knowledge more definite. Lest, however, the preceding sketch of the Palanthropic age—that in which gigantic men were contemporaries of a gigantic fauna now extinct—should be regarded as altogether fanciful, we may proceed to consider the geological facts and classification as actually ascertained.

The Tertiary or Kainozoic period, the last of the four great "times" into which the earth's geological history is usually divided, and that to which man and the mammalia belong, was ingeniously subdivided by Lyell, on the ground of percentages of marine shells and other invertebrates of the sea. According to this method, which with some modification in details is still accepted, the *Eocene*, or dawn of the recent, includes those formations in which the percentage of modern species of marine animals does not exceed $3\frac{1}{2}$, all the other species found being extinct. The *Miocene* (less recent) includes formations in which the percentage of living species does not exceed 35, and the *Pliocene* (more recent) contains formations having more than 35 per cent. of recent species. To these three may be added the *Pleistocene*, in which the great majority of the species are recent, and the *Modern* or Anthropic, in which we are still living. Dawkins and Gaudry give us a division substantially the same with Lyell's, except that they prefer to take the evidence of the higher animals instead of the marine shells. The Eocene thus includes those formations in which there are remains of mammals or ordinary land quadrupeds, but none of these belong to recent species or genera, though they may be included in the same families and orders with the recent mammals. This is a most important fact, as we shall see, and the only exception to it is that Gaudry and others hold that a few living genera, as those of the dog, civet, and marten, are actually found in the later Eocene. The Miocene, on the same mammalian evidence, will include formations in which there are living genera of mammals, but no species which survive to the present time.