term *anamnesis*, or "recollection." To him the process of learning was one of reviving personal memories, while the function of dialectics was to bring this dimly remembered knowledge once more to consciousness.<sup>26</sup> Epicurus, on the contrary, does he denied both the pre-existence and the survival of the soul, found his explanation in the pre-conditioning of man by Nature for life in the propensities and sensations. His word for this phenomenon, *Protipis* or Anticipation, is that the philosophical anatomy of Plato's *anamnesis* or recollection, and so far it is from being true that "the notion of 'sensus divini' would be wholly repugnant to Epicureanism" that it is part of the marrow of his doctrine. His recollection, on this point, is identical. *Philosophy in a nutshell*.

#### REFERENCES FROM SPEARS TO CORRECTION

In the extant text of Epicurus, the term protipis occurs four times in a specific context. The first has reference to the divine nature and the second and third to justice; the fourth applies to the concept of time. There are sufficient to indicate that the sense of *sensus divini* refers to the elements of the elements. To deny this would mean that the concepts of justice and the divine nature are on the same level with the general concept of a horse or an ox.

The discussion of the divine nature is found in the letter to the youthful Menecrates in it is there declared "that the pronouncements of the mathematicians concerning the gods are not anticipations (*protipis*) but false conceptions." What the correct conceptions may be gleaned beyond doubt from the antecedent context: first, the divine nature is imperishable, which means that the bodies of the gods are "interrogation-"

Me": second, the happiness of the gods is unaffected, falling in no way

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ness of perfection. This idea of godhead is related to a more basic, a certain common or unmarked, a "neutral" idea.

This universal idea of god is said by Epicurus "to be situated in outline," the verb being *ἀπαρρίπτε*. This compound word exhibits a prefix known or connotation as "comprehensive," implying that the outline encompasses of its nature limit. The sentence also the verb as signifying "to cast letters for children to write over" or "to trace in outline, sketch out," as printers don't begin to be filled in later with colors. From more illuminating however, is a usage to be found in Aristotle's *Generation of Animals*,<sup>44</sup> where the network of veins in the embryo is described as prefiguring the adult organism. Ideas is plainly demonstrable that elements of anticipation or protoplas which condition the thinking of Epicurus. These sense ideas, which Cicero categorically ascribed to him, stand in the same relation to law and father understanding as the various structures of the embryo in the developed organism. Incidentally, it should be again recalled that the study of biology gained outside usage in the interval between Plato and Epicurus.

The second and third examples of the sense protoplas are found in Aristotle's *De Motu* 21 and 22: the topic is justice. Just as in the case of the divine nature, the first example is to show the essential attributes or attributes. It is stated that forbids the poem and implies in case the metaphoric nature or protoplas of justice in advance of all experience. Hence it is called "the justice of Plato," as in *De Motu* 21: "The justice of Nature is a measure of advantage to the end that men shall not injure one another nor be injured." Having said the idea of the movement, which is a separate topic, it will be noted that the essential requirements of justice is to prevent citizens against injury. Thus "justice" becomes a condition of Epicureanism. Since the law are the instruments of justice, it is clear that must be used by this criterion. Like other attributes of his time, Epicurus was aware of the diversity of law from age

to have the substance of justice. This is the gist of *De Motu* 21, 22, and 23.

The fourth occurrence of protoplas, although negative in its bearing, is particularly illuminating, it deals with the nature of time. The protoplas, as has been indicated, retain the attributes of a thing in their anticipatory definition. Therefore, Epicurus virtually says that a protoplas of time is a contradiction in terms, since time has no attributes. He

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ending in the time is "an accident of accidents," and, if his reasoning be clearly scrutinized, does seem to be even less than this.<sup>45</sup> The line of reasoning may be sketched as follows: a human being is susceptible of sickness but sickness is not a permanent condition, only a temporary condition, that is, an accident. Sickness in its turn may be long or short, but this quality of length or brevity is not a permanent attribute but an accident. Therefore it is an accident of an accident. Hence, by analogy, since we associate time with cases of health or sickness, the time of their duration is said to be long or short. Thus long and short become predicates of time while in reality they apply only to cases of health or sickness. This amounts to saying that in the phrase "a long time" or "a short time" the adjectives are transferred epithets.

Incidentally, in the case of Epicurus this paragraph on the topic of time follows immediately upon the discussion of accidents and accidents. This juxtaposition confirms the assumption that the protoplas is rightly interpreted as an anticipatory notion of the essential attributes

#### LATER EVIDENCES

The word protoplas, now loaned by Epicurus as a technical term, was there used by the first of who exhibited freely from the next they exhibited. It will be noted that in Cicero's time but the sharp edges of the original idea had suffered erosion through careless handling. The basis had developed the study of formal logic and one important of this was the general concepts. This denotes the essential attributes of the

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## Post by "Cassius" of April 16, 2021 at 1:53 AM

Godfrey we crossposted again! 😊

This quote from you I think highlights the issue. Your first sentence is the contention of Bailey and others, and that is NOT the contention of DeWitt. Dewitt argues based on his references that anticipations are in fact "innate" and programmed from birth, not by "early in life" experiences that we have forgotten. Whether one agrees with Dewitt or not, it's important to address what Velleius was saying about etching and so forth and wrestle with the question of "innateness" - referencing PRIOR to experience and PRE-the type of concept -formation based on experience. If you were Bailey, you would say "concept-formation based on experience is the only process we have!" DeWitt would differ, and say that Velleius is clearly stating something that comes BEFORE any experience at all. I think before we can finish our analysis we have to wrestle with Velleius and DeWitt's other references.

