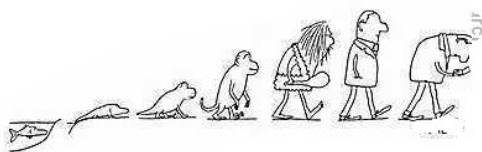


EVOLUTION OF PRIMATES



I. There are presently about 230 primate species, which primatologist usually classify into two sub orders, *prosimians* (retain earlier mammalian characters; claws, long snout, lateral facing eyes etc) and *anthropoids*.

Classification of existing subgroups in the order primates, with common names for some members in each group, are as follows~

Sub Order: prosimii

Superfamily Lemuroidea-Lemurs

Superfamily Lorisioidea –Galagos.

Superfamily Tarsioidea – Tarsiers.

Sub Order : Anthropoidea

Infra Order Platyrrhini [New world]

Superfamily Ceboidea

Family Callitrichidae – marmosets

Family Cebidae – spider monkey, howler monkey.

Infra order Catarrhini [Old world]

Superfamily Cercopithecoidea

Family Cercopithecidae-macaques, baboons, Vervet monkeys.

Family Colobidae –langurs.

Superfamily Hominoidea

Family Hylobatidae-gibbons

Family Pongidae – gorillas, orangutans, Chimpanzees

Family Hominidae – humans.



iv/Teeth and digestive tract- adapted to an omnivorous diet.

v/Posture- A semi erect posture that enables hand manipulation and provides a favorable position preparatory to leaping.

vi/Center of gravity positioned close to the hind legs.

vi/ Well-developed hand eye motor coordination.

vii /Optical adaptation- that include overlap of the visual fields to gain precise three dimensional information on the location of food objects and tree branches.

viii /Shortening of the face accompanied by reduction of the snout.

ix /Compared with practically all other mammals, a very large and complex brain in relation to the body size.

II. Members from the two primate suborder~

A.Lemur:

1. Appear exclusively in Madagascar, which probably separated from the African continent sometime during the late Cretaceous period.

2. More primitive than monkeys, having a longer snout and moist *philtrum* between nose and the upper lip that accentuates their sense of smell.

3. They have a special toilet claw on the second toe, thick fur, sensitive facial hair (vibrissae) and a dental comb formed by the nearly horizontal (procumbent) orientation of the lower incisors and canines that is used for grooming and feeding.

4. Tapetum lucidum (retinal layer that reflects incoming light back through the retina)- present, some remain exclusively nocturnal.

B.Lorises :

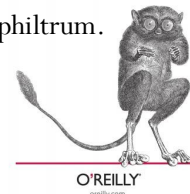
1. Found in forest of both Africa and South east Asia.

2. Snout— is shorter than in Lemurs .

3. Relatively large eyes face forward, indicating adaptation to a larger forebrain and perhaps also to increased emphasis on visual predation.

4. Like Lemurs, Lorises have dental tooth combs, toilet claw and a moist philtrum.

C.Tarsiers:



Traits and tendencies found in Primate group~

i/Independent mobility of the digits.

ii/An opposable first digit in both hands and feet (thumb, big toe)

iii/Replacement of claws by nails to support the digital pads on the last phalanx of each finger and toe.

PRIMATE EVOLUTION_____