

But as much as the trilogy centers on competition, its plot also depends on altruism, which psychologist Daniel Batson defines as “a desire to benefit someone for his or her sake rather than one’s own.”² Katniss at times puts the needs of Rue or Peeta Mellark above her own in the arena, even at considerable risk to herself. Peeta constantly does the same for Katniss. Finnick Odair, Johanna Mason, Mags, and Beetee also make sacrifices to save Katniss in the Quarter Quell. Aren’t these aberrations from the dog-eat-dog world of Darwinian competition?

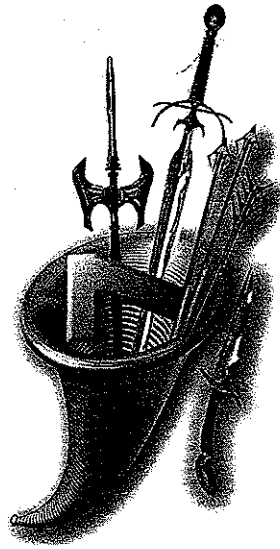
In fact, alliances and acts of altruism like these play a crucial role in Darwin’s theory of evolution and natural selection, which is frequently misunderstood despite being constantly discussed. Evolution, as Darwin described it, depends as much on cooperation and self-sacrifice as on competition and struggle.

“One Slip in Thousands”

The rallying cry of the Hunger Games—“May the odds be ever in your favor”—stresses the importance of chance. So does Darwin’s theory of evolution. In fact, what made Darwin’s theory a winner among the competing theories of evolution in the nineteenth century was his understanding and embrace of chance. Darwin didn’t invent the idea of evolution—the idea of one species evolving from another had been around since the ancient Greeks—but he was the first to describe a plausible way that evolution could work: through a mechanism he called *natural selection*.

Natural selection is essentially about the odds being in your favor. Let’s look at how Darwin himself put it toward the beginning of *The Origin of Species*:

As many more individuals of each species are born than can possibly survive; and as, consequently, there is a frequently recurring struggle for existence, it follows



COMPETITION AND KINDNESS

The Darwinian World of the Hunger Games

Abigail Mann

Maybe we are witnessing the evolution of the human race.

—Plutarch Heavensbee, in *Mockingjay*¹

Although Greasy Sae may be skilled at disguising wild dog in her daily special stew, the Hunger Games trilogy makes no secret of the fact that it’s taking us into the dog-eat-dog world of Darwinian competition. The Games themselves seem to be the epitome of Darwinism. Each year, twenty-four tributes are placed in a barren, “natural” landscape, where they battle the elements, animals, plants, and one another until only one victor remains to reap lifelong riches and rewards. Isn’t all this cutthroat competition and “survival of the fittest” a faithful interpretation of what the work of the pioneering theorist of evolution Charles Darwin (1809–1882) is all about?

that any being, if it vary however slightly in any manner profitable to itself, under the complex and sometimes varying conditions of life, will have a better chance of surviving, and thus be *naturally selected*.³

The first thing to notice is that this struggle involves a competition for resources, an idea that would be familiar to most inhabitants of Panem outside the Capitol. When Katniss first reaches the Capitol, what most strikes her isn't the publicity, the parties, or her almost certain death, but how easy it is to get food: "What must it be like, I wonder, to live in a world where food appears at the press of a button? How would I spend the hours I now commit to combing the woods for sustenance if it were so easy to come by?"⁴ Darwin too suggested that scarcity shapes the lives of most individuals. Basing his ideas on those of the economist Thomas Malthus (1766–1834), Darwin argued that animal populations tend to expand until they can't be supported by the resources available, making sustenance the major issue for almost every individual.

Because Katniss lives in District 12, her life has been shaped by the search for food, but she has some significant advantages over other inhabitants of that district—specifically, her hunting and woodcraft know-how, her skill with an arrow, and her courage, exhibited in her willingness to go past the fence into the woods. That's why she and her family, rather than wasting away after her father's death, have survived.

