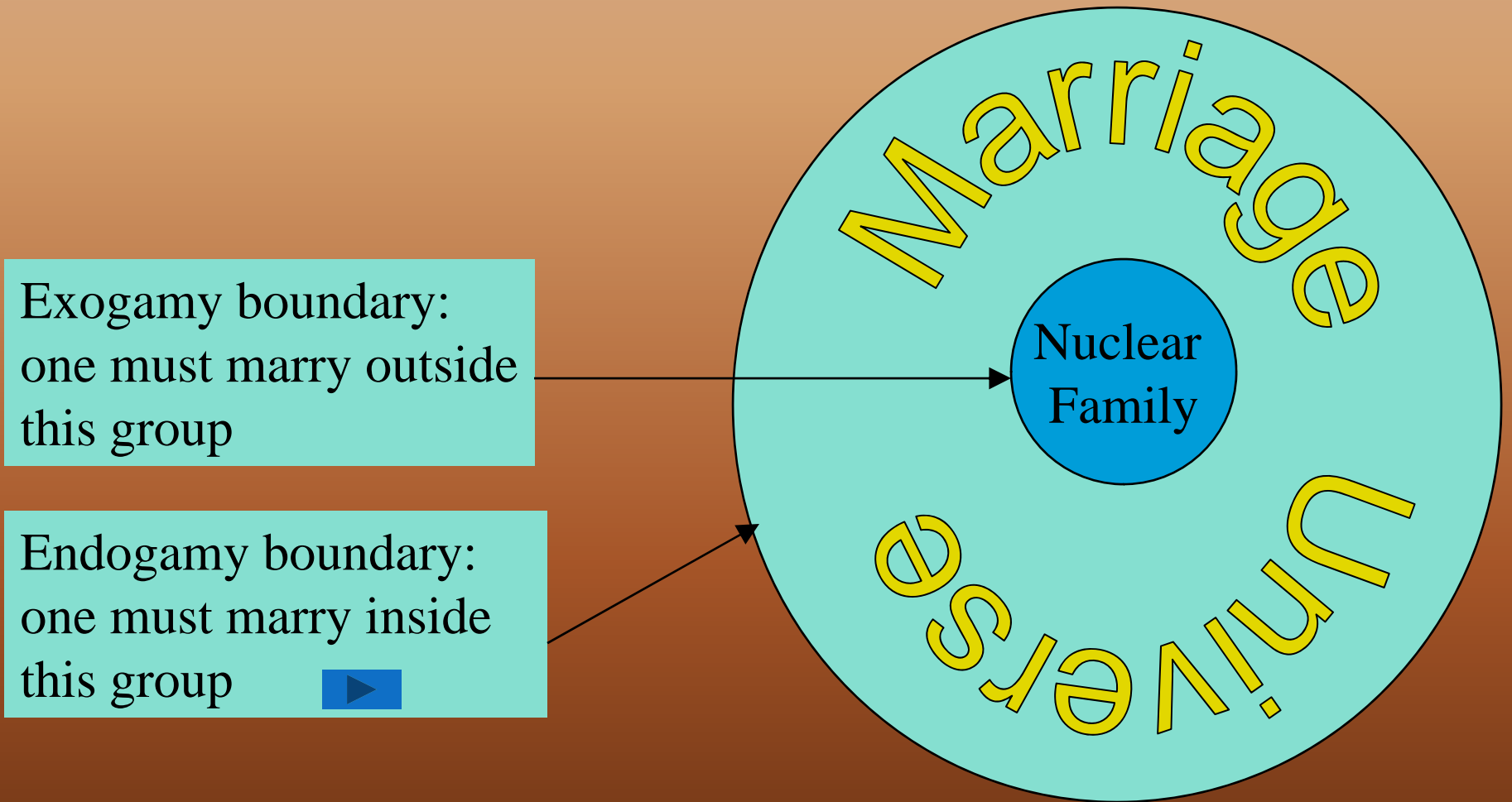


The Incest Taboo: a collection of disaster theories

- Sexual competition in family ▶
- Marry out or die out ▶
- Terminological confusion ▶
- Freud's Oedipus and Electra Complexes ▶
- Inbreeding depression
- The Westermarck's Effect

