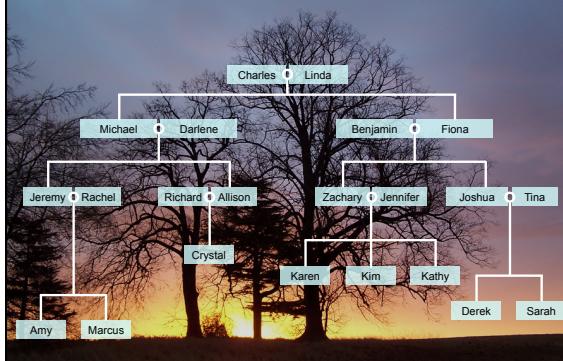


02-Evolution

How does sexual selection affect mate selection and risk-taking?

Heritable variants lead to differential reproductive success. In humans, sexual selection drives different strategies to optimize reproductive success. Today, we discuss how these adaptations influence mate selection and risk-taking behaviours.

Heritable variants lead to differential reproductive success.



Sexual Selection – The evolution of characteristics not because of survival advantage, but because of mating advantage.



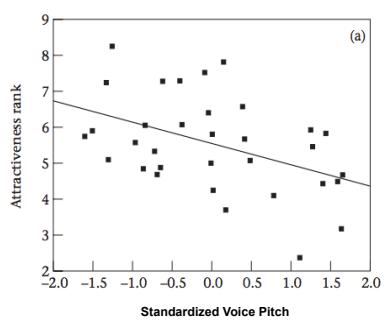
Intrasexual Competition – Members of the same sex compete with each other, and the winners gain mating access to the opposite sex.



Intersexual Competition – Members of one sex prefer certain qualities in mates.



Male Voice Pitch is related to attractiveness ratings from females.



Collins (2000)

Voice pitch predicts reproductive success in a natural fertility population.

Reproductive success and voice pitch

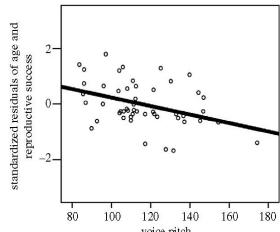
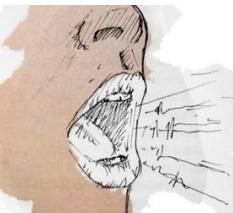


Figure 1. Residuals from regression of reproductive success on age plotted against voice pitch. This scatter plot shows a negative relationship between male voice pitch and reproductive success.

Male Voice Pitch: Human Peacock Tail



- **Is deep voice pitch heritable?**
 - YES - Testosterone almost exclusively determines voice pitch

- **Does deep voice pitch have a cost?**
 - YES – Testosterone actually weakens the immune system and correlates with lower semen quality

Key Assumptions



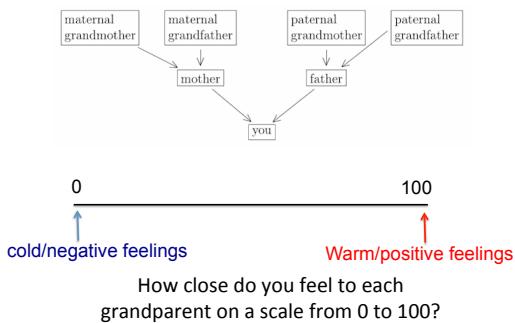
1. Behaviour = psychological mechanisms + input from environment
2. Evolved psychological mechanisms are coded in the brain.
3. Evolved psychological mechanisms can be described as information processing devices to solve adaptive problems.

Genes increase their own replication in two ways:

1. Direct: Influence individual bodies to survive & reproduce.

2. Indirect: Influence individual bodies to help other bodies that are likely to contain copies of themselves.

Rate My Grandparents





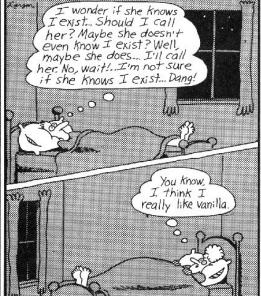
Sexes look for different qualities (Buss, 2012)

Women

- Possession of resources
- Access to resources
- Commitment

Men

- Youth
- Health
- Attractiveness

 Sexes face different adaptive problems

I wonder if she knows I exist. Should I call her? Maybe she doesn't even know I exist? Well, maybe she does... I'll call her. No, wait... I'm not sure if she knows I exist... Dang!

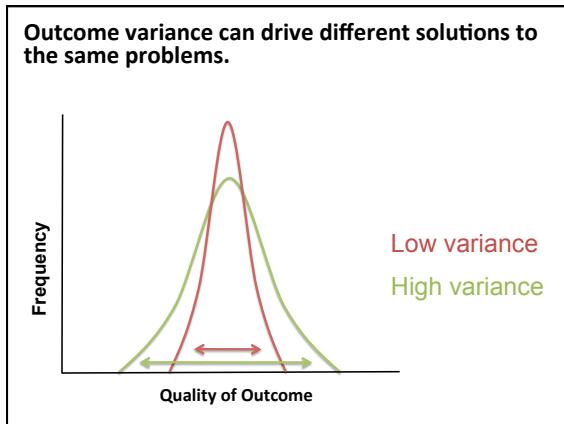
You know, I think I really like vanilla.

