This work contains Buss’ original chapter outline followed by my summaries for each chapter.

**PART ONE: FOUNDATIONS OF EVOLUTIONARY PSYCHOLOGY**

**CHAPTER ONE: THE SCIENTIFIC MOVEMENTS LEADING TO EVOLUTIONARY PSYCHOLOGY - 1**

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**SUMMARY**

32 - Darwin's natural selection has three ingredients: Variation, Inheritance, and Selection. “Natural selection is defined as changes over time due to the differential reproductive success of inherited variation.” Natural selection “united all living forms into one grand tree of descent and simultaneously revealed the place of humans in the grand scheme of life.”

Darwin also coined sexual selection. Intrasexual is between same sex. Intersexual between male and female.

Konrad Lorenz and Nikolaas Tinbergen started ethology, which sought to place animal behavior within an evolutionary context by focusing on the origins and functions of behavior.

In 1964 William D. Hamilton said that selection involves not just classical fitness (the direct production of offspring) but also inclusive fitness, which includes the effects of actions on genetic relatives. He took a “genes eye” view.


In 1975 – Edward O. Wilson published “Sociobiology: A New Synthesis.” It’s last chapter focusing on humans made it controversial. But, it does not say we are genetic robots or optimally designed.

Milestones in human development:
Mammals originated 200 million years ago.
Primates began 85 million years ago.
We became bipedal 4.4 million years ago.
2.5 million years ago came stone tools (1.6 perhaps fire).
Our most rapid brain expansion happened between 500 and 100,000 years ago.
Social competition?
200,000 years ago Neanderthals dominated Europe.

“Molecular genetic studies show that there has been an acceleration of human adaptive evolution over the past 40,000 years, and especially during the past 10,000 years (the Holocene).”

Freud’s sex and aggression paralleled Darwin. William James turned us to instincts in 1890. But in the 1920s we embraced radical behaviorism.

But in the 1960s Harry Harlow found monkeys preferred mothers to food. John Garcia showed we learn some things faster than others. Our brains were preset.

The cognitive revolution was based on the information – processing metaphor. But as Chomsky showed, we’re ready to process some info (language) and not others. So, this set the stage for evolutionary psychology.

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Guidance from Current Mechanisms  
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Guidance from Adaptive Problems

**SUMMARY - 68**

This chapter covers four topics: 1) The logic of generating hypothesis about our evolved psychological mechanisms. 2) The products of the evolutionary process. 3) The nature of evolved psychological mechanisms. 4) The scientific procedures by which we test these hypothesis.

**General theory:** Evolution by natural selection:  
**Middle – Level Evolutionary Theory:** Theory of Parasite – Host Coevolution  
**Specific Evolutionary Hypothesis:** The higher investing sex will be more selective in choice of mating partners.  
**Specific prediction:** Women have evolved preferences for, and attraction to, men who are high in status.

The bottom up method starts with fact and goes up. Ex. Men are more into beauty than women: We can reverse engineer to say possibly why.

Evolution produces adaptations, by products, and noise. Evolutionary psychologists focus on adaptations: specifically psychological adaptations.

These mechanisms solve problems of reproduction recurrently.

Once a hypothesis about an evolved psychological mechanism is formulated, it must be tested. You can compare the prediction to what people actually do. You can compare different species, people across cultures, physiological reactions and brain images, comparing people with different or same genes, comparing males and females, and the same individual in different contexts.

Every source of data has strengths and limitations. You should use two or more sources of data.

The Four classes of adaptive problems: Problems of survival and growth, problems of mating, problems of parenting, and problems of genetic relatives.
Current mechanisms like fear of heights, a taste for fatty foods, and a preference for savanna-like landscapes provide a window into past adaptations.

PART TWO: PROBLEMS OF SURVIVAL

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SUMMARY 102
Food shortages, toxins, predators, parasites, diseases and extreme climates are hostile forces of nature. We have evolved to deal with these. We must find food and then know which to consume, which to avoid.
Among our adaptations are preferences for calorically rich foods; mechanisms to avoid bad food, like the emotion of disgust. Mechanisms for getting rid of bad food, such as gaging, spitting, vomiting, coughing, sneezing, diarrhea, and pregnancy sickness.

