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HUMAN GEOGRAPHY
TOPIC :6**

Human adaptation to environment

(ESKIMO, MASAI, MAORI)

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- *Adaptation* became a term frequently used in various circumstances. In general, the meaning “to adapt to a new situation with the aim to increase the chance or quality of surviving” is almost the same in many different connections related to living organisms including humans. In biology and ecology, adaptation is connected with an evolutionary process whereby an organism becomes better able to live in its habitat or habitats.

- An adaptation in nature is acquired through evolution and conveys some type of advantage that help a species to pass its genetic material along to another generation. **It typically takes one of three forms: structural, physiological and behavioral.**
- **Structural Adaptations**
- A structural adaptation is a change involving a physical aspect of an organism. *The physical change is often related to a change in the organism's physical environment.* Or, *Physical features of an organism that enable them to survive in their environment (e.g. a penguin has blubber to protect itself from freezing temperatures).*

- Behavioral Adaptations

- *A behavioral adaptation is a change affecting the way an organism naturally acts. This type of adaptation could be caused by a change in the surrounding environment or the actions of another species.* e.g. bears hibernate in winter to escape the cold temperatures and preserve energy. predatory animals might start hunting in packs - giving them an evolutionary advantage over solo hunters. In addition to changes in a predatory strategy, examples of behavioral adaptations include changes in social patterns, communication methods, feeding habits and reproductive strategy.

- Physiological Adaptation

- Physiological adaptations are *similar to structural adaptations* in the sense that they involve a physical change to the species. *Internal and/or cellular features of an organism that enable them to survive in their environment.* However, physiological adaptations aren't always seen in an organism's appearance. This type of adaptation may be driven by either a change to the environment or the behavior of another species. *For example*, a species living in water that suddenly becomes more acidic might adapt by slowly shifting its own body chemistry. Other examples of physiological adaptations include developing greater intelligence and improving the senses.

Physical environment and **indigenous** people:

- 1. **Equatorial Forest Region:** Pigmy, Semang, Boro, Papuan etc.
- 2. **Grassland:** *Masai*, Kyrghiz Etc.
- 3. **Tropical Desert:** Bedouin, Bushman, Aborigines Etc.
- 4. **Mountainous region:** Bhutia, Gujjar, Naga etc.
- 5. **Monsoon region:** Gonds, Santhal, Toda, Bhils etc.
- 6. **Arctic cold region:** **Eskimo**, Lapp, Alute, Chukchi etc.

ESKIMOS:

Eskimos are the indigenous circumpolar peoples who have traditionally inhabited the **northern circumpolar region from eastern Siberia (Russia) to Alaska (United States), Canada, and Greenland.**



- **Food :**

- The Inuit have traditionally been fishers and hunters. They still hunt whales(esp. bowhead whales), seals, polar bears, muskoxen, birds, and fish and at times other less commonly eaten animals such as the arctic fox. The typical Inuit diet is high in protein and very high in fat—in their traditional diets, Inuit consumed an average of 75% of their daily energy intake from fat. While it is not possible to cultivate plants for food in the Arctic, the Inuit have traditionally gathered those that are naturally available. Grasses, tubers, roots, stems, berries, and seaweed (kuanniq or edible seaweed) were collected and preserved depending on the season and the location. There is a vast array of different hunting technologies that the Inuit used to gather their food.
- the Inuit were able to get the necessary vitamins they needed from their traditional winter diet, which did not contain any plant matter. In particular, he found that adequate vitamins C could be obtained from items in their traditional diet of raw meat such as ringed seal liver and whale skin (muktuk).

- **Clothing:**

- Inuit made clothes and footwear from animal skins, sewn together using needles made from animal bones and threads made from other animal products, such as sinew. The anorak (parka) is made in a similar fashion by Arctic peoples from Europe through Asia and the Americas, including the Inuit. The hood of an amauti, (women's parka, plural amautiit) was traditionally made extra-large with a separate compartment below the hood to allow the mother to carry a baby against her back and protect it from the harsh wind. Styles vary from region to region, from the shape of the hood to the length of the tails. Boots (mukluk), could be made of caribou or seal skin and designed for men and women

- **Igloo:**

- An igloo also known as a snow house or snow hut, is a type of shelter built of snow, typically built when the snow is suitable. Although igloos are often associated with all Eskimo peoples, they were traditionally used only by the people of Canada's Central Arctic and Greenland's Thule area.
- Other Inuit tended to use snow to insulate their houses, which were constructed from whalebone and hides. Snow is used because the air pockets trapped in it make it an insulator. On the outside, temperatures may be as low as -45°C (-49°F), but on the inside, the temperature may range from -7 to 16°C (19 to 61°F) when warmed by body heat alone.

