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TENDING INSTINCT

*How Nurturing Is Essential for
Who We Are and How We Live*



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Men's Groups

Any parent of boys knows the good-natured chaos that sweeps through the house when boys are at play—the simulated gunfire, bodies dropping in pretend agony, a figure leaping out from behind curtains or furniture, embarrassed to discover that it is you and not the juvenile enemy he expected.

One day, you notice that the voices are much lower and sound eerily like those of soldiers on maneuvers. You think, They are becoming men, no longer boys. Then on the Fourth of July, they spray-paint the dog red, white, and blue, and the illusion of manhood vanishes.

To understand groups of boys or men, we need to make sense of this energetic playfulness, this rowdy camaraderie. We need to understand the symbolic predation, hunting, and aggression these groups often spawn as well. For groups of men and boys are filled with a dynamic spirit that is usually lively and good-natured, but which can unexpectedly turn serious, even violent.

From early childhood, boys have their groups and girls have theirs and as the saying goes, never the twain shall meet. Both genders resist

Men's Groups

playing with the other. Groups of boys are strikingly different than groups of girls—rowdier, more active, more aggressive.¹ Whereas girls' groups exist primarily for their own sake, groups of boys are more frequently organized around specific tasks, such as sports, games, or projects. Boys do things together. And quite quickly into the task, a dominance hierarchy is formed, first through play and aggression, and then through mutual, if reluctant, agreement. Norms about who's at the top and who's further down are established early.²

The sheer energy of boys' groups differentiates them from girls' groups as well. In their classic work *The Psychology of Sex Differences*, psychologists Eleanor Maccoby and Carol Jacklin described how one boy acts as an "evocative stimulus" for another, a gentle characterization that belies what actually happens. One boy studies, reads, plays his music too loud, kicks a ball around his room, but is otherwise not so unlike one girl. Two or three boys together create bedlam.³

This energy and its accompanying capacity for aggression have formed the core of many accounts of men in groups, most notably Lionel Tiger's book of that title, Karl Lorenz's work *On Aggression*, and Robert Ardrey's *African Genesis*. These authors argue that, despite a potential dark side, raw male aggression underlies much that is distinctive, even laudable, about humans, including the ability to shoot to the top of a hierarchy, pursue goals single-mindedly, even engage in warfare.

I will argue that this focus has distracted us from understanding some important purposes of men's groups. The struggle for dominance and the use of aggression to get it are certainly present, but ultimately, as I will explain, rather than fostering aggression, these hierarchies often control, contain, and marginalize it. Contrary to stereotype, the most aggressive men are not the ones who typically make it to the top of male hierarchies; instead, those with social skills, with the ability to work with others, to form coalitions and relationships, to lure, appease, and cajole, and to get rid of those who can't play by the rules are the ones who make it to the top. This realization yields a radically different portrait of men in groups than has been painted by past writings, but one that, I think, is defensible. Although they are different in form and style, like women's groups, men's groups are tending systems.⁴

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OUR TEMPLATE FOR men's groups has come from studying our primate relatives. Scientists have noticed and emphasized these commonalities, particularly hierarchy, coalition formation, and aggression, and, indeed, the parallels are instructive. Our male primate relatives typically live in groups with clear dominance hierarchies, with an alpha male at the top, his lieutenants directly under him, and the rest of the males further down. This hierarchy heavily determines how well any individual fares. High-status males gain access to females, enabling them to mate and pass on their genes. They also have the pick of the food. They are more likely to be groomed by females than lower-status males are, and in some species they are groomed by other males as well. When they are in the company of others, they are deferred to; on those occasions when they must defend their position, they can often call upon their lieutenants and other allies to fend off an adversary, sometimes with fatal consequences for the challenger.⁵

But because of the almost constant threat that other males can pose, male-male encounters proceed cautiously in an environment charged with tension. It's a delicate balance—forging cooperative bonds with other males, while remaining ever watchful of the risk of conflict and aggression. Primatologist Frans de Waal describes this trade-off from the standpoint of the male chimpanzee:

He absolutely needs to get along with his male group mates: united they can stand against (and commit) brutal acts of territorial aggression. At the same time, he vies with these very same males for dominance. He must constantly keep track of his allies and rivals, as he may owe his rank to the first and run risks in the presence of the second.⁶

The dominance hierarchy periodically becomes unstable. Those lower down try to work their way up; tough juveniles come into maturity and want a shot at the top; a leader grows old and other males look to replace him; a male refugee from another troop tries to find a place

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the new troop: many things may conspire to upset the dominance hier-
archy. When this happens, the stress systems of the males operate at full
throttle, especially those of dominant animals, because now their privi-
leged situation is threatened. Testosterone gets engaged in this process,
too, with levels rising and falling with each success and failure. Domi-
nance struggles produce a rich soup of chemicals.⁷

MEN ARE NOT so different from other primates in their zest for domi-
nance. Some need in men seems to seek, even relish hierarchy. As soon
as a group forms, the men often set about establishing a pecking order,
and within hours, sometimes minutes, there's a leader, his allies, a few
more men further down, and a few outliers who are marginalized. Men
establish a hierarchy in even their most informal groups, and much
struggle can ensue over one's position in it.⁸ Stress hormones are dra-
matically engaged, just as is true in nonhuman primate groups. Indeed,
one of the reasons why men get heart disease earlier than women do may
stem from their lifelong concern with issues of dominance.⁹ If you're
constantly involved in power struggles with other men at work, for
example, your catecholamines are regularly rising and falling as compet-
itive situations come up.