Incest and the Marital Universe



Exogamy boundary:
one must marry outside
this group

Endogamy boundary:
one must marry inside
this group



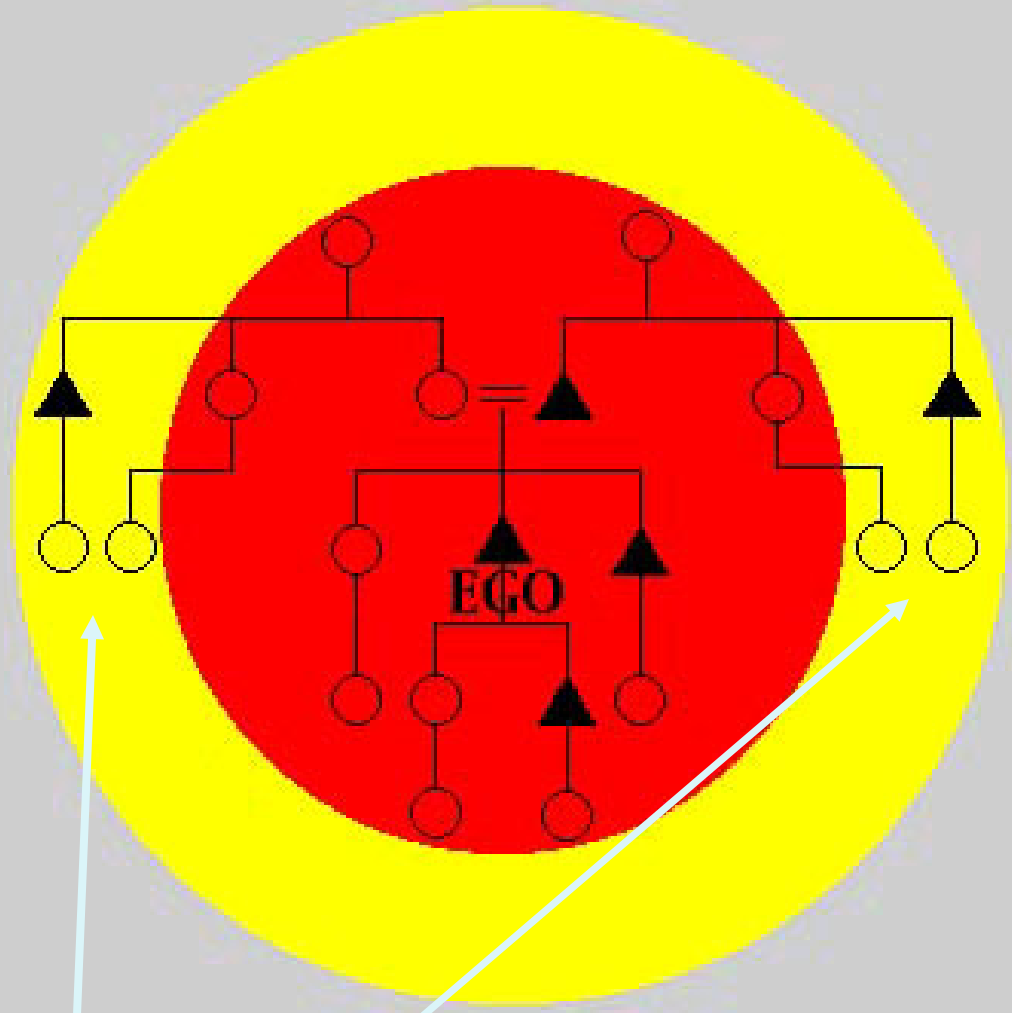
Terms coined by McLennan in 1865 in
reference to descent groups

A distinction

- Incest deals with the prohibition of sexual relations
- Rules of exogamy and endogamy define the universe of legitimate mates
- In some societies one can have sex with an individual but cannot marry them

Western Marriage Prohibition Variants

Standard range of the incest taboo in the US. Red is almost universally* prohibited while yellow is sometimes prohibited.



