

## TEN Sex on the Brain

A NATURAL HISTORY OF RAPE AND THE DUBIOUS  
DOCTRINES OF EVOLUTIONARY PSYCHOLOGY

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Recent best-selling books with such pastoral titles as *A Natural History of Love* and *A Natural History of Parenting* promise a collection of educational stories about the birds and the bees, sung in the key of the scientifically informed nature program.<sup>1</sup> Into this celebration of the kinship between human habits of the heart and animal and plant reproductive customs, however, has lately entered *A Natural History of Rape*, offering a stern baritone reprimand to the gentle lullabies of more bucolic accounts of the nature of sex.

Rape is natural: this is the central claim made by the biologist Randy Thornhill and biological anthropologist Craig T. Palmer in *A Natural History of Rape: Biological Bases of Sexual Coercion*.<sup>2</sup> Thornhill and Palmer do not mean by this that rape is therefore good or inevitable; they write that "to assume a connection [between what is biological and what is

morally right] is to commit what is called the *naturalistic fallacy*."<sup>3</sup> What they *do* mean is that males may have evolved a predisposition toward raping females that will express itself when circumstances permit. They maintain that an evolutionary perspective can aid in reconstructing the natural history that could have led to the existence of rape, which they define as forced copulation. The data they present derive from studies of the sexual behavior of insects such as scorpionflies—Thornhill's specialty—as well as from a review of psychological experiments and sociological surveys conducted among humans.

Rape is a highly political subject. Indeed, Thornhill and Palmer articulate their own political aim: the elimination of rape among humans. Feminist social science analyses, first advanced in Susan Brownmiller's 1975 book *Against Our Will*, posited that rape is not only a sexual assault but also an act of coercive social power.<sup>4</sup> Such social explanations have formed the basis for many present-day rape prevention and crisis counseling programs. Thornhill and Palmer challenge these, arguing that their evolutionary view will be more effective than social science approaches in understanding and preventing human rape.

*A Natural History of Rape* has been described as controversial. Advance publicity based on excerpts in *The Sciences* inspired MIT Press to double the print run from ten thousand to twenty thousand.<sup>5</sup> These are huge figures for an academic book. Thornhill and Palmer have also made appearances in such high-profile venues as the studios of ABC and CNN.

What might be the allure of the argument that rape is natural? More important, has it any merit? In this chapter, as cultural anthropologists of science and of gender, we critically examine Thornhill and Palmer's case. The two write that "scientific critiques . . . must focus on the very heart of the perceived difficulty with an idea or body of research. To show that a tangential or trivial part of some work is wrong and then argue that the work is fundamentally flawed is not valid scientific criticism."<sup>6</sup> We agree. We thus offer a critique of the core, essential claims of *A Natural History of Rape* and identify conceptual difficulties with the data as well as logical problems with the explanations offered by Thornhill and Palmer from the field of evolutionary psychology: the study of how human mental capacities may have evolved.<sup>7</sup>

We first ask what it means to write a "natural history" of rape instead of a social history. Next, we examine each of the elements suggested by the title, *A Natural History of Rape*: we challenge Thornhill and Palmer's accounts of what is *natural* and what being "natural" entails, pointing out problems with their framework of evolutionary psychology. We question their neglect of social *history* and historical context. And we point out how their definitions of *rape* are distorted by their failure to account for what rape means to those upon whom it has been inflicted—upon those who see rape from what anthropologists have called "the native's point of view." We argue that, far from offering a more scientific explanation, their analysis is based on faith and speculation, not on empirical evidence. An explanation of rape that declares itself to be more useful than social science interpretations, yet can offer only unsubstantiated scientific hypotheses coupled with prescriptions for social change that sound curiously naive, does not warrant serious attention.

#### WHY WRITE A "NATURAL HISTORY" OF RAPE?

Why do Thornhill and Palmer offer us a "natural" history of rape as an alternative to a social account? It is because they believe that "when one is considering any feature of living things, whether evolution applies is never a question. The only legitimate question is how to apply evolutionary principles. This is the case for all human behaviors—even for such by-products as cosmetic surgery, the content of movies, legal systems, and fashion trends."<sup>8</sup> Having thus assumed the broad applicability of evolutionary principles to any human behavior, Thornhill and Palmer's argument proceeds directly to how rape can be so explained.