- **Types** : There are *three* traditional types of *igloos*, all of different sizes and used for different purposes:
- The smallest are constructed as temporary shelters, usually only used for one or two nights so they are easier to build. On rare occasions these are built and used during hunting trips, often on open sea ice
- Intermediate sized igloos were for semi-permanent, family dwelling. This was usually a single room dwelling that housed one or two families. Often there were several of these in a small area, which formed an Inuit village.
- The largest igloos were normally built in groups of two. One of the buildings was a temporary structure built for special occasions, the other built nearby for living. These might have had up to five rooms and housed up to 20 people. A large igloo might have been constructed from several smaller igloos attached by their tunnels, giving common access to the outside. These were used to hold community feasts and traditional dances.

- **Transport**

- The Inuit peoples hunted sea animals from single passenger, covered seal skin boats called **qajaq** (Inuktitut syllabics: Europeans which were extraordinarily buoyant, and could easily be righted by a seated person, even if completely overturned. Because of this property, the design was copied by an d Americans who still produce them under the Inuit name kayak .
- Inuit also made **umiaq**("woman's boat"), larger open boats made of wood frames covered with animal skins, for transporting people, goods, and dogs. They were 6–12m (20–39ft) long and had a flat bottom so that the boats could come close to shore.
- In the winter, Inuit would also hunt sea mammals by patiently watching an **aglu**(breathing hole) in the ice and waiting for the air-breathing seals to use them. This technique is also used by the polar bear, who hunts by seeking holes in the ice and waiting nearby. In winter, both on land and on sea ice, the Inuit used dog **sleds(qamutik)** for transportation. The husky dog breed comes from the Siberian Husky. These dogs were bred from wolves, for transportation. A team of dogs in either a tandem/side-by-side or fan formation would pull a sled made of wood, animal bones, or the baleen from a whale's mouth and even frozen fish, over the snow and ice.
- The Inuit used stars to navigate at sea and landmarks to navigate on land; they possessed a comprehensive native system of toponymy. Where natural landmarks were insufficient, the Inuit would erect an inukshuk. Also, Greenland Inuit created **Ammassalik** wooden maps, which are tactile devices that represent the coast line. Dogs played an integral role in the annual routine of the Inuit. During the summer they became pack animals, sometimes dragging up to 20kg of baggage and in the winter they pulled the sled. Yearlong they assisted with hunting by sniffing out seals' holes and pestering polar bears. They also protected the Inuit villages by barking at bears and strangers. The Inuit generally favored, and tried to breed, the most striking and handsome of dogs, especially ones with bright eyes and a healthy coat. Common husky dog breeds used by the Inuit were the Canadian Eskimo Dog, the official animal of Nunavut(**Qimmiq**; Inuktitut for dog), the Greenland Dog, the Siberian Husky and the Alaskan Malamute. The Inuit would perform rituals over the newborn pup to give it favorable qualities; the legs were pulled to make them grow strong and the nose was poked with a pin to enhance the sense of smell.

- **Industry and art:**

- Inuit industry relied almost exclusively on animal hides, drift wood, and bones, although some tools were also made out of worked stones, particularly the readily worked soap stone. Walrus ivory was a particularly essential material, used to make knives. Art played a big part in Inuit society and continues to do so today. Small sculptures of animals and human figures, usually depicting everyday activities such as hunting and whaling, were carved from ivory and bone. In modern time sprits and figurative works carved in relatively soft stone such as soapstone, serpentinite, or argillite have also become popular.

