

two hemispheres of the same planet, we may conceive that in the hemisphere most abundant in waters the different systems of rivers required more time to separate themselves from one another, and establish their complete independence. The deposits of mud, which are formed wherever the running waters lose somewhat of their swiftness, contribute, no doubt, to raise the beds of the great confluent streams, and augment their inundations; but at length these deposits entirely obstruct the branches of the rivers and the narrow channels that connect the neighbouring streams. The substances washed down by rain-waters form by their accumulation new bars, isthmuses of deposited earth, and points of division that did not before exist. It hence results that these natural channels of communication are by degrees divided into two tributary streams, and from the effect of a transverse rising, acquire two opposite slopes; a part of their waters is turned back towards the principal recipient, and a buttress rises between the two parallel basins, which occasions all traces of their ancient communication to disappear. From this period the bifurcations no longer connect different systems of rivers; and, where they continue to take place at the time of great inundations, we see that the waters diverge from the principal recipient only to enter it again after a longer or shorter circuit. The limits, which at first appeared vague and uncertain, begin to be fixed; and in the lapse of ages, from the action of whatever is moveable on the surface of the globe, from that of the waters, the deposits, and the sands, the basins of rivers separate, as great lakes are subdivided, and as inland seas lose their ancient communications.*

The certainty acquired by geographers since the sixteenth century, of the existence of several bifurcations, and the mutual dependence of various systems of rivers in South America, have led them to admit an intimate connection

* The geological constitution of the soil seems to indicate that, notwithstanding the actual difference of level in their waters, the Black Sea, the Caspian, and lake Aral, communicated with each other in an era anterior to historic times. The overflowing of the Aral into the Caspian Sea seems even to be partly of a more recent date, and independent of the bifurcation of the Gihon (Oxus), on which one of the most learned geographers of our day, M. Ritter, has thrown new light.