[Quote from Godfrey](#)

<https://www.epicureanfriends.com/thread/1951-how-emotions-are-made-the-secret-life-of-the-brain-by-lisa-feldman-barrett/>

Something like "the gods" or "justice," as I understand this, is a preconception not because it is innate but because we are exposed to it so early in life that we don't remember ever not knowing it. But that brings up the point that a sense of fairness is often observed in very young children: is this a preconception of justice? I would posit that it is an example of a prediction loop involved in the process of keeping the child's body budget balanced.

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### **Post by "Cassius" of April 16, 2021 at 1:58 AM**

One of the issues here is that we can dig deeply into the details of LFB's analysis, conclude that what she is saying does (or does not) make sense, and yet that conclusion may not necessarily move us one iota closer to having addressed the Velleius / PRE-conception material. If in fact DeWitt is right to allege that Velleius points to something that is going on before all experience of the thing under consideration, then all the analysis in the world about the processing of experiences will never address or illuminate the "innate process" analysis.

Animals through instinct do things regularly that they have never observed themselves or observed their parents do, even though there is much that they do that is indeed influenced by their parents and their own experience. BOTH phenomena can be going on without one ruling out the other, meaning that there are two separate phenomena.

The position of DeWitt/Velleius in no way rules out the process of learning from experiences, so from the Velleius perspective there are two separate phenomena. But the position of Bailey and others is to refuse to acknowledge even the possible existence of their being two separate phenomena, so they collapse all the issues into one single phenomena.

Regardless of whether DeWitt/Velleius are correct from a physiological / brain function point of view, it makes sense to me to suspect that from a philosophical point of view Epicurus would not want "concepts formed through experience" anywhere near his "canon of truth." Otherwise Epicurus built a feedback loop of "opinion" right into the "canon" which he was apparently erecting for the purpose of avoiding the influence of opinion. You would never be able to say that your canon was your unbiased measuring stick, because your measuring stick incorporated your opinion. Or at least that reasoning is what I think impels someone of DeWitt's persuasion to his conclusion.

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### **Post by "Godfrey" of April 16, 2021 at 2:07 AM**

LFB is closer to Elayne's term "pattern recognition" as the only thing innate; she calls it "statistical learning."

#### Quote

The brain begins constructing concepts very early in life, perhaps even in utero. *"The newborn brain has the ability to learn patterns, a process called **statistical learning**. The moment that you burst into this strange new world as a baby, you were bombarded with noisy, ambiguous signals from the world and from your body. This barrage of sensory input was not random: it had some structure. Regularities. Your little brain began computing probabilities of which sights, sounds, smells, touches, tastes, and interoceptive sensations go together and which don't."*

I'm only looking at the neuroscientific view now as it's fresh in my mind. I'll need to step away for a bit before I conceptualize more about concepts.

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#### **Post by "Godfrey" of April 16, 2021 at 2:09 AM**

Oops, another cross post!

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#### **Post by "Cassius" of April 16, 2021 at 2:10 AM**

Yes I agree - the "faculty of pattern recognition" is something that would appear to exist at birth, prior to ANY experience with a thing under consideration. To that extent, the existence of such an innate faculty, and how it would unfold over a lifetime, is where DeWitt is going but which Bailey et al exclude.

DeWitt is saying I think that there is affirmative input that results from the way pattern recognition faculty works, just like there is input from the way the eyes work or the ears work, regardless of what the eyes are seeing or the ears are hearing.

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#### **Post by "Cassius" of April 16, 2021 at 2:20 AM**

<https://www.epicureanfriends.com/thread/1951-how-emotions-are-made-the-secret-life-of-the-brain-by-lisa-feldman-barrett/>

*"This barrage of sensory input was not random: it had some structure. Regularities. Your little brain began computing probabilities of which sights, sounds, smells, touches, tastes, and interoceptive sensations go together and which don't."*

I would see in that sentence the issue of two phenomena:

(1) the sensory input was not random because the sense faculties received and presented their findings in ways influenced by their functional makeup (ears hearing only at certain frequencies, eyes seeing only at certain wavelengths, etc) DeWitt would say that there is in fact an anticipatory faculty as well which is active in helping organize according to the nature of the anticipatory function.

(2) the part as to "your little brain began processing" would be the separate second step of conceptual reasoning - taking the observations and forming them into concepts and then applying those concepts to new observations. DeWitt probably would say that the "which go together and which don't" isn't entirely observational, but that "go together" is at least partly what the anticipatory function recognizes by pre-birth etching. Cats and dogs can observe lots of things that we do, but they never make connections that we as humans do because our minds are wired to see things "go together" that theirs never will, regardless of how much they see and observe.

No amount of additional observation will ever move a cat or a dog to a human level of processing of abstract ideas because the initial wiring to make those connections is simply not "etched" there from the beginning. As I read between the lines it is this etching which Dewitt asserts Epicurus held to be the faculty of anticipation, with "an anticipation" being a connection drawn that would not and could not have been drawn without that pre-existent etching. Which is not to say that the connection drawn will be any more accurate to the full facts than a single perception of an eye or an ear, but is to say that the connection would not come to our attention to consider as a criteria of the "truth" of our eventual opinions if we did not have and exercise the faculty.

And further, it is to say that *the existence of this faculty amounts to something that Nature has provided in order to make available to us these very connections, just like Nature provides eyes that see and ears that hear. And would not the implication of that observation be that to ignore the results of the anticipatory faculty would be as unwise (or as contrary to Nature) as would be ignoring the perceptions of the eyes or the ears?*

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**Post by "Cassius" of April 16, 2021 at 2:40 AM**

No doubt Don will sort all of this out for us when he wakes up in a couple of hours! (Except for the fact that this might be a part of the DeWitt book that he didn't finish, so he might have to have more time to check those references. 😊 )

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## Post by “Cassius” of April 16, 2021 at 8:19 AM

### [Quote from Godfrey](#)

LFB is closer to Elayne's term "pattern recognition" as the only thing innate; she calls it "statistical learning."