The two authors begin with the tenets of evolutionary psychology, a field that views human behaviors and minds, no less than bodies, as products of evolutionary forces such as *natural selection* and *sexual selection*.<sup>9</sup> Natural selection is the process whereby inherited variation among individuals of a population leads to differential reproductive success, shaping future patterns of variation in later generations. Sexual selection is the process whereby secondary sex characteristics such as the dramatic

tail feathers of the male peacock emerge as the result of males and females acting as selective forces on one another, through mate selection. Evolutionary psychology attempts to articulate the steps through which features of the human psyche may have been shaped by such selective forces. Like its intellectual ancestor, sociobiology, evolutionary psychology is concerned with postulating the existence of hereditary triggers for evolved behaviors, especially those that find expression in what researchers term *psychological mechanisms*. As Thornhill and Palmer explain it, "The brain must be composed of many specialized, domain-specific adaptations."<sup>10</sup> Adaptations are traits that have endured because they have been conducive to an organism's survival and reproduction. Those adaptations residing within us today constitute the fundamental nature in which Thornhill and Palmer seek the origins of rape.

Why would rape have evolved? What might have facilitated the development of male inclination to forced copulation? To begin, Thornhill and Palmer take up theories of sexual selection and parental investment.<sup>11</sup> Females and males, they claim, have different stakes in the game of getting their genes into the next generation. In humans, females must gestate and bring into being an entire organism to assure that their genes survive. Males, by contrast, need only make sure they disseminate their sperm widely. These different levels of investment result in different strategies in mating: females will be choosy; males indiscriminate. Rape, then, *could* have evolved among less desirable males as a tactic for dealing with choosy females who did not favor them as mates. Thornhill and Palmer suggest, based on the economic logic of cost-benefit analysis, that, if there is little penalty for rape, males will more often attempt to force an opportunity to make a genetic contribution to the next generation. They suggest implications in the present day: "Men's greater eagerness to copulate and their greater interest in and satisfaction with casual sex evolved because those traits promoted high sex-partner number in evolutionary historical settings."<sup>12</sup>

But rape's natural history, they argue, need not entail that rape is a usefully adaptive response to present-day circumstance: "Today, most humans live in environments that have evolutionarily novel components. . . . Therefore, human behavior is sometimes poorly adapted (in

the evolutionary sense of the word) to current conditions."<sup>13</sup> The book entertains both the hypothesis that rape could have been adaptive in our evolutionary history and the hypothesis that rape—like masturbation or bestiality—might be merely a *by-product* of other psychological adaptations related to male sexual desires. In other words, while rape may have evolved, the jury is out on whether it was ever adaptive. It is as evolutionary by-products, side effects, that Thornhill and Palmer explain such nonreproductively advantageous practices as male-male rape and child-rape.

On the face of it, Thornhill and Palmer seem to suggest that, as a hereditary behavior passed down from generation to generation, a tendency to rape is genetically determined, regardless of the natural or social environment of persons involved. However, they distance themselves from this strict deterministic view by defining biology broadly: "In reality, every aspect of a living thing is, by definition, biological. . . . The interaction of genes and environment in development is too intimate to be separated into 'genes' and 'environment.' Not only is it meaningless to suggest that any trait of an individual is environmentally or genetically 'determined', it is not even valid to talk of a trait as 'primarily' genetic or environmental. However, since 'biological' actually means 'of or pertaining to life', it is quite valid to claim that any phenotypic trait of an organism is biologically, or evolutionarily, determined."<sup>14</sup> Leaving aside the fuzziness of a such a generalized, out-of-focus, definition of biology—"every aspect of a living thing"—let us zero in on what we take to be the heart of Thornhill and Palmer's contention: They argue that *evolution* is a determinative force that can provide the *ultimate* explanation of rape. Explanations of rape that refer to social causes, such as social conditioning, they maintain, provide only *proximate* explanations. These may tell us how behaviors are prompted, but not why they exist in the first place. That first place—that ultimate nature—is what their evolutionary psychology aims to elucidate.

Their framing of the issue may have some logical force, but as Thornhill and Palmer concede, theirs is an untested hypothesis: "When evolutionary psychologists speak of evolved 'psychological mechanisms,' they are actually postulating physiological mechanisms in the

nervous system that, at the present stage of scientific knowledge, can only be inferred from patterns of behavior."<sup>15</sup> It is important not to lose sight of the fact that the arguments presented in *The Natural History of Rape* about biological bases of rape among humans are hypotheses, not research findings. To make their postulated mechanisms convincing would require persuasive inferences and evidence, but these Thornhill and Palmer do not offer.