Her exceptional abilities point to the second major component of Darwin's theory. Individuals "vary," and some of these variations, such as Katniss's skills, are "profitable." According to Darwin's theory, Katniss thus has a better chance of surviving and will be "naturally selected," which means she'll survive while other children wither away and starve. The scientific term for this concept is *fitness*: an individual's odds of surviving (at least long enough to leave offspring).

Darwin's brilliance really showed in his understanding of the chanciness of this whole system. As he pointed out in the quote above, a profitable variation has to be useful in "the complex and sometimes varying conditions of life." More simply, we might say that variations have to be useful for the environment in which the individual finds himself or herself. If the environment changes, so does the fitness of an individual.

Katniss is a good case in point. On the one hand, she's exceptionally well adapted for hunting in the woods outside District 12 and, by extension, in the arena. On the other hand, she's not very well equipped for the political power games and intrigue of the Capitol. Peeta always knows exactly how to charm the audience, but Katniss generally comes off as wooden and sullen. From the perspective of Darwin's theory, it's just as "natural" for Katniss to fail in one environment (as she surely would during the Victory Tour without Peeta, Haymitch Abernathy, and Cinna's help) as it is for her to succeed in another.

Nowadays, people sometimes talk about natural selection failing to operate properly due to human interference. For instance, a lot of virulent hate speech is directed toward the poor, whom some people say are "unfit" and would rightly perish if not for governments that protect them and allow them to flourish against the laws of natural selection. But from a scientific point of view, there's no goal for evolution, so there can be no "failure" of selection.⁵

A popular misconception about evolution is that it's *teleological*, which means that it seeks a particular end. In fact, natural selection depends entirely on chance and circumstance. Nothing is determined in advance, and no value judgments are placed on any of the myriad ways that individuals are "selected" for their environments. Katniss's reflection when Prim's name is called—"One slip. One slip in thousands. The odds had been entirely in her favor"—emphasizes both the Darwinian brutality of Panem and natural selection's dependence on chance.⁶

The Competitive Edge of Kindness

Even if Darwin's theory doesn't value one type of adaptation over any other, Darwin did admit that the natural world can be brutal: he compared it to "a yielding surface, with ten thousand sharp wedges packed close together and driven inwards by incessant blows, sometimes one wedge being struck, and then another with greater force."⁷ (The Gamemakers should really look into that for a good Cornucopia design.)

At the same time, however, he recognized that brutal competition couldn't be the whole story, if his theory were to account for the evolution of human beings with our social nature, our deep feelings of sympathy, and the moral sense that's regarded by many as our crowning attribute. After all, human beings aren't "red in tooth and claw"—a phrase coined by poet Alfred Lord Tennyson (1809–1892)—are we? Surely not all the time and in every respect! We're social creatures who often put the needs of others before our own. Even in the Hunger Games, which are specifically designed to bring out the most vicious competitiveness, the combatants frequently show one another kindness and mercy: not only do Peeta and Katniss aid each other, but even Thresh spares Katniss because she tried to protect Rue.

What Darwin mentioned in only a hurried way in the final pages of his massive *The Origin of Species*—that "light will be thrown" on both the physical origin of man and human "psychology"—he was ready to come out and say more boldly in his next major work, *The Descent of Man*: our moral nature also evolved from lower forms.⁸ In the latter work, Darwin answered his critics who rejected human evolution because they couldn't understand how sympathy and kindness could have been favored by natural selection. Part of his argument was simply to show that cooperation and sympathy were actually common traits in the animal kingdom, contrary to the beliefs of many people who lacked Darwin's firsthand experience

observing the lives of other animals.⁹ Darwin demonstrated that animals living in social groups do indeed possess "social instincts that lead an animal to take pleasure in the society of its fellows, to feel a certain amount of sympathy with them, and to perform various services for them."¹⁰

But he also needed to explain how those traits could have evolved. Altruism is puzzling, from an evolutionary perspective, since it appears to increase another individual's fitness at the cost of one's own. After all, when Thresh spares Katniss, he increases the likelihood that *she'll* be the victor instead of him, thus reducing his own chances of making it home alive. If evolution is all about having the odds in your favor, how could such fair-minded and altruistic behavior have evolved?