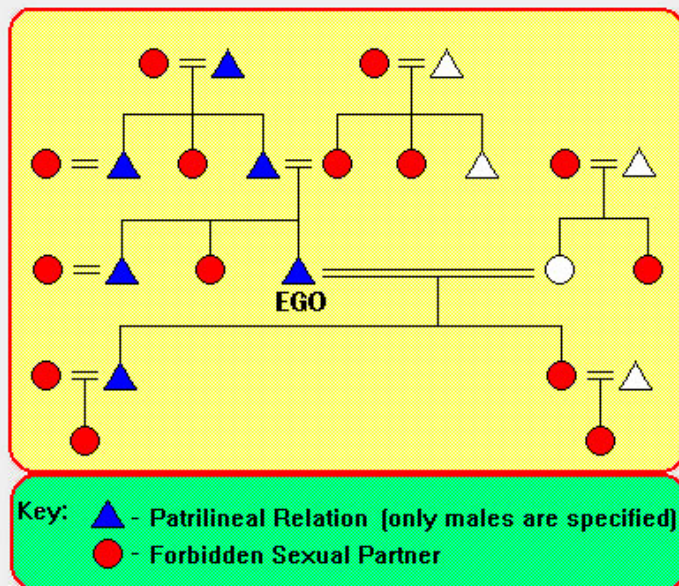
*Uncle-niece sometimes possible

Cousins

Leviticus 18

In the Old Testament cousin marriages of any type were allowed, and in fact there was a preference for patrilineal parallel cousin marriage, i.e., a union between the children of two brothers, in some circumstances. (This arrangement involved marriage within a patrilineal group and indicates that descent groups in this instance were not exogamous.) Moreover, there was no explicit rule against sexual relations or marriages between uncles and nieces, although aunt/nephew prohibitions are specified. This asymmetry seems to be related to a preference for men to marry women of younger generations.

Ancient Hebrew Incest Restrictions



Rules in Leviticus

Marriage Laws

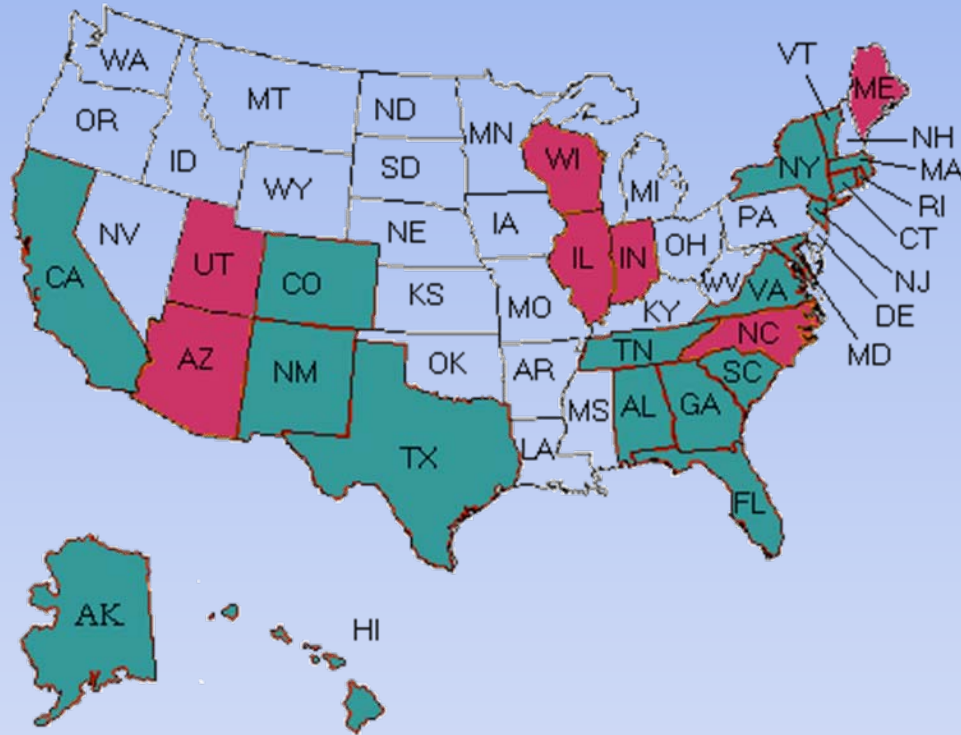
- **Biblical:** extensive bans on affinal marriages but no ban on cousin marriage. Derives from Church of England canon law.
- **Western:** few bans on affinal marriages but prohibition on cousin marriage. Derived from Roman Catholic canon law.

