Week 11, Lectures 1&2: Love and Sex

Love and Sex

Why do the sexes of most species behave differently?

- Darwin: Sexual selection.
 - 1. Male-male competition.





• 2. Female choice.





But why do males compete and females choose?

Week 11, Lectures 1&2: Love and Sex

Why are There Two Sexes to Begin With?

- Intragenomic conflict and mitochondrial DNA.
- Egg: all the necessary biochemical machinery.
- Sperm: naked DNA.

Increasing Specialization of Sperm and Eggs

- Sperm are cheap, so
 - Make lots of them.
 - Give them outboard motors.
 - Make an organ to launch them.
- Eggs are expensive, so
 - Pack each one with food.
 - Give it a protective cover.
 - (Sometimes) let it grow inside the body.

Sperm are cheap:



Eggs are Expensive:



Week 11, Lectures 1&2: Love and Sex

Trivers: Sex differences in Parental Investment Explain Sex differences in Behavior

- Females (usually) invest more than males.
 - Size of egg
 - Internal gestation
 - Lactation.
- Therefore females are the rate-limiting step on reproduction.

Consequences of Asymmetry in Parental Investment:

- 1. Single male can fertilize several females; other males go mateless.
 - High variance in male reproductive success.
 - Therefore, male-male competition:
 - fighting
 - resource gathering
 - · beauty contests

Consequences of Asymmetry in Parental Investment, cont.

- Male reproductive success depends on how many females he mates with.
- Female reproductive success does *not* depend on how many males she mates with.
- Therefore females more choosy: scrutinize males for
 - best genes
 - most willing to feed and protect offspring
 - ones that other females prefer (sexy son hypothesis)

The Exception that Proves the Rule:

- Species where the male invests more, e.g., jicanas:
 - Females compete for males
 - Males are choosy

Week 11, Lectures 1&2: Love and Sex

Have Human Sexual Emotions Been Shaped by Darwinian Sexual Selection?

Some Biologically Significant Properties of Human Sexuality

- 1. *Minimal* parental investment:
 - Women: 9 months of pregnancy; 30 pounds of nutrients; 2-4 years of nursing.
 - Men: 5 minutes of copulation; 1 sperm (1 tentrillionth of an ounce)
- Anatomical evidence for male-male competition: sexual dimorphism in body size

Some Biologically Significant Properties of Human Sexuality, continued

- 2. Typical parental investment:
 - Men feed, protect, teach offspring (unusual for mammals!)
 - Increased survival of forager children with fathers.
- Changes the rules!! Predicts that *both* sexes should compete: (roughly)
 - Males for fertile females willing to copulate.
 - Females for resource-laden males willing to invest.

Some Biologically Significant Properties of Human Sexuality, continued

- 3. Concealed fertilization & gregariousness.
- Paternity uncertainty: "Mama's baby, Papa's maybe."
- Cuckoldry as the male's worst-case scenario; sexual jealousy as an adaptation.
- Why should females be adulterous to begin with?
 - Best of both worlds.
- Male adaptations to sperm competition.

Week 11, Lectures 1&2: Love and Sex

Have Human Sexual Emotions Been Shaped by Darwinian Sexual Selection?

- NOTE: Modern "facts of life" are different from those we evolved with:
 - contraception (sex without babies)
 - artificial insemination; in vitro fertilization (babies without sex)
 - substitutes for lactation
 - equal opportunities for women
 - women no longer necessarily tied down by children; no longer dependent on male parental investment

Are Sexual Emotions Adapted to an *Ancestral* Environment?