Darwin's answer was that it's not necessary to explain every successful adaptation in terms of its contribution to *individual* self-interest, since competition occurs not only between individuals but also between groups. "There can be no doubt," he wrote, "that a tribe including many members who . . . were always ready to give aid to each other and to sacrifice themselves for the common good, would be victorious over other tribes"; this, he concluded, "would be natural selection."¹¹

The tributes in the arena are normally nothing for the Capitol to fear because they're too busy fighting one another to coordinate their efforts against a common enemy. But when, as in *Catching Fire*, they're united and each is willing to sacrifice everything for the cause, they pose a serious threat. Similarly, Darwin believed that cooperative instincts would be favored by evolution as a result of the competitive edge they give to those who can work well as members of a team. This is known as *group selection*.

One form of group selection particularly emphasized by Darwin is *kin selection*. In kin-based altruism, individuals make sacrifices of resources, opportunities to procreate, or even their lives for the sake of other, genetically related, individuals. Throwing oneself into danger to save family members should

sound familiar to readers of the Hunger Games trilogy, because that's exactly what Katniss does when Prim's name is called at the reaping. Although Darwin wrote before the scientific understanding of genes, he knew that parents passed on traits to their children. An organism's fitness is ultimately measured by how many offspring it has; the offspring that survive will pass on their genes, along with any profitable variations, to more offspring. So as long as an individual is sacrificing for a family member with whom she shares a significant number of genes, natural selection will tend to favor kin-based altruism.

Darwin was particularly interested in altruism in ants and bees because most of the members of a community are genetically related. This means that even if the individual making the sacrifice dies, a number of his or her close relatives (children, brothers, sisters, nieces, and nephews) may live as a direct result of its actions. A child will have half of each parent's genes, but siblings, nephews, and nieces will also share at least some percentage of an individual's genes. So, in Darwinian terms, kin-based altruism has a big payoff.

Applying these insights to the Hunger Games, we see that even if Katniss dies, there's a good chance that Prim could live to have lots of children. In ants and bees, this effect is hugely multiplied because everyone in the group is genetically related; saving the hive for an altruistic bee means that all five hundred of your sisters will live to carry on your genes!

By explaining how altruism can create greater fitness for the group and its genes, Darwin showed how kindness could be a product of natural selection rather than a trait that separates us from our animal brethren. Katniss's decision to sacrifice herself for Prim models exactly the sort of factors Darwin stressed to explain the evolution of kindness—a decrease in individual fitness but an increased fitness for one's kin.

Even if the evolution of altruism was initially driven by kin selection, that doesn't mean that individuals are willing to sacrifice their fitness only to benefit close relatives. If Thresh

and Katniss are related, neither of them seems to be aware of that fact. Yet Thresh reduces his own fitness by not bringing his rock down on Katniss's head.

What's more, this isn't an impulsive decision, like the one that Katniss made when she volunteered to save Prim. When Prim's name was called at the reaping, Katniss's instinct for self-preservation was immediately shoved aside, along with the crowd that stood between her and the stage, as her stronger instinct to protect Prim propelled her forward. But judging from Katniss's description, Thresh's decision to show her mercy was a much more complicated and ambivalent affair.

"Conflicting emotions cross Thresh's face," Katniss tells us as he lowers the rock with which he had been planning to open her skull.¹² We can be pretty sure that one of those emotions was his strong, instinctual desire to live and return home safely. Yet something inside him—we might call it his conscience or his moral sense—overrode that normally powerful desire. Can evolutionary theory account for that?

Not Saving the Avox: Conscience and Regret

When Katniss sacrifices herself for Prim, she doesn't pause a moment to think—she just does it, acting without premeditation in what might be seen as an instinctual manner. Darwin was aware that some people would hesitate to use the word *moral* to describe such an action, since it was "performed impulsively," not "done deliberately after a victory over opposing desires, or . . . prompted by some exalted motive."¹³

The philosopher Immanuel Kant (1704–1804) argued that only actions performed out of the "exalted motive" of duty deserved to be called truly "moral."¹⁴ A self-sacrificial act impelled by some *natural* desire or inclination, such as Katniss's protective instinct toward Prim, might produce good results and should be praised and encouraged, but Kant thought that

it lacked the dignity of a genuinely *moral* action, one that requires us to rise above our immediate inclinations, such as when Thresh refrains from bashing in Katniss's brains.