People also use spices that kill off food-borne bacteria. This spreads through cultural transmission. More spices are used in climates that are hotter where food spoils more.

It seems that males hunted and females gathered. Sex differences in spatial ability reflect this. Women outperform men on tasks involving spatial location memory. This would help find tubers, fruits, nuts and so reliably. Men do better with 3/D rotation, navigation and map reading.

We prefer places where one can see without being seen, mimicking savannas.

We have survival enhancing inborn fears. Snakes, spiders, heights, and strangers. These appear across cultures and especially in certain times of development.

We have at least six behavioral responses to fear: Freeze, flight, fight, submit, fright, and faint. [Is this article fodder? What are we currently doing? Fainting.] Fainting is a way to survive at the last minute (playing dead, not a threat). This would mean that women and children would be more likely to faint. Evidence supports this.

We also pick out snakes, and spiders in an array of non-dangerous items.

We are also tuned to hear dangerous items. We also overestimate heights from on top and under from below. Children understand death from predators by 3.

Raising temperature is a natural reaction to burn out predators. Aspirin prolongs illness.

Why do we die? When people are young selection works strongly. When we are older, not so much. An event that happens right before you die has no impact on your reproductive success.

Suicide is also puzzling. It occurs amongst those with poor reproductive prospects, who are in poor health, who have poor financial prospects, who perceive themselves to be burdens on their kin. Evidence points to the possibility that humans have evolved context-sensitive psychological mechanisms to evaluate future reproductive potential and net cost to genetic kin.

Homicide mortality is up to 35%. We’ll look at this in later chapters.

Surviving to adulthood gets us to the next problem: mating.
PART THREE: CHALLENGES OF SEX AND MATING

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The Dark Side of Families

SUMMARY 135

Ancestral women who mated indiscriminately were likely to have been less reproductively successful. Long-term mates bring many assets. Selecting one with assets is very complex. It involves preferences that correlate with assets.
We cannot always see resources, so ambition, intelligence, older age are good stand ins.

But many men with resources are very discriminating and just want casual sex. Seeking love is one solution. Acts of love signal that the man has committed to the woman.

(144) Teenagers often want a slightly older woman. This counters the feminist narrative that men only want younger women so that they can control them.

To have the love and commitment of a man who could be easily killed by other males was a problem for ancestral women. Tall strong, athletic men offered protection.

A man must also not die to protect resources, so women check for diseases. The similarity of interests also keeps the man around.

Women’s preferences shift according to contexts. Women with lots of resources are expected not to care as much about male resources. This hypothesis receives no support. Women with high income want more education and resources in their mates.

In long term mating, signals for providing and being a good father are important. These qualities are less important in short term mating.

Women find men more attractive if they are with other women, particularly if the other women are physically attractive.

Women who are higher in objective and self-perceived attractiveness raise their mating standards and seek men who are more masculine, symmetrical, high in status, attractive, healthy and fit.

For preferences to evolve, they must have had a recurrent impact on actual mating behavior. Women don’t always get what they want, but their preferences do impact mating behavior.

Women respond more to personal ads in which the men indicate good financial status. Men high in status and resources are more likely to marry. In polygynous societies, high status men are more likely to have more wives.

Poor men are more likely to remain bachelors.

Physically attractive women do indeed tend to marry men with higher incomes and status. Worldwide, women marry older men.
Finally, women’s preferences have an impact on men's behavior. Men are more likely than women to display resources in their attraction tactics and to denigrate their competitors using verbal slurs that indicate that their rivals are poor and lack ambition.

When men deceive women in on-line profiles, it usually has to do with wealth, education, and height.

The mere exposure of men to young attractive women activates a psychological cascade in men, such that they increase the importance they attach to financial success and feel more ambitious. Portions of behavior, in short, can be predicted from women's preferences.