Affinal Marriage Bans and Cousin Marriage

- In more than a dozen states it is unlawful for a man to marry his
 - Sister-in-law
 - Mother-in-law
 - Step-daughter
 - Step-mother
- 30 states in the US regulate cousin marriage but no Western nation has any regulation on cousin marriage

States that allow cousin marriage

States that allow cousin marriage



- Does not allow cousin marriages (**Western**)
- Allows cousin marriages (**Biblical**)
- Allows cousin marriages with exceptions (see below)



Historical Perspective

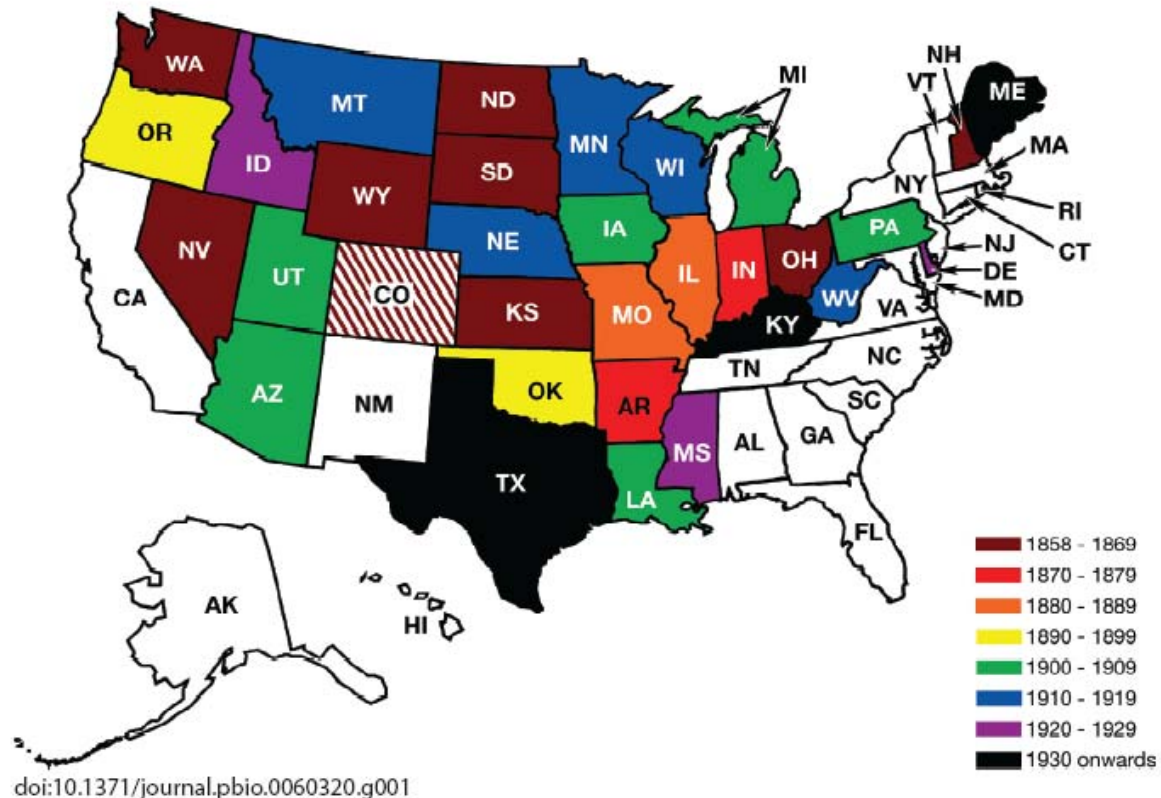


Figure 1. Map of the United States Showing States with Laws Forbidding First-Cousin Marriage. Different colors reflect differences in the timing of passage of the laws. Colorado is shaded because its law was repealed. White states never had such bans.

Source: Paul & Hamish, *PLoS Biology*, 12-2008
"It's OK, We're not cousins by blood"

Causation in incest

- Proximate cause

- Westermarck* effect which suggests that individuals who are reared together find each other unattractive as mates. Such individuals are usually siblings.

- Ultimate cause

- Inbreeding leads to the production of less fit offspring for two reasons
 - Deleterious pairings of recessive genes
 - Reduction of genetic diversity

**History of Human Marriage* 1922 (1891) by Edvard Westermarck

Evidence for the Westermarck Effect

- Kibbutz marriage patterns →
 - Yonina Talmon
- *Sim pua* marriages in Taiwan →
 - Arthur Wolfe
- Parallel cousin marriage in Jordan
 - Janet McCabe
- Moral sentiments
 - Lieberman ▶
- Bevc and Silverman
 - Early and prolonged separation between biological siblings increases the probability of attempted to completed genital intercourse (Canadian sample).