Thresh seems to be moved by a sense of duty that's as robust as he is. He's able to defeat his opposing inclinations as decisively as he defeated his opponent Clove just moments before. That sense of duty sets us apart from the other animals, according to Kant. When Katniss put her life on the line for her sister, however, she was simply obeying the promptings of her natural—or "animal"—instincts. Kant would judge her sacrifice to have no more moral value than the fierce display of maternal instincts displayed by mama mockingjays, who, we're told, "can be dangerous . . . if you get too near their nests."¹⁵

Darwin, however, believed that the line dividing human beings from the other animals was much blurrier than some were prepared to admit. "As far as deliberation and the victory over opposing motives are concerned," he wrote, "animals may be seen doubting between opposed instincts, as in rescuing their offspring or comrades from danger."¹⁶ And if other animals must sometimes battle opposing inclinations in order to act altruistically, human beings have been known to act nobly without any inner struggle at all.

Indeed, Darwin observed, "we all feel that an act cannot be considered as perfect, or as performed in the most noble manner, unless it be done impulsively, without deliberation or effort, in the same manner as by a man in whom the requisite qualities are innate." Seen in this way, the fact that Katniss has no need to stop and deliberate doesn't make her action less morally praiseworthy, but *more* so. Moral actions, Darwin concluded, may be "performed deliberately after a struggle with opposing motives," but they may also be performed "impulsively through instinct, or from the effects of slowly gained habit."¹⁷

Still, Darwin conceded that there is something unique about the human moral sense. Other animals can act altruistically, but Darwin believed that only a human being is "capable of

comparing his past and future actions or motives, and approving or disapproving them."¹⁸ The source of our moral conscience lay in this capacity to reflect on our motives and judge some of them to be good and others to be bad. Evolution has endowed us with both egoistic and altruistic instincts, and these sometimes contend with each other, as we saw in the case of Thresh.

It would be nice if our nobler instincts always emerged victorious, but sadly that's not the case. As Darwin pointed out, although unselfish instincts are a permanent part of human nature (except perhaps for aberrant creatures like President Snow), they're not always as strong as our other impulses, such as the desire to avoid danger. He gives the example of how "a young and timid mother urged by the maternal instinct will, without a moment's hesitation, run the greatest danger for her infant, but not for a mere fellow-creature."¹⁹

Or consider Katniss, who jumps in to save Prim, but earlier let her instinct for self-preservation override whatever impulse she might have felt to help the girl in the woods who was being pursued by the Capitol hovercraft—the same girl she would later meet in the Capitol as an Avox. "I'm ashamed I never tried to help her in the woods," Katniss reflects. "I let the Capitol kill the boy and mutilate her without lifting a finger."²⁰

Darwin didn't think that other social animals feel this sort of remorse—not because they don't also sometimes succumb to more egoistic impulses when the pull of their better nature is weak, but because their mental faculties haven't evolved to the point that they can remember and reflect on their past actions. When we human beings ignore the interests of others, however, our neglected altruistic impulses will often come back to haunt us in the form of shame and remorse, which is exactly what happens when Katniss meets the Avox girl in the Capitol. This capacity to retrospectively assess our motives and actions is, according to Darwin, the source of our moral conscience. He explained as follows:

At the moment of action, man will no doubt be apt to follow the stronger impulse; and though this may occasionally prompt him to the noblest deed, it will far more commonly lead him to gratify his own desires at the expense of other men. But after their gratification, when past and weaker impressions are contrasted with the ever-enduring social instincts . . . [one] will then feel dissatisfaction with himself, and will resolve with more or less force to act differently for the future. This is conscience, for conscience looks backward and judges past actions, inducing the kind of dissatisfaction which, if weak, we call regret, and if severe, remorse.²¹

In short, the human moral sense, which he acknowledged as "by far the most important . . . of all the differences between man and the lower animals," is the product of our naturally evolved altruistic impulses coupled with our ability to remember and reflect.²²

Deep Down, Aren't We All Selfish?