CHAPTER FIVE: MEN’S LONG-TERM MATING STRATEGIES –

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Effect of Men’s Mate Preferences on Women’s Competition Tactics

SUMMARY

171 - Marrying has advantages: Increasing paternity certainty. Also increased survival of their offspring.
Two adaptive problems loom large:

1) Identifying women of high fertility. This is done with signals of youth and health: clear skin, full lips, small lower jaw, symmetrical features, white teeth, absence of sores and lesions, facial femininity, facial averageness, and a small ratio of waist to hip. These are consistent across cultures.

Waist Hip Ratio varies depending on food scarcity as well as the distributions in the local culture.

2) Paternity certainty. Many cultures value virginity highly. But, this is not universal. More importantly is to look for fidelity.

Male homosexuality is an evolutionary paradox. The kin altruism hypothesis has received mixed empirical support.

Many contexts impact males mating strategies. 1) Getting status and resources improves your odds. 2) Viewing images of other attractive women lowers men’s commitment to their regular partner. 3) Getting into a committed relationship reduces your testosterone levels; but only if they are monogamously oriented and do not desire extra-pair sex. 4) Interacting with attractive women increases testosterone and risk taking. 5) Men’s mate preferences shift as a function of their mating budget. On a limited budget men place more importance on necessities, such as attractiveness. After this men pay attention to luxuries such as personality and creativity.

Several sources confirm mate preferences impact action. 1) Men who respond to personal ads do more to women who claim to be young and physically attractive. 2) Men worldwide marry women who are younger. 3) Men married to younger women have higher reproductive success rates. 4) Men attend longer to – and have problems disengaging – from looking at attractive women. 5) Men interacting with attractive women lower their voices. 6) Attractive waitresses, young, large breasts, blonde, receive more tips from men. 7) Men spend more money on engagement rings for younger brides. 8) women devote more of their time to their physical appearance than men – corresponding to what men want. 9) Women denigrate their rivals by putting down their physical appearance and calling them promiscuous and slutty. This makes the rivals seem less attractive as mates.

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**SUMMARY**

The scientific study of mating has focused on marriage. But, human anatomy, physiology, and psychology betray an ancestral past filled with affairs and short-term mating. And, perhaps the benefits of short term mating for men have blinded scientists to such behavior in women.

Via short term mating, men can inseminate more women. Men value short-term mating more than women. Men want more partners and a shorter time prior to sex in relationships, lower their standards dramatically when pursuing short-term mating have more sexual fantasies and more involving multiple partners, experience more regret over missed opportunities, have a larger number of affairs and visit prostitutes more often.

Though some might doubt it. It is very robust and widely confirmed across cultures.

Mathematically, however, short-term requires two. Some women must have sought short term.

Physiologically men’s testicle size, sperm competition show cheating.

There are 5 classes of short term mating benefits to women: 1) Economic resources, genetic benefits, mate switching benefits, short-term for long-term goals., and mate manipulation benefits. These and sexy son genes are supported. Status enhancement and mate manipulation benefits have not been supported by the evidence.

(197) The absence of a father while growing up has been reliably linked with the pursuit of a short-term mating strategy. This is both in men and women. And, both are likely to reach puberty earlier. Childhood sexual abuse is associated with early age of puberty and early onset of sexual activity.
Individual women differ and clues show which ones differ. Women show more eyebrow flashes and glances, dress more provocatively during ovulation; are perceived to be somewhat less masculine in appearance, and are attracted to men who have particularly masculine faces and bodies.

Men who prioritize short-term mating look to attractiveness more than those seeking long-term mates. They also show a preference for women with a low WHR.

Contexts impact short term mating. A surplus of women promotes short-term mating in both sexes. Also, mate value (one's value to the opposite sex). Men high in mate value are more likely to pursue short term mating. They have sex at a younger age and more partners.

The connection between women’s mate value and short-term is more mixed. Some show no relation between self-perceived mate value and short term. Others show that women with low attractiveness are slightly more inclined. Others see them as looser too.

Finally, those high on extroversion and low on conscientiousness are more inclined to short-term partnering. Those high on the dark triad – Narcissism, psychopathy, and Machiavellianism – also pursue exploitative short-term mating strategies.

