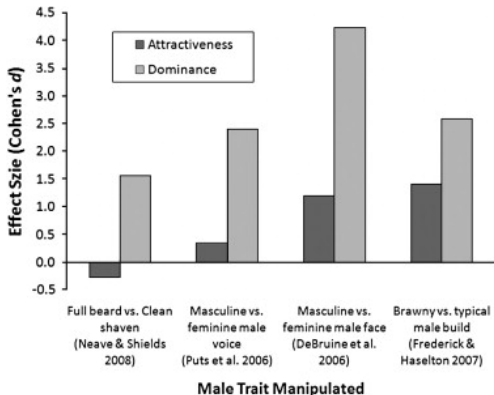


# Short-term Matings

- ▶ Sexual selection and mating patterns (continued)
- ▶ Are men more interested than women in short-term matings?
- ▶ Variation in male strategies
- ▶ Polygyny: what's in it for women?
- ▶ Short-term matings: What's in it for women?

# Mechanisms of sexual selection

In WEIRD societies, mating success would seem to be all about attracting mates (inter-sexual = mate-choice sexual selection). But... men are larger, stronger, faster, more physically aggressive than women  
What is the mechanism of sexual selection on human males?



# Short-term Matings

- ▶ Sexual selection and mating patterns (continued)
- ▶ **Are men more interested than women in short-term matings?**
- ▶ Variation in male strategies
- ▶ Polygyny: why would women marry polygynously?
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## Are men more interested than women in short-term matings?

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- ▶ more visual, less about touch and feelings

Ellis and Symons 1990

# Short-term Matings

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# Tradeoffs and variation in male strategies

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- ▶ low mate value: fewer women available to him

# Tradeoffs and variation in male strategies

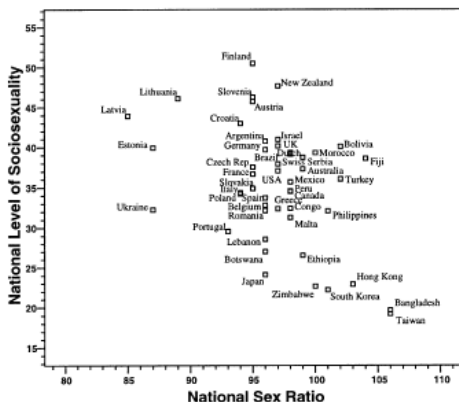
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OSR: 'operational sex ratio":  $\#$  of males ready to mate /  $\#$  of females ready to mate.

Parental investment takes individuals out of the mating pool, increases OSR. Greater OSR implies greater competition.

# Sex ratio and variation in male strategies

- ▶ forager data (Hiwi/Ache)
- ▶ 1950s compared to 1970s (baby boom marriage squeeze)
- ▶ impoverished black communities with many men in jail
- ▶ Cross-national data (Schmitt, *Beh Brain Sci* 2005)

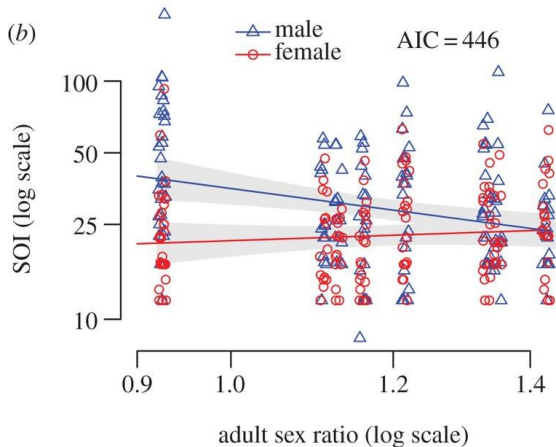


(Sociosexuality = Degree of interest in uncommitted sex)



# Sex ratio and variation in male strategies

Sociosexuality in 8 Makushi communities of southern Guyana



(from Schact and Borgerhoff Mulder 2015)

# Tradeoffs and variation in male strategies

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# Tradeoffs and variation in male strategies

Aka father hold or are within arms' reach of their infants 47% of the time (world's record)  
BUT Aka men with high status do less infant-holding



Text also mentions in Western societies:

- ▶ men who say women are attracted to them have more sex partners and more interest in uncommitted sex (SOI)
- ▶ men high in testosterone and handgrip strength have a more short-term strategy

# Testosterone & the mating/parent trade-off: U.S.

T higher in single than married men. Cause or effect?