Why do men form these groups? According to anthropologists, from
the very beginning of human existence, groups of men have taken on
specific tasks for the social group—hunting, defense, and war, most com-
monly. Currently, among other tasks, they protect the community; fight
fires, floods, and other natural disasters; defend the country against
invaders; and protect families from harm. When a group is organized
around a particular task, a hierarchy is beneficial because it provides a
chain of command and a structure for coordinated action.¹⁰

Men's groups also often have an opponent—another team, an enemy
army, for example, something that must be overcome. In the absence of
a natural enemy, they may create one that will do for the occasion. For
example, men peel off into opposing sports teams, and friends temporar-
ily become adversaries. A group of men getting together on a Saturday
to finish a project and then breaking up into a three-on-three touch

football game does not seem incongruous. It is rare to find a group of women doing the same thing.

The enemy seems to give a focus to the group and fuel its actions. Our neighborhood men's soccer group is never so cohesive as when the park ranger is trying to oust them from their field. Most of the time, they squabble and bicker about who is playing poorly or causing injury to whom, whether the teams are evenly matched, or who isn't trying as hard as he should be. Each Saturday at least one indignant player stomps off the field, vowing never to return. He does return, of course, the next Saturday, and the grousing continues. But when the park ranger comes to complain about the damage their cleats do to the grass and the distress their colorful language has caused for nearby picnicking families, they are as one, shoulder to shoulder, ready to take on the entire Department of the Interior.

The case for status and aggression would seem to be clear: The toughest, most aggressive men get to the top. Yet a closer look suggests that rather than rewarding aggression, men's groups control and channel it instead. How does this happen? Some surprising clues come from elephants.

THE YEARS FROM 1992 to 1997 were trying ones for the gamekeepers of South Africa's Pilanesberg region. They had a major elephant problem on their hands. To expand their population, young orphaned male elephants had been introduced to the park, but instead of quietly joining the existing herds, they had hooked up with one another, often going on rampages. Among their acts of destruction was the killing of more than forty white rhinos. Elephants and rhinos do not mix well in the best of times, but this killing spree was unprecedented in the park's experience.

The situation was aggravated by "musth," a state in which a male elephant experiences dramatic surges in testosterone, contributing to high levels of sexual and aggressive behavior. Male elephants normally start to have short periods of musth of a few days' or a couple weeks' duration when they reach about age twenty-five. As they get bigger and have experience winning aggressive encounters with other males, periods of

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musth lengthen to a couple months. These lengthening periods are thought to help them adjust to their rising levels of testosterone. But in the orphaned young teenagers of Pilanesberg, musth began early and was lasting as long as five months.

Rob Slotow and his colleagues from the Environmental Sciences Department at the University of Natal were called in to see if they could help. They studied the elephants' movements and could see that they were breeding successfully, but they were doing so in groups that lacked adult males. A previous study of elephants in Amboseli, Kenya, had found that young male elephants were much less likely to be in musth if a larger older male in musth was present. And so to see if they could control these aggressive juveniles, Slotow and his colleagues brought in six older males to join the eighty-five elephants of Pilanesberg. When the experiment began, six of the seventeen young males were in musth. Within hours of encountering the new older males, the juveniles began to exhibit fewer signs of musth. Within two weeks, only a few young males were in musth and for a much shorter time. The killing of the white rhinos ceased.

When confronted with an older, higher-ranking male, these young males backed off, both physically and biologically. The older, more experienced males would have succeeded in any aggressive encounter, and so dropping out of musth was protective for the younger elephants. Natural selection favors males who can assess the qualities of potential rivals and adjust their behavior accordingly, and, almost immediately, the juvenile males of Pilanesberg showed this self-protective response because they stood little chance of winning a fight with the more experienced males. Soon their periods of musth shortened until they were able to manage their bursts of testosterone with the maturity that comes with age and experience. The dominant older elephants, then, controlled the aggression of those further down in the hierarchy, in part by suppressing their testosterone levels.¹¹

Scientists have taken a fresh look at male groups and arrived at a conclusion not unlike that reached by the gamekeepers of Pilanesberg: Rather than encouraging lawless aggression, the hierarchies of all-male groups, particularly the presence of experienced males at the top, often

manage and control it. The hierarchies that are so ubiquitous in male groups may be an evolutionary adaptation to control conflict, reduce the frequency of aggression, and limit the likelihood of escalating violence.

Now that we know what to look for, scientists have realized that primate studies reveal much the same pattern. True, aggression is high when a troop's dominance structure is unstable, but once the hierarchy is established, it is more rare and plays only a modest role in maintaining the social structure. Dominance hierarchies implicitly solve problems of aggression because they establish who is where in the hierarchy. Once this hierarchy is in place, spontaneous submission averts much conflict, and grooming and alliances keep it stable. Active interventions by the high-status males smooth over much of the incipient conflict that may remain.