#### "NATURE" OR FUNCTIONALIST FALLACY?

Thornhill and Palmer acknowledge that evidence to demonstrate how evolution shaped rape behavior is lacking. They write that the point of their book, rather, is to "describe the evidence that may be garnered in the future to settle the question."<sup>16</sup> Settling it inconceivably, of course, would require an extended molecular, physiological, and ecological analysis of how a set of genes, interacting with the environment, codes for a set of proteins that can enter into metabolic processes linked up with, say, hormonal dynamics in ways that can produce rape behaviors in specific reproductive environments. Absent such evidence, we are left with a series of tales about how evolution *could* have led to particular traits. But just because stories can be told about how particular functions *could* have been favored by natural selection does not amount to proving that these functions have in fact been so favored. We argue that Thornhill and Palmer are in the grips not so much of a naturalistic fallacy—the assumption that what is biological is moral—as of a *functionalist* fallacy.

Key to Thornhill and Palmer's approach is their claim that "selective pressure will be apparent in the functional design of [an] adaptation."<sup>17</sup> As scientists, they say, we should start by observing behaviors, like rape, and the ends to which behaviors appear to be aimed. This presents the first conundrum. How does one identify the behavior called rape, let alone its function? Why, to begin with, should we use the word *rape* to describe dynamics in nonhumans, as Thornhill and Palmer suggest when they ask, "Why does rape exist in many, but not all, species?"<sup>18</sup> The question broadens the definition of rape to the degree that it loses specific

meaning. When "scientists apply the word to fruit flies, bedbugs, ducks, or monkeys," biologist Anne Fausto-Sterling points out, this conflates different phenomena: "Yet the 'instinct' of a female bedbug to avoid forced intercourse certainly holds nothing in common with the set of emotions experienced by a woman who has been raped. Using the word *rape* to describe animal behavior robs it of the notion of will, and when the word, so robbed, once again is applied to humans, women find their rights of consent and refusal missing. Rape becomes just one more phenomenon in the natural world, a world in which natural and scientific, rather than human, laws prevail."<sup>19</sup> Thornhill and Palmer dismiss the distinction between what we can call "rape" in humans and what they call "rape" in scorpionflies, one of their central examples.<sup>20</sup> They offer, "Asserting that rape is by definition unique to humans excludes the behavior of non-human animals as a potential source of information about the causes of human rape."<sup>21</sup> While this may sound reasonable, it is not really an argument, since it assumes precisely what it wishes to affirm.

Thornhill and Palmer do not hold that rape exists in all species. They do, however, maintain that rape is universal among humans. The assumption is implicit in their question "Why does rape occur in all known cultures?"<sup>22</sup> They explain this generalization in expansive terms: "Human males in all societies so far examined in the ethnographic record possess genes that can lead, by way of ontogeny [development or physical expression of a gene], to raping behavior when the necessary environmental factors are present, and the necessary environmental factors are sometimes present in all societies studied to date."<sup>23</sup> This explanation assumes the universal presence of the very genes for rape behavior that their argument must demonstrate. How do they know the genes are present, and what do they look like? One might wonder whether Thornhill and Palmer really believe that anthropologists have extracted DNA from all the people with whom they have worked and then proceeded to sequence those genes to identify ones that code for rape. Any such research would be well ahead of work done by scientists in the Human Genome Project.

If, however, we take Thornhill and Palmer to mean that rape is merely

widespread in humans and the animal world, they still must explain why evolution offers a compelling explanatory model for rape's existence. Thornhill and Palmer begin by drawing a number of inferences from present-day mammal and human behaviors about the selective pressures on ancestral populations. They infer that, because human males have, on average, greater upper-body strength than females, prehistoric males fought with one another and from this evolved psychological mechanisms to favor competitiveness. They infer from the existence of breasts that human females have evolved emotional mechanisms that aid in infant care. They infer from the popularity of pornography among human males that males have evolved to wish to spend their sperm at every opportunity. They assert, "It is not surprising that female sexual infidelity is a major cause of divorce in the United States."<sup>24</sup> And they announce, without citing any sources, that "rape [is] often treated as a crime against the victim's husband."<sup>25</sup> From this presumed aspect of present-day marriage patterns, they infer that early hominids were concerned (if unconsciously) about "paternity reliability."<sup>26</sup> This could all be true. But none of these inferences are evidence; they are further hypotheses. As Hamish Spencer and Judith Masters point out in *Keywords in Evolutionary Biology*, sexual selection is "easily bent to the generation of fascinating stories rather than useful explanations of observable phenomena."<sup>27</sup>

Thornhill and Palmer move next to analogies between humans and other animals. They explain that analogous traits—wings in bats and wings in flies, for example—are similar not due to shared descent but because they may have been produced by similar selective pressures.