Also:

I think "pattern recognition" is a very useful term. I would also think "pattern detector" would be good.

Continuing to think again about the words, in "canon of truth" I think we are referring to "canon" in the sense of "measuring device" or "ruler" or "yardstick." The measuring device does nothing but measure, it contains no data about the thing being measured.

We also need to examine "truth" but for now maybe what we're talking about is a conclusion which allows us to make accurate predictions about future repeatable observations (or something like that). We need to rule out "truth" in a divine or universally absolute perspective sense, since our physics would tell us that no god or intelligent being exists which could form such a perspective to which we could compare our own.

In addition to "pattern" I would think we are also talking about "relationships" or "connections."

Using these words, if they prove to be accurate after we examine the texts and what we really think is going on, the faculty of anticipations might be describable variously as:

"pattern detector"

"pattern measuring device"

"connection detector"

"connection measuring device"

"relationship detector"

"relationship measuring device"

I think all these terms would probably be useful in varying degrees to indicate an innate faculty which we have at birth, prior to any experience in the real world, which provides a tool (measuring device) in the field of patterns/connections/relationships just like the eyes provide a measuring tool for light, and the ears for sound, etc.

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### **Post by “Don” of April 16, 2021 at 9:52 AM**

Paian Anax! Y'all have been busy!

Well done, [Godfrey](#) , on your summary of LFB's book!

It's going to take me awhile to read all this, but a great start to the discussion.

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### **Post by “Cassius” of April 16, 2021 at 10:02 AM**

Yes and I want to repeat that I do not mean my comments to derail discussion of details of the LFB book. My main point is that to the extent we devote time to analyzing it under the category of anticipations it would be best if we make clear what view of anticipations we're talking about as we discuss her observations.

I'm not sure how to categorize the two competing alternatives, but they generally fall under something like (1) "anticipations as product of an innate faculty predating experience" vs (2) "anticipations as product of conceptual reasoning based on experience."

With one part of the issue being that those who advocate (2) either ignore (1) or contend that (1) does not exist.

I have no clue yet as to where to fit LBF into that paradigm. Presumably the answer to that comes from determining whether LBF believes that there are innate dispositions predating experience, or whether all mental processing occurs after, and based exclusively on, experience. Also, I really don't know if LBF has a position on what "truth" means.

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### **Post by “Don” of April 16, 2021 at 12:02 PM**

<https://www.epicureanfriends.com/thread/1951-how-emotions-are-made-the-secret-life-of-the-brain-by-lisa-feldman-barrett/>

First, let me say that I have nothing to add to [Godfrey](#) 's excellent summary other than to encourage people to read LFB's book and explore her research.

Here's my take on the prolepses relation to LFB:

The Canon has the following:

-Sensations

-Pain/Pleasure

-Prolepses

My understanding is that this order is meaningful and now even more so in light of LFB's research (and, I should include, from others):

- the sensations include all of our sensory input

- This input then impacts our "feeling" of pain or pleasure, or as LFB states, pleasure/displeasure.

-and our minds use this to compare our past experience to our current situation. These are our predictions based on our "prolepses."

I'm still not entirely convinced that Cicero is a reliable narrator.

The "inborn" vs "early experience" paradigm of the prolepses is an important one and I'll not resolve it here. But it seems to me that there is probably a faculty we're born with but individual prolepses have to come from experience in utero, early in life, or even later. To say we're born with prolepses seems to me to fall into the realm of Plato. Epicurus vociferously argued against his philosophy.

My take was that LFB's "concepts" come very close to describing Epicurus's prolepses.

I think her pleasure/displeasure axis is maybe a better description of "feelings" since Epicurus's ἄλγος can be translated as "pain" but encompasses "pain (of either mind or body), sorrow, trouble, grief, distress, woe" That's the word he usually uses that's translated "pain."

So, there are my initial thoughts for this thread. Look forward to continuing this conversation!

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**Post by "Cassius" of April 16, 2021 at 1:45 PM**

### [Quote from Don](#)

- Sensations
- Pain/Pleasure
- Prolepses

My understanding is that this order is meaningful and now even more so in light of LFB's research (and, I should include, from others):

- the sensations include all of our sensory input
- This input then impacts our "feeling" of pain or pleasure, or as LFB states, pleasure/displeasure.
- and our minds use this to compare our past experience to our current situation.

Display More

This is a point that I think deserves discussion over time. Have you seen a commentator assert that the "order is meaningful," or do you have other reasons for making that deduction? I believe if I recall correctly that DeWitt asserts that they basically go hand in hand, rather than sequentially. I see why it would be tempting to order them in the way that you have, as that would coincide with an order of processing if "prolepses" are equated with "concepts," but again that is probably the ultimate question.

At this point in my thinking I would interpret this aspect differently, and suggest that the three legs of the canon are not in fact the steps by which concepts are formed, but are the "checks" against which concepts are judged for accuracy. Probably as an example I would suggest that "concepts" can be made up out of whole cloth, with no input whatsoever from the legs of the canon, such as "let  $A=B$ " then "let  $B=D$ " therefore " $A+B = A+D$ " or whatever you'd want to construct from pure words. Those would be (I think) conceptual constructs formed separately and apart from experience of any kind.

So in fact i would think that considering prolepses to be the equivalent of concepts and considering them to be the result of sensations and feelings, rather than a separate category of experience, would produce a dramatically different result than considering prolepses to be an experience or measurer of its own.

