

Materialist Conception of History

FOR BEGINNERS

NATURAL ENVIRONMENT (Continued) Lesson 9.

THE ancient civilization arose where the fertility of the soil produced an abundant return with little labor, therefore its priority to the later civilizations. It was also less liable to be disturbed because it was less complicated.

In Egypt, the fertility of the soil as a result of the flooding of the Nile, enabled an accumulation of wealth and built up the first civilization to be recorded, and believed to exist from five to ten thousand years B. C. No other people made a living so easily. The Nile flooded the country and left behind a black muck which needed no other labor than casting seed on the surface. No changes of the weather need be feared; nothing but sunshine; and Egypt is the land of sunshine. Their first inventions were a system of dykes and canals to regulate the water and store it for dryer years. They were also impressed by the fact that the rising waters coincided with certain aspects of the stars. This led to the study of astronomy and the discovery of the solar system. Because of the changes of the surface of the land after the flood, demanding a redistribution of the land, surveying became an economic necessity. The division of the soil in rectangular plots, originated geometry, and taxes were reduced according to the amount of land washed away. Here we find geometry developing in the concrete. The Greeks developed geometry in the abstract, the object of which was to establish precise relations between parts of a figure. Thales was the Greek who measured the height of the Pyramids by placing a staff at the extremity of the shadow, which the pyramid casts, forming two triangles by the contact of the sunbeams, and showed the height of the pyramid was to the length of the staff in the same ratio as their respective shadows. Egyptians must have been acquainted with mechanical powers. The largest obelisk in Egypt is calculated to weigh 297 tons, 70 feet in height, and to have been carried 138 miles from the quarry. The later civilizations were affected more by the European climatic conditions, which, as Buckle points out, caused a more successful and continued labor, and which have been more favorable to his ultimate progress than the agency of the soil.

Buckle again is near discovering the economic factor. Buckle also points out that the civilizations of Mexico and Peru were a result of the fertility of the soil. He says: "The position of Mexico, being near the Equator, the shape of the land gave it humidity, and this being the only part of North America in which these two conditions were united (heat and humidity), it was likewise the only part which was at all civilized." He points out that in North America, also South America, all the large rivers flow into the Atlantic, with the soil better irrigated in the East as a consequence, while the heat in is the West. He claims, in consequence of the two great conditions of fertility not being united in the American continent north of Mexico, the accumulation of wealth was thus impeded, and the progress of society stopped until the 16th century, when the knowledge of Europe was brought to bear upon America.

He points out that the great rivers of South America and the climate of the equator makes the soil remarkable for its exuberance not only in the tropics, but beyond it to the south of Brazil, possessing a fertility not to be found in any part of North America under a corresponding latitude. We would expect this part, being endowed by nature with great fertility, a civilization would have been found which in other parts of the globe, similar conditions produced. Buckle explains why there was not a civilization found here because of the prolific prodigality of the soil. He says: "The trade wind blows during the whole year either from the north-east or the south-east. The causes of their regularity are understood and are known to depend, partly, on the displacement of the air at the equator, and

partly on the motion of the earth, for the cold air from the north is constantly flowing towards the equator, and thus producing northern winds in the northern hemisphere and southern winds in the southern hemisphere. These winds are deflected from their natural course by the movement of the earth as it revolves on its axis from west to east. The rotation of the earth is more rapid at the equator, the speed of which outstrips the movement of the atmosphere from the poles, forcing them into easterly currents, called trade winds. These winds blowing from the east across the Atlantic reach the land surcharged with vapours accumulated in passage. These vapours, on touching the shore, are, at periodical intervals condensed into rain, and as their progress westward is checked by the mountain range of the Andes, which they are unable to pass, pour their moisture on Brazil, which is often deluged with destructive torrents. This, along with the vast waterways of the eastern part of America, has stimulated the soil into an activity unequalled in any other part of the world.

