

CHAPTER XIV

THE WAXING AND WANING OF LOP-NOR

IN traveling through the Lop basin we have everywhere found evidences of pronounced changes of climate during historic times. It will now be well to sum up the evidence, and to ascertain how far the conclusion which we have reached is in accordance with the phenomena of Lop-Nor. The most widespread proof that there have been climatic changes during the last two or three thousand years is found in the death of vegetation over large areas. On the lower slopes of the Kwen Lun Mountains the dissected condition of deposits of loess shows that a cover of grassy vegetation prevailed at no remote time, but has now died. In the zone of vegetation, for a distance of seven hundred miles, plants of all kinds show signs of drying up: the tamarisks usually stand upon mounds; the poplars are dead or dying except in the moistest places; and beds of dead reeds cover scores of square miles. It has often been asserted that in many parts of the world the destruction of forests has been the cause of a diminution of rainfall. In the Lop basin, it is manifest that the opposite has been true: a diminution in the water supply has been the cause of the destruction of forests. Another line of evidence shows that ancient roads such as that from Keriya northward, or the great trade route through Lulan, have been abandoned because there is now no water along them. Again, in the Dry Mountains and elsewhere, springs once frequented by animals or by men have