ANTHROPOLOGY NEWS DIARY

(AND)

20.08.2021

FOR UPSC CSE MAINS

This series provides compilation of daily CURRENT AFFAIRS of Anthropology. It is aimed at addressing the requirement of aspirants to add contemporary aspects of the subject to the answers.

It also helps in understanding the trends of anthropology across India and the world.

**NOTE:** Please attempt the questions given at the end of the document and can upload on the *telegram channel: Sosin for Anthropology Q&A*, for peer review.
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Note - For convenience, the respective reference links have been dropped at the end of every topic.
A. ARCHAEOLOGICAL ANTHROPOLOGY

1. Genetic Histories

- The field of Archaeogenetics has substantially contributed to a better understanding of how the movement and admixture of people across Europe during the Neolithic and Bronze Ages shaped genetic ancestries.
- However, not all regions are equally well represented in the archaeological record. To fill this gap, researchers have now sequenced whole genomes of 28 individuals from two sites in present-day eastern Croatia and gained new insights into this region's genetic history and social structures.
- The researchers' goal was to understand both the genetic ancestry as well as social organisation within each community -- in particular, to study local residency patterns, kinship relations and to learn more about the varied burial rites observed.
- Dated to around 4,700-4,300 BCE the Middle Neolithic settlement at Beli-Manastir Popova zemlja belongs to the Sopot culture.
- The second site the researchers studied was the Middle Bronze Age necropolis of Jagodnjak-Krčevine that belongs to the Transdanubian Encrusted Pottery Culture and dates to around 1,800-1,600 BCE.
- The researchers found that the people from Jagodnjak actually carried very distinct ancestry due to the presence of significantly more western European hunter-gatherer-related ancestry. This ancestry profile is present in a small number of other studied genomes from further north in the Carpathian Basin. These new genetic results support archaeological evidence that suggests a shared population history for these groups as well as the presence of trade and exchange networks.
- This study helps to fill the gap in the archaeological record for this region, characterising the diverse genetic ancestries and social organisations that were present in Neolithic and Bronze Age eastern Croatia. It highlights the heterogeneous population histories of broadly contemporaneous coastal and inland Bronze Age groups, and connections with communities further north in the Carpathian Basin.
- Furthermore, it sheds light on the subject of Neolithic intramural burials -- burials within a settlement -- that has been debated among archaeologists and anthropologists for some time.

Reference:
https://www.sciencedaily.com/releases/2021/08/210818083959.htm

2. Dravidian Language & IVC

- A new research paper published in the peer-reviewed journal of the Springer Nature Group has provided some interesting new insight on the linguistic culture of the Harappans.
- A new research paper published in the peer-reviewed journal of the Springer Nature Group has provided some interesting new insight on the linguistic culture of the Harappans.
- Taking clues from a few words shared between the Indus Valley people and the cultures they came in contact with, the paper traced their language roots to proto-Dravidian, which is the ancestral language of all the modern Dravidian languages.
Thereafter the paper suggested that speakers of ancestral Dravidian languages had a greater historic presence in northern India including the Indus Valley region from where they migrated.

The paper titled, ‘Ancestral Dravidian languages in Indus Civilization: ultraconserved Dravidian tooth-word reveals deep linguistic ancestry and supports genetics’ has been written by software developer and independent researcher Bahata Ansumali Mukhopadhyay.

The study took into account the thriving trade relations between the Indus Valley Civilisation (IVC) and the Persian Gulf as well as Mesopotamia.

Accordingly, Mukhopadhyay searched through the near-Eastern texts to locate foreign words with roots in the Indus Valley. The logic, as the paper suggests, is the fact that when a commodity is not locally produced, we call it by its foreign name.

Consequently, the study found that the Akkadian (language spoken in ancient Mesopotamia) word for elephant- ‘pīru’/‘pīri’ and their variations, as well as the old Persian word for ivory, ‘pīrus’ possibly had roots in the Indus Valley.

Further, the paper suggested that in several Dravidian languages, ‘pīlu’, ‘pella’, ‘palla’, ‘pallava’, ‘pīluvam’, ‘pīluru’ are used to signify elephant. Mukhopadhyay pointed out to the discrepancy between the use of ‘l’ in the Indic languages and ‘r’ in Akkadian and old Persian and suggested that “since people of ancient Persia had functioned as intermediaries between Mesopotamia and IVC traders, while exporting IVC’s ivory, they had arguably spread the Indic elephant word (‘piru’ ‘pilu’) to Mesopotamia as well.