High-ranking male primates are not necessarily the strongest or the most aggressive; they are those with good social skills. They form alliances with a few other group members to defeat challengers. They have methods of reconciliation, reassurance, and appeasement for restoring social relationships following aggressive encounters. Dominant males know how to tell the difference between minor provocations and major struggles. They don't overreact to a subordinate male who happens to be napping too close or who bumps into them by accident. A sideways glance or tensing of the body may be enough to deter a potential challenge. Dominant males who can't make these distinctions tend not to remain dominant for long. Dominant males who remain dominant have social intelligence.¹²

Among the well-studied chimpanzees of Gombe, for example, the alpha male maintains social control through savvy skill and gentle bullying. He stops fights that break out, sometimes by rushing into the middle of them and knocking the opponents to the ground. He may sit between quarreling parties to keep them from renewing their conflict. Eventually, he may induce them to come together to make up, through a combination of social pressure and subterfuge.¹³

Support for this new view of male groups comes from studies with humans as well. These processes begin by growing up with a father, an older male who, much like all high-status primates, keeps his juveniles

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in hand. The mere presence of a father seems to help boys manage their
aggression, by teaching them how to substitute social skills instead. The
range of adverse outcomes for boys whose fathers are absent is plentiful.
Despite the often Herculean efforts of mothers, boys without fathers
have a greater risk of delinquency, drug use, and poor academic achieve-
ment, as well as a risk for hostility, anxiety, and depression.¹⁴ Psycholo-
gist Mark Flinn and his colleagues studied the endocrine profiles of boys
whose fathers were present or absent while they were growing up.
Among the father-absent boys, testosterone was higher in adolescence
than was true of father-present boys. In adulthood, however, the men
who had been raised without fathers had lower testosterone levels and
higher cortisol levels, a profile suggesting they were anxious subordi-
nates in their adult male peer group. Indeed, they were perceived by oth-
ers to be lacking some basic social skills.¹⁵

Experience with male peers also plays an important role in shaping
social skills, especially rough-and-tumble play. Common among young
males of many species, this energetic, physical activity may have some
specific functions. Once thought of as practice in aggression, it may
instead teach males how to control it. In one study that led to these
conclusions, Jaap Koolhaas and his colleagues raised young male rats
without any contact with male peers. They then compared their behav-
ior in adulthood with that of male rats who had grown up with the
normal rough-and-tumble play of the male peer group. The rats without
the rough-and-tumble play experience were less able to deal with both
friendly and aggressive encounters from other males as adults, whereas
those who had this experience managed both types of encounters more
successfully.¹⁶ Why does this occur? Rough-and-tumble play not only
helps you practice your moves, it gives you opportunities to size up oppo-
nents' strengths and weaknesses, helping you learn whom and what to
avoid. It helps you distinguish playful roughhousing from real threats.
And it helps you learn to calm down and reconcile following a strenuous
bout of aggressive play as well.

Boys on the playground learn much the same skills. They quarrel,
have a brief fistfight, and then make up on the spot by shaking hands or
by getting back to a sports game or other joint activity, as if nothing had

happened. The idea that this pattern of aggressive bouts, followed by reconciliation, is fundamental to men's groups gets some credibility from the fact that groups of girls and women have very different patterns of quarreling and reconciliation. Although quarrels and aggression are less common in female groups, when an incident does occur, the females are less likely to reconcile and the activity that sparked the controversy is more likely to come to an end.¹⁷

Men who are socially skilled, capable, and mature rise to the top of a hierarchy and marginalize the more aggressive, often younger men, harnessing their energy in service of the group without letting their potential for aggression get out of control. Why has it taken scientists so long to recognize this important truth? One answer is that scientists interpret what they see: in men's groups aggression is, if not omnipresent, then certainly common. No one sees aggression that doesn't happen, and so the forces in male groups that reduce its frequency have gone largely unappreciated until recently.

What role does testosterone play in these processes? In the elephants of Pilanesberg, much of the control exerted by the older males was chemical. Humans are not elephants, of course, and men do not go into periods of musth as they mature biologically. They do, however, experience great surges in testosterone that can fuel aggressive behavior. Lots of other things like genes and sexual activity control testosterone, too, of course, but contacts with other males are unquestionably a potent influence. Testosterone increases naturally when men compete, as they do in their struggles for dominance. Just before an athletic contest, for example, men's testosterone levels rise, and the winner's testosterone level continues to stay up, while the loser's testosterone level drops.¹⁸

The popular literature has alternately blamed and lauded testosterone, viewing risk taking, aggression, and even violence as the darker side of a hormone that is responsible for great benefits, including competition, achievement, sex, and ultimately life itself. Testosterone is linked to aggression, but not to impulsive, destructive aggression. The aggression of the man with high testosterone is often managed in more restrained, socially acceptable ways.¹⁹

