

nourishing than the rare molecules of a nebula, or the still rarer particles of interstellar space, must be provided.

We may safely conclude, therefore, on the basis of our reliable knowledge of the universe, that active life can exist probably only upon a dense, crusted body<sup>1</sup>; for, of course, the interior of the earth is no better suited to life than is the interior of the sun.

We have perhaps taken a long road to arrive at so familiar an idea. But our task involves the consideration of every conceivable form of life, not merely that relatively anthropomorphic kind which we commonly think of when speculating loosely regarding life in other worlds.

It is indeed possible that the common-sense judgment of the universe which declares our solar system to be on the whole, in its fundamental characteristics, typical of every such system may turn out to be in some respects unjustified. For the present, however, so long as we use it only as an indication of the direction in which we are to turn our attention, there is certainly no risk whatever in following this hypothesis in the later discussion.

<sup>1</sup> For an interesting discussion of the necessary conditions of existence see P. Lowell, "Mars as the Abode of Life." The Macmillan Company, New York, 1908.