

Sexual Conflict



Outline

Evolutionary psychology predicts differences between the sexual strategies favored by females and males, leading to conflicts of interest.

- **Sexually antagonistic selection and co-evolution**
- Sources of conflict between men and women
- Communication biases: sexy or friendly?
- Jealousy
- Rape

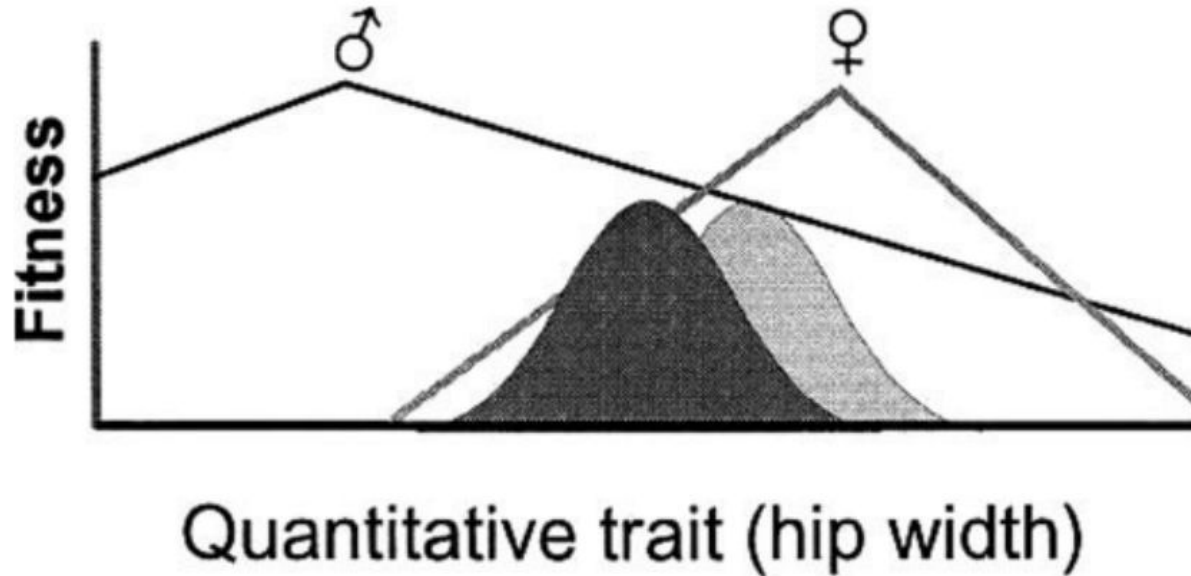
Sexually antagonistic selection

Conflicts of interest are expected because the sexual strategies favored by females may conflict with the sexual strategies favored by males.

Can lead to new kinds of evolutionary pressures, where selection acts in different directions in males and females (**sexually antagonistic selection**).

Maladaptive arms races (**sexually antagonistic co-evolution**) can develop, in which one sex evolves a favorable trait that is offset by a countering trait in the other sex.

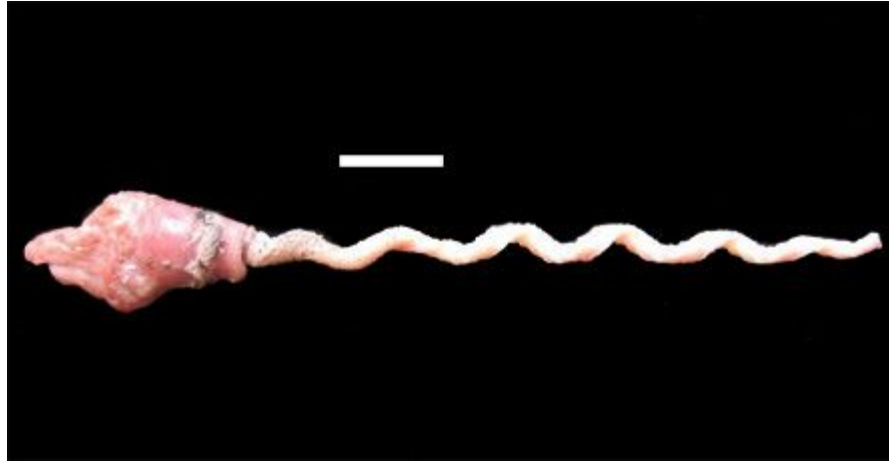
Sexually antagonistic selection



Lines show the optimal trait value for males and females, shaded areas are the phenotypes that result from this sexually antagonistic selection

Sexually antagonistic co-evolution

What is
this?