Some philosophers have doubted the reality of genuine, thought-out, and deliberate acts of altruism of the sort that Darwin believed that our highly evolved moral conscience had equipped us to perform. When Katniss volunteers for Prim, she's acting on pure instinct, without deliberation or any real rational plan. But how altruistic is she really on other occasions, when reason and forethought govern her actions? Consider, for example, her relationship with Peeta in the arena. Clearly, a large part of it is strategized: Haymitch rewards her with resources when she follows the romantic script.

Moreover, when she decides to save Peeta in the arena the first time, neither she nor the reader is really sure whether she acts out of concern for Peeta ("real" altruism) or a need to protect herself from the scorn she would face from the people

of District 12 if they saw her betray him.²³ Even her decision to throw down her bow and arrow after Claudius Templesmith announces that there can only be one victor involves a consideration of what would serve her own best interests. "If he dies," she reasons, "I'll never go home, not really. I'll spend the rest of my life in this arena trying to think my way out."²⁴ And what about Peeta? He definitely loves Katniss and is willing to lay down his life for her. But he also knows that his lovesick routine has the audience eating out of his hands—it benefits him as much as it does her.

Katniss's "altruism" in the arena could be interpreted as motivated by what philosophers have called *enlightened self-interest*: doing good to others only because it ultimately redounds as good for oneself. The philosopher Thomas Hobbes (1588–1679) would have favored that interpretation, since he argued that pure, selfless altruism can't exist. In his opinion, people are psychologically constrained at all times to choose what they think will most benefit themselves—at least, when they're acting rationally and not impetuously succumbing to irrational impulses.²⁵ He once explained that he had given money to a beggar not to help the poor man but to relieve his own distress at seeing the beggar's misfortune, thus exemplifying his belief that "every man is . . . naturally after his own good; he seeks Justice only incidentally."²⁶ If we help others, it's only because we're indirectly trying to help ourselves. This strand of philosophical thought, known as *psychological egoism*, has found at least a handful of supporters in every generation, as well as many critics.

A modern-day twist on psychological egoism that's particularly relevant to this discussion comes from the contemporary evolutionary biologist Richard Dawkins, the originator of the theory of the "selfish gene." Like Hobbes, Dawkins denies the possibility of pure altruism, but his reasoning rests on biology, not psychology. He claims that we are all "gigantic lumbering robots," created by our genes to serve as "their survival machines."²⁷

Consequently, it's not enlightened self-interest that motivates our acts of decency and kindness; instead, we are simply obedient robots following the dictates of our genes and acting in *their* best interest by helping them to survive into the next generation. We serve their interests by reproducing, but also by protecting family members and others with whom we share genetic material. Of course, genes don't really have feelings, plans, or motives, so we can't speak of them as *literally* selfish. Rather, Dawkins uses the metaphor of selfish genes as a dramatic way to drive home his main point: that our rational calculations and plans may play a much smaller role in our lives than we'd like to believe.

Like all organisms, we frequently behave in ways that benefit the long-range interest of our genes, even when those actions clash with what we believe is in our own best interests. Katniss, for instance, had foresworn having children out of fear that they might have to compete in the Hunger Games someday, but her genes still "want" to make lots of copies, which helps to explain her sexual attraction to both Peeta and Gale. Other scientists have questioned whether our genes dictate our destiny as deterministically as Dawkins's theory implies. Are our lives really just one long marionette dance to a tune played on little strings of DNA? Even if our genes have equipped us with certain dispositions because, at least at one time, they served our gene's "selfish" interest in reproducing themselves, that still leaves room for Darwin's belief that along the way we also evolved a moral sense that allows us to choose which of our often conflicting instincts to obey. And even if Dawkins's "selfish genes" can account for some of our altruistic impulses, that doesn't make those impulses any less real.

