

M. Bertrand de Doue as of intermediate age between the ancient and modern cones of Velay.

The fauna to which *Elephas meridionalis* and its associates belong, can be shown to be of anterior date, in the north of France, to the flint implements of St. Acheul, by the following train of reasoning. The Valley of the Seine is not only geographically contiguous to the Valley of the Somme, but its ancient alluvium contains the same mammoth and other fossil species. The Eure, one of the tributaries of the Seine, in its way to join that river, flows in a valley which follows a line of fault in the chalk; and this valley is seen to be comparatively modern, because it intersects at St. Prest, four miles below Chartres, an older valley belonging to an anterior system of drainage, and which has been filled by a more ancient fluvial alluvium, consisting of sand and gravel, ninety feet thick. I have examined the site of this older drift, and the fossils have been determined by Dr. Falconer. They comprise *Elephas meridionalis*, a species of rhinoceros (not *R. tichorhinus*), and other mammalia differing from those of the implement-bearing gravels of the Seine and Somme.* The latter, belonging to the period of the mammoth, might very well have been contemporary with the modern volcanic eruptions of Central France; and we may presume, even without the aid of the Denise fossil, that Man may have witnessed these. But the tuffs and gravels in which the *Elephas meridionalis* are embedded were synchronous with an older epoch of volcanic action, to which the cone of St. Anne, near Le Puy, and many other mountains of M. Bertrand de Doue's middle period belong, having cones and craters, which have undergone much waste by aqueous erosion. We have as yet no proof that Man witnessed the origin of these hills of lava and scorïæ of the middle phase of volcanic action.

* See Appendix A, p. 507, on the alleged traces of the coexistence of Man with *E. meridionalis* at St. Prest, near Chartres.