

of facts, even from the discoveries of the Portuguese and Spaniards. Within fifty years after the death of the Prophet, the Arabs had already reached the extremest western coasts of Africa and the port of Asfi. Whether the islands of the Guansches were visited by Arabian vessels subsequently, as I was long disposed to conjecture, to the expedition of the so-called Almagrurin adventurers to the *Mare tenebrosum*, is a question that has again been lately regarded as doubtful.* The presence of a great quantity of Arabian coins, found buried in the lands of the Baltic, and in the extreme northern parts of Scandinavia, is not to be ascribed to direct intercourse with Arabian vessels in those regions, but to the widely-diffused inland trade of the Arabs.†

Geography was no longer limited to a representation of the relations of space, and the determinations of latitude and longitude, which had been multiplied by Abul-Hassan, or to a description of river districts and mountain chains; but it rather led the people, already familiar with nature, to an acquaintance with the organic products of the soil, especially those of the vegetable world.‡ The repugnance entertained by all the

Ouseley published in London in 1800, is that of Abu-Ishak el-Istâchri, and, as Frähn has shown (Ibn Fozlan, p. ix., xxii., and 256-263), is half a century older than Ebn-Haukal. The maps which accompany the "*Book of Climates*" of the year 920, and of which there is a fine manuscript copy in the library of Gotha, have afforded me much aid in my observations on the Caspian Sea and the Sea of Aral (*Asie Centrale*, t. ii., p. 192-196). We have lately been put in possession of an edition of Istâchri, and a German translation (*Liber Climatorum, ad similitudinem Codicis Gothani delineandum*, cur. J. H. Moeller, Goth., 1839; *Das Buch der Länder*, translated from the Arabic by A. D. Mordtmann, Hamb., 1845).

* Compare Joaquim Jose da Costa de Macedo, *Memoria em que se pretende provar que os Arabes não conhecerão as Canarias antes dos Portuguezes* (Lisboa, 1844, p. 86-99, 205-227, with Humboldt, *Examen Crit. de l'Hist. de la Géographie*, t. ii., p. 137-141).

† Leopold von Ledebur, *Ueber die in den Baltischen Ländern gefundenen Zeugnisse eines Handels-Verkehrs mit dem Orient zur Zeit der Arabischen Weltherrschaft*, 1840, s. 8 und 75.

‡ The determinations of longitude which Abul-Hassan Ali of Morocco, an astronomer of the thirteenth century, has embodied in his work on the astronomical instruments of the Arabs, are all calculated from the first meridian of Arin. M. Sédillot the younger first directed the attention of geographers to this meridian. I have also made it an object of careful inquiry, because Columbus, who was always guided by Cardinal d'Ailly's *Imago Mundi*, in his fantasies regarding the difference of form between the eastern and western hemispheres, makes mention of an Isla de Arin: "centro de el hemispherio del qual habia Toloréa y qués debaxo la linea equinoxial entre el Sino Arabico y aquel de Persia." (Compare J. J. Sédillot, *Traité des Instrumens Astronomiques*