Epicurean Logic and Reason: Deriving True Opinion Through Evidence From The Canon of Truth

Post by “Cassius” of January 18, 2021 at 7:51 PM

The issue to be explored here is the nature of opinion, and how opinion is derived from the Canon of Truth without the use of "formal logic" or "dialectic." In Epicurean philosophy, as we know from Lucretius, knowledge does not reside within the senses, In discussing shadows Lucretius says "*But in this case we are not in the least to allow that the eyes are deceived; it is their business to discover only where the light and shade are, but to determine nothing whether the light be the same, or the shadow be the same that moves from one place to another, or whether it be as we explained above. It is the office of the mind and judgment to distinguish this, for the eyes can know nothing of the nature of things, and therefore you are not to impute to them the failures of the mind.*"

Recent discussions indicate to me that it is important to clarify the terminology in this area. As I see it, there is a distinctly Epicurean form of "logic" and "reason" as opposed to the use of "abstract logic" or "formal logic" or "symbolic logic" in which truth is considered to be derived from formal propositions using syllogisms in mathematical or geometric form such a "If A then P," with the major difficulty of the formal approach being that the use of symbols cannot adequately convey the reality of the thing being measured. There is in reality no "A" or "P" in ideal form a might be associated with the views of Plato - there are in the universe only individual things comprised of atoms and void, and there is a constant peril that the individual characteristics of the thing being considered vary from the ideal "A" or "P."

Here are some references to Lucretius' use of "reason" and "true reason"

IV. "OBJECTIVITY" IN LUCRETIUS

The vocabulary of Lucretius emphasizes a methodology of "objectivity" in the sense of facts or perceptions expressed undistorted by personal emotions, prejudices, or traditional viewpoints. Lucretius places considerable stress on *ratio* and related terms as the mental basis upon which explanations of the universe are to be made. *Ratio* is used in various senses, but its primary significance is "reasoning, rational system of thought or explanation." Things are to be confirmed (*confirmare*) by the "reasoning of the mind" (*animi ratione,* 425) and are to be seen (*videndum*) with "keen reasoning" (*ratione sagaci,* 130–131). The arguments Lucretius presents are sufficient for "a keen mind" (*animo sagaci,* 402). One needs to be open-minded, which involves "empty ears" (*vacuas auris,* 50), being "removed from cares" (*semotum a curis, 51),* freedom from oppressive religion (62–101), freedom from fear, particularly fear of death (102ff.). The ultimate explanation must be comprehensive (*omne immensum peragravit mente animoque,* 74) and should be based on evidence presented to the human senses, particularly that of sight (422–425, 699–700). A serious truth-seeker will not allow himself to fall away from "true reasoning" (*vera ratione*) by twisted words (*inversis verbis)* that touch the ears nicely (*belle tangere auris)* and are "painted" ("tricked out") with a charming (seductive) sound (*lepido quae sunt fucata sonore*) (635–644).

In keeping with these principles, Lucretius makes frequent use of inferential conjunctions throughout his work to emphasize the logical flow and force of his arguments. Most common among these is *igitur;* others include *ergo, quapropter* and the emphatic *quare etiam atque etiam.*

Should the canon of truth be considered to be a replacement or substitute for "logic" and reason" as those terms are used by ordinary people, or are they better thought of as a description of specifically Epicurean premises which are the beginning point of a truly practical and useful logic and reason?

One place to start is to collect the major references in the Epicurean texts and commentators. Major sources are:

1. Diogenes Laertius on the Canon of Truth.
    1. We must begin with the first letter, but I will first speak briefly about the divisions of his philosophy. It is divided into three parts, the Canonicon (or Procedure), the Physics and the Ethics. The Canonicon gives the method of approach to the system, and is contained in the work called The Canon. The Physics contains all the investigation into nature, and is contained in the thirty-seven books On Nature and in an abridged form in the letters. The Ethics deals with choice and avoidance, and is contained in the books On Lives and the letters and the book on The End. The Epicureans usually group the Canonicon with the Physics and state that it deals with the criterion of truth and the fundamental principles and contains the elements

of the system. The Physics deals with creation and dissolution and with nature; the Ethics with things to be chosen or avoided, with the conduct of life and its purpose.