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able, and mature rise to the top of a male hierarchy. Aggressive, often younger men, harass a group without letting their potential be known. Why has it taken scientists so long to find the answer is that scientists interpret aggression as, if not omnipresent, then a necessary aggression that doesn't happen, and so the frequency of its occurrence have gone largely

unnoticed in these processes? In the case of elephants, control exerted by the older males is not as obvious as in men, of course, and men do not go through the same biological processes. They do, however, have the same hormones that can fuel aggressive behavior. Sexual activity control testosterone, and in other males are unquestionably a function of dominance. Just before an athletic contest, testosterone levels rise, and the winner's testosterone level while the loser's testosterone level

is dramatically blamed and lauded testosterone, and even violence as the darker side of testosterone for great benefits, including commitment to life itself. Testosterone is a hormone that fuels impulsive, destructive aggression. The testosterone is often managed in more subtle ways.¹⁹

These are the guys who are in the friendly touch football game to win. They're the first ones to the door to challenge uninvited arrivals to a party, making it clear that the party is private. They like to win arguments and may press a point a little too long, but once they win, a friendly clap on the shoulder of the opponent largely returns them to good-natured affability. Provoked or threatened, these men may respond with greater aggression than men with low testosterone, but impulse does not typically rule their nature. Moreover, testosterone is associated with many positive qualities such as toughness, social assertiveness, dominance, competitiveness, and physical vigor. As is true for elephants and monkeys, our society typically rewards men with these qualities.

Perhaps the best way to test this new view of men in groups would be if we could show that unmanaged aggression sends you to the bottom of a male hierarchy and good social skills get you to the top. In an earlier chapter, I showed you some indirect evidence for this assertion. Monkeys with a risk for impulsive aggression who possessed the short allele of the 5-HTT serotonin transporter gene dropped to the bottom of the hierarchy when they had been raised by peers and lacked monkey social skills for grooming, peacemaking, and other forms of affiliation; those who had the same genetic risk but who instead were raised by nurturant mothers rose to the top of the dominance hierarchy.²⁰

Let's look at what may be even more direct evidence for the tending role of male groups. Researcher Michael Raleigh and his colleagues have long studied the biological underpinnings of affiliation, rank, and dominance, focusing especially on the potential role of serotonin in these processes. Among other findings, they have observed that, when monkeys are given a dose of the serotonin precursor tryptophan or other drug treatments that increase levels of circulating serotonin, the monkeys become more social, grooming one another and showing other signs of affiliation. Conversely, drugs that diminish brain serotonergic functioning reduce affiliative behavior and increase aggression instead.

Raleigh wanted to see what would happen if he systematically manipulated levels of serotonin in male monkeys who were striving for dominance. Would the aggressive monkeys win out or would the leaders be

those who approached their peers with friendly, affiliative gestures and grooming instead?

Raleigh and his colleagues created small groups of vervet monkeys, each with three adult males and at least three adult females and their offspring. They waited until a dominance hierarchy was in place among the males and then removed the dominant male from the group. They then selected one of the two remaining subordinate males and gave him either a drug that enhanced serotonergic activity or a drug that diminished it. In every case, the monkey who was treated with a serotonergic enhancer—and therefore grew more affiliative—became the dominant monkey. And when the monkey received the drug that reduced his serotonin levels—making him irritably aggressive—his male cage mate became dominant. In short, it was social skills, not aggression, that propelled these monkeys into leadership positions.

The reasons why social skills moved a monkey into a dominant position are revealing. It wasn't simply that he won out over the more aggressive, mean-spirited subordinate. With social skills, he "convinced" the females that he should be the dominant one, and so, to a degree, he ruled at their discretion. More generally, in nonhuman, primate-dominance hierarchies, the males jockey for top positions, but the females watch what is going on very carefully. If by chance an aggressive leader, who is abusive to the females or who harms the infants or juveniles, should rise to the dominant position, the females may throw their support to another leader or to a coalition that will oust the leader, sometimes with fatal force, and replace him with a socially skilled leader who enjoys the broader support of the females.²¹

THE VIEW OF men's groups as regulators of aggression through dominance struggles and corresponding fluctuation in testosterone levels tells only part of the story. As with our other social ties—the parent-child relationship, women's connections with one another, group responses to stress—there is a force that keeps men committed to one another, even as they join forces in competitive or aggressive action against others.

What is this glue that holds men's groups together? In nurturant early family life, the bonds of attachment tie child to parent and parent to

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as regulators of aggression through dominating fluctuation in testosterone levels tells us about our other social ties—the parent-child relationships with one another, group responses to stress, and how men committed to one another, even in the face of or aggressive action against others. How do men's groups together? In nurturant early attachment, the tie child to parent and parent to

child. In times of threat, bonding brings the social group together, with strangers commonly tending to one another's needs. In women's groups, there is substantial evidence of bonding cemented through conversation. Much writing about men's groups has taken a more dispassionate focus, however, seeking to show how coalition formation among small alliances of men may ensure that common needs are met, with coalitions breaking down if resources are unsuccessfully defended against outsiders.²²

But as threats to men's groups increase, so does evidence of emotional bonding that looks much the same as that found in other circumstances of stress. Lionel Tiger was, perhaps, the first to describe the phenomenon. He characterized bonding in men's groups as a commitment to other men that inhibits aggression to help men cooperate. Tiger describes it vaguely, in almost sexualized terms, but he credits it with an energy that ties men to one another, and you can sense it when you are around groups of boys or men.²³

The armed forces have developed this intuition to an art form. The dilemma that war poses is how to ensure that a group of unrelated men will work together and bond sufficiently with one another so that, when they are attacked, each man will watch out for his comrades and not merely for himself. Traditionally, these bonds have been instilled in several ways. Drawing on that segment of the population that is fearless, risk taking, and prone to aggression, namely young men, is a good beginning. It provides the raw material for the aggressive action of war. Something to fight for—an enemy, a noble cause, an entitlement, or retribution, for example—gives focus to what might otherwise threaten to be a meaningless contest. And last, but certainly not least, is bonding. Basic training reduces the salience of ties to family and friends, replacing them with ties, formed in adversity, to fellow soldiers. Through boot camp and other hazings, the bonds of shared misery develop so that when sacrifice and heroism are needed in wartime, the basis for heroism will be there.