Sim pua marriages in Taiwan

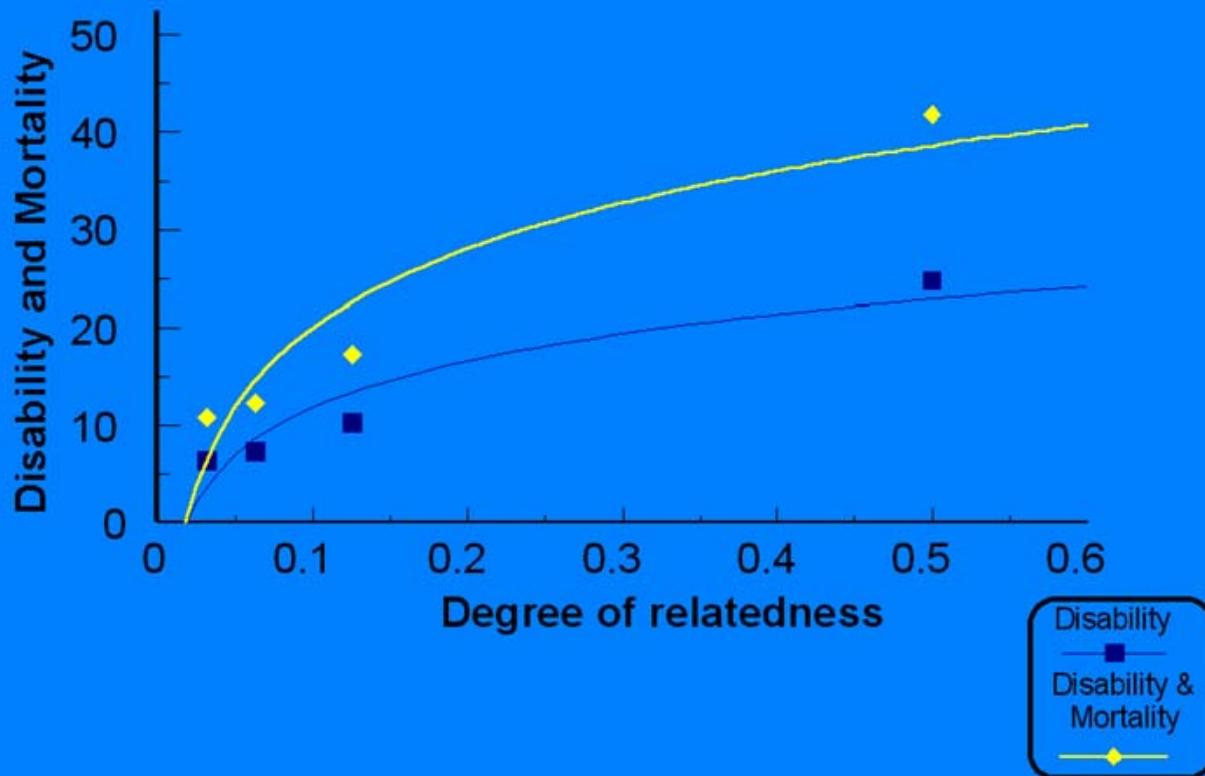
- Term means “little daughter-in-law”
- A female infant or young girl is given to a family and upon maturity she will marry a son in the family
- These marriages have:
 - Low fertility
 - High divorce
 - More adultery
 - Lack of sexual attraction
- All of the above despite family & social pressure to have a fertile and successful marriage

Freudian argument against Westermarck: why would we have a taboo against something we don't want to do anyway?

- There are many things we don't want to do, like incest, that are tabooed:
 - Suicide
 - Bestiality
 - Eating rotten things
 - Self-mutilation

