

Hominin discussion : the evidence for early human evolution

[Science](#), [Anthropology](#)



Hominin Discussion Paper: the evidence for early human evolution of affiliation Hominin Discussion Paper: the evidence for early human evolution Hominin Discussion Paper: the evidence for early human evolution Although many believe that Homo habilis is the first ancestor of Homo erectus, introducing Dmanisi skull 5 and WT 15000 in the evolutionary line brings out different results. The Dmanisi skull 5 and WT 15000 are classified as more closely related ancestors of Homo erectus especially given that they share numerous features. Homo erectus interests many scientists as it is thought to be the likely ancestor of modern day human beings given that his fossils differed from those of ape-man or Homo habilis. This paper focuses on identifying the true or direct ancestor to Homo erectus. After comparing Homo erectus with Dmanisi, and Homo erectus with the WT 15000, this paper reveals that the paper Homo erectus and WT 15000 share numerous characteristics and this makes WT 15000 the direct ancestor to Homo erectus.

Within the same time the fossils of Homo erectus were found in East Africa, the fossils of Dmanisi were found in Eastern Europe in Georgia republic and Turkana boy or Nariokotone found in west of Lake Turkana Kenya (Hazarika, 2007). These discoveries were however not all Homo erectus but the Dmanisi and the Turkana boy are considered as the ancestors of Homo erectus. However, from Turkana boy or Nariokotone classified as Homo ergaster offers more characteristics similar to Homo erectus (Solomon, Berg, & Martin, 2011). First, WT 15000 or Nariokotone fossils rated 1. 9-1. 2 million years ago or mya while those of Dmanisi or D2700 rated as old as 1. 8-1. 7 mya. While the Homo erectus fossils rated as old as 1. 8 mya, the

Nariokotone was older hence higher chances of association to the earliest human lineage.

In terms of characteristics, WT 15000 species' brain size was about 880 cc as a boy which then developed to 910cc in adulthood (Stanford, Allen, & Anton, 2012). Today, an adult human is said to have a brain size of about 1350cc.

this makes the Nariokotone a very close ancestor to Homo erectus whose brain size ranged from between 750 to 1250cc. Conversely, Dmanisi had an average brain capacity of 600cc which lies between the Homo habilis and Homo erectus making the species less likely to be the direct ancestor of Homo erectus. According to Stanford, Allen, & Anton (2012), the body size feature further distances Dmanisi from Homo erectus compared to Turkana boy. The body size of Dmanisi was small and the bone length measures estimated between 145-166cm. Compared to Dmanisi, WT 15000 species body size measured around 150.5-169.1 cm and this was much taller.

However, the early Homo erectus was large bodied characterized by elongated legs, smaller arms, and moderate torso. The large bodied characteristics are associated with living on the ground through walking or perhaps running just like present day humans (Solomon, Berg, & Martin, 2011).

According to Smithsonian National Museum of Natural History (2014), the shared qualities between Turkana boy and Homo erectus were very essential in understanding the evolution of the two in terms of body size, rates of growth, and body shape. For Turkana boy, the body was long and slender which provides evidence of early human adaptation to dry and hot climate as found in Africa. Additionally the fact that the Turkana boy was long-legged

with a narrow pelvis further relates him to Homo erectus who was bipedal with more adapted body feature to walking and running other than tree climbing (Smithsonian National Museum of Natural History, 2014).

Additionally, WT 15000 was characterized by strong and heavily muscled skeleton which indicated that the species, like the Homo erectus was involved in profound exertion physically.

In conclusion, although the DManisi and the Turkana boy fossils were identified within the almost the same period in time, the Turkana boy found in Kenya's Lake Turkana exhibit characteristics that are closely related to those of Homo erectus.

References

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