

Mating Systems

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- Monogamy: 1 woman 1 man ← rarest in humans
- Polyandry: 1 woman multiple men ← most common (mild polygyny)
- Polygyny: multiple women 1 man
- Polygynandry: multiple women, multiple men

Default system for humans: serial monogamy (can remarry)

- ↳ polygyny acceptable but uncommon
- ↳ ^{older, successful} more wealthy men → more polygynous (more success for women vs. marrying poor)

Example: Kisumu pastoralists in Kenya

- forcibly moved by Europeans, studied marriages + land ownership
- default polygyny, with some monogamy
- as wealth increases, monogamous wives have lower reproductive success vs polygyny
 - ↳ direct relationship b/tw acres owned, # of wives
 - ↳ small # of successful males have most of the children (up to 80)

Variance in reproductive success

Farmers > herders > hunter-gatherers

(accumulation of material wealth → more inequality)

Based on polygyny threshold model, hunter-gatherers don't reach tipping pt. of wealth
Agriculture changes balance of economy + labor: farming women contribute small amt. of calories

Physical Adaptations

- Average reproductive success: 11-13 m-f in hunter gatherers
 - ↳ 13-26.5 m-f in farmers
 - ↳ emperors: 49-400 children
- } early agricultural-empire evolution

Evolutionary history: monogamy

- unknown common mating ancestor (chimps, gorillas use different methods)
- ↳ polygynandry: used to protect children from infanticide
- ↳ selection for larger testes size (sperm competition)
- ↳ large physical difference b/tw males, females

Human morphology:

- small testes (not evidence for polygyny)
 - low levels of sexual dimorphism (males slightly larger)
 - presence of female orgasm as honest signal for pair bond
 - lack of penile spine/baculum (additionally in neandertals)
- } evidence for monogamy/mild polygyny

Conclusions from morphology:

- low reproductive variance in females
- selection for long-term care providers (behavioral traits, wealth)
- short-term mating (good genes hypothesis) for diversifying offspring
- male strategy: maximize number of mates in short term (no cost of child care)
 - ↳ but long term wife to ensure maternity

Economics of Reproduction

To increase reproductive success:

- women prefer older, more successful/wealthy males with ^{masculine focus associated w/ calmness, aggression} feminine features (lower testosterone)
- men prefer younger, less experienced females → neoteny: preference for features from earlier developmental stage

Supernormal stimulus: exaggerated features with little/residual value

↑ increase competitiveness in mate selection

• Example: small waists (corsets), large hips + fat deposition pattern indicates fertility

↓
gluteofemoral fat is honest signal that improves neural development for fetus (increased cognitive scores after birth)

Baby schema: baby proportions

Choosing wealth

- material wealth: food, housing, land, money (not prevalent in forager societies)
- embedded wealth: health, age, knowledge, strength, intelligence
 - ↳ when maximizing embedded wealth, most foragers marry older since they need to learn hunting first
- relational wealth: family size, alliances (social capital)

Family Planning

most family sizes constrained by economic concerns

↳ ex. !Kung desert living: 1 child every 4 yrs, up to 3-4

↳ must travel long distances in heat w/ children - can only carry one child

↳ interbirth interval inversely related to weight of nuts foraged

Purpose: reduce infant mortality. birth interval is variable

↳ Hadza in East Africa: more abundant food, children can be left at camp

↳ infant care by grandmothers, self sufficient/weaned by 5

Result: much lower interbirth interval, higher fertility

↳ 19th-19th century Krummhorn Germany: poor women have shorter lives, more children ← for poor women, having more children decreases health and lifespan

↳ Gabra pastoralists: wealth measured in camels + livestock, must pay bride price → family size proportional to # camels
↳ 7-8 camels ⇒ 1 child

Weird Marriages

- in Western cultures, marrying cousins is taboo
- ↳ this is the outlier: most cultures (75%) have marriage of cousins
- first cousin offspring have greater chance of success

Other weird traits

- Bilateral descent (28% of societies) ← considered equally descendant of both parents
- Few within-family marriage (25%)
- Monogamous (15%)
- Nuclear family (8%)
- Neolocal residence (5%) - new couples make separate household

Only 0.7% of societies have all 5 traits

Most human societies:

- ↳ arranged marriage

- 1 in 10 marry a relative
- property owned by family, not individual
- spouses are paid for (dowry, brideprice)
- patrilocal/matrilocal (spouse lives w/ groom or bride's family)
- patrilineal: oldest men arrange for powerful alliances

↓
Segmentary lineage: links to:

- immediate family (minimal segment)
- cousins (minor)
- extended family (major)
- common ancestor (maximal lineage)