In their investigations of wartime comradeship, sociologists Glen Elder and Elizabeth Clipp explored the psychology of bonding among men who had served together in World War II and Korea. Bonding through adversity is a persistent theme in these wartime accounts.²⁴ An

injured Marine who decided to rejoin his unit after being wounded, rather than accept an early discharge, explained:

Those men on the line were my family, my home. They were closer to me than I can say, closer than any friends had been or ever would be. They had never let me down, and I couldn't do it to them. I had to be with them rather than let them die and me live with the knowledge that I might have saved them.²⁵

As a bomber pilot put it:

We did it because it was given to us to do, or perhaps we did it because we could not bear the shame of being less than the man beside us. We fought because he fought.²⁶

The veterans commonly said that they supported each other because they didn't want to let the other men down. As one Marine who had been in Okinawa during World War II put it, "All I could think of was how I could get him to the hospital . . . not that I was in danger of being killed. It never occurred to me that way. We were a mutual survival society."²⁷

Whereas bonding might enhance the likelihood that men would act on one another's behalf in war, we might expect that it would put them at risk psychologically, making it hard to cope with the death or injury of fellow soldiers. Elder and Clipp explain this paradox by distinguishing between friendship and comradeship. Friendship is a personal bond of liking between two people, whereas comradeship is less a commitment to an individual man than to the group. The wartime bonds depended on the latter: if you got too close to another man, you were emotionally vulnerable because he could die at any moment. Comradeship enabled each man to take heroic action and make sacrifices for others without being immobilized by fear for his own survival or that of friends.

Indeed, adversity actually strengthens bonding. Elder and Clipp found that evidence of bonding increased the more a unit had been under attack and the more casualties it had sustained. A World War II

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veteran remarked, "Any one of these men would have given up his life for me, and some of them did," referring to the members of his unit who had died.²⁸

These men met one another's needs in a second way as well. When they returned from the war, the bonds they had forged with one another helped them recover from the psychological trauma of combat experience. You might imagine that men who had stayed aloof during the action would be better protected against the trauma of losing comrades in battle. Yet the opposite was the case. The men who did not forge bonds with their mates or who had remained socially isolated from the other men fared less well, both in wartime and in the aftermath of psychological recovery. The bonds of wartime, then, made it possible for these men to fight and die on one another's behalf, but they also provided them with the sustenance to cope with the horrors they had witnessed, once the war had ended.²⁹

STILL, THERE IS a chilling underside to men's groups. Many aggressive men do not learn how to manage their aggression through exposure to the regulating effects of other men. What happens to intensely aggressive males who disrupt the otherwise smooth pace of social life? One answer is that they, too, bond with one another, but in ways that may ultimately foreshadow their destruction.

Consider the case of Gelada baboons. These primates typically live in small bands, each led by a male with several, often related females and their offspring. Males who are low in status and who therefore do not have their own "harems" typically merge into an all-male group and act as a buffer between the females and an attacking predator. They are essentially on the front lines. Anthropologist Lionel Tiger, who was one of the first scientists to draw intriguing parallels between the Geladas and human aggression, describes these groups of low-status unattached males in somewhat romanticized terms as quite stable and loyal, the primate equivalent of Robin Hood's band of merry men. In fact, life is far more harsh. The stability Tiger referred to rarely lasts longer than a few months or weeks because these unattached males are vulnerable, and

after a time they are never seen again, seemingly swallowed up by the land they inhabit.³⁰

At a recent animal conference, primatologist Jeanne Altman presented her field work on baboons in the wild and talked about these luckless males, noting that after several unsuccessful efforts to mate with females or to move up in the dominance hierarchy, they simply disappear. Disappear? The audience was startled. "We assume they die," Altman added. "Of what?" asked one audience member. Precisely because these males disappear, we do not know exactly what happens to them, but we can make a few educated guesses.

These unattached males typically form a roaming band that lives on the fringes of a troop. The males in these bands are young and aggressive and often inflict injuries on one another that can fester with fatal consequences. Because they are marginal to the main troop, they are easily picked off by predators. Without female companionship, they are rarely groomed, and so parasites may live undisturbed until they form a life-threatening infection. In short, these unattached, sexually mature males create for themselves a fatal lifestyle.