Consequences of inbreeding by degree of relatedness

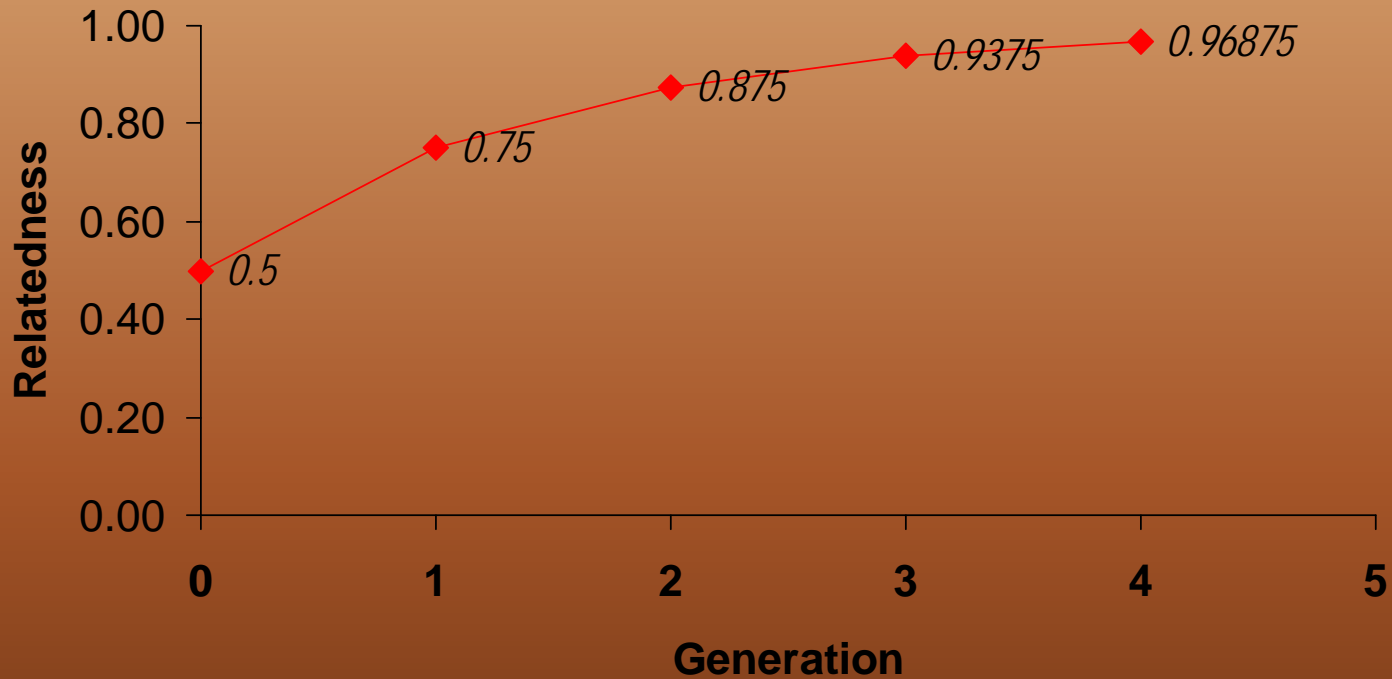
The Effects of Inbreeding



To understand incest we may have to understand the evolution of sexual reproduction

- Incest defeats the purpose of sexual reproduction by reducing genetic variance in offspring.
- According to the “Red Queen” theory sex may be a response to an evolutionary arms race with pathogens: pathogens can mutate faster than we can to defeat our immunological defenses.
- And “Muller’s Ratchet”, a more fundamental reason for sexual reproduction: sex “cleanses” the genome of harmful mutations.

Inbreeding and relatedness



If inbreeding depression is important, how do we explain cousin marriage?

- Robin L. Bennett in the *Journal of Genetic Counseling* that children of first cousins face a 50% higher risk of birth defects than the rest of the population, making them about as risky genetically as babies born to women 41 years old.
- For example, children of outbred individuals have about a 5% chance of inheriting a genetic disorder while children of first cousins have a 7.5% of inheriting a genetic disorder.
- This is because we carry 6 to 7 lethal recessive genes. In modern populations we have a history of outbreeding and a large number of potential mates leading to increases in lethal recessives. Therefore, in large populations with some degree of outbreeding lethal recessive can accumulate.
- In small populations it is likely that these recessive genes exist at much lower levels because the pool of potential mates is smaller. In small populations lethal recessives tend to be removed from the population. This is because offspring with a double dose of the lethal recessive does not live to pass these genes on thus reducing the transmission of harmful alleles.
- As a consequence of a small population size cousin marriage and even successive cousin marriage as in Yanomamö double cross-cousin marriage has a lower probability of producing defective children.

