CHAPTER XXXI.

ON THAT DIFFERENCE OF VARIOUS PLACES WHICH WE CALL THE DIFFERENCE OF LONGITUDE.

HE who aims at accuracy in this subject must try to determine the distance between the spheres of the meridians of the two places in question. Muslim astronomers reckon by *equatorial times* corresponding to the distance between the two meridians, and begin to count from one (the western one) of the two places. The sum of equatorial minutes which they find is called *the difference between the two longitudes;* for they consider as the *longitude* of each place the distance of its meridian from *the great circle* passing through the pole of the equator, which has been chosen as the limit of the οἰκουμένη, and for this first meridian they have chosen the *western* (not the eastern) limit of the οἰκουμένη. It is all the same whether these *equatorial times,* whatsoever their number for each meridian may be, are reckoned as 360th parts of a circle, or as its 60th parts, so as to correspond to the *day-minutes,* or as *farsakh* or *yojana.*

The Hindus employ in this subject methods which do not rest on the same principle as ours. They are totally different; and howsoever different they are, it is perfectly clear that none of them hits the right mark. As we (Muslims) note for each place its *longitude,* the Hindus note the number of *yojanas* of its distance from the meridian of Ujain. And the more to the west the position of a place is, the greater is the number of