

—*i.e.*, the generation of living out of dead or not-living matter.

50.
The ubiquity
of life.

But in proportion as abiogenesis or spontaneous generation has disappeared from our scientific text-books, life being recognised as a phenomenon between which and dead matter there exists no intelligible and no practical transition except that of destruction, the ubiquity of life has forced itself more and more on our attention. Not long ago, as Huxley¹ tells us, the adherents of spontaneous generation urged as an argument on their side that if biogenesis be true, innumerable facts and experiments prove "that the air must be thick with germs; and they regarded this as the height of absurdity. But nature," as Huxley continues, "occasionally is exceedingly unreasonable, and Professor Tyndall has proved that ordinary air is no better than a sort of stirabout of excessively minute solid particles." It is now, after a generation has passed, hardly necessary to refer to any special experiments of Tyndall or of others, when the daily press brings us records of the number of billions of germs contained in a cubic inch of the atmosphere of large cities, precisely as it does of the mortality of their population. The cellular theory of disease has been succeeded and amplified by the bacillar theory, and no modern scientific fact has fastened on the popular mind with a stronger hold than the ubiquity of the micro-organisms, which, with beneficent or fatal results, assist everywhere—chiefly in the larger organisms—in the struggle for existence.

It is, moreover, only a logical inference that if living

¹ 'Critiques and Addresses,' p. 233.