

that zone. To begin with, their existence resulted from a tendency to yield along that line and a great load once borne by them has been taken off. So the plains sink and it would seem the mountains tend to rise and that the displacement is to beneath the mountains. Assuming this, we still have to account for uptilting of piedmonts along the border, and often two or more such lines nosed up with fault-scarps facing the mountains.

This fact is the key to a deep-seated process that forms an important corollary to such displacement. Deep-buried, flat formations are under an enormous pressure that will squash the strata into thinner layers, if horizontal expansion is possible. There is, therefore, reason to believe that such a sinking of the plains of a desert basin involves a deep-seated squashing of the layers, a flat squashing out into folding in the nearest zone of yielding weakness, *i. e.*, under the bordering ranges that rise therefrom. And the crust being broken along the shearing lines, this zone dies out into bending moments somewhat under the plains, so that minor folding may take place under there also and bend up the piedmont edge. It is also conceivable that more outlying folds would result with their surface phenomena; that is, the fault-scarps of our uptilted piedmonts probably pass beneath into monoclinical continuity or other folding of our squash-thrusted layers.

One of the most striking facts about Nature, especially geology, is the pertinacity of habit and the accumulative power of habit to overcome its obstacles. It is to this that we must attribute the fact that in reality each succeeding cycle of our process appears to have occupied less time than the one before, and that the first was vastly the longest. Moreover, it is only logical to suppose that it took a much greater shifting of load and, therefore, a much longer time to shear the crust on a virgin line than to renew that shearing in an already weakened zone. We do not intend to assume that no other terrestrial movements took place during all this time, nor that some more regional or mundane change of climate did not have its influence on these more local changes. All that is possible now, even in a tentative way, is to trace the influence of a desert basin on itself and try to superimpose its climatic cycles on those phases that it felt from the mundane glacial period.

Having offered these explanations and methods of attack with the above working hypothesis, we may analyze a series of notes on land forms. Beginning with the Pamir (Roof of the World), the following sections of this chapter will take up certain valleys and the chief basins of Central Asia, and each section will close with a tentative physiographic reconstruction of the past.