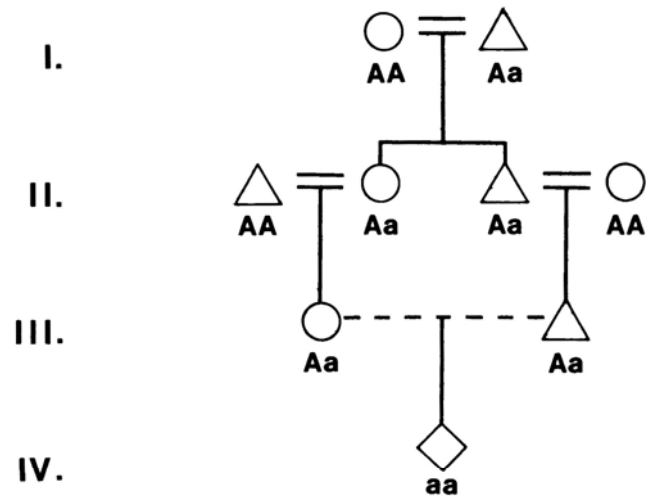
Some recent research on inbreeding

- S. Joseph's "Kissing Cousins" and Bedouin Marriage (Bekka Valley of Lebanon)
 - Offspring of first cousins had an infant mortality rate of 5.6% compared to 2.2% for non-first cousins
 - Offspring of cousins had a childhood mortality rate 2.3% compared to 0.8% of non first cousins (ns)

Inbreeding and lethal recessives

Generations

Hypothetical genealogy



△ Male

○ Female

◇ Male or female

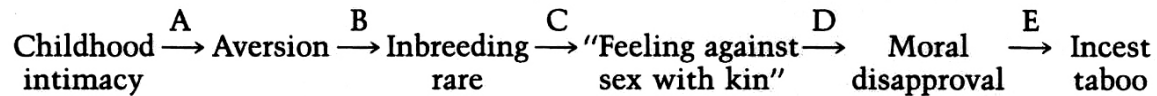
--- Consanguineous mating

Westermarck's and Burton's Models Compared

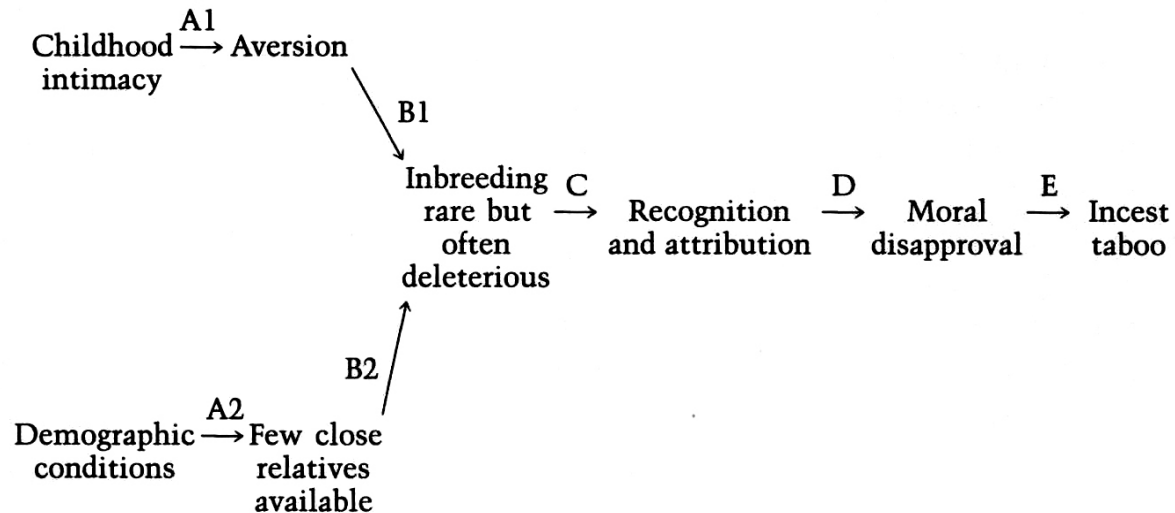
TABLE 6.3

A Comparison of Westermarck's and Burton's Theories Concerning Incest Taboos

I. Westermarck: "Aversion and moral disapproval theory"



II. Burton: "Recognition and attribution theory"



Support for Burton from Durham

- Durham found that the majority of societies recognize the relationship between inbreeding and bad reproductive results (55%).
- Beliefs include:
 - Insanity
 - Premature death
 - Lack of vigor
 - Susceptibility to illnesses
- Furthermore, 73% provide social sanctions and 40% believe there will be supernatural sanctions.

