

# Is Motion One Of The Three Eternal Properties of Atoms? I.E. Are The Three Properties Shape, Size, and MOTION?

Post by "Cassius" of April 13, 2026 at 4:38 PM

Good thoughts Bryan. I would not want to use a word not closely related to something actually used.

Do you have any thoughts on the Greek or Latin words used in any of the places you have seen this discussed? I don't gather that "weight" is a direct transliteration of either Greek or Latin.

I see βαρύς (*barys*), meaning heavy, but that goes to barometer or "barium" rather than our english word.

And I see Lucretius uses both **pondus** which gives us "ponderous," "pound," and related English words and also *gravis* (heavy)

Is it as Eikadistes quoted earlier perhaps better to use the term gravity if Lucretius is using *gravitas*? Did the Greeks have separate word for "gravitas"?

In english gravity to me implies a force, which is really more what we are looking for.

i am finding no academic articles, but I see citation to the following place (On Fate 24) where Cicero apparently used BOTH *pondus* and *gravitas* in the same sentence, *arguably* implying that he considered them to be separate things (perhaps having weight BECAUSE of the gravitational force within it):

## Cicero, *De Fato* 11.23-24

*De Fato* 23: "*si semper atomus gravitate ferretur naturali ac necessaria*" — "if the atom were always carried along by natural and necessary *gravitas*"

*De Fato* 24 (repeated): "*per inane moveatur gravitate et pondere*" — "moved through the void by *gravitas* and *pondus*" — and then immediately: "*ipsius individui hanc esse naturam, ut pondere et gravitate moveatur*" — "it is the nature of the atom itself to be moved by *pondus* and *gravitas*"

[23] [Hanc Epicurus rationem induxit ob eam rem, quod veritus est, ne, si semper atomus gravitate ferretur naturali ac necessaria, nihil liberum nobis esset, cum ita moveretur animus, ut atomorum motu cogeretur.](#) **11.** [Id Democritus, auctor atomorum, accipere maluit,](#)

necessitate omnia fieri, quam a corporibus individuus naturalis motus avellere. Acutius Carneades, qui docebat posse Epicureos suam causam sine hac commenticia declinatione defendere. Nam cum docerent esse posse quendam animi motum voluntarium, id fuit defendi melius quam introducere declinationem, cuius praesertim [p. 261] causam reperire non possent; quo defenso facile Chrysippo possent resistere. Cum enim concessissent motum nullum esse sine causa, non concederent omnia, quae fierent, fieri causis antecedentibus; voluntatis enim nostrae non esse causas externas et antecedentis.

24] Communi igitur consuetudine sermonis abutimur, cum ita dicimus, velle aliquid quempiam aut nolle sine causa; ita enim dicimus "sine causa", ut dicamus: sine externa et antecedente causa, non sine aliqua; ut, cum vas inane dicimus, non ita loquimur, ut physici, quibus inane esse nihil placet, sed ita, ut verbi causa sine aqua, sine vino, sine oleo vas esse dicamus, sic, cum sine causa animum dicimus moveri, sine antecedente et externa causa moveri, non omnino sine causa dicimus. De ipsa atomo dici potest, cum per inane moveatur gravitate et pondere, sine causa moveri, quia nulla causa accedat extrinsecus.

M. Tullius Cicero, De Fato, section 24