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Darwin side-stepped this problem. He simply accepted without explanation the observed fact that organisms do vary one from another, irrespective of cause. He did not distinguish between inheritable and non-inheritable variations. His problem was the action of natural selection which caused the formation of species, if a variable progenitor is granted.

The second major problem of evolution is the origin of discontinuity within a varying series, for by this means several segments of a single species become distinct species. This is the problem with which Darwin was primarily concerned. It is important to realize that discontinuity is the basic means of distinguishing between closely similar species. The differences between several subspecies of a single species may be quite as great as those between species of a single genus. Yet there is no sharp line of separation between subspecies. They hybridize freely with their neighbors, and intergrades between adjacent subspecies are common in nature. The hallmark of good species is that, however small the differences between related species may be, they are consistent differences, so that Goldschmidt can speak of “the bridgeless gap” between species.

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