

bones themselves. The same formation may appear recent in places where it shews itself at the surface, and ancient in those where it is covered by the beds which have succeeded it. Ancient formations may have been transported by partial inundations, and thus have covered recent bones; they may have fallen upon them by crumbling, and thus have enveloped and mingled them with the productions of the ancient sea, which they previously contained. Bones of ancient periods may have been washed out by the waters, and afterwards enveloped in recent alluvial formations. Lastly, recent bones may have fallen into the fissures or caverns of ancient rocks, and been enveloped by stalactites or other incrustations. In every individual instance, therefore, it becomes necessary to analyze and appreciate all those circumstances which might disguise the real origin of fossil remains; and it rarely happens that people who have collected bones have been themselves aware of this necessity, the consequence of which has been, that the true characters of their geological position have been almost always neglected or misunderstood.

Thirdly, there are some doubtful species, which must occasion more or less uncertainty in the results of our researches, until they have been clearly ascertained. Thus the horses and buffaloes that occur along with the elephants, have not yet re-