- Modern Environments versus Environment of Evolutionary Adaptedness
- EEA:
 - Sex = reproduction, and vice-versa.
 - Greater female investment.
 - Helpless young, biparental investment.
- Our sexual emotions may be adaptations to a world that no longer exists

A Cautionary Note on Evolution & Human Behavior:

- 1. Evolutionarily "optimal" strategies (and human sexual emotions) do not necessarily lead to human *happiness*.
- 2. Evolutionarily "optimal" strategies (especially ones that differ between sexes) are not models for how we *ought* to live.
 - True of evolutionary explanations in general: selfishness, etc.
 - "The Naturalistic Fallacy"

Evidence on Sexual Selection and Sexual Emotions

- Prediction: Men should be more interested in *numerous* partners than women.
 - Note: not the same as saying that men have more interest in sex than women
- Widely believed:

Higgamus, hoggamus,

Woman's monogamous.

Hoggamus, higgamus,

Man's polygamous.

• BUT: just an old-fashioned stereotype?

Week 11, Lectures 1&2: Love and Sex

David Buss:

- 1. How strongly are you seeking a spouse?
 - Women: Pretty strongly.
 - Men: Pretty strongly.
- 2. How strongly are you seeking a one -night stand?
 - Women: Not very strongly.
 - Men: Pretty strongly.

- 3. How many sexual partners would you like to have in the next month / two years/ lifetime?
- Women:
 - Next month: .8
 - Next 2 years: 1
 - Lifetime: 4-5
- Men:
 - Next month: 2
 - Next 2 years: 8
 - Lifetime: 18

• 4. How long would you have to know a desirable person before *definitely* wanting to have sex?

How long before being *neutral*? For how long would you *definitely not* want to have sex?

- Women:
 - "Yes": > 1 year.
 - "Neutral": 6 months.
 - "Definitely not": < 1 week.
- Men:
 - "Yes": 1 week.
 - "Definitely not": ????

In vivo Experiments (Elaine Hatfield):

- "I have been noticing you around campus. I find you very attractive."
- (a) Would you **go out** with me tonight?
- (b) Would you **come over to my apartment** tonight?
- (c) Would you go to bed with me tonight?"

Week 11, Lectures 1&2: Love and Sex

in vivo expt, cont.

"Date?"

- Women, 50%
- Men: 50%
- "Apartment?"
- Women, 6%
- Men: 69%
- "Sex?"
- Women, 0%
- Men, 75%

Other evidence:

- The Coolidge Effect.
- Indiscriminateness and pornography.

Cross-cultural similarities:

- Just Western culture?
- Donald Symons: A cross-cultural universal: female sexuality as a precious commodity.
- Andrea Dworkin:
 - "A man wants what a woman has -- sex. He can steal it (rape), persuade her to give it away (seduction), rent it (prostitution), lease it over the long term (marriage in the United States) or own it outright (marriage in most societies)"

- Cross-culturally, men way more than women:
 - -woo
 - proposition
 - seduce
 - use love magic
 - give gifts in trade for sex
 - pay brideprices (rather than collect dowries)
 - hire prostitutes
 - rape

Week 11, Lectures 1&2: Love and Sex

Some Comments on Rape



- Feminist contributions to understanding rape, e.g., Susan Brownmiller, 1975
 - Trauma of rape
 - Casual attitudes in legal system
 - Putting the victim on trial
 - Commonness in wartime
- Theory:
 - Rape is an act of power, not sex
 - Rape is a tactic of male dominance

Rape, cont.



- Thornhill & Palmer: A Natural History of Rape
- Men rape as a reproductive tactic (ultimately, not proximately), used when benefits exceed costs. Rape victims sexually desirable.
- Women resist rape because it cuts off choice
- Highly controversial:
 - Depicts rape as sex, not power
 - "condones rape"? "men can't help it"?
- How to resolve the controversy:
 - Avoid naturalistic fallacy: "is" ≠ "ought"
 - Multi-part mind: desires (limbic system) vs. self-control, moral sense (frontal lobes)

What Does a Man Want?