- **Society:**

- The division of labour in traditional Inuit society had a strong gender component, but it was not absolute. The men were traditionally hunters and fishermen and the women took care of the children, cleaned the home, sewed, processed food, and cooked. However, there are numerous examples of women who hunted, out of necessity or as a personal choice. At the same time men, who could be away from camp for several days at a time, would be expected to know how to sew and cook.
- The marital customs among the Inuit were not strictly monogamous. Open marriages, polygamy, divorce, and remarriage were known. Among some Inuit groups, if there were children, divorce required the approval of community and particularly the agreement of the elders.
- The Inuit were hunter gatherers , and have been referred to as following the birth of an infant was for an **Angakkuq** (shaman nomadic . One of the customs) to place a tiny ivory carving of a whale into the baby's mouth, in hopes this would make the child good at hunting. Loud singing and drumming were also customs.

- **RECENT CHANGES**

- Eskimo life has changed greatly because of increased contact with societies to the south. Snowmobiles have generally replaced dogs for land transport, and rifles have replaced harpoons for hunting purposes. Outboard motors, store-bought clothing, and numerous other manufactured items have entered the culture, and money, unknown in the traditional Eskimo economy, has become a necessity. Many Eskimos have abandoned the nomadic hunting and now live in northern towns and cities, often working in mines and oil fields. Others, particularly in Canada, have formed cooperatives to market their handicrafts, catches, and tourism ventures.



- **Pastoral economy:**

the pastoralist Maasai built an economy and way of life deeply intertwined with their cattle herds in the Great Rift Valley of southern Kenya and northern Tanzania.

The Maasai have historically depended on their cattle (sheep, goat, cow, donkey etc.) in meeting all of their basic needs: food, clothing, and shelter.

Cattle represent the fundamental currency in traditional Maasai society.



- **Food-clothing – shelter:**

- *Milk products, maize-millet, banana, root crops and vegetable, wild honey.*
- *Simple cloths, cloth made of animal skin, bull hide sandals.*
- *They live in huts. A kraal is circular enclosure in which 20-30 huts are constructed. Outer ring is protected by thorny fence.*