**PART FOUR: CHALLENGES OF PARENTING AND KINSHIP**

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**SUMMARY 234**

Mechanisms of parental care have been studied in many species. The big puzzle is why women spend more time on this than men. Two hypothesis:
1) Paternity uncertainty.  
2) The mating opportunity cost hypothesis  
Current evidence supports both.  

Evolved mechanisms of parental care are predicted to be sensitive to at least three contexts: 1) Genetic relatedness to offspring, 2) The ability of the offspring to convert parental care into fitness. 3) Alternative resource uses.  
The first has lots of support. Stepparents have fewer positive parental feelings. The interactions are more conflict – ridden. Newborn babies are said to look more like Dad than Mom. This reassures the father that he should invest. Genetically related offspring get more college money support. Children living with a stepparent are 40x more likely to suffer physical abuse. And 40 -100 times more likely to be killed.  

(59) Girls get an earlier period when growing up with out a father.  

Women have 100% paternity certainty. They spend longer looking at baby photos, and are more skilled at recognizing infant facial expressions of emotion, and are more likely to tend to infants and befriend others to protect them.  

The ability of the offspring to convert parental care into fitness is seen in the abandonment of infants with down syndrome and spina bifida. They are also far more likely to be abused. Mothers invest more in healthy twins. Young infants are more likely to be abused and homicide victims than older ones. 

The third context is the availability of alternatives. Young mothers are more likely than older mothers to commit infanticide. Unmarried women commit more too. Men high in status invest less in direct child care. Men in low status JASON provide more. 

Parents and children’s genetic stake are different. You have 100% of your genes. Children 50%. Fetuses secrete large amounts of HCG into their mother’s bloodstream, which prevents the mother from menstruating and allows the fetus to remain implanted, thus subverting spontaneous abortions. Parents who grow older are more likely killed by their offspring than the reverse. Mother child conflict increases more with the introduction of a sibling and even more with a half sibling. And, finally, conflict happens around child mate selection. Offspring prioritize attractiveness more than their parents. Parents want family background. They dislike short-term mating and especially of daughters and so do ‘daughter guarding.’  

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The Dark Side of Families

**SUMMARY 262**

Hamilton’s inclusive fitness accounted for altruism in nature.
We help people to the extent that they are genetically related to us.

Implications:
1) There will be relatedness nomenclature and corresponding psychology. 2) Young and male have higher reproductive potential than old and female. 3) Kin categories will be arrayed from closeness to distance. 4) Cooperation and solidarity will reflect closeness. 5) Older kin will encourage younger to be more inclined than they would normally be. 6) Ones position within the family will be central to ones identity. 7) People will exploit kin terms in non-kin situations.

Indeed squirrels do alarm more when kin are nearby.

This requires that we can recognize kin. This is done via 1) Association 2) Odor 3) Kin classification systems based on universal grammar, 4) facial resemblance.

People are more likely to rescue and leave more money to genetic relatives. Grief at funerals is related to genetic closeness.

The kin impact also manifests in watching kin’s relationships, especially female’s. Children who grow up in stepfamilies with half siblings have higher cortisol levels.

The paternal grandfather has a double risk of not being actually related to the offspring. Father’s, father’s do show the least investment in grandchildren. Reports of emotional closeness and monetary investment are greater from the mother’s mother.

Uncles on the women’s side invest more.
Families are found in only about 3 percent of mammals. So why do they exist? Stephen Emlen says they exist when 1) There is a scarcity of reproductive vacancies elsewhere or 2) when there are distinct benefits of staying at home, such as enhancing survival – giving and getting aid.

People discount his theory on several basis, including that people help non-kin too.

PART FIVE: PROBLEMS OF GROUP LIVING

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Indirect Reciprocity Theory
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SUMMARY 294

Altruistic behavior aids others at an expense to yourself. This goes against Hamilton. One solution is reciprocal altruism. The biggest danger this solution encounters is that of cheaters.

To test this Robert Axelrod did his tit-for-tat competition.

We see such cooperation in the animal world.