Scorpionflies, Thornhill and Palmer suggest, have adaptations that facilitate forced copulations and might therefore provide analogies for similar human adaptations. Male scorpionflies possess "a clamp located on the top of the abdomen, behind the wings," that they use to retain a female "in copulation for the period needed for full insemination." This clamp, say the two authors, is "designed specifically for rape."<sup>28</sup> The two postulate that, since humans do not have such obvious physical mechanisms facilitating rape, we "must look to the male psyche for candidates for rape adaptations."<sup>29</sup> But one might as persuasively suggest that, since

cows have four-chambered stomachs, we must look to the human psyche for an equivalent! Having made the adventurous suggestion that we leap from scorpionfly rape clamps to human psychology, Thornhill and Palmer assert that, "if found, such adaptations would be analogous to those in the male insects."<sup>30</sup> Maybe. But we would do well to keep in mind that, as the evolutionary biologist Richard Lewontin has written, "analogy is in the eye of the observer."<sup>31</sup> Not only does Thornhill and Palmer's line of argument here seem farfetched, it directly contradicts their earlier caution against analogical reasoning: "A human psychological adaptation such as that responsible for rape must be studied in humans, and a chimp or orangutan psychological adaptation must be studied in chimps or orangutans."<sup>32</sup>

In spite of the paucity of their evidence and in the face of blatant inconsistency with their own rules, Thornhill and Palmer hypothesize possible human psychological rape adaptations: perhaps the ability to discern the vulnerability of a victim, or a "beauty-detection" mechanism, designed specifically for rape, or a mechanism that causes men to rape their wives if they suspect they have been unfaithful, or a male capacity to "unconsciously adjust the size of . . . ejaculate" "in a manner conducive to high probability of fertilization during rape."<sup>33</sup> Thornhill and Palmer also postulate that the spermatozoa of different males will compete with one another if a woman is inseminated by more than one partner, mimicking at the cellular level the competition that the two authors describe at the level of the organism. Again, these are inferred mechanisms—hypotheses—and the genes that could lead to them are conjectural. But in calling these traits "mechanisms," Thornhill and Palmer imply function a priori, suggesting *before* an explanation has even been advanced that there is a goal-directed design to be discovered. This is simply speculation.

Thornhill and Palmer prove themselves able to make up a story, based on genes, for almost any trait. They offer, for example, this evolutionary explanation for feminism: "The idea that women have evolved to avoid rape also may help explain certain aspects of the feminist movement, since opposition to sexual coercion of all forms—but especially rape—is a major concern of that movement. . . . We suggest that the combination

of greater mobility and less protection by mates and male kin results in women perceiving an enhanced risk of sexual coercion. This perception (probably accurate) may have fueled the feminist movement's promotion of the kind of female-female alliances against male coercion that are seen in many other mammalian species."<sup>34</sup> If feminism and female solidarity, across species, are to be viewed as evolutionary strategies in the face of male aggression, would this mean that, if we accept Thornhill and Palmer's definition of rape, we should also speak of resistance to forced copulation among scorpionflies as "insect feminism"? The silliness of this suggestion points up the sloppiness of their logic.

Thornhill and Palmer even offer an evolutionary explanation for the "paradox" of the popularity of one of their most prominent adversaries, the biologist Stephen Jay Gould.<sup>35</sup> Readers find his arguments appealing, Thornhill and Palmer say, because humans have evolved to present themselves as moral and benevolent (a claim advanced without evidence); Gould's argument that not all traits are aimed at competition is congenial to these beliefs. Thornhill and Palmer's use of their evolutionary argument to make a case against one of their academic rivals illustrates the elasticity of their framework.

This flexibility also renders Thornhill and Palmer's distinction between ultimate and proximate causes—between explanations of why and how—problematic. How does one know when one has reached the bedrock of ultimate evolutionary explanation? Is it when describing traits humans have shared since they first became humans, or those they share with primate relatives? Is it traits they share with other animals, even insects? With plants? With bacteria? The level of ultimate causation is elusive; its designation depends on the questions asked. One can always conjure up an ultimate rationale and categorize everything else as "proximate." This arbitrariness permits Thornhill and Palmer to slip between evolutionary time scales and from human to primate to mammalian and insect bodies and back again. And their use of the word *why* to describe evolutionary causes smuggles in *meaning*, even though Thornhill and Palmer vigorously argue that traits that are natural have no implicit significance.

