

a planet only in size, but the difference in size involves also many other differences, notably the fact that the larger body can attract and hold to itself an atmosphere—a circumstance of the utmost importance to the existence of life on its surface. In order, however, that a planet may by gravitative attraction control the roving atoms of gas, and confine their excursions to within a certain range of itself, it must have a very considerable mass.

The earth is big enough to do it; the moon is not. By simply piling atoms or stones together into a mighty mass there comes a critical point at which an atmosphere becomes possible; and directly an atmosphere exists, all manner of phenomena may spring into existence, which without it were quite impossible.

So, also, it may be said that a sun differs from a dark planet only in size; for it is just the fact of great size which enables its gravitative-shrinkage and earthquake-sub-