Vampire bats share their blood with “friends” who were unsuccessful on any given night. Later others reciprocate. Chimpanzees have alliances.
Social contract theories suggest five cognitive capacities to solve the problem of cheaters. 1) recognize individuals; 2) remember mutual history; 3) communicate one’s values, desires, and needs; 4) recognize those of others; 5) represent the cost and benefits of large numbers of items in swaps.

Researchers have shown cheating detection modules in the mind. We better compute when problems are put in terms of social contracts. We are especially vigilant against those who take without contributing. We can also, studies show, detect genuinely altruistic behavior; We choose those who are especially motivated to cooperate – this helps us avoid cheaters.

In addition to kin altruism and reciprocal altruism, there are two other kinds: indirect reciprocity and costly signaling.

With indirect altruism, you don’t get reciprocity from those who you helped, you get it from those who saw you help. With costly, it is showing that you’re rich and can afford to help. This increases your status.

The bankers paradox is that we won’t lend money to those who need it, we lend money to people with good credit and don’t need it. One solution is to become irreplaceable. Then friends have a stake in our welfare. Having conquered nature, it is now hard to know who will really help us in an emergency; not being able to spot true friends can be a cause of alienation.

In opposite sex friendships, men look for short-term sex and women protection. Both are happy to get info about the opposite sex. The cost of same-sex friendship is sexual rivalry. It is more prevalent among male friends.

We also have dyadic, groups of friends. These work if we avoid free riders. Punative sentiments help facilitate this. Scientists have found some brain regions involved when people punish noncooperators – they are in reward centers. People enjoy punishing or seeking revenge against violators.

Punishing can be altruistic. It costs to punish when others don’t. To explain this we may need to invoke “cultural group selection.” Then again reputation gains may explain it. This explanation vies for “strong reciprocity” among a whole group population. Fehr and Henrich, 2003 go for this. ~ 292

Cross-cultural studies show punishment is a human universal. (291) It is especially harsh toward in-group members who have failed to cooperate when they could.

292 – “Cultural group selection describes a process by which certain culturally transmitted ideas, beliefs, or values spread because of the competitive advantages they provide to the social groups holding them.” “If groups competed with one another over time, and the most successful groups enforced group-altruistic norms, then cultural group selection would favor groups with the more effective norms.”
That is it in this book, followed by the weak assertion that this would cause less successful groups to imitate their strategies and acquire the social norms.

The fact that being ostracized or shunned hurts so much points to a mechanism that creates conformity.

302 – Of homicides in Chicago between 1965 and 1980, 86% were committed by men. This is close to what we see cross culturally. [But we see this difference between races in the US and don’t attribute it to genetics].

302 – The more dimorphic the greater the variance in reproduction. The more intense the polygyny, the greater the dimorphism and the more selection favors riskier strategies (including intrasexual competition) within the sex. Human males are roughly 18 % heavier than females.

More polygyny means more males get shut out. “This leads to more ferocious competition within the high-variance sex. In essence, polygyny selects for risky strategies, including those that lead to violent combat with rivals.” [How is dimorphism in the Middle East?].

308 – Young men must fight and so are aggression prone. But, they do it with an audience for a reputation.

309 – Boys have a surge in muscle strength from puberty to their mid-twenties.

319 – “Men are more likely than women to form strong ingroup/outgroup distinctions, and to derogate outgroup members as being animalistic, diseased, or subhuman, which presumably lowers inhibitions to kill them.” “Men compared to women, show a particularly strong bias against outgroups, especially towards male outgroup members.”

**CHAPTER TEN – AGGRESSION AND WARFARE**

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Negotiate Status and Power Hierarchies
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**SUMMARY 325**

298 – “Of the more than 10 million animal species that exist, including four thousand mammals, only two species have been documented to show male-initiated coordinated coalitions that raid neighboring territories and result in lethal attacks on members of their own species: chimpanzees and humans.”

(59) The 7R allele of the DRD4 gene has been linked with novelty seeking and extraversion. It occurs at dramatically different rates in different geographical regions (e.g., higher in North America than in Asia)


Aggression is not a singular phenomenon. It is a collection of strategies that manifest in specific contexts. However repugnant, they are solutions to adaptive problems such as resource procurement, intrasexual competition, hierarchy negotiation, and mate retention.