2. Logic [or dialectic?] they reject as misleading. For they say it is sufficient for physicists to be guided by what things say of themselves. Thus in The Canon Epicurus says that the tests of truth are the sensations and concepts and the feelings; the Epicureans add to these the intuitive apprehensions of the mind. And this he says himself too in the summary addressed to Herodotus and in the Principal Doctrines. For, he says, all sensation is irrational and does not admit of memory; for it is not set in motion by itself, nor when it is set in motion by something else, can it add to it or take from it. Nor is there anything which can refute the sensations. For a similar sensation cannot refute a similar because it is equivalent in validity, nor a dissimilar a dissimilar, for the objects of which they are the criteria are not the same; nor again can reason, for all reason is dependent upon sensations; nor can one sensation refute another, for we attend to them all alike. Again, the fact of apperception confirms the truth of the sensations. And seeing and hearing are as much facts as feeling pain. From this it follows that as regards the imperceptible we must draw inferences from phenomena. For all thoughts have their origin in sensations by means of coincidence and analogy and similarity and combination, reasoning too contributing something. And the visions of the insane and those in dreams are true, for they cause movement, and that which does not exist cannot cause movement.
3. The concept [preconception / anticipation?] they speak of as an apprehension or right opinion or thought or general idea stored within the mind, that is to say a recollection of what has often been presented from without, as for instance ‘Such and such a thing is a man,’ for the moment the word ‘man’ is spoken, immediately by means of the concept his form too is thought of, as the senses give us the information. Therefore the first signification of every name is immediate and clear evidence. And we could not look for the object of our search, unless we have first known it. For instance, we ask, ‘Is that standing yonder a horse or a cow?’ To do this we must know by means of a concept the shape of horse and of cow. Otherwise we could not have named them, unless we previously knew their appearance by means of a concept. So the concepts are clear and immediate evidence. Further, the decision of opinion depends on some previous clear and immediate evidence, to which we refer when we express it: for instance, ‘How do we know whether this is a man?’ Opinion they also call supposition, and say that it may be true or false: if it is confirmed or not contradicted, it is true ; if it is not confirmed or is contradicted, it is false. For this reason was introduced the notion of the problem awaiting confirmation: for example, waiting to come near the tower and see how it looks to the near view.
4. The internal sensations they say are two, pleasure and pain, which occur to every living creature, and the one is akin to nature and the other alien: by means of these two choice and avoidance are determined. Of investigations some concern actual things, others mere words. This is a brief summary of the division of their

philosophy and their views on the criterion of truth.