Across all primate species, the group most likely both to cause harm and to get in harm's way is juvenile and young adult males. They are in the vanguard of nearly every risky behavior primates can undertake. When one macaque monkey spies a snake, he sends out an alert cry, and the entire troop heads for the trees. But within minutes, the juvenile males are back on the ground, poking and prodding the snake until it gets one of them or slithers away. Groups of young men are not so different. Young men commit more crimes, get into more automobile accidents, commit suicide more often, and kill one another more than any other group in the population.

At any given time in the world, there are bands of teenage and young adult males roaming the countryside or the cities, leaving a trail of destruction, rape, and murder in their wake. Sometimes these groups have an ostensible political purpose; other times they emerge from poor economic conditions. Whatever their apparent cause, they seem to be an inevitable fact of the human social landscape. Often we ignore them or interpret them as local responses to specific conditions, such as the

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outgrowth of politics in Burma, tribal warfare in Rwanda, religious fanati-
cism in the Mideast, soccer hooliganism in Britain, or gang rivalries in
Los Angeles. Whatever the cause, their form is much the same, and so
are their dynamics. They cause chaos and spread fear, and ultimately
their members often die young in the midst of their destructive activity.
They are the harsh casualties of the status struggles among men.

THE NEW VIEW of men's groups, then, argues that through experiences
with other males, socially skilled men rise to the top and help to control
the aggression of those below them, often marginalizing, even ostraciz-
ing those who fail to use these skills. Rather than the ubiquitous aggres-
sion emphasized by such writers as Karl Lorenz, we have come to see
these groups as flexible systems that respond to the need to manage the
twin demands of competition and cooperation. Certainly these groups
can be harsh and lethal, punitively ostracizing the most aggressive in
their numbers; but they are marked by the same bonding and capacity
for sacrifice that distinguish all our tending systems.

cin and dopamine receptors via estrogen-
le, vasopressin and serotonin interact in an
injection facilitates females' developing a
mating, and administration of an oxytocin
ference (Insel and Hulihan, 1995).

between romantic relationships and infant-
-een noted (see Hazan and Shaver, 1987;
refers to oxytocin as the endocrinological
a glass of wine," p. 154. Other neurotrans-
ing as well, including dopamine (Gingrich,

ow, Hastings, Carter, Harbaugh, and Insel
erwilliger, and Young (2001) have recently
oles by transferring a receptor gene for vaso-
force the idea that monogamy in male prairie
hanced by vasopressin. Note as well that a
ment of partner preference, suggesting that it
nogamous male prairie vole's commitment.
re aggression against potential rivals. Partner
ked, inasmuch as the administration of vaso-
us bonding in the form of both partner prefer-
s. A vasopressin antagonist administered prior
ace and selective aggression against potential
appear to be in place. Thus, much as oxytocin
ot the maintenance of partner preference in
is implicated in the initial partner preference
tings, Carter, Harbaugh, and Insel, 1993).

(1997); Stone (2000). See also Dehne, Kho-
999); Stegmayr et al. (2000); Strasser (1998).
er (2000). As would be expected from the
m the Eastern European countries faced was
her et al., 2000).

1997; *The Economist* (1994, April 23); Stone

).

Marmot (1996); Hajdu, McKee, and Bojan

mrot (1998); Bobak, McKee, Rose, and Mar-
rzer (1993) for a perspective on alcohol con-
fuges from East Germany. See Bobak and
id Mustonen (1997) for perspectives on Rus-

28. See, for example, Carlson (1998); Cockerham (1997). Watson (1995) suggests that
the very burdens that take a physiological toll on women act as a source of protection.
The argument goes like this: Women have to both work outside the home and do all
the housework and child care, but that keeps them going. Their lives depend less on a
single vision of success, namely viable economic employment, than is true for men.
Instead many aspects of their lives provide them with a sense of meaning and purpose.
For example, children are a source of great pride and purpose for women, more so than
is true for men. Setbacks in one life domain, such as unemployment, may be buffered
by gratifying experiences in other life domains, such as raising children.

The evidence for this argument is research from the United States showing that
women who both work outside the home and have family responsibilities are more
satisfied with their lives and less likely to be stressed than women who have only work
or family responsibilities. But the relevance of the U.S. studies is questionable. The
so-called protective effects of women's employment occur primarily for women of at
least middle-class means and for whom the total burden of employment, house, work,
and child care is not overwhelming (see Taylor, 1999, for a review and discussion of
this issue; see also Stephens, Franks, and Townsend, 1994; Gove and Zeiss, 1987;
Lundberg, Mardberg, and Frankenhaeuser, 1994; Williams, Suls, Alliger, Learner, and
Wan, 1991). Women who say that they get enough help at home, either through hired
help or a partner helping, are most likely to report the benefits of combining work and
family life. Working-class and poor women often say, instead, that they are exhausted
by trying to combine both roles. This latter situation is more likely to be true for the
majority of women in Eastern Europe.

29. Bobak, Pikhart, Hertzman, Rose, and Marmot (1998).

30. See Stone (2000); Weidner (1998). For example, Schwarzer, Hahn, and Schroder
(1994) conducted a longitudinal study of East German migrants to West Germany
and found that migrants who formed new social ties typically adjusted well. Following
the move women migrants reported receiving more support and said there was more
support available to them than men did. Women's new ties tended to be heavily,
though not exclusively, with other women.