Not all philosophers have been as grim and cynical about our motivations as Hobbes and Dawkins. David Hume (1711–1776), for instance, anticipated Darwin by arguing that a concern for others is something that comes naturally to human beings. "Everything which contributes to the happiness of

society," he wrote, "recommends itself to our approbation and good will."²⁸

More recently, psychologist Daniel Batson has also argued that genuine altruism indeed exists. Though admitting that self-interest, enlightened or otherwise, plays a large role in human motivation, he denies that it can account for all the acts of altruism people perform. For example, he points out that the easiest way for someone like Hobbes to feel better about the beggar would have been to just walk in the opposite direction. If he didn't see the beggar, he'd no longer feel distress. Out of sight, out of mind.

The fact that some people do give to beggars—and volunteer with Habitat for Humanity, work to pass legislation that benefits the poor, and spend their time and money in a host of other ways intended to help the less fortunate—demonstrates that we don't always take the easy way out; rather, we choose actions that we think will best benefit others who are in need.

Maybe Peeta *did* give Katniss the bread because he'd been attracted to her since the first day of kindergarten and wanted to make her notice him. But if that was all that mattered to him, he could have accomplished his goal by simply handing her half a cookie one day at school. He burned the bread and endured a beating because she and her family were badly in need of that sustenance at the time, and he cared enough to help.

Altruism: Real or Not Real?

In a sense, the philosophical debate about altruism for the last few centuries has been a never-ending round of Real or Not Real. Katniss herself seems to go around and around on this very question, always dubious of others' motives. When all is said and done, however, she clearly wants to believe that people really can be altruistic in the pure Humean sense—and this may help to explain why she finally chooses Peeta over Gale.

Gale almost wins Katniss's heart in large part because of the very real and practical contributions he makes to her fitness. He shares hunting duties with her and helps to feed her family on days when she doesn't catch enough, and she does the same for him. If Gale were a disciple of Richard Dawkins, he might argue that Katniss's love for him depends on his utility to her gene pool. In fact, he comes very close to formulating that hypothesis: "That was the one thing I had going for me," he tells her at their last meeting, "taking care of your family."²⁹

Clearly, there's an element of enlightened self-interest in Gale's altruism: he helps Katniss and her family in part because it benefits him in return. It is interesting that she never questions Gale's motives in the same way she does Peeta's. Because she can see the tangible benefits Gale receives from their relationship—his family, too, is better fed because of their association—she accepts that he will reciprocally act in ways that benefit her and her family. There's nothing mysterious about enlightened self-interest working to maintain a mutually beneficial arrangement.

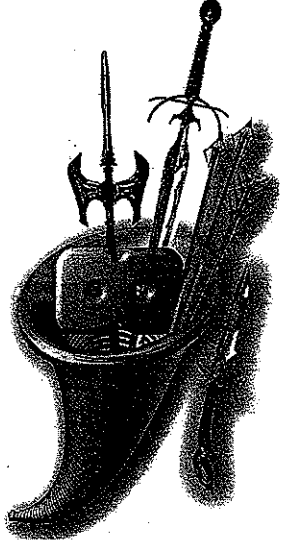
What ultimately may have prevented Katniss from being with Gale, however, is not that he designed a bomb that killed Prim, but that he designed a bomb that kills altruists by manipulating their best instincts. His bomb was designed to trap altruists: the initial detonation is followed by a full explosion after helpers rush in to save the injured children. Gale knows how to exploit altruistic impulses a bit too well for Katniss's comfort.