2. Epicurus' Recorded sayings and letters:
    1. Principal Doctrines
        1. PD 16. In but few things chance hinders a wise man, but the greatest and most important matters, reason has ordained, and throughout the whole period of life does and will ordain.
        2. PD 22.We must consider both the real purpose, and all the evidence of direct perception, to which we always refer the conclusions of opinion; otherwise, all will be full of doubt and confusion.
        3. PD 23. If you fight against all sensations, you will have no standard by which to judge even those of them which you say are false.
        4. PD 24. If you reject any single sensation, and fail to distinguish between the conclusion of opinion, as to the appearance awaiting confirmation, and that which is actually given by the sensation or feeling, or each intuitive apprehension of the mind, you will confound all other sensations, as well, with the same groundless opinion, so that you will reject every standard of judgment. And if among the mental images created by your opinion you affirm both that which awaits confirmation, and that which does not, you will not escape error, since you will have preserved the whole cause of doubt in every judgment between what is right and what is wrong.
        5. PD 25. If on each occasion, instead of referring your actions to the end of nature, you turn to some other, nearer, standard, when you are making a choice or an avoidance, your actions will not be consistent with your principles.
    2. Letter to Herodotus
        1. Forthose who are unable, Herodotus, to work in detail through all that I have written about nature, or to peruse the larger books which I have composed, I have already prepared at sufficient length an epitome of the whole system, that they may keep adequately in mind at least the most general principles in each department, in order that as occasion arises they may be able to assist themselves on the most important points, in so far as they undertake the study of nature. But those also who have made considerable progress in the survey of the main principles ought to bear in mind the scheme of the whole system set forth in its essentials. For we have frequent need of the general view, but not so often of the detailed exposition. Indeed it is necessary to go back on the main principles, and constantly to fix in one’s memory enough to give one the most essential comprehension of the truth. And in fact the accurate knowledge of details will be fully discovered, if the general principles in the various departments are thoroughly grasped and borne in mind; for even in the case of one fully initiated the most essential feature in all accurate knowledge is the capacity to make a rapid use of observation and mental apprehension, and this can be done if everything is summed up in elementary principles and formulae. For it is not possible for anyone to

abbreviate the complete course through the whole system, if he cannot embrace in his own mind by means of short formulae all that might be set out with accuracy in detail. Wherefore since the method I have described is valuable to all those who are accustomed to the investigation of nature, I who urge upon others the constant occupation in the investigation of nature, and find my own peace chiefly in a life so occupied, have composed for you another epitome on these lines, summing up the first principles of the whole doctrine.

2. First of all, Herodotus, we must grasp the ideas attached to words, in order that we may be able to refer to them and so to judge the inferences of opinion or problems of investigation or reflection, so that we may not either leave everything uncertain and go on explaining to infinity or use words devoid of meaning. For this purpose it is essential that the first mental image associated with each word should be regarded, and that there should be no need of explanation, if we are really to have a standard to which to refer a problem of investigation or reflection or a mental inference. And besides we must keep all our investigations in accord with our sensations, and in particular with the immediate apprehensions whether of the mind or of any one of the instruments of judgment, and likewise in accord with the feelings existing in us, in order that we may have indications whereby we may judge both the problem of sense perception and the unseen. Having made these points clear, we must now consider things imperceptible to the senses.
3. Now we must suppose too that it is when something enters us from external objects that we not only see but think of their shapes. For external objects could not make on us an impression of the nature of their own colour and shape by means of the air which lies between us and them, nor again by means of the rays or effluences of any sort which pass from us to them — nearly so well as if models, similar in color and shape, leave the objects and enter according to their respective size either into our sight or into our mind; moving along swiftly, and so by this means reproducing the image of a single continuous thing and preserving the corresponding sequence of qualities and movements from the original object as the result of their uniform contact with us, kept up by the vibration of the atoms deep in the interior of the concrete body. And every image which we obtain by an act of apprehension on the part of the mind or of the sense-organs, whether of shape or of properties, this image is the shape or the properties of the concrete object, and is produced by the constant repetition of the image or the impression it has left. Now falsehood and error always lie in the addition of opinion with regard to what is waiting to be confirmed or not contradicted, and then is not confirmed or is contradicted. For the similarity between the things which exist, which we call real and the images received as a likeness of things and produced either in sleep or through some other acts of apprehension on the part of the mind or the other instruments of judgment, could never be, unless there were

> some effluences of this nature actually brought into contact with our senses. And error would not exist unless another kind of movement too were produced inside ourselves, closely linked to the apprehension of images, but differing from it; and it is owing to this, supposing it is not confirmed, or is contradicted, that falsehood arises; but if it is confirmed or not contradicted, it is true. Therefore we must do our best to keep this doctrine in mind, in order that on the one hand the standards of judgment dependent on the clear visions may not be undermined, and on the other error may not be as firmly established as truth and so throw all into confusion.