Thornhill and Palmer are in the grips of a functionalist fallacy: the idea

that traits exist because they have been adaptive, if not in the present, then earlier. Gould diagnoses the difficulty. He notes that evolutionary psychologists have argued that "many universal traits of human behavior and cognition need not be viewed as current adaptations, but may rather be judged as misfits, or even maladaptive, to the current complexities of human culture. But most evolutionary psychologists have couched this acknowledgment with a belief that the origins of such features must be sought in their adaptive value to our hunter-gatherer African ancestors."<sup>36</sup>

The theater of early human evolution is a central court of appeal for Thornhill and Palmer's ultimate causes, and this is an environment to which we have no empirical access. We have no reason to believe that early humans were not also burdened with inheritances that made no sense in *their* contemporary world: we face the problem of where in our evolutionary past to draw explanatory boundaries.

The explanations in *A Natural History of Rape* follow the three-step recipe decoded by Lewontin for spurious sociobiological argument.<sup>37</sup> This goes as follows: First, describe some aspect of universal "human nature"—here, that men have a tendency to rape women—and offer analogies from animals to suggest these traits are seated in shared nature. Second, claim that what is universal must be so because it emanates from biology. Third, since the evidence is not available, claim that traits in question arose through natural or sexual selection, and construct a logical tale for how whatever is universal was favored by evolution and may therefore have a strong hereditary, indeed genetic, component. Note that this tale need bear no relation to what actually occurred. Thornhill and Palmer's account, like much evolutionary psychology, is no more than a "just-so" story.<sup>38</sup>

Thornhill and Palmer's book is replete with the rhetorical slipperiness such a lax standard of argumentation allows. Again and again they offer hypotheses and later refer to them as if they had been proven. For example, in chapter 2 (p. 37), they write, "In mammals with a history of greater sexual selection on females, evolutionary theory predicts the following [nine predictions about sex differences in mammals; our emphasis]." On page 84, they write of "the sexual adaptations that exist in

women and men, described in chapter 2" (our emphasis). The adaptations hypothesized for mammals (a group that subsumes a lot of diversity) are now said simply to "exist." On pages 59–60, Thornhill and Palmer write that rape "*may be an adaptation* that was directly favored by selection because it increased male reproductive success by way of increasing mate number" or that it "*may be only a by-product* of other psychological adaptations" (our emphasis).<sup>39</sup> On pages 64–65, they argue that we "must look to the male psyche for candidates for rape adaptations."<sup>40</sup> This slide from *may* to *must* would require many more steps to make a sound argument.

Thus Thornhill and Palmer's warning against the naturalistic fallacy—that "what is, ought to be"—obscures functionalist fallacies at the center of their work. It also hides their persistent suggestion that "what may be, must be." The individualized, unconscious cost-benefit evolutionary explanations they offer—that men will rape when costs are low—side-step any explicit moral charge for the nature they discuss. But their arguments are meant to anchor rape in nature, through arguments about why evolution might rationally have favored or supported rape behavior. The nature in which Palmer and Thornhill site rape is ordered and predictable because every behavioral trait is explicable through recourse to a functionalist story about an adaptation or its by-products. We are not persuaded that rape can be so easily explained through recourse to cost-benefit reasoning, nor that it is useful to exclude from an explanation of rape the dynamics of a social world in which behavior is often arbitrary and far too complex to be explained by a single story.<sup>41</sup>

#### "HISTORY": NATURAL OR SOCIAL?

What is rape? Most anthropologists would describe rape as a social behavior, the experience and meaning of which depend on where and when it happens and to whom.<sup>42</sup> Three examples of human behaviors that have been called rape—wartime rape, rape of slaves, and fraternity gang rape—each of which takes a different form and requires a different understanding, demonstrate that social histories of rape cannot be

replaced or improved upon by a "natural history of rape" that appeals in the last instance to conjectural reproductive success stories.