31. Stone (2000).

Chapter 8: Men's Groups

The title of Maccohy's book describing these trends is *The Two Sexes: Growing Up
Apart, Coming Together*. Studies of social networks suggest that the coming together
may be quite limited, however, inasmuch as adults typically exhibit a preference for
members of their own sex in their social networks (Dunbar and Spoons, 1995; see also
Young and Willmott, 1957).

It is important to note that competitive striving for leadership among males may not
have characterized simple foraging societies but did characterize the more complex
hunter-gatherer societies that followed them. Simple foraging societies appear to have
been more egalitarian (see, for example, Tooby and DeVore, 1987, for a discussion of
this issue).

3. Maccoby and Jacklin (1974).
4. See Sapolsky (1998) and Aureli and De Waal (2000) for discussions related to this issue. See especially Preuschoft and van Schaik (2000).
5. Sapolsky (1998).
6. See also Preuschoft and van Schaik (2000). Once primatologists began to look for this kind of behavior in primate groups, they began to see it. More than 100 papers on twenty-seven different primate species have documented social skills like these in both wild and captive groups of primates.
7. Sapolsky (1998).
8. Tiger (1970).
9. Manuck, Kaplan, Adams, and Clarkson (1988). More egalitarian work conditions have been tied to lower levels of cardiovascular disease (Marmot and Davey Smith, 1997).
10. Tiger (1970).
11. Slotow, van Dyk, Poole, Page, and Klocke (2000). Evidence from primate studies suggests that dominance position affects testosterone as well. If you place four male squirrel monkeys together in a cage—two dominant monkeys, and two less so—the two dominant ones will gain weight, have higher levels of testosterone, and show the seasonal variation in testosterone expected in males that helps them mate and reproduce. The low-status males will be smaller, have lower levels of testosterone, and show less seasonal variation. Place a dominant and a subordinate male together in a cage, and the dominant male's level of testosterone will rise and stay there. If a female is brought into the cage, only the dominant male will show a rise in testosterone (Coe and Levine, 1983; see also Coe, Mendoza, and Levine, 1979).
12. Sapolsky (1998).
13. Goodall (1986).
14. Jensen, Grogan, Xenakis, and Bain (1989); Draper and Harpending (1982) suggest that father absence sets in a reproductive strategy characterized by a stressful rearing environment, precocious sexuality, unstable pair bonding in adulthood, and a limited investment in child rearing. Boys from families in which parents have divorced or where fathers are otherwise absent frequently engage in exaggeratedly and stereotypically masculine behavior during childhood. (See also Belsky, Steinberg, and Draper, 1991; Bereczkei and Csanaky, 1996.)
15. Flinn and England (1997).
16. Van den Berg, Hol, Van Ree, Spruijt, Everts, and Koolhaas (1999). At one time researchers believed that play fighting in male animals was rehearsal for adult combat. However, the evidence now suggests that this is probably not the case. Play fighting is quite distinctive and different from combat and involves little overlap in skills. Rather, play appears to help animals to distinguish playfulness from true aggression (Pellis and Pellis, 1998; 1996). Although this knowledge is not necessarily critical in early childhood, it assumes substantial importance as animals become sexually mature and stronger and begin competing for dominance in a social group (Pellis and Pellis, 1996).
17. Geary (1999).
18. Dabbs (1998); see Dabbs and Dabbs (2000) for a perspective on testosterone and behavior. Even watching a sports event can have these effects. A study of male

and De Waal (2000) for discussions related to this and van Schaik (2000).

ik (2000). Once primatologists began to look for this, they began to see it. More than 100 papers on species have documented social skills like these in primates.

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id Klocke (2000). Evidence from primate studies suggests testosterone as well. If you place four male squirrels—two dominant monkeys, and two less so—the two have higher levels of testosterone, and show the sea-spected in males that helps them mate and reproduce. Lower, have lower levels of testosterone, and show less dominant and a subordinate male together in a cage, and testosterone will rise and stay there. If a female is brought dominant male will show a rise in testosterone (Coe and Adoza, and Levine, 1979).

ain (1989); Draper and Harpending (1982) suggest reproductive strategy characterized by a stressful rearing environment, unstable pair bonding in adulthood, and a limited number of offspring from families in which parents have divorced or do not frequently engage in exaggeratedly and stereotypical childhood. (See also Belsky, Steinberg, and Draper, 1996.)

Spruijt, Everts, and Koolhaas (1999). At one time, play fighting in male animals was rehearsal for adult combat. It suggests that this is probably not the case. Play fighting is different from combat and involves little overlap in skills. Rather than distinguish playfulness from true aggression (Pellis and Pellis, 1999), this knowledge is not necessarily critical in early childhood. Its importance as animals become sexually mature and establish dominance in a social group (Pellis and Pellis, 1999).

Dabbs (2000) for a perspective on testosterone and sports event can have these effects. A study of male fans

watching the World Cup soccer match found that those who supported the winning team had higher levels of testosterone than those who had supported the losing team (Bernhardt, Dabbs, Fielden, and Lutter, 1998).

There is now substantial evidence that testosterone is associated with dominance behavior and with aggression related to dominance. Studies range from those conducted with boys in early adolescence (Tremblay, Schaal, et al., 1998) through adulthood (see Dabbs and Dabbs for a readable summary on the literature on testosterone).