Kraal

- **Society:**

- Endogamous

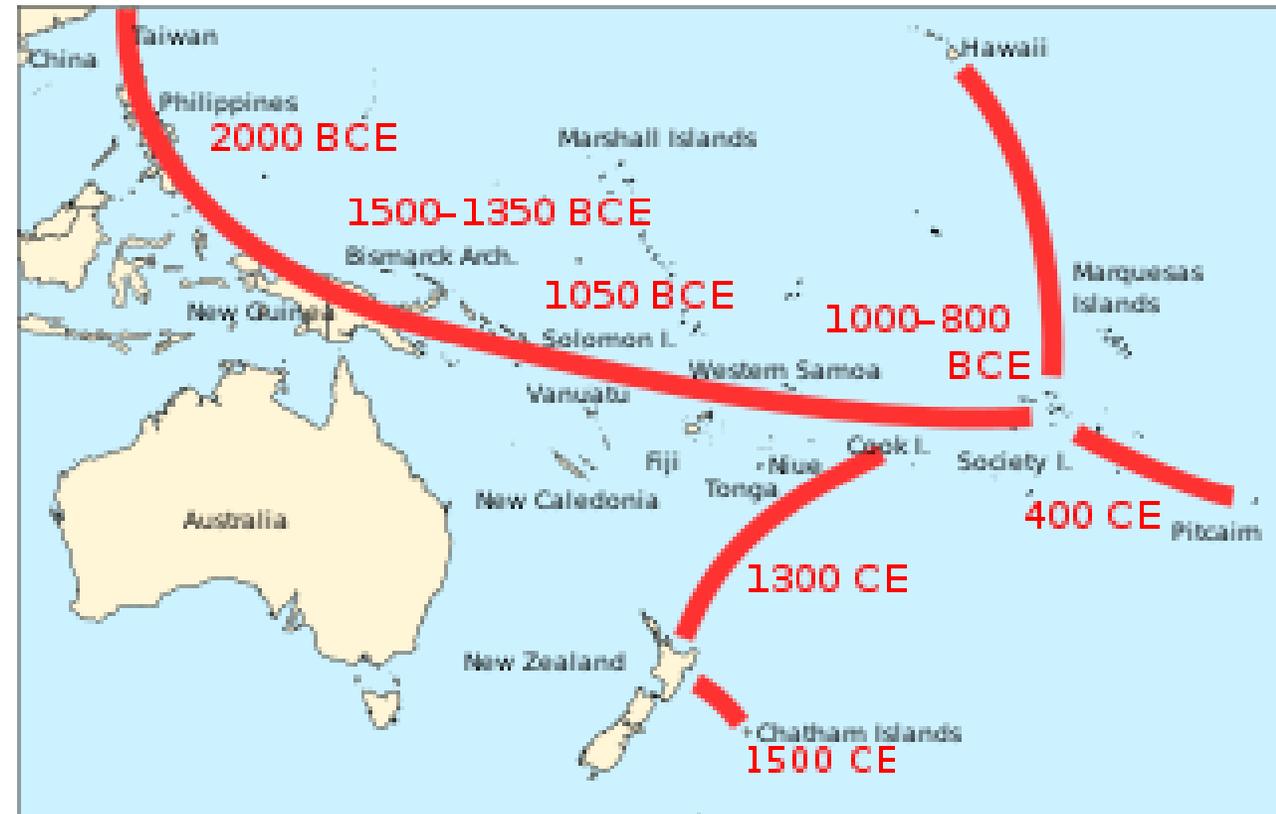
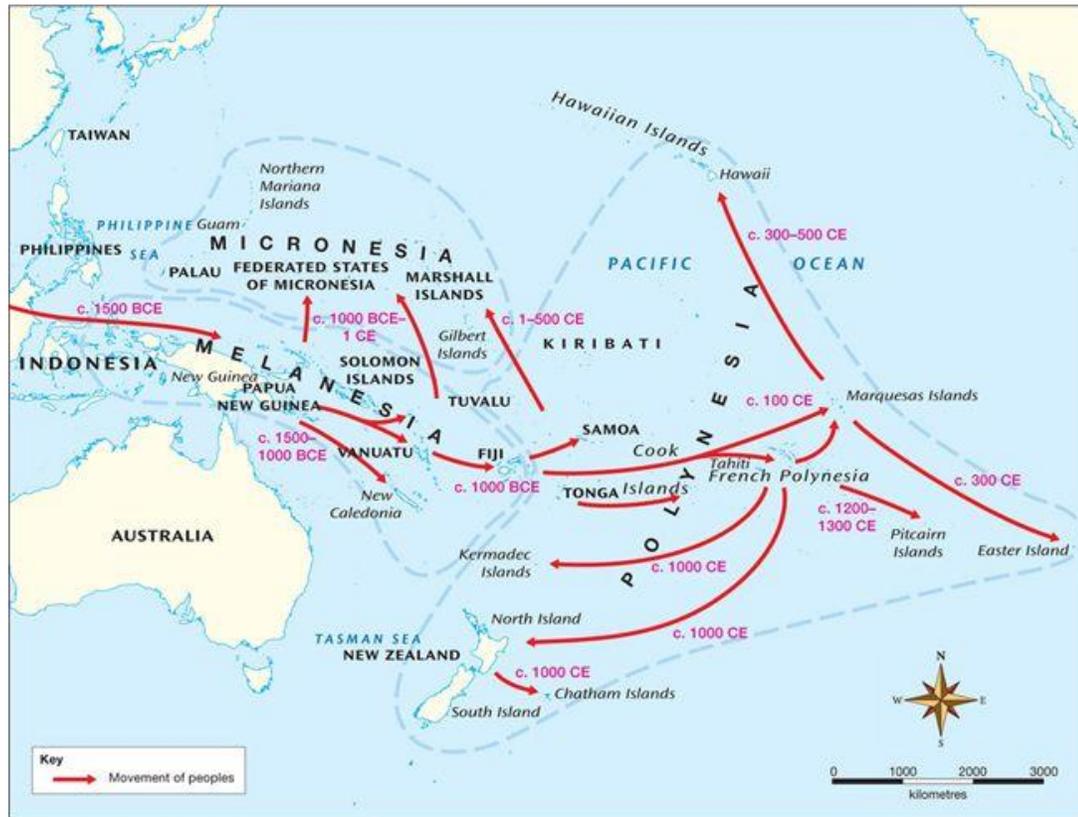
- Clan is important

- Patrilineal soceity

MAORI

- Location :





- The **history of the Māori** began with the arrival of Polynesian settlers in New Zealand (Aotearoa in Māori), starting from the late 13th or early 14th centuries. Over several centuries of isolation, the Polynesian settlers formed a distinct culture that became known as the Māori.