1. Lucretius Book IV, particularly the section starting with images and illusions and culminating in the assertion that there the denial of the possibility of knowledge is foolish or perverse, and that there is no source of authority higher than the senses.
    1. Lastly, if anyone thinks that he knows nothing, he cannot be sure that he knows this, when he confesses that he knows nothing at all. I shall avoid disputing with such a trifler, who perverts all things, and like a tumbler with his head prone to the earth, can go no otherwise than backwards. And yet allow that he knows this, I would ask (since he had nothing before to lead him into such a knowledge) whence he had the notion what it was to know, or not to know; what it was that gave him an idea of Truth or Falsehood, and what taught him to distinguish between doubt and certainty? But you will find that knowledge of truth is originally derived from the senses, nor can the senses be contradicted, for whatever is able by the evidence of an opposite truth to convince the senses of falsehood, must be something of greater certainty than they. But what can deserve greater credit than the senses require from us? Will reason, derived from erring sense, claim the privilege to contradict it? Reason - that depends wholly upon the senses,which unless you allow to be true, all reason must be false. Can the ears correct the eyes? Or the touch the ears? Or will taste confute the touch? Or shall the nose or eyes convince the rest? This, I think, cannot be, for every sense has a separate faculty of its own, each has its distinct powers; and therefore an object, soft or hard, hot or cold, must necessarily be distinguished as soft or hard, hot or cold, by one sense separately, that is, the touch. It is the sole province of another, the sight, to perceive the colors of things, and the several properties that belong to them. The taste has a distinct office. Odors particularly affect the smell, and sound the ears. And therefore it cannot be that one sense should correct another, nor can the same sense correct itself, since an equal credit ought to be given to each; and therefore whatever the senses at any time discover to us must be certain. And though reason is not able to assign a cause why an object that is really four-square when near, should appear round when seen at a distance; yet, if we cannot explain this difficulty, it is better to give any solution, even a false one, than to deliver up all Certainty out of our power, to break in upon our first principle of belief, and tear up all foundations upon which our life and security depend. For not only all reason must be overthrown, but life itself must be immediately extinguished, unless you give credit to your senses.

These direct you to fly from a precipice and other evils of this sort which are to be avoided, and to pursue what tends to your security. All therefore is nothing more than an empty parade of words that can be offered against the certainty of sense. Lastly, as in a building, if the principle rule of the artificer be not true, if his line be not exact, or his level bear in to the least to either side, every thing must needs be wrong and crooked, the whole fabric must be ill-shaped, declining, hanging over, leaning and irregular, so that some parts will seem ready to fall and tumble down, because the whole was at first disordered by false principles. So the reason of things must of necessity be wrong and false which is founded upon a false representation of the senses.

2. Philodemus' On Methods of Inference. The reference work that I refer to on this is the translation by Philip and Estelle DeLacy, and I believe the commentary provided by Delacy is of particular importance in pointing out the ways to distinguish Epicurus from Aristotle and Plato and others. I urge everyone to read this section about Epicurus' rejection of Platonic and Aristotelian rationalism and their opinion that a matter cannot be considered to be true unless it is reducible to a syllpogism.
    1. [Note: We have not explored "On Methods of Inference" closely on this forum, and we urgently need to remedy that. I will paste here just a couple of excerpts but there are probably far better ones to list here]
    2. Dionysius tries to refute by sophistry the answers which our school makes; for while we [Epicureans] claim that the method of analogy pervades completely the method of contraposition, and that the latter is confirmed by the former, he says that we err because of the ambiguity of the word, since we use the word “analogy” first of the common qualities of the apparent and the unperceived, and second, of the process of inference. Furthermore, he charges, in some cases we infer about objects by our own method of analogy, and sometimes by contraposition, so that we use both principles; and (he charges further) we consider that every appearance and notion is necessarily true and suppose that that which is called analogy in any sense is useful.
    3. It happens, indeed, that his arguments are easily dissolved by anyone who examines them closely. The first two have the same force and are refuted in the following way. Granted that the proposition, *“If the first, then the second,”* is true whenever it is true that, *“If not the second, then not the first;”* it does not follow from this that only the method of contraposition is cogent. The proposition, *“If not the second, then not the first,”* sometimes is proved true when the second may be denied by hypothesis and from the mere denial of it the first is also denied, as in the proposition, *“If there is motion, there is void.”* For when void is denied by hypothesis, by the mere denial of it, motion will also be denied. Such an example, therefore, belongs to the class of contraposition. But sometimes the proposition is not proved in this way, but rather, when it is not possible to conceive that the first is or is of a certain character, and the second is not or is not of such character. For example, *“Plato is a man, and Socrates is a man.”* If this is true, it is true also that, *“If Socrates is not a man, neither is Plato a man,”* not because by the denial of

