

either in duration or in quantity, is an inquiry which a philosopher could hardly be tempted to enter upon, by any success which has attended previous speculations of a similar nature. Why should not the moon be ten times as large as she is? Why should not the pupil of man's eye be ten times as large as it is, so as to receive more of the light which does arrive? We do not conceive that our inability to answer the latter question prevents our knowing that the eye was made for seeing: nor does our inability to answer the former, disturb our persuasion that the moon was made to give light upon the earth.

Laplace suggests that if the moon had been placed at a certain distance beyond the earth, it would have revolved about the sun in the same time as the earth does, and would have always presented to us a full moon. For this purpose it must have been about four times as far from us as it really is; and would therefore, other things remaining unchanged, have only been *one sixteenth* as large to the eye as our present full moon. We shall not dwell on the discussion of this suggestion, for the reason just intimated. But we may observe that in such a system as Laplace proposes, it is not yet proved, we believe, that the arrangement would be stable under the influence of the disturbing forces. And we may add that such an arrangement, in which the motion of one body has a *co-ordinate* reference to two others, as the motion of the moon on this hypothesis would have to the sun and the earth, neither motion being subordinate to the other, is contrary to the whole known analogy of cosmical phenomena, and therefore has no claim to our notice as a subject of discussion.

2. In turning our consideration to the satellites of the other planets of our system, there is one fact which immediately arrests our attention;—the number of such attendant bodies appears to increase as we proceed to planets farther and farther from the sun. Such at least is the general rule. Mercury and Venus, the planets nearest the sun, have no such at-