European Contact

Dutch navigator Abel Tasman was the first European to encounter the Maori. Four members of his crew (*pakhea*) were killed in a bloody encounter in 1642. In 1769 British explorer James Cook established friendly relations with some Maori. By 1800, visits by European ships to New Zealand became frequent which inflicted a heavy death toll by disease on Maori.

The Musket Wars

A greater threat to Maori however were their own tribal conflicts called the Musket Wars which raged between 1807–1842. This included around 500 battles where Maori tribes fought each other resulting in heavy tolls on each tribe. Maori also attacked another indigenous people **called the Moriori** which all but wiped them out. After the Musket Wars there was a period of relative peace until 1845 when the New Zealand Wars broke out due to land disputes which lasted till 1872. After these wars and the death toll due to disease, the Maori population dropped to a low 100,000 persons or thereabouts.

Treaty of Waitangi

In 1840 representatives of Britain and Maori chiefs signed the Treaty of Waitangi. This treaty established British rule of New Zealand and granted the Maori, British citizenship, while also recognising Maori land rights.

The early Māori diet included an abundance of **moa bird** and other large birds and fur seals that had never been hunted before.

Te Reo Maori is their native language which is related to Tahitian and Hawaiian.

- **Māori culture**

- Māori culture plays a role in everyday life in New Zealand. They are Polynesian and make up 15 percent of the country's population.
- The best place to observe Māori culture is on a marae, which is a sacred communal meeting space.
- During a marae visit, you'll also hear Māori speeches and singing, see carved meeting houses, greet the locals with a hongī (pressing of the noses) and enjoy a HANGI feast cooked in earth ovens.
- Tikanga, or Māori customs, are also important in daily life. Manaakitanga (hospitality) is all about welcoming guests and providing great hospitality, something which all Kiwis pride themselves on.
- Kaitiakitanga embodies the sense of respect and guardianship Māori feel toward the natural world. *This philosophy is central to the love and care many New Zealanders have for the environment.* We ask all visitors to New Zealand to make the Tiaki Promise, which captures this respect for our precious natural resources.
- Performing arts or kapa haka, which incorporate harmonious singing, rhythmic dancing, and Māori dances such as the haka,

Maori Traditions

Before the coming of the *Pakeha* (white man) to New Zealand, all literature in Maori was orally passed onto succeeding generations. This included many legends and waiata (song). Although some stories are also told within the carvings that adorn their whare (houses).

Haka

The most recognised tradition today is the "**Haka**" which is a war dance. Performed before the onset of war, today it has been immortalized by New Zealand's Rugby Team the All Blacks, who perform this dance before every game.

Powhiri

The traditional Maori welcome is called a powhiri, this involves a *hongi* which is a greeting that involves *pressing noses as opposed to a kiss*.

After the **pōwhiri**, **kai (food)** will be shared, in keeping with the Māori tradition of **manaakitanga** or **hospitality**.



Haka

Food

A traditional form of cooking called a **Hangi** is a feast cooked inside the earth. Stones are heated in a fire inside a dug out pit and covered in cabbage leaves or watercress to stop the food from burning. Mutton, pork, chicken, potatoes, and kumera (a sweet potato) are then unusually lowered into the pit in a basket.

The food is covered with Mutton cloth or similar and traditionally with flax. Finally earth is placed on top to keep in the heat and steam. The food takes about 3 hours to cook.

The Hangi is still popular today and is a viable alternative to a weekend barbecue, although more suitable for larger groups due to the reasonable amount of preparation required.

The unique taste of food cooked in a Hangi can best be described as steamed food with an earthen flavour.

Tattoo

Another prominent feature of Maori culture is their striking facial tattoos. Known as "moko" it was and is a predominantly a male activity.

Female forms of moko were restricted to the chin area, the upper lip, and sometimes the nostrils. Today the moko still lives on as an increasing number of Maori opt to receive it in an effort to connect deeper with their cultural identity and preservation of their culture within a multicultural western country.



- References:
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