- Drive reduction (hydraulic) theory versus Darwinian theory.
- Hyper-promiscuity:





• Hyper-polygyny: Despots and harems

What Does a Man Want? continued

- Male homosexuality versus lesbianism. San Francisco, 1970s:
 - -28% of gay men: >1000 partners.
 - -75% of gay men: >100 partners.
 - -0% of gay women: > 1000 partners.
 - -2% of gay women: >100 partners.
- Daryl Bem:
 - "Suppose you went up to your average, single, heterosexual male and said, 'There's a new institution called a bathhouse and it's full of young women who want sex, who are wearing only towels, and there's no exploitation.' What do you think would happen?"

Week 11, Lectures 1&2: Love and Sex

The Importance of *Interactions* Among People in Determining Overt Behavior

- Behavior depends not just on desires, but on context: opportunities & costs
- Heterosexual versus homosexual behavior among men
- Why are rape and sexual harassment not even more common?
 - Kin and marital networks
 - Male sexual behavior in the absence of social networks: war and rape
 - Moral sense as adaptation to social networks

Sexual Attraction

- *Short-term* versus *long-term* mating strategies.
- Male, long-term: Fertile, young, faithful wife.
- Male, short-term: Fertile, willing partner.
- **Female, long-term:** Fertile husband able and willing to invest.
- **Female, short-term:** Fertile partner with good genes and resources.

Buss's 37-country study:

- Intelligence & kindness: important for both sexes.
- Earning capacity, emotional stability: More important to females.
- Youth and looks: More important to males.
- Confirmation from Personal Ads.
- Alternative interpretations.
- Confirmation from marriage statistics

Beauty

- The paradoxical psychological importance of beauty.
- Importance for mate selection (especially men seeking women).
- Importance for other interpersonal evaluations:
 - judgments of intelligence, honesty, other positive traits
 - income
- Is "beauty in the eye of the beholder?"
 - Agreement among individuals
 - Agreement among children
 - Infant studies.
- Cultural differences and human universals.

Week 11, Lectures 1&2: Love and Sex

- Fran Lebowitz:
 - People who get married because they're in love make a ridiculous mistake. It makes much more sense to marry your best friend. You *like* your best friend more than anyone you're ever going to be in love with. You don't choose your best friend because they have a cute nose, but that's all you're doing when you get married; you're saying, "I will spend the rest of my life with you because of your lower lip."
- Hypothesis: Beauty is an external cue for the biological fitness of other people (especially as mates)

Criteria for Beauty Both sexes:

health

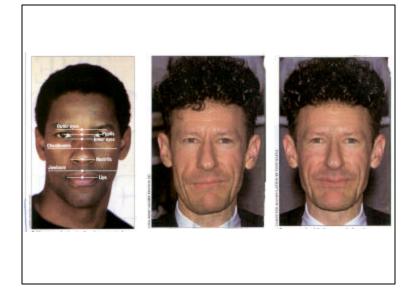
- eyes
- cleanliness
- hair
- absence of deformities
- symmetry

• skin

• features of average size and shape

• teeth

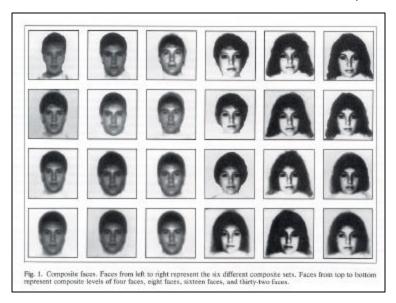
....

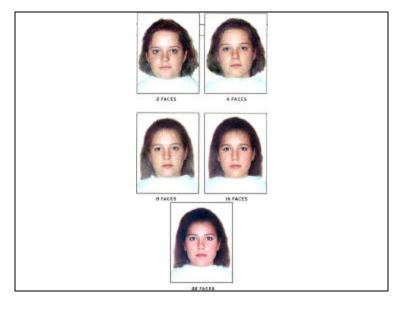


Francis Galton & Average faces:



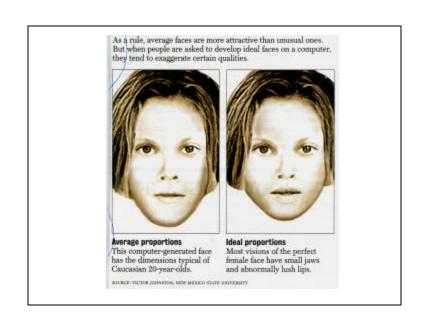
Week 11, Lectures 1&2: Love and Sex





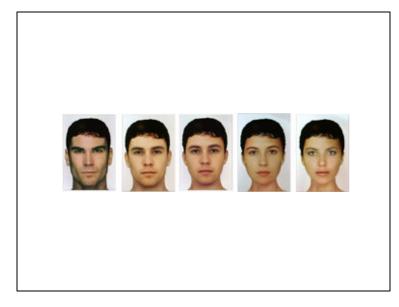
Differences between Beauty in Men and Women

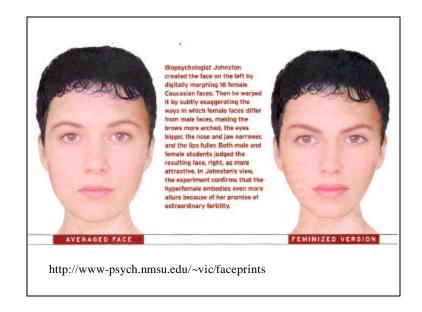
- Faces:
- Cues for fertility, normal hormones, right sex.
- Effects of testosterone on jaw, brow ridge.
- Youth & nulliparity: eyes, lips, skin, body.

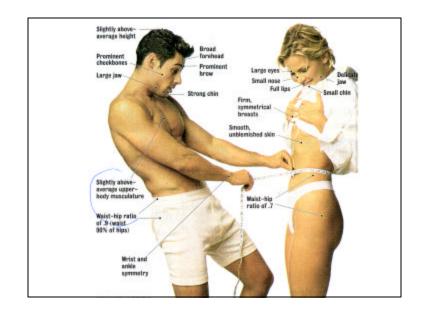


Week 11, Lectures 1&2: Love and Sex

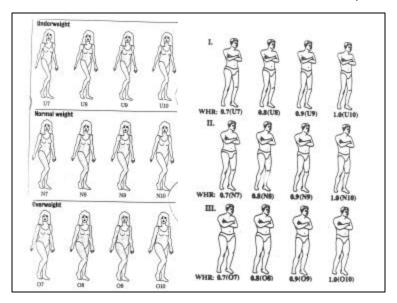








Week 11, Lectures 1&2: Love and Sex



- **Bodies:** Waist-hip ratio.
- Modern versus ancestral environments and the beauty industry.

Sexual Jealousy

- Concealed fertilization, uncertainty of paternity, and the cost of cuckoldry.
- Similarities & differences between men and women in jealousy (Buss):
 - Men: sexual infidelity worst.
 - Women: emotional infidelity worst.
- Violence against women and male sexual jealousy and control.
- Male-male rivalry and jealousy.

Motives for homicide, Philadelphia, 1948-62.

· Altercation of relatively trivial origin; ins	ult,
curse, jostling, etc	35%
Domestic quarrel	14%
Jealousy	12%
Altercation over money	11%
Robbery	7%
Revenge	5%
Accidental	4%
Self defense	1%
Halting of felon	1%
Escaping arrest	1%
Concealing birth	1%
• Other	3%
Unknown	5%

Week 11, Lectures 1&2: Love and Sex



Cops: Toddler cowered as freed con strangled woman

Two days after his release from prison, a convicted stalker strangled his girlfriend in her East Boston apartment early yesterday as the woman's 2-year-old

apartment early yesterday as the woman's 2-year-out son cowared in a closet, police said.

"I just killed my girifriend," Francisco Robies, 20, confessed to police in a 911 call shortly after the 8 am. slaying of Kristine Painten, sources said.

Robies, released Priday from the South Bay Correctional Center after serving six months for stalking another woman, apparently suspected the 21-year-old mother of being unfaithful while he languished behind the policious said.

purs, restause said.