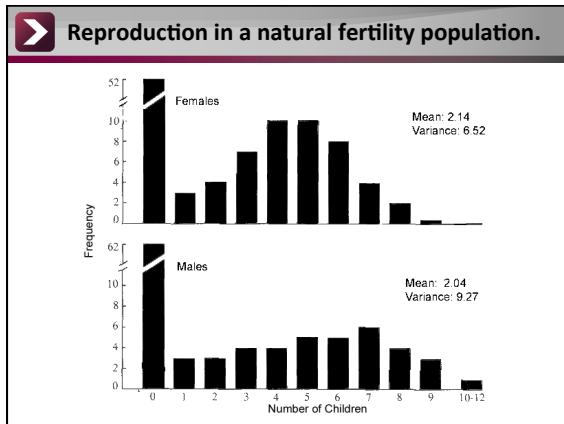
Same planet, different adaptive problems...

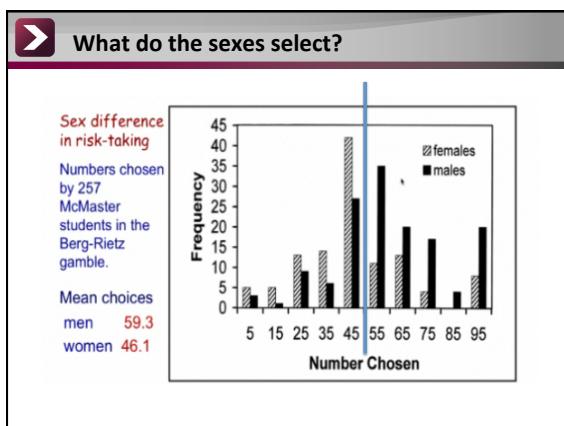
- Metabolic demands of reproduction
- Parental investment
- Genetic cuckoldry

Romance in the Friend Zone is perceived differently in men and women, Bleske-Rechek et al., (2012)

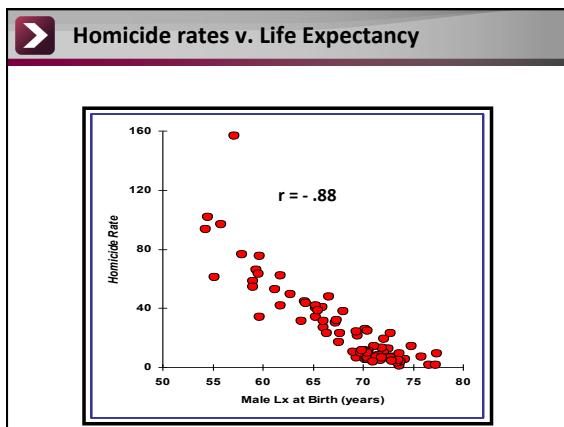
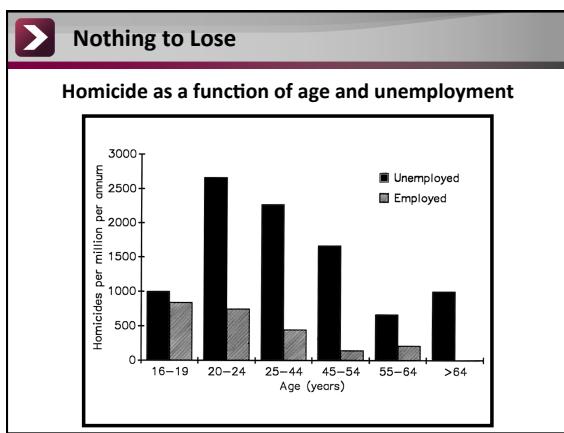
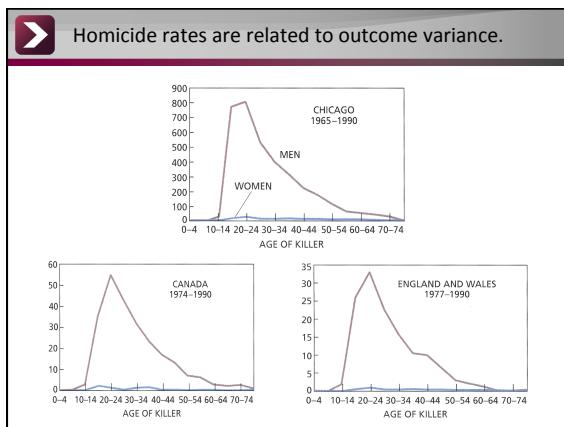
	Men	Women
1. Are you attracted to your friend?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2. Is your friend attracted to YOU?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. Would you date your friend?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>











► Evolutionary adaptation or “just-so” story?

Ethology and Sociobiology
Volume 3, Issue 2, 1982, Pages 89–79

Whom are newborn babies said to resemble?
Martin Daly ▲, Mervin J. Wilson ▲
doi:10.1016/0162-3259(82)90022-4

Abstract
We tested a series of hypotheses derived from the view that allegations of resemblance of newborns are motivated responses to the problem of uncertain paternity. Paternal resemblance was judged far more often than maternal resemblance. Infants were more similar to their father than to their mother by both male respondents (mothers, fathers, and relatives on both sides). This bias was evident for infants of both sexes, albeit for sons more than for daughters. It is evidently normative to remark paternal similarity: 25 parents reported ‘‘my baby looks like me’’, 0 of the 14 had an opposite, whereas there were no reports of similarly committal allegations of maternal resemblance.




From Christenfeld and Hill (1995), Nature.

Errors that come from leaps in logic.

Naturalistic fallacy:
A leap from *is* to *should be*

Moralistic fallacy:
A leap from *should be* to *is*

