

I shall dwell on this article, because there are still geometricians who think that the figure of the earth depends upon theory ; and this from a system of philosophy they have embraced, and from a supposed direction of gravity. The first thing we have to demonstrate is, the mutual attraction of every part of matter, and the second the homogeneity of the terrestrial globe ; if we clearly prove, that these two circumstances are really so, there will no longer be any hypothesis to be made on the direction of gravity ; the earth will necessarily, have the figure Newton decided in favour of, and every other figure given to it by virtue of vortexes or other hypotheses, will not be able to subsist.

It cannot be doubted, that it is the force of gravity which retains the planets in their orbits ; the satellites of Saturn gravitate towards Saturn, those of Jupiter towards Jupiter, the Moon gravitates towards the Earth : and Saturn, Jupiter, Mars, the Earth, Venus, and Mercury, gravitate towards the Sun : so likewise Saturn and Jupiter gravitate towards their satellites, the Earth gravitates towards the Moon, and the Sun towards the whole of the