The origin of human bipedality

Abstract

Theories that assign the origin of human bipedality to functions such as manual food transport, or thermoregulation, etc., without concern for physical aggression and defense disregard the real-world hazards in the natural environment. Man possessing no natural weapons is a weak and helpless animal in the open savannah. The idea that stone throwing led to upright stance does realize that standing up maximizes throwing efficiency, but stones are most effective as a group weapon, less so for a single individual. Rather, it is the use of clubs as a weapon that most likely evolved human bipedality. Primates, just as many other animals tend to rear up on two legs when fighting, and that behavior supplies the initial ground for bipedality. But when joined to fighting with sticks, the efficiency of which depends on efficient arm-leg-body coordination and advantages of height, upright posture acquires the most crucial selective significance. The use of clubs provides a basic and universal weapon for a slow running biped without fangs, as much in the present as it could have in the past. This paper presents the reasons why wielding the stick was the chief factor that made man a biped.

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