White bar is 2 cm. (total length ca 9.8 cm)

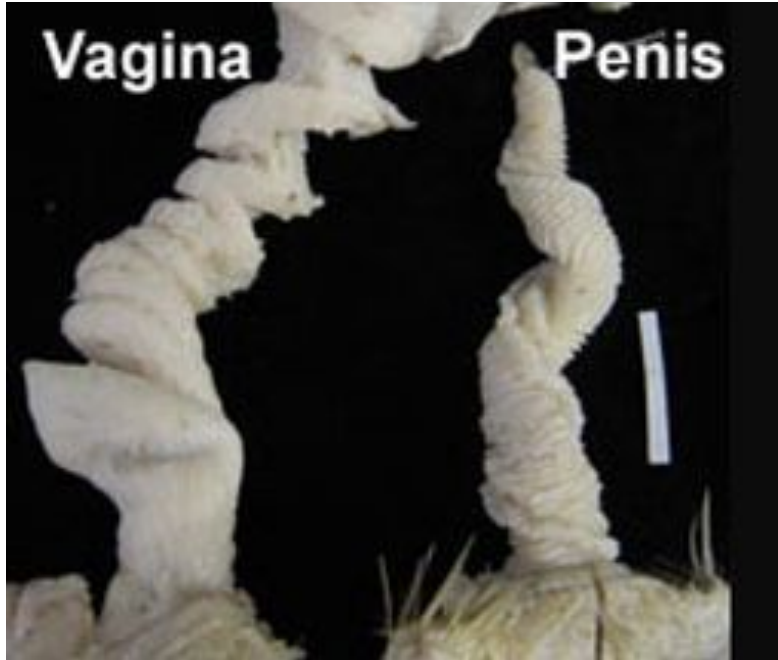
The Ruddy Duck

Why is the Ruddy Duck's penis
Shaped like a long corkscrew?



by Patricia Brennan

A genital arms race: Antagonistic co-evolution



Female ducks are often unable to escape male coercion.

but they have evolved a complex oviduct to divert or block the penis

(corkscrew shapes and spirals that go in the direction opposite to the males)

.

Other examples of antagonistic co-evolution

SEED BEETLE



MALE TRAIT: Spiny, damaging phallus deters female from mating with others

FEMALE TRAIT: Thickened oviduct wall to minimise damage during copulation

BED BUG



MALE TRAIT: “Traumatic insemination” directly through the body wall, avoiding any barriers females might have evolved in their reproductive tract

FEMALE TRAIT: A groove in the exoskeleton ensures insemination occurs into the spermatheca, a unique structure containing many immune cells to minimise the risk of infection

FERAL FOWL



MALE TRAIT: Subordinate males forcibly copulate with females

FEMALE TRAIT: Females immediately eject sperm of unwanted males

DUCKS



MALE TRAIT: Forced extrapair copulation and large phallus

FEMALE TRAIT: Anatomically complex oviduct to divert or block phallus

Antagonistic coevolution reduces mean fitness

Fruitfly sperm is toxic to other sperm (so favored by sexual selection) but it is harmful to females (so they evolve defenses against it)

Scientists stopped each side of the sexual arms race to see what would happen

- (1) When females were prevented from evolving a response, the evolving males outcompeted other males, but females had shorter lifespans (Rice *Science* 1992)
- (2) When males were forced to mate monogamously, males evolved to be less harmful to their mates, and females evolved to be less resistant to toxic sperm...