### [Quote from Don](#)

But it seems to me that there is probably a faculty we're born with but individual prolepses have to come from experience in utero, early in life, or even later. To say we're born with prolepses seems to me to fall into the realm of Plato

In regard to that, I would say that is where it is essential to distinguish the faculty from the perceptions it generates.

We are born with eyes, yet not with visions of trees. The mechanism of eyesight, however, is innate.

Presumably if prolepses are an equal leg of the canon, rather than concepts formed after experience, then the "faculty of prolepses" would be innate.

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### **Post by "Godfrey" of April 16, 2021 at 1:46 PM**

A quick post; today is pretty busy so it may be a while before I get back on....

In reacting to [Don](#)'s post, I think one of LFB's points is that sensations in a particular instance don't come first. A prediction comes first and the sensations serve as a reality check as you can see from the description of a prediction loop. So the sensations are "true" but they don't seem to be primary.

Another thing that seems like it might be fruitful to discuss is affect and the affective circumplex.

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### **Post by "Don" of April 16, 2021 at 1:50 PM**

#### [Quote from Godfrey](#)

A quick post; today is pretty busy so it may be a while before I get back on....

In reacting to [Don](#)'s post, I think one of LFB's points is that sensations in a particular instance don't come first. A prediction comes first and the sensations serve as a reality check as you can see from the description of a prediction loop. So the sensations are "true" but they don't seem to be primary.

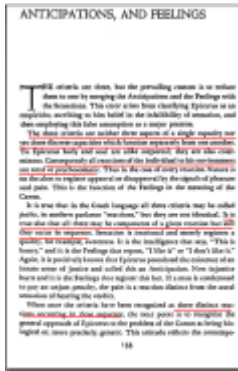
Another thing that seems like it might be fruitful to discuss is affect and the affective circumplex.

Good point, [Godfrey](#) ! I appreciate and agree with your clarification there.

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## Post by "Cassius" of April 16, 2021 at 2:46 PM

On the "sequence" issue I think this is probably the key section of DeWitt's view on that question:



With the continual caveat that (1) Epicurus' philosophical perspective might not be the same at all as what modern science is looking at, and (2) we need to be constantly on guard as to the implications of any particular approach.

I believe DeWitt to be correct at least insofar as he is stressing that there is a human functioning process that Nature set up for us to use to determine what to consider to be "true," and that this biological process is not "abstract reason" or "abstract logic." That would be the takeaway of most any version of the whole "canon of truth" discussion.

At this point I don't know what LFB's takeaways would be. I did finish listen to the podcast today however, and I agree that we would expect her takeaways to be similar.

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## Post by "Don" of April 16, 2021 at 2:49 PM

Oh, and I should be clear: Much of the time, I'm thinking out loud when I post so I'm not committed to any of my previous assertions.

Just to make things slightly more difficult for everyone 😊

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## Post by "Cassius" of April 16, 2021 at 2:51 PM

<https://www.epicureanfriends.com/thread/1951-how-emotions-are-made-the-secret-life-of-the-brain-by-lisa-feldman-barrett/>

### [Quote from Don](#)

Oh, and I should be clear: Much of the time, I'm thinking out loud when I post so I'm not committed to any of my previous assertions.

Just to make things slightly more difficult for everyone

LOL! Probably that should be a caveat to at least 3/4 of what most everyone (including me!) posts here on the forum! 😊

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### **Post by “Cassius” of April 16, 2021 at 3:07 PM**

Also on the topic of "take-aways" I think it's useful to review these couple of paragraphs from DeWitt. As I read it, it's possible that he is right or possible he is wrong about the way he is interpreting the functioning of the anticipations. However I think in his diagnosis of what Epicurus was trying to do, he is almost certainly correct.

If we (Epicurus) want to defeat both rationalism and skepticism, we have to be able to articulate a totally natural (non-abstract-logic-based) process which allows us to have confidence in the conclusions we reach based on our observations. This process cannot rely on abstract logic, or else abstract logic takes over like the proverbial camel with nose under the tent, so it has to be ejected entirely except as a supplemental factor. Likewise we can't let observation alone rule the day, without drawing any conclusions, but that would effectively amount to skepticism and establish the rule that we can never have confidence in anything.

So to some extent this is an issue that is probably like the free agency and the swerve. As with the swerve, we may not be able to describe the mechanism of consciousness with certainty, nor should we really think that we need to (since such a task would be as impossible as asking to view the entire universe in order to see if it has an end). All we really need to do is to articulate in broad terms that there are mechanisms by which we can have confidence in living happily if we eject both skepticism and rationalism in favor of reliance on the faculties that Nature gave us.

EPICURUS AND HIS PHILOSOPHY

John Locke, in fact, set out as the founder of modern empiricism. Thus a misunderstanding of Epicurus underlies a main trend of modern philosophy. This surprising fact begins an even greater search for a correct interpretation, which may seem likely to appear slightly later.

The inclusion of the Canon reflects a contemporary striving for an increase of precision in all the arts, agriculture, architecture, music, and mathematics, but the immediate provocation is to be found in the teachings of Pythagoras the Olympic and of Plato. Pythagoras' rejection of both reason and the emotions as criteria revealed acute the need of establishing a canon of truth. In the judgment of Epicurus Plato also failed as a skeptic, because he believed the emotions as indispensable and phenomena as deceptive, the only real and eternal existence being the ideas. Thus in his system reason became the only source between man and reality, and human reason was crippled by the imprisonment of the soul in the body.

Epicurus denied the existence of Platonic ideas on the ground that the only existences were atoms and empty space. Thus in his thinking man stood face to face with physical reality and his sensations constituted the sole contact with this reality. What he supposed in this point he would have been an empiricist, but he did not. He made room also for a kind of intuition, which is incompatible with empiricism. He postulated that man was equipped in advance by Nature for living in his prospective environment, and not in his physical environment alone but also in his social environment. In addition to the five senses this experience included inner ideas, such as that of justice, and these ideas, because they existed in advance of experience, were called anticipations. Moreover, as Epicurus postulated, each experience of the individual, the sensation included, is accompanied by a secondary reaction of pleasure or pain. These pleasures and pains are the feelings, which also react as criteria, being Nature's Go and Stop signals.