"Some people are saying he thinks she cheated on him while he was in jail," said Painten's cousin, 17 year-old Alicia Burgeo, who added that she and other year-old Alicia Burgeo, who added that she and other yearing relationship

Patriarchy and the "Ownership" of Women

- Marriage as transfer of woman from father to husband.
- Brideprices and brideservice.
- Ownership badges: rings, names, forms of address.
- Control of female sexuality: chaperones, veils, wigs, chadors, segregation by sex, confinement, foot-binding, genital mutilation.

Patriarchy and the "Ownership" of Women, continued

- Double standard for adultery.
- Adultery as a property violation.
- Elopement as theft from the father.
- Rape as an offense against the husband (or father).
- Legality of marital rape.

Love

Different kinds of feelings toward mate:

- 1. Sexual desire
- 2. Romantic passion (infatuation)
- 3. Long-term commitment

Week 11, Lectures 1&2: Love and Sex

Romance and Infatuation

- The universality of romantic love (even when the lovers can't act on it)
- Why romantic love?
- The mating market
- The unavoidable tradeoff: value versus time
- Assortative mating

- Romantic passion: sometimes seems to violate "smart shopping"
- The illogic of romance & infatuation.
- The logic of romance & infatuation: "The commitment problem"
- The problem with promises: Why should the recipient of the promise trust you?
- The inherent untrustworthiness of courtship:
 - "Men's vows are women's traitors"





CHAIN LETTER****DO NOT BREAK THE CHAIN

This chain letter was started in hopes of bringing relief to other tired and discouraged women. Unlike most chain letters, this one does not cost anything.

Just send a copy of this letter to five of your friends who are equally tired and discontented. Then bundle up your husband or boyfriend and send him to the woman whose name appears at the top of the list, and add your name to the bottom of the list. When your turn comes, you will receive 15,625 men.

One of them is bound to be better than the one you already have. At the writing of this letter, a friend of mine had already received 184 men, 4 of whom were worth keeping.

Week 11, Lectures 1&2: Love and Sex

REMEMBER----this chain brings luck. One woman's dog died, and the next day she received an NFL offensive tackle!

An unmarried woman living with her widowed mother was able to choose between an orthodontist and a successful gynecologist.

You can be lucky too, but DO NOT BREAK THE CHAIN!

One woman broke the chain, and got her own husband back again.

- A solution to the commitment problem:
 - Paradoxical tactics: Make a course of action involuntary to convince skeptics:
 - · protester handcuffs himself to railroad tracks
 - · car dealer can't make deal without boss
 - how can a hostage convince a kidnapper to free him?
- Is romance a paradoxical tactic?
- "I didn't choose to fall in love with you based on your mate value, so I'm less likely to choose to fall *out of love* with you when someone better comes along."
- The content of courtship.
 - I want you so bad, it's driving me mad.
 - I like the way you walk; I like the way you talk.
 - I can't help falling in love with you ...

Long-Term Love (and Friendship)

- Lasting love (and friendship) versus reciprocal altruism.
- Negative correlation between turn-taking reciprocation and love.
- Where do pure love (and friendship) come from?

Confluence of Interest Among "Ideal" Spouses

- Symbiosis/mutualism = benefit to other *and* benefit to self (compare altruism: benefit to other at cost to self)
- Biological fates of husband and wife are identical if:
 - both are monogamous
 - both favor their own children over their parents, brothers, sisters, nieces, nephews, etc.
 - both die at the same time

Week 11, Lectures 1&2: Love and Sex

- Predicts: "ideal" husband and wife should value other's life, happiness as equivalent to one's own
- Predicts: sources of marital strife = infidelity, in-laws, age differences (largely true).

Other Confluences of Interest:

- Same interests, tastes, friends, enemies
- Also applies to friends
- "Virtuous circle":
 - Others have a "selfish" stake in your survival.
 - That gives you a "selfish" stake in their survival.
 - etc.
 - Positive feedback loop of love and/or friendship