And the monogamous females reproduced faster than controls (Holland & Rice *PNAS* 1999).

So there is a fitness cost to the population of all that competition.

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Sources of conflict between men and women

Buss asked undergraduates what it is about men that infuriates women, and vice versa

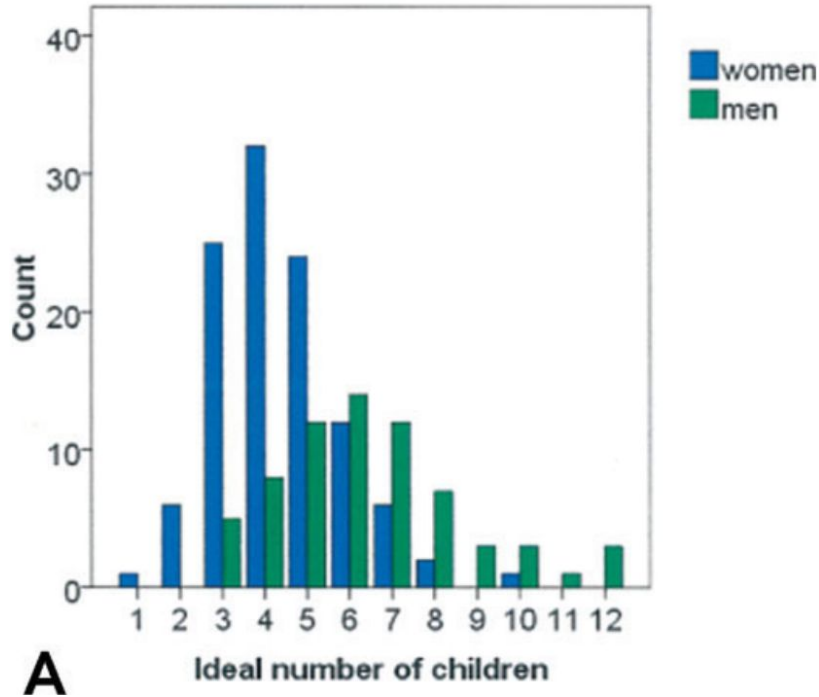
Female complaints?

- Sexual aggression, sexual harassment
- Lack of commitment
- Doesn't express his feelings openly

Male complaints?

- Sexual withholding
- wants to monopolize his time (commitment)

Conflict about the ideal number of children



“What is the ideal number of children you would like?”

Male and female responses among the Pimbwe (mostly monogamous, high divorce rate)

Why might Pimbwe men want more children than their wives do?

Among the polygynous Kipsigis, there was less conflict (more agreement) because a man could get more children by his other wives.

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Communication biases: Sexy or friendly?

Are they flirting? Or just friendly?



Men more likely than women to assume sexual intent.

Evolved communication biases

Two mistakes are possible:

1. Assume sexual interest when it isn't there
2. Assume no sexual interest when it is there.

A man with high mating effort will lose more from #2, so selection will bias his interpretation.

A predisposition on part of males to give the sexual interpretation the benefit of the doubt.

Evolved biases are part of “error management theory”

Communication biases: Some caveats

Some evidence suggests that:

- Men rated male targets, not just female targets, as also behaving more sexually (see the world in more sexualized terms?)
- Effect may be strongest where the dating context isn't explicit
- Not all men (associated primarily with sexually-coercive men & men who endorse sex-role stereotypes)

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Jealousy



Sexual jealousy & the sexual double standard

The sexual double standard is rooted in sex differences in parental confidence

Cross-culturally (except Western industrial cultures) it is the woman who is punished for adultery more than the man.

Where men are punished, it is typically only if she is married -- i.e., if another man's "property" is taken. The aggrieved husband is compensated, not the woman.

