

Neolithic: Adaptation to the Environment

Adaptation is built in to human nature. Subtle (or substantial) changes in the environment humans live in can cause a demand to act, operate or behave differently than before. For example; a growing population in a specific settlement would need to change their farming techniques in order to generate more food quickly and efficiently to supply the habitants, if they didn't have access to a larger plot of land. They would need to utilise the space they have available.

In relation to the first paragraph, Farming is a prominent area in which adaptation has proven to be crucial in ensuring the efficient production of crops. Areas in which adaption has occurred ranges from the growing, to harvesting of crops. One way in which adaptation has caused humans to change the way they farm, is access to prime land used to grow crops. Prime, nutrient rich land is ideal to grow crops in; as this will allow for a much higher, healthy potential than ground of lower quality and less available nutrients. In relation to this; land that is ideal for one crop may not be ideal for another.

Humans have gained the knowledge of deciphering which land is best for which crop; and this can be seen during the neolithic period. The main example of this, is the growing of crops in the fertile crescent. ¹"Its area covers what are now southern Iraq, Syria, Lebanon, Jordan, Palestine, Israel, Egypt, and parts of Turkey and Iran." Humans had chosen to grow crops here because of the plentiful supply of water (from the Tigris and Euphrates rivers) and nutrient-rich land. This shows adaptation, as a demand (higher amounts / quality of crops needed) created incentives for humans to change their ways of operating (farming).

Another area in which adaptation is prominently shown, is in the type of materials Neolithic people used for construction, tools and clothing. Adaptation was needed during this time to support changes in a society's demand for a broad range of tools (to harvest multiple different building materials such as wood and stone), clothing (to withstand the weather and wear and tear of an increased workload due to the needs of a larger population) and construction materials (to build different types and sizes of structure).

The adaptation of construction materials is presented clearly, as at the start of the Neolithic period, houses had some improvements to that at the end of the Mesolithic era. One of these examples is the materials used in the construction of the walls. ²"a mixture of crushed chalk, chopped straw and water" (known as chalk daub). This change was most likely derived from a higher request for housing as populations started to grow and more people needed to be accommodated for; parallel to this chalk daub is easier to obtain and use than wattle and daub (primary material used for walls in the Mesolithic period). This made chalk daub a much more viable material.

Secondly, adaptations can be seen through the different types and materials of tools used by the Neolithic population. Where the Neolithic era was a key player for man in the pioneering of farming; the creation of new tools to allow for easier gathering and manipulation of resources. ³"Axes make the clearing of land much simpler, allowing the spread of agriculture." This shows how settlers adapted to the environment and their own need to create a tool to make it easier for new agricultural land to be created. Like previous adaptations humans have experienced, this change was a product of increased population size, resulting in bigger agricultural spaces needed to harvest more crops.

Lastly, clothing has been a crucial factor in where and how Neolithic humans have lived and completed daily tasks. Different climates require different clothing in order to survive, and humans have had to adapt in order to do so. The two primary climates that humans lived in (hot and cold) demanded two main types of clothes; clothes to keep warm and clothes to keep cool. While occupying hot climates, the clothing of choice would be made ⁴"out of linen, since it was cool and lightweight". On the other hand; "in colder climates and during the ice ages, they made their clothes out of leather. Wool was used in later agricultural societies as well". This change was brought about, due to the desire for humans to inhabit areas close to crucial natural resources such as water and wood. Where Neolithic humans could choose where they would settle they could not control the environment of that location, so had to change the variables they could control in order to live there. Also discussed in a later paragraph, wool was used in later agricultural societies as domestication of animals had started to develop and new materials had become available.

Domestication is another example of how humans have had to change to suit the environment's demands, as the use of animals for food (meat, milk), resources (wool, hide, bone) and Companions and Hunting (Dogs, Wolves).

One animal that was domesticated in the Neolithic period around 6,000 years ago, was the Horse. The Horse was a perfect animal to domesticate, as it was used for agriculture. ⁵"People began domesticating larger animals, such as Oxen or Horses, for plowing and transportation." Horses and Oxen were great work animals as they are very strong, and could endure the tasks that humans had given them. This is an exceptional example of adaptation, as humans have tamed other living things to reduce their own workload, and produce food, crops and resources quicker as the animals can do the same jobs, more efficiently. This demand, like most other adaptations to the current environment, was derived from the demand for a higher amount of resources. Humans needed more of each resource, and were able to do this through the use of work animals. This also reduced the amount of time needed for humans to go out and hunt, slowly transitioning the society away from being entirely dependent on the Hunter-Gatherer ideal. As more animals were being domesticated; the societies could rely more heavily on them, and kill and harvest them from within the pens in which they are kept.

Another type of animal that were domesticated during the Neolithic period, were companion animals. Dogs were a very common, domesticated companion animal. The first dog to be domesticated was a descendant of a Wolf around 14,000 years ago. There is an abundance of evidence to support this, one in particular provides an outstanding point of reference.

⁶"Archaeologists have discovered 6,000-year-old bones from a pet dog alongside the human remains of its owners at a burial site in Saudi Arabia." This proves that dogs have been domesticated and had a significant role, intertwined with their owner; that they were important enough to be buried with them. This was a practice throughout history across many cultures and civilisation, in which a companion animal would travel to the afterlife with whom they spent their life with. Domesticated solely by hunter-gatherers; dogs are said to have been domesticated by ⁷"accident, by sharing excess meat". Where I believe this to hold validity in some cases, I think a more likely explanation was to accompany solo hunters and help with the retrieval of smaller game, hunted from a distance; such as gun-dogs of today.

Finally, adaptation can be shown through methods of transport of humans and resources / physical objects and goods.

Where there was no machinery during the Neolithic period, transport was manually operated. Where the main methods of transport were pulling a wagon or walking long distances around Lakes and Oceans; humans were incentivised to adapt and make their life easier.

For example, if a group of people needed to move large rocks from one location to another, in order to build a monument or outpost (if the building materials needed were not accessible in the intended construction location) humans learned that using tree trunks to act as wheels to roll large items. This is shown by the current monument 'Stonehenge'; in which ⁸"they were transported on sledges, on greased tracks of wood, pulled by rope". Previous humans felt a need to move these stones, and adapted their techniques to move them as efficiently as they could for their era.

In conclusion, I believe the need to adapt is derived directly from the environment and the changes in demand of resources and food; primarily caused by an increase in population.

Reference List:

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