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? WHY THE WEATHER ?

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THE CLASSIFICATION OF CLIMATES

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Climates are variously classified, usually on the basis of one or more of the climatic elements but sometimes with reference to their effects. The most familiar classification refers to temperature. We speak of tropical, temperate and polar climates; but in using these terms one should not forget that other things besides latitude control the distribution of temperature. Location with respect to the ocean and other large bodies of water is almost equally important. A land surface grows warm by day<sup>and</sup> in summer, and grows cold by night and in winter, much more rapidly than a water surface, and the adjacent air varies in temperature accordingly. Hence we have a classification of climates as marine and continental. The former, under the influence of oceanic winds, have a moderate range of temperature, while the latter are subject to extremes of heat and cold.

There is also a classification with respect to moisture, in which<sup>desert</sup> climates are at one extreme and humid climates at the other. From the standpoint of the physiologist climates may be classified as invigorating, relaxing, mild, rigorous, etc.

Several authorities have given us quite elaborate systems of classifications based on combinations of climatic elements, their seasonal variations, their biological relations, etc. A remarkable example is the system devised by Dr. W. Koeppen, originally published in 1900 and extensively revised in 1918.

Lastly, we have the new conception of "microclimates," prevailing in very small portions of the atmosphere, such as the immediate vicinity of a particular plant or some part of a plant, as distinguished from the "macroclimate" of a more extensive region.

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