Socrates, Plato is denied along with him, but because it is *inconceivable* for Socrates not to be a man and Plato to be a man. But this inference is derived from the method of analogy. Therefore, neither the first nor the second argument proves that the analogical method of inference is not cogent.

4. The argument from unique cases is also weak. No one of our school denies such peculiarities, and yet the method of analogy does not become invalid because one class of stones draws iron. There is only one sun and one moon in our world; and there are a number of constant peculiarities in every class of objects; nor does any one class have the same peculiarities as the other classes. If other stones were similar to or identical with the stones that draw iron, and some drew iron, and some did not, the method of analogy would be destroyed. Since this does not happen, but since among the many different varieties of stones the magnet has a certain peculiarity of a specific kind, and it shows from the outset its particular nature, in no way is the method of analogy shaken. And the fact that the square of four is the only square having its perimeter equal to its area does not hinder us from inferring by analogy; for all the square numbers tested by trial have shown that this distinction exists among them, so that one who denies it contradicts appearances. It is ridiculous that anything inferred from appearance about the unperceived should contradict appearance. When appearance has once revealed a square number of this kind, one who infers from such numbers in our experience to those in the infinite universes will make a valid inference that every square of four has its perimeter equal to its area, on the ground that it is inconceivable for those in our experience to be of this nature and those elsewhere not of this nature.
5. Whenever we infer from the proposition, *"Men in our experience are mortal,"* to the proposition, *"Men everywhere are mortal,"* we do not presuppose that the men about whom we infer are like those in our experience in respect to mortality, nor that they are like them in all other ways but are different in respect to mortality; but from the fact that all men in our experience are similar even in respect to mortality, we infer that all men universally are liable to death, since nothing opposes the inference or draws us a step toward the view that men do not admit of death. Appealing to this similarity we declare that in respect to mortality the men outside our experience are similar to those within our experience.
6. Inferences should be made from objects that are most closely related and from those that are as similar as possible; and one should not use broad similarities, disregarding those qualities which correspond more closely. For example, the inference is best made from particular men to those especially similar to them, and from the class of men to the class of things which follows the whole class of men, nothing inclining us the slightest bit to the contrary; from animals of a certain species to those especially like them, and from a class to the classes close to it; and from a body of a certain kind to another of the same kind, and from the generic body to the generic; from an entity of a certain nature to those especially like it, and from the generic entity, that which is a constant attribute of the greatest number of things, apart from which we are not able to conceive a common

existence, to the generic.