Thus aggression between sexes, and across cultures are expected.

There are at least 6 classes of benefits to aggression: co-opting the resources of others, defending oneself and their kin against attack, inflicting costs on intrasexual rivals, negotiating hierarchy, deterring rivals from future aggression, and deterring infidelity.

If there is polygamy, some men will not get women. This would favor risky tactics among men both to gain sexual access to more women and to avoid total exclusion. Men are more aggressive, sexually and violently than women across cultures.

Men’s aggression triggers include being unemployed and unmarried. These conditions indicate that a man may be excluded from reproduction altogether. Men also aggress when their status and reputation are threatened. Or when they suspect someone is ‘poaching’ on their mate.

Women aggress mostly in intrasexual competition. They use denigration more than physical aggression. They go after fidelity and looks.
Men aggress against women mostly to control their sexuality. Younger women, more fertile, are more vulnerable to aggression.

Warfare, cooperative attacking of another cooperative coalition, is rare in the animal world. Only two mammals do it: Humans and chimpanzees.

Men primarily do it and get sexual access as a reward. Men more than women spontaneously assess their fighting ability relative to others; and men more than women value coalition members who are strong, brave and have good fighting abilities.

And men display other phenomena that suggest evolved warfare adaptations: High mortality rates; a greater proclivity to attack in simulated war games; a greater tendency to display strong ingroup/ outgroup distinctions and to derogate outgroup members as being subhuman.

Why kill others? 1) Perhaps they are slip-ups or by-products that result from the threat of violence used to control others. 2) perhaps it is an adaption that gets more than it costs.

The high prevalence of homicide fantasies, the predictability of the circumstances that trigger them, the gender differences, and the premeditated quality of many homicides all support the homicide adaptation theory.

331 – “Brazilian college students consistently perceived more sexuality in the characters’ behavior than did the American college students.” Gender differences were also highly significant.”

**CHAPTER ELEVEN – CONFLICT BETWEEN SEXES**

**Strategic Interference Theory 329**

**Conflict About the Occurrence and Timing of Sex 330**

Conflict over Sexual Access

**Sexual Aggression and Evolved Defenses Against Sexual Aggression 335**

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Do Men Have Evolved Rape Adaptations?

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**From Vigilance to Violence: Tactics of Mate Retention 348**
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**Conflict over Access to Resources 355**
Causes of Resource Inequality: Women’s Mate Preferences and Men’s Competitive Tactics
Are All Men United to Control Women?

**SUMMARY 357**

Men and women will have different ways to promulgate and so conflict. One will stop the other from reaching their goals. Women long-term mating, men short-term mating. Anger, distress, and jealousy result.

358 Men consistently infer more sexual intent than do women. They see smiles as come ons. 2) Men sometimes deceive women about their emotional involvement and long-term intentions. This can be viewed via “error management theory.” It costs more to underestimate sexual interest than to overestimate it. Women, OTOH, are expected to be skeptical by error management theory.

Sexual harassment at the workplace goes one way. The victims are usually young, attractive and single. Women are more upset by this than men. Women are especially upset if the harasser is of low status.

Men tend to underestimate how much women are upset by unwanted touching and harassment.

A controversial question is whether or not men have evolved a rape adaption. Is it an actual strategy or just a byproduct of wanting short term sex and using violence to get what you want? Evidence is not conclusive.

We have found that rapists start having sex earlier, have a wider variety of sexual experiences, show penile arousal to stories of rape, and tend to commit other crimes as well.

The theory that failures in the mating world rape is not supported. Men who rape their long-term partners tend to do it due to suspected infidelity. This is especially true if they view themselves as of higher mate value than their spouses.

Women have, people think now, anti-rape adaption. Special friends for protection, a preference for large, dominant mates, fear of situations that place them at risk of rape, and pain following sexual violence.