Thus Nature, having equipped man with a triple contact with his environment, became a norm, while the Platonic Reason is eliminated along with the Platonic ideas. It now remains to explain in more detail the disengagement of Reason and the recognition of Nature as the norm.

THE DESEPARATION OF REASON

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## Post by "Don" of April 16, 2021 at 3:15 PM

### [Quote from Cassius](#)

With the continual caveat that (1) Epicurus' philosophical perspective might not be the same at all as what modern science is looking at, and (2) we need to be constantly on guard as to the implications of any particular approach.

Agreed, but I don't think it's counter to the philosophy to try to incorporate our best understanding of nature. Epicurus and the founders didn't have access to the last 2000+ years of science, so the fact that we can even have this conversation comparing modern neuroscience with Epicurus's philosophy is mind-boggling to me!

### [Quote from Cassius](#)

I believe DeWitt to be correct at least insofar as he is stressing that there is a human functioning process that Nature set up for us to use to determine what to consider to be "true," and that this biological process is not "abstract reason" or "abstract logic." That would be the takeaway of most any version of the whole "canon of truth" discussion.

From what I read, DeWitt is surmising there's a sequence but basically so intertwined it's hard to say which comes first. She's yes Barrett would not give logic a part in this. Godfrey is right to in saying: Past experience gives us the ability to build "concepts" (read Epicurean prolepses). Our senses are compared to these concepts/prolepses which affects our affective circumplex (read Epicurean pathē: pleasure/pain ἡδονή/ἄλγος).

## Post by “Don” of April 16, 2021 at 3:34 PM

<https://www.academia.edu/resource/work/4310042>

Of possible interest here is Sedley's paper on Epicurus's On Nature Book XXVIII on language which talks quite a bit about prolepses and how the mind works especially in relation to language.

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## Post by “Godfrey” of April 16, 2021 at 8:48 PM

[Quote from Cassius](#)

All we really need to do is to articulate in broad terms that there are mechanisms by which we can have confidence in living happily if we eject both skepticism and rationalism in favor of reliance on the faculties that Nature gave us.

The only thing that I would add to this is that if understanding the mechanism in more detail helps us to increase pleasure, then it is worthwhile to do so to the degree that it does so. I think that having a basic understanding of predictions and affect could be useful in that regard.

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## Post by “Cassius” of April 17, 2021 at 2:38 AM

[Quote from Godfrey](#)

The only thing that I would add to this is that if understanding the mechanism in more detail helps us to increase pleasure, then it is worthwhile to do so to the degree that it does so.

Agreed, with the question always being "Does this increase detail in understanding **actually** produce that result?"

What I am not sure about, since I haven't gone as far into the details of LFB as you guys have, is whether the result increases confidence in resisting rationalism and idealism in thinking, or the reverse. I think there is a constant tension in the pursuit of any "detail" or "tool" that we not

<https://www.epicureanfriends.com/thread/1951-how-emotions-are-made-the-secret-life-of-the-brain-by-lisa-feldman-barrett/>

get so consumed in the detail that we lose sight of the reason we are pursuing the detail. We are never interested in knowledge for the sake of knowledge; the issue is whether it contributes to living happily. And the obstacle to living happily is only sometimes the lack of knowledge (such as might be the case when we need knowledge to diagnose and cure a disease, for example). Someone who gets a disease profits tremendously from drugs that treat that disease, and if we haven't pursued the knowledge to develop the drug, then we have a problem.

But there's also the constant issue that I think is present in Epicurean teaching that the disease we are treating and inoculating against is not a something that stems purely from lack of knowledge, but from an affirmative warped way of thinking that actually has a constituency behind it pushing its malevolent influence on unsuspecting people.

Skepticism, nihilism, rationalism, idealism, and on and on are the primary **philosophical** opponents that we are playing against just as much as we're playing against schizophrenia or other "clinical" conditions. We aren't in the game solely to respond to clinical conditions that developed naturally, though we do want to respond to those too.

I think that the ancient Epicureans diagnosed an example of this problem in the Stoic (and earlier) fixation on "virtue." Pursuing virtue became a tool in the minds of some people that transcended its function in happy living, and became an end in itself, with terribly misleading effects.

Sometimes it is in fact true that "the cure can be worse than the disease." If the pursuit of clinical knowledge ends up for any reason taking our eye off the overall goal, and leaves us open to other harms (because we fail to address them) then in philosophical study too the "cure" (pursuit of knowledge for the sake of knowledge) can be worse than the disease, by leaving us open to more powerful enemies which must at the same time be constantly guarded against.

An example of this occurs I think in our reading of Lucretius or many of the details of Epicurean physics. If we get too caught up in the comparison of Lucretian-age "science" against modern-day "science" then we can easily lose focus on the overall message. And that is something that is tempting to do, because all of us can easily get caught up in appreciating how far "ahead of its time" Epicurean physics turned out to be, as if the point of the discussion was to appreciate "the history of science" or something similar. If we see Lucretius as an exercise in the *history of science* it's very easy to lose sight of the fact of how the **conclusions** and **philosophical benefits** from science have in many ways **regressed**, rather than **progressed**, from the ancient Epicurean period. The Epicureans looked at their science and saw in it confirmation of the absence of supernatural gods, of the fact that we have but one life to live, of the fact that pleasure is the goal of life, and the fact that there can be no absolute standards of virtue or justice. If our "science" today isn't sustaining those conclusions with even greater clarity than before, then I think we have to seriously question how much "progress" has really been made.