7. In answer to the argument about unique cases we say that one who infers well has noted rightly both the common qualities and the peculiarities, and he will use substances, powers, qualities, attributes, dispositions, quantities, and numbers as the inference requires. In some cases he will dismiss many differences in things homogeneous, when the differences correspond to the differences within our experience, and in some cases he will dismiss very few. Inferring in this way he will judge that men everywhere are vulnerable and have this peculiarity along with other differences analogous to the variations in our experience. There will not, however, be a peculiarity of such a kind, that it will appear possible in any way that a man be invulnerable or that we see any finite object not bounded by another object. For from the very fact that in all cases the same qualities are joined to these objects, the study of appearances has given confirmation to our argument
8. We shall dispose of the next argument by saying that those who infer badly are corrected by the facts in individual cases, with the qualification that those who make declarations about anything whatsoever sometimes affirm confidently a universal proposition, and sometimes use probability. Certainty and probability are both derived from the observation of appearances. For appearances have established that relativity is important in some cases, and yet in other cases there are constant similarities, as in the case of certain deadly poisons, purgatives, and drugs with other powers. It is not at all surprising that, although there is great and manifold variation in foods and in the beings nourished by them, there can be a determinate limit to what men can eat. For this reason we shall not admit that there are men who eat hay, easily digest it, and are nourished. Some things (mentioned by our opponents) are fabricated according to opinion and are taken from false records of the past; and, besides, nothing is accomplished by such inventions. For anyone who misrepresents any common features of appearances will destroy the whole method of inference.

3. Norman DeWitt's Chapter Seven on "The Canon, Reason, and Nature"
4. Diogenes of Oinoanda's references to the flux, and that Epicurus agreed that there is a flux, but not that it moves so fast that reliable conclusions cannot be drawn about it.
    1. Fr. 5 - [Others do not] explicitly [stigmatise] natural science as unnecessary, being ashamed to acknowledge [this], but use another means of discarding it. For, when they assert that things are inapprehensible, what else are they saying than that there is no need for us to pursue natural science? After all, who will choose to seek what he can never find? Now Aristotle and those who hold the same Peripatetic views as Aristotle say that nothing is scientifically knowable, because things are continually in flux and, on account of the rapidity of the flux, evade our apprehension. We on the other hand acknowledge their flux, but not its being so rapid that the nature of each thing [is] at no time apprehensible by sense-perception. And indeed [in no way would the upholders of] the view under discussion have been able to say (and this is just what they do [maintain] that [at one time] this is [white] and this black, while [at another time] neither this is [white

nor] that black, [if] they had not had [previous] knowledge of the nature of both white and black.

2. Fr. 34 [note that this passage is heavily reconstructed by MFS] ... reasoning ... [of happiness] ..... [is ... hope, after selection of these], and cure of erring emotions. So where, I say, the danger is great, so also is the fruit. Here we must turn aside these fallacious arguments on the grounds that they are insidious and insulting and contrived, by means of terminological ambiguity, to [lead] wretched human beings [astray] ..... [let us] not [avoid every pain that is present, and let us not choose every pleasure, as the many always do. Each person must employ reasoning,] since he [will not always achieve immediate success: just as] exertion (?) [often] involves one [gain at the beginning and] certain [others as time passes by], so it is also with [experiencing pleasure;] for sowings of seeds do [not] bring [the same benefit] to the sower but we see some seeds very quickly germinating [and bearing fruit and others taking longer] ..... of pleasures and [pains] ..... [pleasure].

5. Torquatus' references to Epicurus' differences from Plato as to geometry and related subjects in Cicero's "On Ends"
    1. The most important section is: "Logic [verify the Latin word?], on which your school lays such stress, he held to be of no effect either as a guide to conduct or as an aid to thought. Natural Philosophy he deemed all-important. This science explains to us the meaning of terms, the nature of predication, and the law of consistency and contradiction; secondly, a thorough knowledge of the facts of nature relieves us of the burden of superstition, frees us from fear of death, and shields us against the disturbing effects of ignorance, which is often in itself a cause of terrifying apprehensions; lastly, to learn what nature's real requirements are improves the moral character also. Besides, it is only by firmly grasping a well-established scientific system, observing the Rule or Canon that has fallen as it were from heaven so that all men may know it—only by making that Canon the test of all our judgments, that we can hope always to stand fast in our belief, unshaken by the eloquence of any man. On the other hand, without a full understanding of the world of nature it is impossible to maintain the truth of our sense-perceptions. Further, every mental presentation has its origin in sensation: so that no certain knowledge will be possible, unless all sensations are true, as the theory of Epicurus teaches that they are. Those who deny the validity of sensation and say that nothing can be perceived, having excluded the evidence of the senses, are unable even to expound their own argument. Besides, by abolishing knowledge and science they abolish all possibility of rational life and action. Thus Natural Philosophy supplies courage to face the fear of death; resolution to resist the terrors of religion; peace of mind, for it removes all ignorance of the mysteries of nature; self-control, for it explains the nature of the desires and distinguishes their different kinds; and, as I showed just now, the Canon or Criterion of Knowledge, which Epicurus also established, gives a method of discerning truth from falsehood.