Throughout her ordeals, Katniss struggles to understand altruism and the often complicated, mixed motives that lie behind people's actions. In the end, though, she prefers to believe in the reality of simple kindness. "On bad mornings," she reports at the conclusion of *Mockingjay*, "I make a list in my head of every act of goodness I've seen someone do. It's like a game. Repetitive. Even a little tedious after more than twenty years." But, she adds, "there are much worse games to play."³⁰

NOTES

1. Suzanne Collins, *Mockingjay* (New York: Scholastic Press, 2010), 379.
2. C. Daniel Barson, *Altruism in Humans* (New York: Oxford University Press, 2011), i.
3. Charles Darwin, *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life* (London: John Murray, 1859), 5.
4. Suzanne Collins, *The Hunger Games* (New York: Scholastic Press, 2010), 65.
5. Social Darwinists have always used the idea of the "survival of the fittest" to justify neglecting and mistreating the poor and to promote fear about their unnatural "rise." The doctrine of social Darwinism holds that the poor should be neglected so they will die out as quickly as possible. Darwin himself stressed that survival was merely a matter of chance, but in *The Descent* he too expressed fear that "the weak members of civilised societies propagate their kind" due to increased social welfare (*The Descent*, 168).
6. Collins, *The Hunger Games*, 22.
7. Darwin, *The Origin of Species* 67.
8. *Ibid.*, 488.
9. For an up-to-date account of research on altruism and cooperation in the animal kingdom, see Mark Bekoff and Jessica Pierce, *Wild Justice: The Moral Lives of Animals* (Chicago: University of Chicago Press, 2010).
10. Charles Darwin, *The Descent of Man* (1871; repr., Lawrence, KS: Digireads, 2009), 85.
11. *Ibid.*, 110.
12. Collins, *The Hunger Games*, 288.
13. Darwin, *The Descent of Man*, 94.
14. Immanuel Kant, *Groundwork of the Metaphysics of Morals*, trans. Mary Gregor (New York: Cambridge University Press, 1998), 10. For more on Kant, see chapter 4, "The Odds Have Not Been Very Dependable of Late: Morality and Luck in the Hunger Games Trilogy"; chapter 11, "Sometimes the World is Hungry for People Who Care: Katniss and the Feminist Care Ethic"; and chapter 14, "Safe to Do What?: Morality and the War of All against All in the Arena."
15. Collins, *The Hunger Games*, 212.
16. Darwin, *The Descent of Man*, 94.
17. *Ibid.*, 95.
18. *Ibid.*
19. *Ibid.*, 94.
20. Collins, *The Hunger Games*, 85.
21. Darwin, *The Descent of Man*, 97.
22. *Ibid.*, 70.
23. For more on the significance of Katniss's uncertainty about her own motives, see chapter 4, "The Odds Have Not Been Very Dependable of Late: Morality and Luck in the Hunger Games Trilogy."

24. Collins, *The Hunger Games*, 343.
25. For a discussion of how Thomas Hobbes's views of human nature influenced his political philosophy, see chapter 14, "Safe to Do What?: Morality and the War of All against All in the Arena."
26. Thomas Hobbes, *On the Citizen*, ed. Richard Tuck and Michael Silverthorne (New York: Cambridge University Press, 1998), 52.
27. Richard Dawkins, *The Selfish Gene* (New York: Oxford University Press, 1976), 26.
28. David Hume, *An Enquiry Concerning the Principles of Morals* (New York: Oxford University Press, 1998), 110.
29. Collins, *Mockingjay*, 367.
30. *Ibid.*, 398.



"NO MUTT IS GOOD"—REALLY?

Creating Interspecies Chimeras

Jason T. Eberl

Katniss Everdeen and her fellow tributes face many challenges in the Hunger Games arena, the most fearsome being one another. But the second most fearsome threat has to be the *muttations*, creatures like the tracker jackers, with their madness-inducing venom, and the wolflike animals with the eyes of deceased tributes that make Cato's death in the 74th Hunger Games the most drawn out and gruesome of all.

Those aren't the only mutts to have been produced by the Capitol's malevolent scientists. During the rebellion that ended with the Treaty of Treason, which instituted the Hunger Games, the Capitol produced a variety of hybrid and chimeric (the difference between these is explained in the next section) insects and animals with specifically engineered traits to be deployed for acts of espionage, terror, and sheer violence. These transspecies weapons of war are more than just tools exemplifying the Capitol's technological superiority. They are also signs of scientific hubris: attempts to manipulate nature to