

seemed co-extensive; and yet how incalculably vast their difference of area! Thousands of systems seemed but commensurate to the eye with a small district of earth fifty miles each way. But capacious as the human imagination has been deemed, can it conceive of an area of wider field? Mine cannot. My mind cannot take in more at a glance, if I may so speak, than is taken in by the eye. I cannot conceive of a wider area than that which the sight commands from the summit of a lofty eminence. I can pass in imagination through many such areas. I can add field to field *ad infinitum*; and thus conceive of infinite space, by conceiving of a space which can be infinitely added to; but all of space that I can take in at one process is an area commensurate with that embraced at a glance by the eye. How, then, have I my conception of the earth as a whole,—of the solar system as a whole,—nay, of many systems as a whole? Just as I have my conceptions of a school-globe or of an Orrery,—by diminution. It is through the diminution induced by distance that the sidereal heavens only co-extend, as seen from the top of Tor-Achilly, with a portion of the counties of Ross and Inverness. The apparent area is the same, but the coloring is different. Our ideas of greatness, then, are much less dependent on actual area than on what painters term aerial perspective. The dimness of distance and the diminution of parts are essential to right conceptions of great magnitude.

“Of the various figures presented to me here, I seize strong hold of but one. I brood over the picture of the solar system conjured up. I conceive of the satellites as light shallops that continually sail round heavier vessels, and consider how much more of space they must traverse than the orbs to which they are attached. The entire system is presented to me as an Orrery of the apparent size of the area of landscape seen from the hill-top; but dimness and darkness prevent the diminution from communicating that appearance of littleness to the whole which would attach to it were it, like an actual Orrery, sharply defined and clear. As the picture rises before me, the entire system seems to possess, what I suspect it wants, its atmosphere like that of the earth, which reflects the light of the sun in the different degrees of excessive brightness,—noon-tide splendor, the fainter shades of evening, and gray twilight obscurity. This veil of light is thickest towards the centre of the system; for when the glance rests on its edges, the suns of other systems may be seen peeping through. I see Mercury sparkling to the sun, with its oceans of molten glass and its fountains of liquid gold. I see the ice mountains of Saturn, hoar through the twilight. I behold the earth rolling upon itself, from darkness to light, and from light to darkness. I see the clouds of winter settling over one part of it, with the nether mantle of snow shining through them; I see in another a brown, dusky waste of sand lighted up by the glow of summer. One ocean appears smooth as a mirror,—another is black with tempest. I see the pyramid of shade which each of the planets casts from its darkened side into the space behind; and I perceive the stars twinkling through each opening, as through the angular doors of a pavilion.

“Such is the scene seen at right angles with the plane in which the planets