The laws reflect a theory of human nature

The architects of the French revolution were concerned about equality

Yet they retained sexual discrimination in this one sphere. Their rationale (from Fenet 1827; taken from Daly and Wilson *Homicide*):

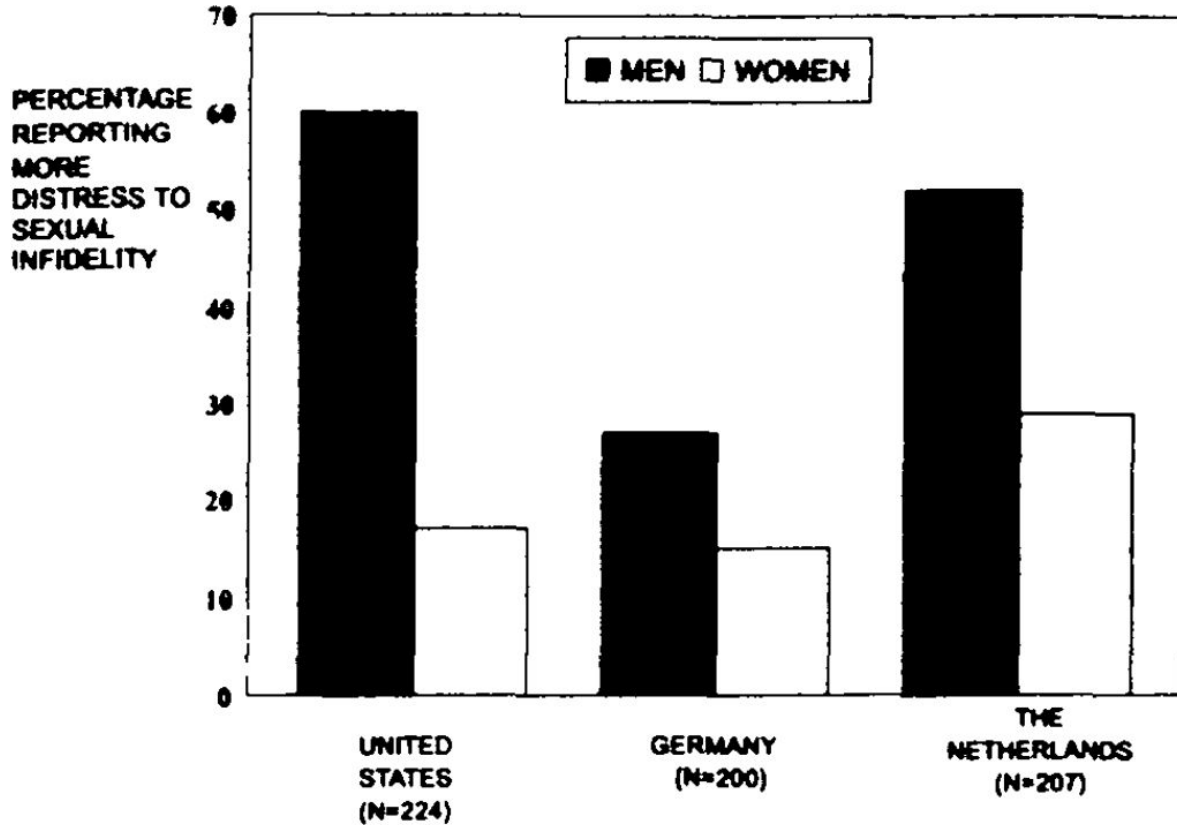
“It is not adultery per se that the law punishes, but only the possible introduction of alien children into the family and even the uncertainty that adultery creates in this regard. Adultery by the husband has no such consequences”

What are men and women jealous about?

Imagine that you discover that the person with whom you've been seriously involved became interested in someone else. What would distress or upset you more:

- imagining your partner forming a deep emotional attachment to that person
- imagining your partner enjoying passionate sexual intercourse with that other person

What are men & women jealous about? (cont)



When asked to choose one or the other, men were more likely than women to be bothered by sexual, rather than emotional, infidelity.

Sexual jealousy a response to paternity uncertainty, emotional jealousy to lack of commitment.

