

The Twelve Fundamentals - Discussion on Lucretius Today Podcast

Post by "Eikadistes" of January 5, 2023 at 8:18 PM

[Quote from Todd](#)

I think primordial is the wrong word. (I'm now waiting for Don or Nate to go find where Epicurus used exactly that word 😊)

I think the image of atoms falling in parallel was an imaginary construction Epicurus used as evidence that there must be a swerve. I don't think it was intended to describe an actually existing state of the universe.

If there were no swerve, there would never be anything other than isolated atoms falling in parallel. Nothing more complex than individual atoms would ever come into existence. But other things do exist. Therefore...

It's time:

1. That a "Swerve" Is Necessary For Nature To Create:

...corpora cum deorsum rectum per inane feruntur

ponderibus propriis, incerto tempore ferme

incertisque locis spatio depellere paulum,

tantum quod momen mutatum dicere possis.

quod nisi declinare solerent, omnia deorsum

imbris uti guttae caderent per inane profundum

nec foret offensus natus nec plaga creata

principiis; ita nihil umquam natura creasset. (DRN II 217-225)

"...when first-bodies are being carried downwards straight through the void by their own weight, at times quite undetermined and at undetermined spots they **push** a little from their path: yet only just so much as you could call a change of trend. But if they were not used to **swerve**, all things would fall downwards through the deep void like drops of rain, nor could collision come to be, nor a blow brought to pass for the first-beginnings: nature would never have brought aught to being." (DRN II 217-225; trans. Bailey)

“...when the atoms are being drawn downward through the void by their property of weight, at absolutely unpredictable times and places they **deflect** slightly from their straight course, to a degree that could be described as no more than a shift of movement. If they were not apt to **swerve**, all would fall downward through the unfathomable void like drops of rain; no collisions between primary elements would occur, and no blows would be effected, with the result that nature would never have created anything. (DRN II 217-225; trans. Smith)

“Though atoms fall straight downward through the void | by their own weight, yet at uncertain times | and at uncertain points, they **swerve** a bit— | enough that one may say they changed direction. | And if they did not **swerve**, they all would fall | downward like raindrops through the boundless void; | no clashes would occur, no blows befall | the atoms; nature would never have made a thing.” (DRN II 217-225; trans. Copley)

2. That a "Swerve" Is Required To Refute a Deterministic Universe:

quare etiam atque etiam paulum inclinare necessest

corpora; nec plus quam minumum, ne fingere motus

nec plus quam minimum, ne fingere motus

obliquos videamur et id res vera refutet.

namque hoc in promptu manifestumque esse videmus,

pondera, quantum in <se> est, non posse obliqua meare,

ex supero cum praecipitant, quod cernere possis;

sed nihil omnino <recta> regione viai

declinare quis est qui possit cernere sese?

Denique si semper motu conectitur omnis

et vetere exoritur <motus> novus ordine certo

nec declinando faciunt primordia motus

principium quoddam, quod fati foedera rumpat,

ex infinito ne causam causa sequatur,

libera per terras unde haec animantibus exstat... (DRN II 244-256)

“Wherefore, again and again, it must needs be that the first-bodies **swerve** a little; yet not more than the very least, lest we seem to be imagining a sideways movement, and the truth refute it. For this we see plain and evident, that bodies, as far as in them lies, cannot travel sideways, since they fall headlong from above, as far as you can descry. But that nothing at all

swerves from the straight direction of its path, what sense is there which can descry? Once again, if every motion is always linked on, and the new always arises from the old in order determined, nor by **swerving** do the first-beginnings make a certain start of movement to break through the decrees of fate, so that cause may not follow cause from infinite time; whence comes this free will for living things all over the earth..." (DRN II 245-257; trans. Bailey)

"So I insist that the atoms must **swerve** slightly, but only to an infinitesimal degree, or we shall give the impression that we are imagining oblique movements—a hypothesis that would be contradicted by the facts. For it is a plain and manifest matter of observation that objects with weight, left to themselves, cannot travel an oblique course when they plunge from above—at least not perceptibly; but who could possibly perceive that they do not **swerve** at all from their vertical path? Moreover, if all movements are invariably interlinked, if new movement arises from the old in unalterable succession, if there is no atomic **swerve** to initiate movement that can annul the decrees of destiny and prevent the existence of an endless chain of causation, what is the source of this free will possessed by living creatures all over the earth?" (DRN II 245-257; trans. Smith)

"And so again and again atoms must **swerve** | a little—the tiniest bit: we must not picture | crosswise movement, for facts would prove us wrong. | For this, we see, is obvious and clear: weight of itself can never move transversely; | it drops from above straight down, as we observe. | But that no atom ever **swerves** at all | from the perpendicular, who could sense and see? | To continue: if all movement is connected, | (new movement coming from old in strict descent) | and atoms never, by **swerving**, make a start on movement that would break the bonds of fate | and the endless chain of cause succeeding cause, | whence comes the freedom for us who live on earth?" (DRN II 245-257; trans. Copley)

3. That Freedom of Mind Is Facilitated By "the Tiny Swerve":

...sed ne res ipsa necessum

intestinum habeat cunctis in rebus agendis

et devicta quasi cogatur ferre patique,

id facit exiguum clinamen principiorum

nec regione loci certa nec tempore certo. (DRN II 289–293)

"But that the very mind feels not some necessity within in doing all things, and is not constrained like a conquered thing to bear and suffer, this is brought about by the tiny **swerve** of the first-beginnings in no determined direction of place and at no determined time." (DRN II 289–293; trans. Bailey)

"But the factor that saves the mind itself from being governed in all its actions by an internal necessity, and from being constrained to submit passively to its domination, is the minute **swerve** of the atoms at unpredictable places and times." (DRN II 289–293; trans. Smith)

“...all things are not caused by blows—external force; no internal power | controls the mind in every move it makes, | a helpless captive bound by what must be: | this comes from the tiny **swerving** of the atoms | at no fixed place and no fixed point in time.” (*DRN II 289-293; trans. Copley*)