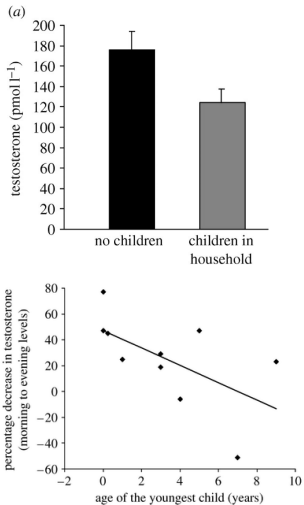
# Testosterone & the mating/parent trade-off: U.S.

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Testo:  $\uparrow$  before divorce,  $\downarrow$  after marrying,  $\downarrow$  in new dads (US).

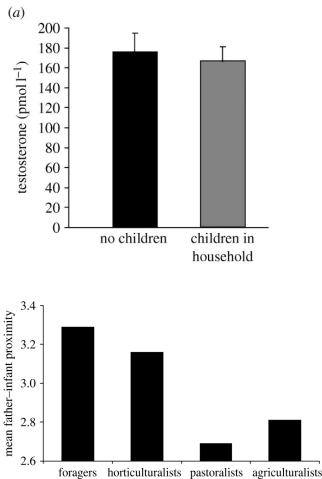
# Testo & the mating/parent trade-off cross-culturally

## Hadza foragers



data from Muller

## Datoga pastoralists

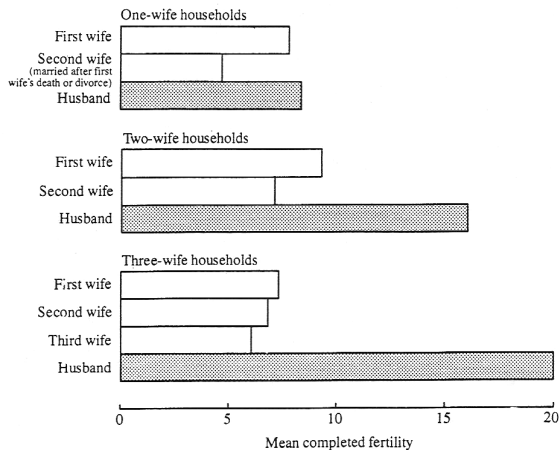


# Short-term Matings

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- ▶ Short-term mating: What's in it for women?

# Why might females marry polygynously?

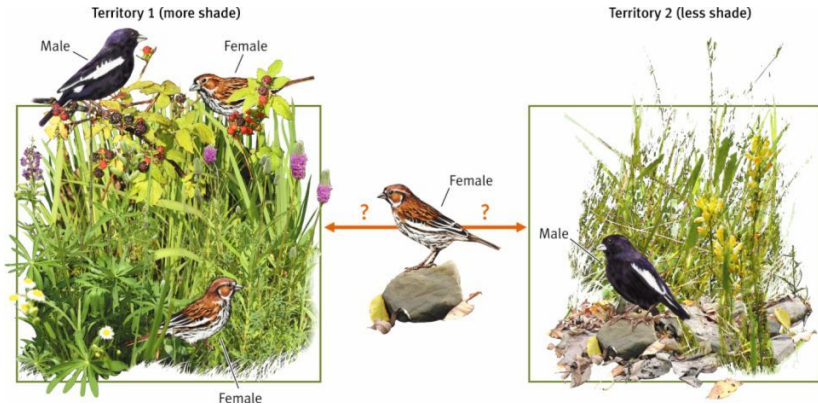
Men benefit reproductively from multiple mates. What about women?



(19th century Utah Mormons, from Daly and Wilson)

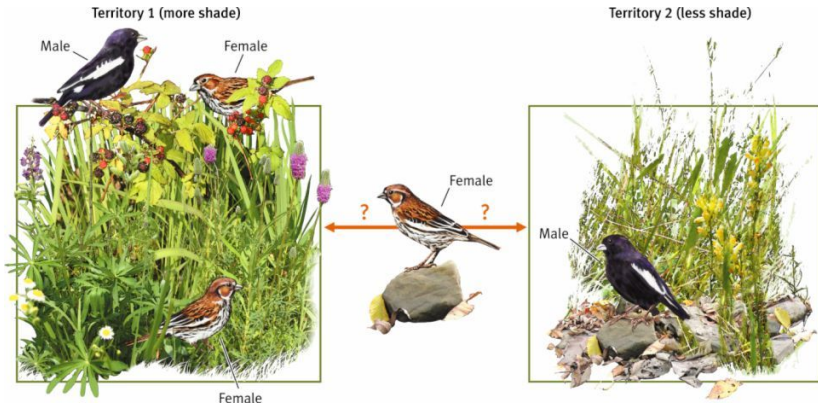


# Why might females marry polygynously?



The “polygyny threshold model”

# Why might females marry polygynously?



The polygyny threshold model: Does it apply to people?  
Is it female choice or male coercion?