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## Post by “Don” of April 17, 2021 at 8:23 AM

### [Quote from Cassius](#)

What I am not sure about, since I haven't gone as far into the details of LFB as you guys have, is whether the result increases confidence in resisting rationalism and idealism in thinking, or the reverse.

My first response to that is "Yes, it does resist those." My take on LFB is that her research shows that our bodies naturally inform us how to act. Our bodies want to be in equilibrium, to have our budgets in balance. We ignore that at our peril. Understanding that things that gives us pleasure are generally positive for our well-being and things that move our affective circumplex toward high arousal levels of displeasure are negative for it. With caveats, per LFB, that things like exercise may be unpleasant in the moment and make us run a deficit in our body budget but will pay benefits in the long run. And not automatically assigning emotions to our affective feelings but instead looking at the underlying physical characteristics can get us in touch with pleasure and displeasure in our lives.

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## Post by “Cassius” of April 17, 2021 at 8:41 AM

### [Quote from Don](#)

Our bodies want to be in equilibrium, to have our budgets in balance.

How does "equilibrium" square with: *"For we recognize pleasure as the first good innate in us, and from pleasure we begin every act of choice and avoidance, and to pleasure we return again, using the feeling as the standard by which we judge every good."*

Is talk about "equilibrium" going to carry one down the road to "tranquility" - or even Buddhism - instead of to "pleasure?"

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## Post by “Don” of April 17, 2021 at 10:49 AM

My first reaction is that tranquility/equilibrium ("neither pain in the body nor trouble in the mind") are defined specifically as pleasure by Epicurus.

I'm still of the general opinion that Epicurus's goal or telos is "living pleasurably" and not "pleasure" which sounds to me like we need to be titillated at all times.

I fully agree that the greatest good can't be imagined "without the joys of taste, of sex, of hearing, and without the pleasing motions caused by the sight of bodies and forms" but there's nothing inherently inconsistent with Epicurus's philosophy to wanting to have a calm mind and a pain free body.

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## Post by "Cassius" of April 17, 2021 at 12:15 PM

### [Quote from Don](#)

nothing inherently inconsistent with Epicurus's philosophy to wanting to have a calm mind and a pain free body.

Absolutely agreed that there is nothing inconsistent about that, the issue would be that of being strictly rigorous in identifying the goal - the "end of nature," rather than getting sidetracked on lesser issues that are only part of the goal, like some people tend to do when they focus on the means rather than the end.

As for the distinction between "living pleasurably" and "pleasure" I think that the issue revolves around the context in which you're discussing the issue. If you're in a strictly philosophic debate you reduce things down to as essential and clear a concept as possible, so you end up expressing it like Torquatus did with his formulation:

### Quote

I will start then in the manner approved by the author of the system himself, by settling what are the essence and qualities of the thing that is the object of our inquiry; not that I suppose you to be ignorant of it, but because this is the logical method of procedure. We are inquiring, then, what is the final and ultimate Good, which as all philosophers are agreed must be of such a nature as to be the End to which all other things are means, while it is not itself a means to anything else. This Epicurus finds in pleasure; pleasure he holds to be the Chief Good, pain the Chief Evil.

When we start talking about "living pleurably" we're getting in the details of exactly what pleasures we're pursuing in a particular moment. When we talk about "pleasure" it sounds like we're at that higher level of identifying our ultimate goal (such as "virtue" vs "piety" vs "reason" vs "wisdom" vs "pleasure")

Both perspectives are valid and should not be seen to be at war with each other, or that one needs to replace the other.

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## Post by "Godfrey" of April 17, 2021 at 2:30 PM

Digressing to post #31:

### [Quote from Cassius](#)

Skepticism, nihilism, rationalism, idealism, and on and on are the primary philosophical opponents that we are playing against just as much as we're playing against schizophrenia or other "clinical" conditions. We aren't in the game solely to respond to clinical conditions that developed naturally, though we do want to respond to those too.

"Predictions," perhaps as a fine-tuning or an evolution of anticipations, provide both a response to other philosophies and a tool for working with clinical conditions. This is because of the information that we are able to modify our predictions (although it is a process and takes work) as a means toward increasing our pleasure. Also, as LFB takes pains to point out, there is no pure "rationality" as it is always affected by our affect.

Understanding the processes she describes in her book not only provides arguments against other philosophies, but because the processes do seem to have a relationship to the Canon then they also provide support for the Epicurean view of life.

The affective circumplex is something that can be evaluated as to whether it gives us a better understanding of pleasure and pain. That information is valuable to an Epicurean to the degree that it can be put into practice.

As to clinical conditions, I came across this short podcast:

<https://shows.acast.com/one-thing-pain...lorimer-moseley>

At about 7 plus minutes there is a description that sounded to me like a practical application of the Canon. Although that's my interpretation; the interviewee was discussing information from his scientific work and not anything about Epicurus. But that is exactly what, to me, is so

interesting: we keep running across science that seems to correspond to EP. This doesn't make me want to become a scientist, but it does motivate me to try to understand ways to incorporate new information into my pursuit of Epicurean pleasure as the two seem to be mutually reinforcing.

Physics seems to me to be more of an intellectual exercise and perhaps not as useful for daily living. (Unless, of course one is a physicist [Martin](#) !) But neuroscience seems to have direct applications to daily living. One doesn't need to be a neuroscientist, but one can get value from reading up on it (to the point where it brings one more pleasure than pain 😊 )

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### Post by “Don” of April 17, 2021 at 3:04 PM

#### [Quote from Cassius](#)

Both perspectives are valid and should not be seen to be at war with each other, or that one needs to replace the other.

