

elevated towns, and not aware that the peninsula of Araya, composed of mica-slate, shares the commotions of the calcareous coast of Cumana, well-informed persons imagined they discerned security in the structure of the primitive rocks of Caracas, as well as in the elevated situation of this valley. Religious ceremonies celebrated at La Guayra, and even in the capital, in the middle of the night,\* doubtless called to mind the fact that the province of Venezuela had been subject at intervals to earthquakes; but dangers of rare occurrence are slightly feared. However, in the year 1811, fatal experience destroyed the illusion of theory and of popular opinion. Caracas, situated in the mountains, three degrees west of Cumana, and five degrees west of the volcanos of the Caribbee islands, has suffered greater shocks than were ever experienced on the coast of Paria or New Andalusia.

At my arrival in Terra Firma, I was struck with the connection between the destruction of Cumana on the 14th of December, 1797, and the eruption of the volcanos in the smaller West India Islands. This connection was again manifest in the destruction of Caracas on the 26th of March, 1812. The volcano of Guadaloupe seemed in 1797 to have exercised a reaction on the coasts of Cumana. Fifteen years later, it was a volcano situated nearer the continent (that of St. Vincent), which appeared to have extended its influence as far as Caracas and the banks of Apure. Possibly, at both those periods, the centre of the explosion was, at an immense depth, equally distant from the regions towards which the motion was propagated at the surface of the globe.

From the beginning of 1811 to 1813, a vast superficies of the earth,† bound by the meridian of the Azores, the valley of the Ohio, the Cordilleras of New Grenada, the coasts of Venezuela, and the volcanos of the smaller West India Islands, was shaken throughout its whole extent, by com-

\* For instance, the nocturnal procession of the 21st of October, instituted in commemoration of the great earthquake which took place on that day of the month, at one o'clock in the morning, in 1778. Other very violent shocks were those of 1641, 1703, and 1802.

† Between latitudes 5° and 36° North, and 31° and 91° West lon. from Paris.