Men’s jealousy focuses on sexual infidelity; women’s on emotional infidelity. These sex differences are robust across cultures. MRIs have been used to test this.
The psychology of jealousy results in behaviors that deter infidelity or abandonment. This goes from vigilance to violence. Men do it more when the women is young; women when the man has status.

There is also a conflict over resources, which men tend to control – this being their key to success. Thus patriarchy is natural. Men, are NOT in coalition to keep women from resources, they are primarily in competition with other men.

**CHAPTER TWELVE – STATUS, PRESTIGE, AND SOCIAL DOMINANCE**

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*Dominance and Status in Nonhuman Animals 363*
*Evolutionary Theories of Dominance, Prestige, and Status 365*
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Dominance Theory
Social Attention-Holding Theory
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Facial Dominance
Self-Esteem as a Status-Tracking Mechanism
Strategies of Submissiveness

**SUMMARY 387**

Testosterone is an androgen. Men have 7 times the amount of T of women.

381 – T levels of athletes rise just prior to their matches, perhaps making individuals more willing to take risks. “Winners in the matches show a rise in T for up to two hours after the match, whereas the losers show a decline in T. Mood changes accompany T changes.” Elevated.

“The effects of winning and losing extend even to sports fans who do not participate in the competition.”

Status and social dominance are observed widely through the animal world from crayfish to humans. A dominance hierarchy refers to some individuals getting more access to resources than others. Size is a key to dominance in some species, but not primate species. Competence knowledge, generous displays, and social skills do it for us.

Status striving is greater in men than women. The more polygynous the mating system the more it has paid in reproductive success for men to take risks in getting status. Across cultures it means more women.
Males form hierarchies as early as the age of three. Women tend to be more egalitarian. Women express dominance via pro-social actions (Settling disputes) men in personal gain and ascension (getting others to do menial tasks for them). When given a choice, dominant women tend to appoint men as leaders, whereas dominant males take the leadership role for themselves.

Denise Cummins’ dominance theory suggests domain specific strategies for navigating dominance norms: Understanding permissions (who mates with whom), obligations (who must support whom in contests), and prohibitions (who cannot join the war dance). These strategies are postulated to be separate from other areas of reasoning. And, indeed, 1) 3-year-olds understand hierarchy. 2) people remember the faces of cheaters more if they are low in status. And 3) when asked to assume high status, people look for rules violations more in low status folks.

Whereas dominance theory emphasizes reasoning mechanisms, SAHP theory looks at emotional mechanisms. Elation after a rise in status, social anxiety when it could be lost; shame and rage as a consequence of status loss, envy to motivate acquisition; and depression to facilitate submission.

Dominance can be seen in an upright posture, low voice, direct eye contact, fast-paced stride, a strong jaw and physical size. The hormone testosterone and serotonin have been linked with dominance. Testosterone seems to rise and fall with winning and losing.

Self esteem is also thought to indicate status. It motivates us to curry favor or repair social relations when respect from others wanes, 2) to guide us to making appropriate decisions about whom to challenge and to whom to submit 3) to track our desirability in the mating market.

People can also deceive down to avoid confrontation and derogate tall poppies. More study is needed.

385 – “The evolutionary logic is that situations have commonly existed in which it was adaptive to convincingly portray oneself as subordinate and hence nonthreatening. Those who are real threats risk incurring the wrath of the dominant, who might seek to vanquish anyone who is perceived as a rival. By truly acting subordinate, one avoids incurring this wrath, continuing to occupy a position within the group. It also permits one to bide one’s time until a more opportune moment arises in which to seek dominant status.”
PART SIX: AN INTEGRATED PSYCHOLOGICAL SCIENCE

CHAPTER THIRTEEN – TOWARD A UNIFIED EVOLUTIONARY PSYCHOLOGY

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The Evolution of Language
The Evolution of Extraordinary Human Intelligence

Evolutionary Social Psychology 405
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The Evolution of Moral Emotions
The Return of Group Selection as Multilevel Selection Theory

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Theory of Mind Mechanisms
Life-History Strategies