Example of state restrictions: Age and parental consent in Kansas

- Individuals must be 18 to marry without parental consent
- Males may marry at 14 and females at 12 with parental and district judge consent
- The Nebraska Case Matthew Koso of Falls City, Neb, is being charged with statutory rape of 14-year-old girl, even though they were wed with parents' blessing months before girl, Crystal, gave birth to their child; couple crossed into Kansas because Nebraska prohibits marriages of people under 17; Kosos, who had learning problems in school and was discharged from Marine Corps after four months, is 22 and has known Crystal since they both were young children; couple and their newborn are living with his parents; outrage over case ripples through state; Atty Gen Jon Bruning's office is deluged with letters, vast majority angrily urging that he leave couple alone; experts say it is extremely rare for man to be prosecuted for statutory rape when he has married his minor partner. August 2005



Problems Remain for Westermarck

- Does natural aversion through co-residence explain or generate cultural elaboration of the taboo (e.g., lineage exogamy)?
- Are other mechanisms involved (physical similarity, MHC sensing through olfaction)?
- What about siblings with large age differences such that they never co-resided?
 - Lieberman argues that seeing your mother caring (e.g., breast feeding) a new sibling is a signal to the older sibling of close relatedness. But what about the younger sibling? What mechanism does he or she use?

Miscegenation Laws (mixing of kinds) as an example of endogamy

- In the past, 41 states nullified marriage between whites and blacks and
- 20 of these states criminalized sex between blacks and white and
- far more criminalized sex between white females and black males compared to white males and black females





Kibbutz Characteristics

- Members live on and make living from land
- Property is collectively owned
- Goods and services distributed according to need
- Equality of social relations regardless of job help
- Luxurious living eschewed
- The group is more important than the individual

Moral Sentiments and Incest

- Theoretical background:
 - We have a **kinship estimator** (a psychological mechanism) based on patterns of interaction
 - co-residence and
 - viewing your mother caring for a young child
 - This knowledge is fed into a **sexual value estimator** – high value for non-kin.
- Research Design & Findings
 - Decided **not** to ask those surveyed whether they had committed incest but rather their views on the morality of incest.
 - Interview data indicated a positive correlation between duration of co-residence (length of time living with siblings) and judgments of moral wrongness of incest
 - Furthermore, co-residence duration is a stronger predictor than kinship
 - Research undermines phenotype matching or MHC similarity





Incest Rules in Leviticus

- Leviticus 18:6 " 'No one is to approach any close relative to have sexual relations. I am the LORD.
- Leviticus 18:7 " 'Do not dishonor your father by having sexual relations with your mother. She is your mother; do not have relations with her.
- Leviticus 18:8 " 'Do not have sexual relations with your father's wife; that would dishonor your father. [Note father's wife does not necessarily mean "mother". Why?]
- Leviticus 18:9 " 'Do not have sexual relations with your sister, either your father's daughter or your mother's daughter, whether she was born in the same home or elsewhere.
- Leviticus 18:10 " 'Do not have sexual relations with your son's daughter or your daughter's daughter; that would dishonor you.
- Leviticus 18:11 " 'Do not have sexual relations with the daughter of your father's wife, born to your father; she is your sister.

Some Endogamous Rules



- Age
- Generation
- Religion
- Race
- Ethnicity
- Caste
- Social class

Alliance Explanation

- We will give you our daughters and take yours for ourselves. Then we can live among you, and we shall all become one people

Genesis 34:16





Family Harmony

- “Sex with its accompaniment of courtship, jealousies, and competition, is not compatible with the attitude of reverence and submission characteristic of child-to-parent relations.”



Oedipus and Elektra

- **In both cases incest taboos were culturally invented to deal with a child's natural sexual desire for opposite sex parent.**
- **Oedipus Complex:** defined as a male child's unconscious desire for the exclusive love of his mother. This desire includes jealousy towards the father and the unconscious wish for that parent's death. Realizing that the father is powerful and can castrate the son, the infant internalizes the rules (incest taboo) pronounced by his father. The father now becomes the figure of identification and the boy resigns from his attempts to take the mother, shifting his libidinal attention to new objects of desire.
- **Elektra complex:** the girl is originally attached to the mother as well; however, when she discovers that she lacks a penis during the phallic stage the daughter becomes libidinally attached to her father and imagines that she will become pregnant by him, while becoming more hostile towards her mother. This is due mostly to the idea of "penis envy": that the girl is envious of her father's penis and wants to possess it so strongly that she dreams of bearing his children. **In later life,** so the theory goes, the girl will grow into the character type that her mother has developed as a means to attracting a man similar to her father

Terminological Confusion

- In father-daughter incest: father is *husband* and *father* while brother is *brother* and *son*
- In mother-son incest: mother becomes *wife* and *mother* while sister becomes *daughter* and *sister*



Historical Change in Marriage Laws (clear states never prohibited cousin marriage)

