

barometer alone can not afford a certain evidence of the general change of level in the ocean. The remarkable fact that some of the ports in the Mediterranean were repeatedly left dry during several hours at the beginning of this century, appears to show that currents may, by changes occurring in their direction and force, occasion a *local* retreat of the sea, and a permanent drying of a small portion of the shore, without being followed by any actual diminution of water, or any permanent depression of the ocean. We must, however, be very cautious in applying the knowledge which we have lately arrived at, regarding these involved phenomena, since we might otherwise be led to ascribe to water, as the elder element, what ought to be referred to the two other elements, earth and air.

As the *external* configuration of continents, which we have already described in their horizontal expansion, exercises, by their variously-indented littoral outlines, a favorable influence on climate, trade, and the progress of civilization, so likewise does their internal articulation, or the vertical elevation of the soil (chains of mountains and elevated plateaux), give rise to equally important results. Whatever produces a polymorphic diversity of forms on the surface of our planetary habitation—such as mountains, lakes, grassy savannas, or even deserts encircled by a band of forests—impresses some peculiar character on the social condition of the inhabitants. Ridges of high land covered by snow impede intercourse; but a blending of low, discontinued mountain chains* and tracts of valleys, as we see so happily presented in the west and south of Europe, tends to the multiplication of meteorological processes and the products of vegetation, and, from the variety manifested in different kinds of cultivation in each district, even under the same degree of latitude, gives rise to wants that stimulate the activity of the inhabitants. Thus the awful revolutions, during which, by the action of the interior on the crust of the earth, great mountain chains have been elevated by the sudden upheaval of a portion of the oxydized exterior of our planet, have served, after the establishment of repose, and on the revival of organic life, to furnish a richer and more beautiful variety of individual forms, and in a great measure to remove from the earth that aspect of dreary

* Humboldt, *Rel. Hist.*, t. iii., p. 232-234. See, also, the able remarks on the configuration of the earth, and the position of its lines of elevation, in Albrechts von Roon, *Grundzügen der Erd Völker und Staatenkunde*, Abth. i., 1837, s. 158, 270, 276.