Point well taken. It just worries me at times that people (opponents primarily) may try to use the single word "pleasure" to mischaracterize the philosophy as Cyrenaic hedonism.

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### Post by “Cassius” of April 17, 2021 at 4:17 PM

#### [Quote from Godfrey](#)

The affective circumplex

OK we're going to need some definitions soon!

#### [Quote from Don](#)

may try to use the single word "pleasure" to mischaracterize the philosophy as Cyrenaic hedonism.

What is this "may" stuff? Two thousand years of it and you can bet your life the misrepresentation / confusion will last another two thousand years too! I'm afraid this is

something we just have to live with and do our best to avoid, but not by watering down the true philosophy. 😊

Quote

When, therefore, we maintain that pleasure is the end, we do not mean the pleasures of profligates and those that consist in sensuality, as is supposed by some who are either ignorant or disagree with us or do not understand,

More seriously you are of course right, but the issue that takes precedence (at least in my mind, and in many circumstances) is that clarity and the benefit of ourselves and our friends trumps everything else, regardless of what the "rabble" choose to believe! 😊

Quote

VS 29. For I would certainly prefer, as I study Nature, to announce frankly what is beneficial to all people, even if none agrees with me, rather than to compromise with common opinions, and thus reap the frequent praise of the many.

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### Post by “Godfrey” of April 17, 2021 at 5:29 PM

[Cassius](#) affect and the affective circumplex (I keep thinking of cineplex 😄) are described in post #2. The affective circumplex is illustrated in the image in that post and is just a graph of valence (pleasure/displeasure) in one direction and arousal in the other direction. Maybe there's a simpler name for it like "affect graph," I've just been using the name from the book.

It seems like another useful way to represent and discuss pleasure, as we do from time to time 😊

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### Post by “Don” of April 17, 2021 at 7:54 PM

[Quote from Cassius](#)

More seriously you are of course right, but the issue that takes precedence (at least in my mind, and in many circumstances) is that clarity and the benefit of ourselves and our friends trumps everything else, regardless of what the "rabble" choose to believe!

When you say rabble, I relish the fact that Epicurus literally uses οἱ πολλοί "hoi polloi" (the many, literally) to refer to the masses who misunderstand our hold false opinions.

More seriously (to borrow a phrase), I think it behooves all of us in all circumstances to be clear in our minds what we mean and to be clear in our presentation. I have no argument with those who say the goal is pleasure period, but I'm going to always read that as live pleurably.

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### **Post by “Cassius” of April 17, 2021 at 8:09 PM**

Yeah I thought about not using the "rabble" word but I couldn't remember the "hoi polloi"! Actually neither term fits my target, because I don't mean to say anything demeaning about those who innocently misconstrue. My focus is on the strictly philosophical debate i referenced earlier, in with "pleasure" is the more technical term and "living pleurably" is the more colloquial description. (I was thinking there was a passage about "the crowd" but couldn't put my finger on it.)

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### **Post by “Don” of April 19, 2021 at 9:42 AM**

#### [Quote from Cassius](#)

Yeah I thought about not using the "rabble" word but I couldn't remember the "hoi polloi"! Actually neither term fits my target, because I don't mean to say anything demeaning about those who innocently misconstrue. My focus is on the strictly philosophical debate i referenced earlier, in with "pleasure" is the more technical term and "living pleurably" is the more colloquial description. (I was thinking there was a passage about "the crowd" but couldn't put my finger on it.)

I was just thinking that we need to be clear that saying the "goal is pleasure" doesn't mean we don't voluntarily choose pain if it means attaining the "goal of living pleurably." And that's not Stoic, that's Epicurus.

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## Post by “Cassius” of April 19, 2021 at 10:31 AM

### [Quote from Don](#)

I was just thinking that we need to be clear that saying the "goal is pleasure" doesn't mean we don't voluntarily choose pain if it means attaining the "goal of living pleasurable." And that's not Stoic, that's Epicurus.

Right, but it's possible to use the same construction and say that you voluntarily choose pain in order to achieve pleasure if you define the pleasure you're talking about as "the greatest net" pleasure or "ultimate pleasure." The wording is clearly tricky and I keep coming back in my mind that the use of the construction "pleasure" makes sense mainly as a reply, and in the context of choosing between, "virtue" or "piety" or "wisdom" or some other very high level abstraction.

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## Post by “Godfrey” of April 19, 2021 at 1:43 PM

[Cassius](#) just to be clear, are you saying that there is a difference between "arguing" the philosophy and living the philosophy?

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## Post by “Cassius” of April 19, 2021 at 2:48 PM

To some extent definitely, but I think the distinction that I am making is that philosophy can be, from some perspectives, a word game which is a trap for the unwary. I do not believe Epicurus said simply 'don't play that game.'. I think Epicurus realized that many people are already trapped by that word game, and he formulated the way out using the rules of his opponents' games, as a means of liberating those who fell into the trap before they were exposed to Epicurus.

For such people, teaching a way out of the word game is an essential and valid approach. And I think that approach is at least as valuable today as it was then, because virtually everyone is captured by some variation of the virtue / rationalism game.

## Post by "Cassius" of April 19, 2021 at 3:52 PM

To expand now I am home, yes - I think this perspective is essential to understanding what appear otherwise to be ambiguities or inconsistencies in the philosophy. Epicurus is all about practicality, and yet he is frequently referring to "pleasure" which is about as broad a word as can possibly be.

I think the reason is that what we have preserved in the letters is the highest-level summary of the philosophy, which as such is necessarily stated in highly abstract terms. That leads to what I think is the key error of the "absence of pain" approach. Those people are attempting to take a highest-level summary and trying to convert it directly into a "what should I eat at noon today" level of detail. Talking about "Pleasure" was never meant to be that kind of immediately practical advice --- or better stated, the immediate practical use of the abstraction "pleasure" is to respond to the false assertion that it is not feeling, but Virtue or Reason or Piety that should be the goal of life.