Kipsigis women chose men with more land after division among co-wives, not more land overall: supports female choice in this population (from Borgerhoff-Mulder).

What about the Asante market women ?

# Short-term Matings

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- ▶ **Short-term matings: What's in it for women?**

## Multiple matings: females do it too: why?

More mates does not mean more children, so what is the payoff?

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More mates does not mean more children, so what is the payoff?

- ▶ more mates can mean more provisioning of offspring
- ▶ more mates can mean immediate gifts
- ▶ “extra-pair copulations” (EPCs) for genetic benefits
- ▶ mate-switching (looking for a better long-term mate)

# Dunnocks

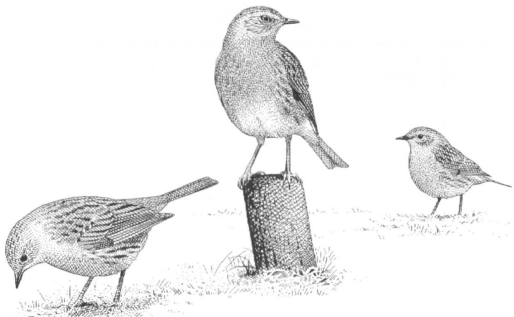
“Humble and homely in its deportment and habits, sober and unpretending in its dress. . . the dunnock exhibits a pattern which many of a higher grade might imitate.” (Reverend F. O. Morris, 1856).

“The Reverend Morris’s recommendation turns out to be unfortunate: we now know that the dunnock belies its dull appearance, having bizarre sexual behaviour and an extraordinarily variable mating system. Had his congregation followed suit, there would have been chaos in the parish. . .” (N. B. Davies, 1992)

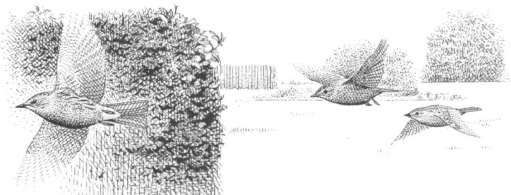


## Multiple matings for provisioning: Dunnocks

(top): The bird on the stump is the alpha male. He is guarding the female on the left from the beta male on the right.

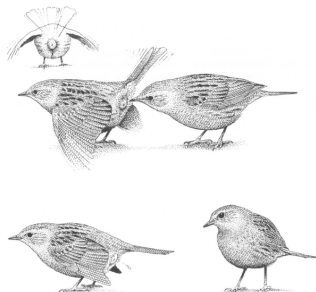


(bottom): She flies off, pursued by both of them



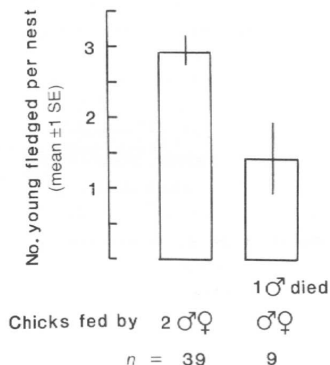
## Multiple matings: Dunnock females solicit multiple mates

- ▶ She solicits matings from other males, tries to evade guarding male
- ▶ High sperm competition
- ▶ frequent copulation ( $> 2x/\text{hour}$  if polyandrous)
- ▶ male cloaca pecking a response to female multiple matings



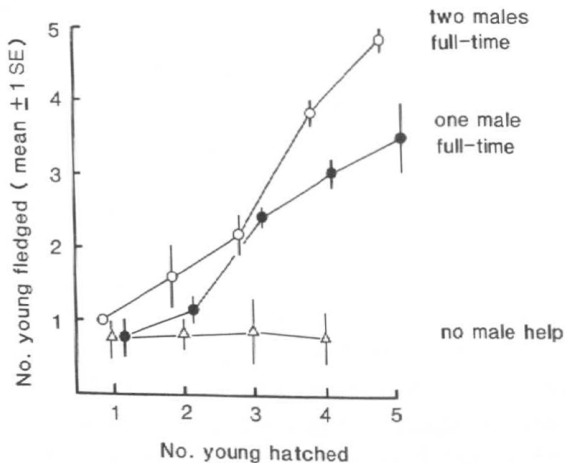


# What is the benefit to the female dunnock?



- ▶ better fed baby dunnocks are more likely to survive.
- ▶ beta male provisions chicks if he mates near egg-laying
- ▶ chick survival drops when one male dies