Nature seems to riot in its very wantonness of power. Brazil has dense and tangled forests, whose trees are elegant, throwing out their produce in endless prodigality. On their summits perch birds with gorgeous plumage; below on the ground the trunks are crowded with brushwood, creeping plants, innumerable parasites all swarming with life. There are myriads of insects, reptiles of strange and singular form, serpents and lizards spotted with deadly beauty. All find means of existence in this vast workshop and repository of nature. Nothing is wanting; the forests are skirted with enormous meadows which, reeking with heat and moistures, supply nutriment to countless herds of wild cattle that browse and fatten on the herbage, while the adjoining plains are the chosen abode of all kinds of ferocious animals which prey on each other. But amid all this pomp and splendour no place is left for man. He is reduced to insignificance by the majesty of Nature. The forces that oppose him are formidable, thus he has never been able to make any headway, and with all these natural advantages of fertility, the natives had remained uncivilized. Its inhabitants were wandering savages and were incompetent to resist those obstacles the very bounty of Nature had put in their way. The natives, like every people in the infancy of society, are adverse to enterprise and never grapple with the difficulties that stop their progress. Any civilization in Brazil has been introduced from Europe. The physical laws are so active. The mountains too high to scale, the rivers too wide to bridge. The mind of these primitive people, cowed by this unequal struggle, was unable to advance. The prodigality of the soil had made the people barbarous in their struggle against wild animals and deadly reptiles. But immediately opposite Brazil is Peru, where was found a civilization lying under the same latitude, but subjected to different physical conditions. While the fertility of Brazil was carried beyond the point where the imperfect knowledge of uncivilized man is unable to cope with it, in Peru and Mexico, the fertility was confined within manageable limits, and instead of hindering social progress, favored it, by encouraging that accumulation of wealth without which progress is impossible.

In Mexico and Peru they could obtain sustenance with very little energy, which gave them leisure to improve their knowledge, and had not a fertility great enough to produce wild animals, reptiles and deadly insects to hinder them in their progress.

"These physical conditions had an effect on man's mind by exciting imagination."

Allison, in his history, describing the Hindostan mountain says: "The depth of the valley below and the splendour of the surroundings formed so grand a picture that the mind was impressed with a sensation of dread instead of pleasure." In such cases, man contrasting himself with this majesty of nature

is appalled with his inferiority, which leads to explaining all phenomena as the work of a supernatural agency. On the other hand where the works of nature are small and feeble, man regains confidence, relies more on his own power, becomes of an inquisitive mind to discover the laws that govern the phenomena. For instance, earthquakes and volcanic eruptions and deadly diseases were prevalent in the countries that were the first to progress, and therewith its constant danger to man, increased the activity of his imagination, created strong religious sentiment where the dangers were ascribed to supernatural interference. This imagination dominated their understanding, and even today we see the ignorant more prone to seek aid from the supernatural when some of our pious friends are putting the fear of hell and damnation into them. Earthquakes, tempest, hurricane and pestilence had the tendency to impair the intellectual powers and increase the activity of the imagination, which aroused the belief in the supernatural. Human power, unable to grasp the phenomena there grew up the feeling of awe and helplessness without which superstition cannot exist. Prof. Loria, in his "Economic Foundation of Society," says: "Religious ideas, however elaborate and complex, are all derived from the original feeling of impotence, that the human being experiences before the forces of nature—the moral persuasion of the ruling class ideas have reduced themselves to fear, religion and public opinion."

Buckle illustrates that "earthquakes and volcanos are more frequent in Italy, Spain and Portugal than in any other part of Europe. There we find superstition more rife and superstitious classes more powerful. Those are the countries where the clergy first gained their authority," and where superstition has retained its firmest hold.

McAulay, "Historical Essays," says: "The powerful organization of the Roman Catholic Church in Italy was the necessary result of labor's inferiority to overcome the resistance of matter in these southern countries, and of the consequent greater intensity of the southerners' feelings of impotence and subjection to occult and invincible forces." The fine arts are addressed to the imagination and science to the intellect. Now it is remarkable, all the greatest painters and sculptors of modern Europe have been produced in the Italian and Spanish peninsulas. In regard to science, Italy has produced several men of conspicuous ability, but their numbers are small when compared with the number of artists and poets. The literature of Spain and Portugal is eminently poetic and these countries have produced some of the best painters, while the purely reasoning faculties have been neglected, and they do not produce from the earliest historical period any man of merit in natural science. The natural elements of these countries are threatening to human life and encourage superstition, discourage knowledge, and ascribe all the serious dangers to supernatural interference, arousing a religious sentiment.

If we take the literature of India, during its best period, imagination runs riot. Buckle says some of their kings and saints reigned 6,300,000 years. These Asiatic civilizations were intimidated by the natural phenomenon. The dangers incidental to tropical climates, mountains which seemed to touch the sky, from which mighty rivers poured down their torrents, too wide for bridge to span, impassable forests, deserts without water, great seas ravaged by tempests far more destructive than in Europe, without a suitable harbor, all teaching man his own feebleness and inability to cope with natural forces. This also tended to create the idea of terrible gods, which their idols represent. On the other hand, Greece, which forms a peninsula the nature of which is entirely different. In India everything was great and terrible, while in Greece everything is small and feeble, situated on a narrow sea, dangers of all kinds far less numerous than in tropical civilizations, climate more healthy, earthquakes less frequent, man