

- “**Humanness**” - What are the features that make us “human”?
How do our nearest relatives the chimps compare?
Are we qualitatively or quantitative different from other animals?
Is there some minimum number of features required to define “humanity”?
When do each of these features first appear in the course of human evolution?

modern humans (*Homo sapiens*)

Physical

bipedal
large cranial capacity, ca. 1325 cc
vocal tract with large phonetic range
small canines (both sexes)
thick tooth enamel
long lumbar region (5 vertebrae)
precision and power grips - both good
relatively hairless
loss of visible estrus signs
menopause in older females
slow maturation
46 chromosomes

Behavioral

“abstract” intelligence (symbolic thought)
complex symbolic language
tool use and tool making - very complex
(fire, clothing, composite tools, etc.)
delayed food consumption - food sharing
home bases and central place foraging
division of labor
long learning periods for offspring
complex cultural behaviors

modern chimps (*Pan troglodytes*)

Physical

quadrupedal
small cranial capacity, ca. 425 cc
vocal tract with limited phonetic range
dimorphic canines - larger in males
thin tooth enamel
short lumbar region (3 vertebrae)
precision (poorer), power grip (good)
relatively hairy
estrus cycle pronounced
no menopause in older females
more rapid maturation
48 chromosomes

Behavioral

less “abstract” intelligence
less complex communication system
very simple tool use and tool making
no delayed consumption, minimal sharing
lack home bases, central place foraging
lacks division of labor
shorter learning periods for offspring
simple cultural behaviors