## The optimal number of dunnock fathers is two



- ▶ chicks survive better with more fathers
- ▶ mother lays more eggs if she anticipates more fathers

# Multiple matings for provisioning: Partible paternity

Partible paternity:

- ▶ Cultural belief that a child has more than one biological father
- ▶ Found in many Amazonian societies
- ▶ Secondary fathers typically help provision the child

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- ▶ uxorilocal (he moves to her home) - gives women more power?
- ▶ May facilitate alliances among males

## Partible paternity: Optimal number of Bari fathers is two

<u>child category</u>	<u>survivorship</u>
with secondary father	80%
siblings of above	61%
with only primary father	64%
siblings of above	69%



- ▶ gifts are targeted to child, not entire family
- ▶ children benefit from secondary father's gifts during times of scarcity

# Multiple matings for immediate resources

## Examples

- ▶ meat for sex (Shiranahua)
- ▶ gifts for mistresses (Trobriands, Mehinaku of Amazonia)

## Under what circumstances?

- ▶ where long-term provisioning unlikely
- ▶ proximates: father-absence during development?

Sex for resources can be seen as “assiduously maternal” behavior (Hrdy).

# Multiple matings for genetic benefit

Some suggestive evidence:

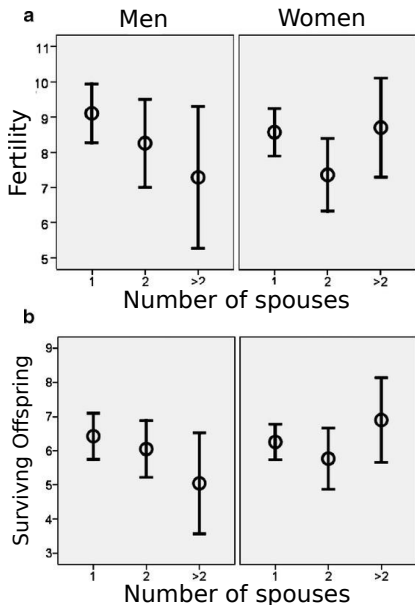
- ▶ she shows more skin at nightclubs during fertile period (Grammar)
- ▶ more EPCs during fertile period? (Baker and Bellis)
- ▶ more attention to their appearance near ovulation (Haselton)

The Haselton study:

- ▶ asked women to come in for 2 photos (follicular and luteal phase)
- ▶ showed the photos (faces masked) to 42 judges (m and f)
- ▶ asked “in which is she trying to look more attractive?”
- ▶ 60% chose the pic in the “high-fertility” phase.



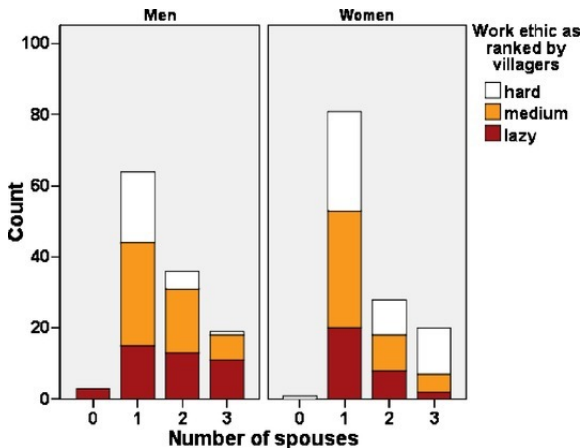
# Multiple matings for mate-switching: the Pimbwe



Usually, serial monogamy benefits men, not necessarily women.

Among the Pimbe, women with more mates do better, men do worse! (Borgerhoff Mulder 2009)

# Why do Pimbwe women benefit from serial monogamy?



If a woman's first husband is lazy, she finds another. And maybe another. Data consistent with women initiating divorce.

# Conclusion

We are a mildly polygynous species. Evidence includes

- ▶ Sexual dimorphism (body size, upper-body strength, etc)
- ▶ Sex differences in sexual fantasies and preferences
- ▶ Marriage cross-culturally (polygyny common, vs. polyandry)
- ▶ Men gain in reproductive success from multiple matings

But a lot of variation in commitment:

- ▶ does a male have other options? (OSR etc).
- ▶ can a female expect much male investment?

Multiple mating can benefit women under some circumstances:

- ▶ more males can mean more providers
- ▶ an extra-pair mate can provide genetic benefit
- ▶ mate-switching for a better mate