Having seen that men regulate one another's testosterone levels through their aggressive contests striving for dominance, the question may arise as to whether women regulate each other's biology, too, and if so to what end? The answer is yes. The initial observation was made by Martha McClintock (1971), who showed that groups of women living together in dormitories achieved menstrual synchrony in their close living conditions. Subsequently, Stern and McClintock (1998) investigated how this effect was mediated. They found that pheromones, airborne chemicals released by an individual into the environment, affect the physiology and behavior of other members of the same species. By exposing one woman to an odorless compound extracted from another woman's armpits in the late follicular phase of the menstrual cycle, they were able to accelerate the preovulatory surge of luteinizing hormone of the recipient woman and shorten her menstrual cycle. Later in the cycle, however, the synchrony was not achieved.

19. Mazur and Booth (1998). Risk for aggression, as we've seen, does not come solely from testosterone. Serotonin levels are clearly implicated as well (Simon, Cologer-Clifford, Lu, McKenna, and Hu, 1998). The combination of high testosterone and low serotonin appears to be particularly problematic, leading to the impulsive aggressive behavior that commonly gets males of all species in trouble (see, for example, Suomi, 2000). Vasopressin also contributes to aggressive behavior (Panksepp, 1998; Stribley and Carter, 1999).

20. Insel and Winslow (1998); Suomi (1997; 2000). Dominance hierarchies are maintained by coalitions, grooming, third-party interventions into squabbles, spontaneous submission, and the use of infants as buffer zones between potentially quarreling parties (De Waal, 1991; 2000).

21. Raleigh, McGuire, Brammer, Pollack, and Yuwiler (1991). Consistent with Raleigh et al. (1991) results, Smuts (1987) has suggested that in nonhuman primates, females are often able to affect how males control and coerce others in small societies.

The orbitofrontal cortex is implicated in social affiliative behavior and is of interest in part because of certain subtypes of serotonin receptors, the density of which correlates with an animal's social status (Adolphs, 1999).

At least some of the neuroendocrine protection that is afforded to high-status males is available only to those who have social skills. Sapolsky and Ray (1989) demonstrated that dominant males consistently have lower basal concentrations of cortisol than do subordinate males, but only if they have social skills. Dominant males who lacked these social skills had cortisol levels as high as those of subordinate males.

(See also Sapolsky, 1992b.)

weary (1999).

23. Tiger (1970). The physiological underpinnings of bonding in male groups have, to my knowledge, been studied. Investigators have, however, examined the effects of vasopressin and oxytocin on stress responses in veterans suffering from post-traumatic stress disorder incurred during personal combat injury. A group of forty-three veterans was randomized to receive either vasopressin, a placebo, or oxytocin, and their stress responses to combat imagery were assessed (heart rate, skin conductance, and EMG responses). The results indicated that vasopressin enhanced stressful responses relative to a placebo, but oxytocin reduced them (Pitman, Orr, and Lasko 2001). Whether vasopressin enhances the stress response during actual combat, whether oxytocin incurred during bonding may come into play once one is out of the stressful circumstance, remains to be seen. Given oxytocin's role in affiliative behavior, this is suggestive regarding a potential point of investigation.
24. Elder and Clipp (1988).
25. Manchester (1980), p. 451 (quoted in Elder and Clipp).
26. Muirhead (1986), pp. 106-7 (quoted in Elder and Clipp).
27. Gray (1956), p. 46 (quoted in Elder and Clipp).
28. Quote from a WWII veteran interviewed on *NBC Evening News* (June 6, 2000).
29. Elder and Clipp (1988).
30. Tiger (1970).

Chapter 9: Where Altruism May Reside

1. Brown and Harden (1982) and Meyer and Kurtz (1982) (of *The Washington Post*) are excellent sources on the Air Florida crash. There are more than 1,000 Web sites devoted to Arland Williams.
 2. Huston, Ruggiero, Conner, and Geis (1981); Huston, Geis, and Wright (1976).
 3. Moen, Robison, and Fields (1994). Approximately 26 million people provide unpaid health-care services in homes throughout the United States, most of them women. As people have lived longer, caregiving has become a more significant part of a woman's life. Moen et al. (1994) found that nearly one in four women became a caregiver between ages thirty-five and forty-four, and 36 percent by ages fifty-five to sixty-five. Another survey found that only 45 percent of women born between 1905 and 1927 became caregivers to aged parents or husbands, whereas 64 percent of those born between 1927 and 1934 did. I did an informal count of my friends born a couple of decades later than these women, and more than 50 percent have already been involved in caregiving, in some cases for as long as ten years. Furthermore, as was found in both this study and my informal network, being employed full-time in no way diminished the likelihood of taking on caregiving. See Web sites for the National Institute on Disability and Rehabilitation Research (www.disabilitydata.com), for the National Alliance for Caregiving (www.caregiver.org), and www.dsaapd.com.
- The difference in women's and men's propensity for caregiving is especially evident toward the end of life. Whereas women are likely to keep their husbands at home when they become disabled, men are more likely to institutionalize their wives. Part of the reason is that wives are typically younger and healthier than their husbands.