

Developers:

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Scene 1

At the University of Alberta, on third floor of the Cab Building.

Camera pans in on Person 1, nibbling on grapes at table

Person 1 is sitting on a chair reading “The Sisterhood of the Travelling Pants.”

A friend (Person 2) walks up to Person 1

Camera placed at a side angle

Person 2: Hey, what are you reading?

Person 1: Hi! I’m reading this remarkable book (while handing it to Person 2). It is about four best friends that plan to stay connected with one another as their lives stem off in different directions. They pass around a pair of second hand jeans which fit all of them flawlessly.

Person 2: Wow! Seems like an interesting read. Those girls must have a very strong relationship, almost as if they were blood sisters.

Person 2 hands back the book to Person 1.

Person 2: Maybe I could borrow the book after you are done with it. I should be getting to class though. I do not want to be late again! See ya!

Person 1 says goodbye and continues reading book.

Scene 2

*Camera pans in on **Image 1***

Here is something to think about. “Are friends treated differently than relatives or would they both be cared for in the same way?”

*Camera pans in on **Image 2***

Let me put it this way. If you are able to save one person, a good friend or your own blood-related sister from a burning building, who would you choose? What if you had a closer

relationship with a friend than with your own kin? Or what if some non-kin were there, what then? Who would be saved?"

*Camera pans in on **Image 3***

Well, let's reflect upon this for a minute. Many people would say that they are more likely to help kin than non-kin in times of crisis, because they have a stronger relationship with them. That may be part of it, but recent research suggests the issue may have another deeper, evolutionary explanation.

*Camera pans in on **Image 4***

Neyer and Lang suggest that "blood is thicker than water," implying that kin are generally favored over non-kin and this appears invariant across the diverse cultures of the human species and does not seem to vary greatly across animal species. One study done by Williams surveyed 295 undergraduate students about help exchanged with siblings, cousins, acquaintances or friends. It was found that a greater coefficient of relatedness was associated with higher levels of helping.

The theory here is that kinship could serve as powerful mechanisms in social relationships and gene competition.

*Camera pans in on **Image 5***

This implies that helping kin rather than non-kin in times of crisis has not only occurred for thousands of years, but that it has been regular enough to impact the evolution of not only our species, but animal species as well.

George Williams noted that when animals cooperate, it is almost always between close relatives. He suggested that when animals are acting altruistically to their kin, then they are really acting to promote copies of their own genes in relatives. Humans may not be so different.

*Camera pans in on **Image 6***

Neyer and Lang point out that Hamilton identified kin selection as a key mechanism for achieving inclusive fitness. The overall influence of an individual on the continuation of their genes in subsequent generations is an additive function of the individual's own fitness plus the effects of their actions on the reproductive success of genetic relatives, degraded by the degree of genetic relatedness.

Basically, in times of emergency, people would help out their own kin based on genetic relatedness, and act in ways that maximize their inclusive fitness and ensure a higher probability that their genes are passed on!

*Camera pans in on **Image 7***

But, there is a problem: Infanticide. What about some individuals who kill their own offspring. Wouldn't this go against the theory of gene competition, and perpetuating ones genes to succeeding generations?

Investment in an offspring that has a low chance of survival may be better invested in a future offspring that has a higher probability of survival and therefore a greater rate of return on the investment by passing on genes. For example, if a baby is born deformed or sick, then continued investment may be wasteful for the parents until a more favorable time that may increase overall fitness ensuring a greater chance in survival of kin.

*Camera pans in on **Image 8***

How does all this relate to social relationships?

Subjective closeness with various partners is also highly associated with different levels of genetic relatedness.

Daly, Salmon and Wilson argued that kin and non-kin relationships are universally arrayed on an aspect of closeness, which correlates strongly with genetic relatedness.

It seems that humans apply a simple heuristic that guides them toward kin emotionally, because the subjectively felt closeness may signify, among other things, one proximate cue to genetic relatedness.

In a study done by Neyer and Lang it was found that subjective closeness with relationship partners was much more predictable from genetic relatedness than was the acknowledged support from relationship partners. They concluded that subjective closeness in personal relationships was mainly shaped by nepotism, suggesting an outstanding role of kinship in social regulation.

*Camera pans in on **Image 9***

Although Hamilton's rule predicts that humans will prefer kin over non-kin, it is possible that human individuals may vary in how much they keep track of kin.

Humans face different social opportunities depending on social network composition, sex-related life strategies, and perhaps even differences in basic individual personality traits!

Scene 3

Person 1 walks towards a bench in Cab Building

Camera zooms in on person 1 sitting on bench

People are complicated creatures, and no one is the same. Different people will have different reactions to certain things, but research in this area of evolutionary psychology may help us gain more of an extensive understanding as to why some people act the way they do.

Thanks for watching!!

Camera stops rolling.

References:

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Image 1:

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Image 2:

Clipart Image

Image3:

Zhollis, D. Embarrassed. [Online Image]. (2011). Retrieved April 1, 2011 from http://familyrights.us/how_to/balance_scale.gif

Image 4:

Jones, C. Flickr. [Online Image]. (2011). Retrieved April 1, 2011 from http://farm6.static.flickr.com/5099/5388220524_6d8600ea53.jpg

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Image 8:

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Image 9:

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Additional Sources:

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