Buunk et al. *Psych Sci* 1996

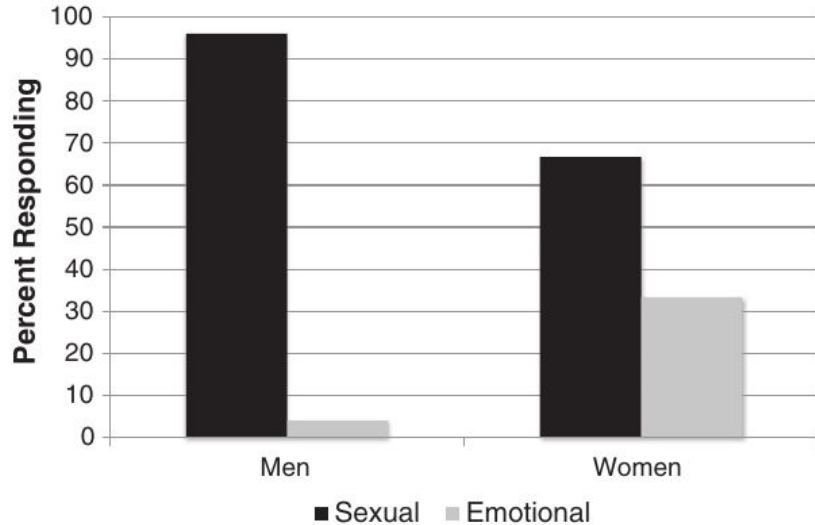
Is it universal?

Sex difference supported by a meta-analysis of 45 studies, and by physiological measures of arousal.

But if emotional jealousy is about lack of commitment, what about cultures where males invest little in offspring?

In a study of 11 mostly non-industrial societies, the sex difference was found in 9/11, but sexual infidelity was viewed more harshly by men in cultures where they invest more in children (Scelza et al. *Nat Hum Beh* 2020)

The Himba and Tchimba (like the Twe) have little male investment (matrilineal inheritance) and lots of extra-pair paternity.



Imagine that your partner both fell in love with another person and had sexual intercourse with that person. Which aspect of your partner's involvement would upset you more?

- A. Sexual Intercourse
- B. Falling in love

Many respondents said things like, "Both are fine," or "Neither makes me upset"

More women chose emotional infidelity when their current partner was a "love match" (45% vs 12%)

Sexual jealousy: Abuse and homicide

Homicide between romantic partners is overwhelmingly about sexual jealousy:

- Canada: 25% of 800 cases, motive was “jealousy” (or related issues e.g., “pays too much attention to other men”)
- In an in-depth study of 31 men who killed wives: 81% were over sexual proprietariness (most after she left for new partner)
- where women kill men, it usually follows his violence to her.

Not adaptive, but an extreme expression of male sexual jealousy

Daly and Wilson, *Homicide*, 1988

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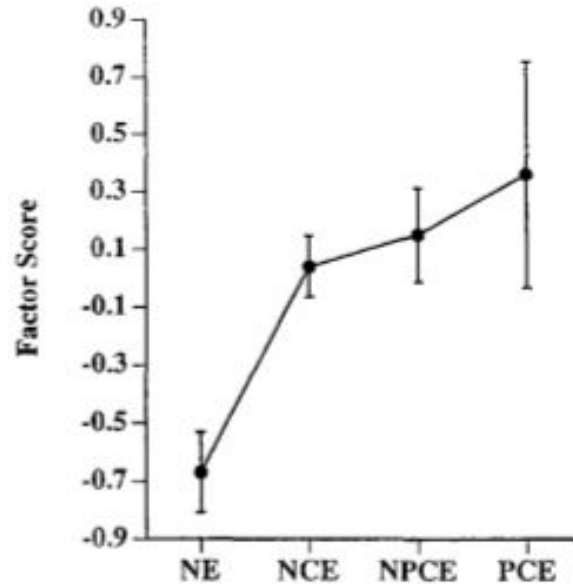
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Who rapes?