We ought to address: What would we say are the distinguishing features of an Epicurean Logic / Epicurean Reason?

I would say that the most distinguishing feature is the material preserved in Book IV: that the test of valid logic and reason (Lucretius' vera ratio?) is that it begins with premises that are established as true and real by data from the senses, with the more validating data the better. This would be the presumed meaning of the assertions that there is no higher source of credibility than the senses in Book IV of Lucretius. To be more accurate, this would need to be extended to include all three legs of the canon of truth, to include the feelings and the anticipations, as stated by Diogenes Laertius.

We also need to be clear: Is everything that is in our minds "opinion," and it's just a matter of separating true opinion from false opinion from uncertain opinion by referring to the data gathered in the Canon of truth?

The Canon provides us the data that allows us to judge the correct answer, but the canon is not itself "the answer" to our questions, is it?

Perhaps the highest level summary of this is from Diogenes Laertius (this is Bailey with alternate translations of "logic" and "concept" included in brackets:

> Quote
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> We must begin with the first letter, but I will first speak briefly about the divisions of his philosophy.
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> It is divided into three parts, the Canonicon (or Procedure), the Physics and the Ethics. The Canonicon gives the method of approach to the system, and is contained in the work called The Canon. The Physics contains all the investigation into nature, and is contained in the thirty-seven books On Nature and in an abridged form in the letters. The Ethics deals with choice and avoidance, and is contained in the books On Lives and the letters and the book on The End. The Epicureans usually group the Canonicon with the Physics and state that it deals with the criterion of truth and the fundamental principles and contains the elements of the system. The Physics deals with creation and dissolution and with nature; the Ethics with things to be chosen or avoided, with the conduct of life and its purpose.
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> there anything which can refute the sensations. For a similar sensation cannot refute a similar because it is equivalent in validity, nor a dissimilar a dissimilar, for the objects of which they are the criteria are not the same; nor again can reason, for all reason is dependent upon sensations; nor can one sensation refute another, for we attend to them all alike. Again, the fact of apperception confirms the truth of the sensations. And seeing and hearing are as much facts as feeling pain. From this it follows that as regards the imperceptible we must draw inferences from phenomena. For all thoughts have their origin in sensations by means of coincidence and analogy and similarity and combination, reasoning too contributing something. And the visions of the insane and those in dreams are true, for they cause movement, and that which does not exist cannot cause movement.
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And one of the most useful observations about how Epicurean reasoning takes place is from Philodemus quoted above:

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> Inferences should be made from objects that are most closely related and from those that are as similar as possible; and one should not use broad similarities, disregarding

> those qualities which correspond more closely. For example, the inference is best made from particular men to those especially similar to them, and from the class of men to the class of things which follows the whole class of men, nothing inclining us the slightest bit to the contrary; from animals of a certain species to those especially like them, and from a class to the classes close to it; and from a body of a certain kind to another of the same kind, and from the generic body to the generic; from an entity of a certain nature to those especially like it, and from the generic entity, that which is a constant attribute of the greatest number of things, apart from which we are not able to conceive a common existence, to the generic.

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