I think if we had the reams of other material we would see the practical translation of this term into the details we are looking for, but that instead all we have is the highest level outline rather than the details we are expecting to find (having been conditioned by stoicism and religion to detailed do's and don't).

This is not shortsightedness or an error on Epicurus' part but an error on our part in thinking that what amounts to a high-level spec sheet can be used as an operating manual.

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## Post by "Cassius" of April 19, 2021 at 4:43 PM

To state one more way, this is the "[Philebus](#)" issue. People who have fallen into the trap of the Academy or the Stoa or even the Peripatetics cannot escape the trap laid by Socrates in [Philebus](#) because they are in thrall to "logic." As such, they cannot think their way out of the implications of Socrates' questions, which boil down to the requirement that the greatest good must be describable in absolute terms as having a "limit.". They presume that more pleasure is always better, so they are forced to admit that pleasure has no limit, and thereby (according to the premises they have accepted) cannot be the greatest good.

Describing the limit of pleasure as the absence of pain has little if any "practical" appeal (real people always want to know which pleasures and which pains) but it is the precise answer to the logic trap which [Philebus](#) could not escape.

I think stating the issue this way is reasonably clear, but I do not think it is possible to appreciate the significance of this without reading [Philebus](#) for oneself and seeing the trap that was laid, and how Epicurus offers the way out.

Back in Athens most people would know the story of [Philebus](#). Today very few do, so pushing this argument forward is going to require laying the foundation through [Philebus](#). The same argument appears in Seneca so the Epicurean remedy can also be illustrated there, but of course Seneca long post dated Epicurus, so the real key is [Philebus](#), which is focused on the issue of Pleasure.

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## Post by “Cassius” of April 19, 2021 at 6:29 PM

To save time for anyone reading along, the heart of the sections in [Philebus](#) and Seneca I am referring to are:

*SOCRATES: I omit ten thousand other things, such as beauty and health and strength, and the many beauties and high perfections of the soul: O my beautiful [Philebus](#), the goddess, methinks, seeing the universal wantonness and wickedness of all things, and that there was in them no **limit to pleasures** and self-indulgence, devised the limit of law and order, whereby, as you say, [Philebus](#), she torments, or as I maintain, delivers the soul. — What think you, Protarchus?*

...

***SOCRATES: Have pleasure and pain a limit, or do they belong to the class which admits of more and less?***

*[PHILEBUS](#): They belong to the class which admits of more, Socrates; for pleasure would not be perfectly good if she were not infinite in quantity and degree.*

*SOCRATES: Nor would pain, [Philebus](#), be perfectly evil. And therefore the infinite cannot be that element which imparts to pleasure some degree of good. But now — admitting, if you like, that pleasure is of the nature of the infinite — in which of the aforesaid classes, O Protarchus and [Philebus](#), can we without irreverence place wisdom and knowledge and mind? And let us be careful, for I think that the danger will be very serious if we err on this point.*

*[PHILEBUS](#): You magnify, Socrates, the importance of your favourite god.*

*SOCRATES: And you, my friend, are also magnifying your favourite goddess; but still I must beg you to answer the question.*

...

*SOCRATES: And whence comes that soul, my dear Protarchus, unless the body of the universe, which contains elements like those in our bodies but in every way fairer, had also a soul? Can there be another source?*

*PROTARCHUS: Clearly, Socrates, that is the only source.*

*SOCRATES: Why, yes, Protarchus; for surely we cannot imagine that of the four classes, the finite, the infinite, the composition of the two, and the cause, the fourth, which enters into all things, giving to our bodies souls, and the art of self-management, and of healing disease, and operating in other ways to heal and organize, having too all the attributes of wisdom; — we cannot, I say, imagine that whereas the self-same elements exist, both in the entire heaven and in great provinces of the heaven, only fairer and purer, this last should not also in that higher sphere have designed the noblest and fairest things?*

*PROTARCHUS: Such a supposition is quite unreasonable.*

*SOCRATES: Then if this be denied, should we not be wise in adopting the other view and maintaining that there is in the universe a mighty infinite and **an adequate limit**, of which we have often spoken, as well as a presiding cause of no mean power, which orders and arranges years and seasons and months, and may be justly called wisdom and mind?*

*PROTARCHUS: Most justly.*

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We can find the same point made by Seneca in the following letters:

*Quote Seneca's Letters - Book I - Letter XVI: This also is a saying of Epicurus: **"If you live according to nature, you will never be poor; if you live according to opinion, you will never be rich."** Nature's wants are slight; the demands of opinion are boundless. Suppose that the property of many millionaires is heaped up in your possession. Assume that fortune carries you far beyond the limits of a private income, decks you with gold, clothes you in purple, and brings you to such a degree of luxury and wealth that you can bury the earth under your marble floors; that you may not only possess, but tread upon, riches. Add statues, paintings, and whatever any art has devised for the luxury; you will only learn from such things to crave still greater. **Natural desires are limited; but those which spring from false opinion can have no stopping point. The false has no limits.***

*Quote Seneca's Letters - To Lucilius - 66.45: "What can be added to that which is perfect? Nothing otherwise that was not perfect to which something has been added. Nor can anything be added to virtue, either, for if anything can be added*

thereto, it must have contained a defect. Honour, also, permits of no addition; for it is honourable because of the very qualities which I have mentioned.[5] What then? Do you think that propriety, justice, lawfulness, do not also belong to the same type, and that they are kept within fixed limits? **The ability to increase is proof that a thing is still imperfect.**”