## Roles of technology and geography in western civilization essay samples

Parts of the World, Europe



Technology and geography are unquestionably the most important factors that have influenced many of the nations, even the current super power and those among the developed nations. However, few people really understand how the current civilization came about or where it started and the people who have benefited the most. Of importance to note is that almost everything in our daily life has an element of technology; from listening to a sermon in church, to going to international war, from the activities of the farmer to the deals of a great cartel swindling his countries money. One of the notable effects of these advancements in technology is felt in the western part of the globe. The question is: how exactly did they benefit from the advancements in technology and geography?

The Greek states despite being constantly at war with Persians and sometimes Sparta, they did make a great contribution to the western civilization in the fields of politics and trade. The geography of these cities could not allow them to produce all the things they needed which thus forced them to take part in trade. It was the blocking of Aegean and the Bosporus (through which the grains to Athens passed) that led to a fierce war to retake control but when it finally lost the war, it was very short time before she was forced to surrender. The fact that the cutting off of the grain supply so much weakened the states is evidence of its great dependence in trade. However, in the period of these wars, Hippocrates, the founder of western medicine, began medical science by observing the human body (anatomy) and the various effects of disease. This early advances in medicine was important in caring for those wounded at war in later years in Europe and forms the basis for current medical practice.

On the other hand, Rome was built because the geography of the area encouraged settlement and trade; there were seven hills and a river providing water (the Tiber). The people who settled here were farmers on the lower side of the liver and shepherds on the upper side of the river. With advancing technology in construction, there was built the earliest sewer in Rome, the Cloaca Maxima, which is still in use. This formed a prototype of the current sewer systems. In order to expand the land under its rule, Rome conquered many other states and formed an empire, the prototype of the later European hegemony. The conquests and the signing of treaties with the enemy states always ensured political stability for the winner states and submission by the defeated states .

Mesopotamia on the other hand was advancing in agricultural technology along the river using irrigation to increase their crop production. This was because of the geographical features of flat land and availability of water . This kind of agricultural advancement was replicated in Egypt where irrigation was also going on along the river Nile. The Egyptians are also documented to have been among the first to perform operations on a human being and gave directives to the citizens on birth control methods. They further are credited with being among the first nations that kept their records in writing using the papyrus reeds. This is taken as the beginning of the current print industry and the print media which so influenced the later advances in the west like navigation using maps and also the use of maps in military conquests. The Hebrew on the other hand was much more interested with religion and are accredited with the writing of the bible. Because of this advancement, they helped in the establishments of many

nations. The most notable if the use of the bible by Emperor Constantine to unify an otherwise polarized empire. By making himself both the political and religious ruler (where the bible was the book of authority) he was able to rally the people behind him and make a strong nation.

The early middle ages saw the decline of the Western Roman Empire. This greatly affected the general states of political associations. There was also the invasion of Europe by the Vikings. The notable development in this period is the return to agriculture by many of the people, there was reduced population (it actually declined), and a lot of migration from the urban areas to rural areas. Immigration was also high and a high decline in trade was recorded (the reason it was called the dark ages). No advances in either art work or government can be gathered from this period. However, later on, Charlemagne revived the title of emperor in Europe and introduced new innovations in the field of agriculture like the three-field planting and also the heavy plough. Also, there was return to the feudal system of agriculture, a systematic agriculture.

In the high Middle Ages however, the trend was almost reversed with such features as a rapid increase in population which resulted in a great political and social change from the previous era. The high and strong population benefited the economy of Europe reaching the highest ever levels. This helped them to establish strong and more organized social and political systems since the invasions were few. The advance in agriculture let to the clearance of many forests in Europe to create land for farming. The Catholic Church, being the most powerful political body at the time called armies from all over Europe to crusades against the Seljuk Turks, occupying the holy

land, there by leading to the formation of the crusader states. This is the period when paper manufacturing was began in Italy, invention of the windmills, watermills and printing, spectacles, gunpowder, scissors, and also the spinning wheel (which came from India). Gunpowder in specific made a great impact in the art of war and led to the need for each nation to defend itself effectively. Indeed, this gunpowder greatly helped in the establishment of any nation states. The magnetic compass was a very valuable item, aiding in navigation. Also, at this time, Arabic numerals were introduced by Leonardo of Pisa. Also, rubber is credited to have been invented at this time. The late middle ages marks the age of discovery. The need for new trading areas led to the European exploration by the likes of Columbus travelling to America in 1492 and vasco Da Gama's search for the sea route to India while passing round African coasts. Their discoveries strengthened the European economies and hence increased the power of the European nations. It is at this time that England stopped exporting raw wool and started exporting made cloths which increased its profit several fold. This greatly helped in the stabilizing the British economy which further made it possible for it to have more political influence globally which later let to colonization.

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