Evolutionary Personality Psychology 413
Alternative Niche Picking or Strategic Specialization
Adaptive Assessment of Heritable Qualities
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Evolutionary Insights into Problems Erroneously Thought to Be Dysfunctions

Evolutionary Cultural Psychology 422
Evoked Culture
Transmitted Culture
The Evolution of Art, Fiction, Movies, and Music

Toward a Unified Psychology 428

SUMMARY
393 – 394 A survey of 736 front-page newspaper stories found “The content across time and cultures revealed attention to these key themes: death (accidental or natural), murder or physical assault, robbery, reputation, heroism or altruism, suicide, marital problems such as infidelity, harm or injury to offspring, abandoned or destitute families taking a stand or fighting back, and rape or sexual assault.”
422 – Using the word ‘culture’ to explain something is not an explanation. It is not
unless the causal processes that are subsumed by these labels are properly
described. Labels for phenomena are not causal explanations.

After we label them, we need explanations. Two sorts are “evoked” and
“transmitted” culture.

423 – “Evoked culture refers to phenomena that are triggered in some groups more
than in others because of differing environmental conditions.” For example, foods in
tribes are more likely shared if there is high variability in how often they are gotten.
Meat only comes from 60% of hunts, so it is high variance and shared. Gathering
gets food reliably, so sharing would only aid the lazy.

This pattern has been shown in different places around the world.

The greater the prevalence of parasites, the more importance was put on
attractiveness.

The evoked is a universally noted characteristic that is evoked in some environs
more than others.

Parasite prevalence has also been linked to smaller ethnic groups, higher rates of
polygyny, lower levels of parental care, and even greater levels of ‘collectivism.’

TRANSMITTED culture goes from one mind to another, like a joke or a trend. Since
the info that could come from others is infinite, we have sorting mechanisms.

We don’t know what they are but they must include selective attention and
encoding and transmission.

Consider the tendency to imitate the clothes of those with high status. We need to
look at senders too; for example those who start rumors.

There is a conformity bias, wherein people tend to adopt cultural trends or positions
held by the majority of people. Prestige of the transmitter is another.

425 - So 1) “Culture” is not an autonomous causal agent in competition with
“biology” for explanatory power; 2) cultural diversities – local within-group
similarities and between-group differences – are phenomena to be explained, but do
not, by themselves, provide an explanation for cultural phenomena; 3) cultural
phenomena can be usefully divided into types, such as evoked culture or
transmitted culture; 4) explanations for evoked culture require a foundation of
evolved psychological mechanisms, without which the differently activated cultural
diversity could not occur; and 5) transmitted culture also rests on a foundation of
evolved psychological mechanisms that influence which ideas are attended to,
encoded, retrieved from memory, and transmitted to other individuals. “Nothing about culture makes sense except in light of evolution.”

426 - There are two theses as to why art exists. 1) The display hypothesis. It says that culturist “is an emergent phenomenon arising from sexual competition among vast numbers of individuals pursuing different mating strategies in different mating arenas.” It is a courtship strategy for getting women.

ART
This accounts for several facts: 1) Men historically have produced more art and music, and literature across a wide variety of cultures. 2) It also accounts for most art and music being created by men in early adulthood.

However, it cannot explain: 1) The content of the cultural products. Why are some songs popular and others not? Why is Shakespeare so revered? 2) Why do so many people spend so much time enjoying art in solitary situations? They read lit where no one is watching.

The second approach is Pinker’s. It comes from the mechanisms of the mind that “let people take pleasure in shapes and colors and sounds and jokes and stories and myths.” Ripe fruit and fertile females, for example. Just like drugs juice our rewards systems.

427 – Music impacts language, auditory separation mechanisms, emotional calls, habitat selection (thunder) motor control.

428 – We see this in literature too. Popular films contain intrasexual competition, mate choice, romance, and life threatening hostile forces of nature. In a book we get to see landscapes, hobnob with important people, fall in love with beautiful men and women, protect loved ones, attain impossible goals and defeat wicked enemies.”

One analysis of 36 plot lines showed most were defined by 4 themes: Love, sex, personal threat or threat to the antagonist’s kin. (Carroll, 2005)

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