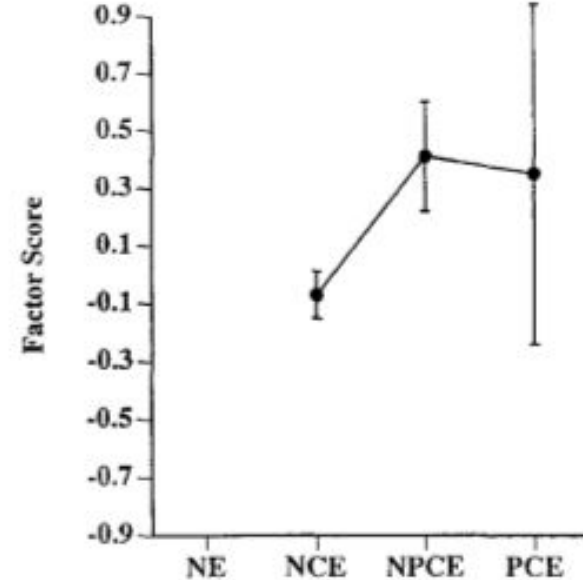
Do men rape because they lack other options?

Probably not (at least not in college students)

Self-perceived Mating Success



Sexual Experience



sexual experience: NE (none), NCE (noncoercive), NPCE (non-physical coercive), PCE physical coercive).
(from Lalumiere et al. 1996)

Rape: Evolutionary perspectives

Is rape about sex or power? Probably both.

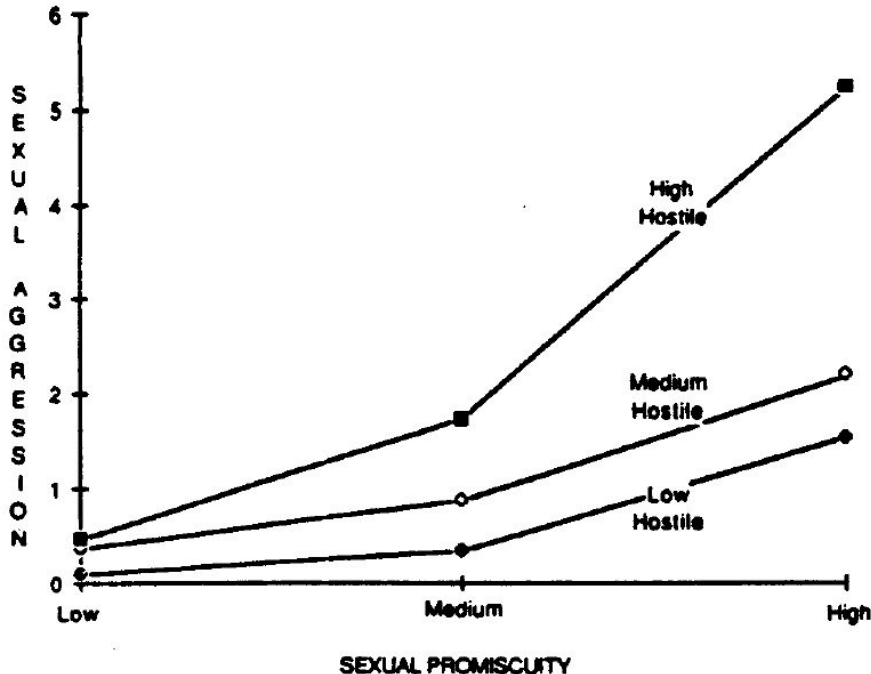


Fig: Sexual aggression increases both with hostile masculinity and sexual promiscuity (Malamuth et al. *J Consult & Clin Psych* 1991)

Age distribution of rape victims reflects age distribution of women's reproductive value (vs. age distribution of assault victims)

Summary

- Sexually-antagonistic selection can produce a costly evolutionary arms race (antagonistic co-evolution)
- Much of the conflict between men and women reflects differences in reproductive strategies
- Men more likely than women to see sexual intent in a friendly interaction.
- Concerns about paternal certainty underlie
 - the sexual double standard (less tolerance for female infidelity)
 - sex differences in causes of jealousy (sexual vs. emotion infidelity)
 - mate guarding and spousal homicide