Reference:

B. BIOLOGICAL ANTHROPOLOGY

1. Fasting & Intestinal Disease

- Fasting before and during exposure to invasive food-borne bacteria protects mice from developing a full-blow gastrointestinal infection, in part through the actions of the gut microbiome.
- In addition, fasting therapies have become popular in recent years and show promise for treating chronic inflammatory diseases, but it is uncertain whether fasting-induced immunosuppression could leave an already fasted host more vulnerable to infection than a fed host.
- In the study, mice were fasted for 48 hours before and during Salmonella enterica infection.
- Fasting decreased the signs of bacterial infection compared to fed mice, including nearly eliminating all intestinal tissue damage and inflammation.
- When fasted animals were re-fed for a day after their fast, there was a dramatic increase in Salmonella enterica numbers and invasion into the intestinal walls, although the associated inflammation was still attenuated compared to normal.
- The results did not hold true when mice were exposed to Salmonella enterica intravenously instead of orally, and analyses of the microbiomes of mice showed significant changes associated with fasting and protection against infection.
- Moreover, fasting did not fully protect germ-free mice — bred to lack a normal microbiome — from Salmonella enterica, suggesting that some of the protection was due to fasting’s effect on the microbiome.
• These data suggest that therapeutic fasting or calorie restriction has the potential to beneficially modulate infectious and potentially non-infectious gastrointestinal diseases.
• When food is limited, the microbiome appears to sequester the nutrients that remain, preventing pathogens from acquiring the energy they need to infect the host.
• While more research is needed, fasting or otherwise adjusting food intake could be exploited therapeutically to modulate infectious diseases in the future.

Reference:

2. Preterm Birth & Autism
• Autism, or autism spectrum disorder (ASD), refers to a broad range of conditions characterized by challenges with social skills, repetitive behaviors, speech and nonverbal communication. According to the Centers for Disease Control, autism affects an estimated 1 in 54 children in the United States today.
• Researchers say babies who are born preterm may have a higher chance of developing autism.
• They say their findings add to previous research that has concluded that genetic and environmental factors can play a role in autism risk.
• Researchers add that babies born preterm still only have a 6 percent rate of autism, so their findings should be used as a diagnostic tool to help with early intervention.
• Around the age of 2, children’s brains undergo significant growth and neural connection formation during which the brain is at its highest ‘neural plasticity’ or potential for change.
• One study of a half-million people found that children who had a sibling with autism were 14 times more likely to have autism than the general population — again indicating genetic factors at play.

Reference:
https://www.healthline.com/health-news/preterm-birth-may-increase-the-chance-of-autism#Early-intervention-is-key

3. Sauropod Dinosaur Species
• Paleontologists have identified two new species of giant herbivorous dinosaurs from fossils found in the Turpan-Hami Basin, Xinjiang, northwestern China.
• The two new dinosaurs lived in what is now China during the Early Cretaceous epoch, between 130 and 120 million years ago.
• Dubbed Silutitan sinensis and Hamititan xinjiangensis, they were about 20 m and 17 m (66 and 56 feet) long, respectively.
• This is the first time that somphospondylans have been reported from the Early Cretaceous of Xinjiang.
• The fossils of Silurian sinensis and Ham Titan xinjiangensis were recovered from the Lower Cretaceous Shengjinkou Formation.
• The first consists of an articulated middle to posterior cervical vertebrae series.
• The second consists of an incomplete articulated caudal sequence that could be assigned to lithostrotion titanosaurs based on the strongly procoelous caudal vertebrae with lateral concave surface, as well as marked ventrolateral ridges.
• The researchers also found four vertebrae and rib fragments from a third, yet-undescribed species of somphospondylan sauropod dinosaur.
Additionally, they found a small tooth of carnivorous theropod dinosaur near the fossilized remains of *Hamititan xinjiangensis*.

*Reference:*  

**UPSC Previous year questions based on today’s concept:**

1. Indus Valley Civilization  
   (S.N. - 1999)
2. Linguistic Anthropology  
   (10 Marks - 2002)

**DAILY PRACTICE QUESTION/S FOR MAINS 2021.**  
Pl do not forget to upload your answer sheet for a peer review on the telegram channel:

**Sosin for Anthropology Q&A**

1. Present different anthropological studies held IVC sites.  
   (20 Marks)