*Rape in the Context of War*

For Thornhill and Palmer, the fact that a rape takes place in war tells us only what the proximate cause might be, evolution being the ultimate cause. But why women are raped in the course of war depends very much upon the specifics of the war. Soldiers have raped women because their bodies are seen as additional "booty" to be looted along with household possessions. Thousands of German women were raped by Allied soldiers at the end of World War II in an act of celebratory revenge. Militarized mass rape is viewed by both aggressors and victims not just as a crime against a woman's person, not just as an expression of male sexual proclivities, but as a calculated act of aggression against an enemy people.<sup>43</sup>

The anthropologists and Balkans specialists Susan Gal and Gail Kligman argue that in contexts of ethnic nationalism, mass rape has been a particularly effective weapon.<sup>44</sup> Ethnic nationalism may be contrasted with civic nationalism, in which, as in the United States and France, the nation comprises people who subscribe to shared beliefs and political commitments. Under ethnic nationalism, "a nation" is bound together through shared culture, language, and history believed to cohere as a kind of inheritance, symbolically passed down through "blood." Women, through reproducing and socializing future citizens, may be regarded as the symbolic bearers of a cultural and national identity fathered by men; rape thus disrupts the symbolic unity of the nation. In such a context, "sexual violation of women erodes the fabric of a community in a way that few [technological] weapons can."<sup>45</sup>

In the 1990s, ethnic nationalism drove the war in Bosnia-Herzegovina; in 1992, more than twenty thousand women reportedly were raped. Bosnian Serb soldiers imprisoned Muslim Croat women in makeshift "rape camps" for the express purpose of sexually violating them for days or months. This was so well documented that it prompted a 1996 United Nations criminal tribunal to define rape for the first time as a war crime against humanity.<sup>46</sup>

To understand why this happened in Bosnia, it is important to consider how the twentieth-century history of the region made it a cauldron for ethnic nationalism. Skipping back all the way to our hominid ancestors, as Thornhill and Palmer would have us do, cannot substitute for this social history. For hundreds of years, the Ottoman Empire ruled the area through local religious leaders without carving up the Balkans into administrative districts. Serb-speaking Orthodox Christians lived side by side with, if independently from, Serbo-Croat-speaking Muslims. Religious and, later, ethnic identification was encouraged. Following World War II, however, as the new state of Yugoslavia was formed, Josip Tito unified the disparate peoples of the region into a multiethnic socialist federation. After Tito's death, the federated republic began to dissolve as different groups broke off and proclaimed themselves nations. Seeking autonomy, Serbs and Croats fought bitterly over cities and territories they had been sharing as neighbors for generations (see Tone Bringinga, chap. 4 this volume). In this context, rape was used "as a weapon of war in 'ethnic cleansing.'"<sup>47</sup> Women impregnated by Serbian soldiers were often held for seven or eight months before being released, too late to seek an abortion.<sup>48</sup> Muslim Croat girls and women who had been raped were forced to give birth to what were viewed as non-Muslim children, thereby diluting claims of Croatian nationhood where people identify ethnic identity with parenthood. Here, cultural ideas about gender shape kin-based metaphors of national and ethnic belonging (see Keith Brown, chap. 3 this volume). In such a setting, the meaning of and motivation for rape exceeds the physically sexual to become a highly orchestrated strategic instrument of war. It is *not* paternity that is being maximized here; it is a focused collective effort to terrorize, and destroy the cultural integrity of, the vanquished group.

Rape is not inevitable in or limited to ethnic nationalist war, nor is it an inevitable feature of human life—it is not useful to view militarized mass rape as a logical outcome of evolutionarily driven competition between males to impregnate women. Rather, its presence in different places requires examination of social history in specific contexts. The anthropologist Veena Das, for example, has written about the rape of tens of thousands of women by both Muslim and Hindu factions after the par-

tion that led to the creation of India and Pakistan. She argues that "the idea of appropriating a territory as nation and appropriating the body of the women as territory" was powerfully informed by British imperial images of the nation and of the role of women within it.<sup>49</sup> We must look at the history of the British Empire to evaluate the case she makes.

In 1994, during Rwanda's civil war, armed Hutus raped thousands of Tutsi women. Many of these women were raped with machetes and spears and were then killed; even Thornhill and Palmer would have difficulty arguing that this is the "by-product" of some kind of reproductive strategy. In other instances, "the government was bringing AIDS patients out of the hospitals specifically to form battalions of rapists."<sup>50</sup> Rape was thus used intentionally to kill; it was a weapon not of ethnocide, but genocide. Mass rape commanded from above, as in Rwanda, cannot be usefully understood as the act of a lone individual whose deepest instincts are finally able to express themselves without being checked by social disapproval. It cannot be explained in the same terms as individualized incidences, such as rape by an acquaintance in an unlit parking lot. Thornhill and Palmer might reply that rape using objects hijacks for non-reproductive ends a previously evolved rape mechanism, but such a response so generalizes the mechanism that it becomes meaningless, very far indeed from one of the "specialized, domain-specific adaptations" that the two authors describe.<sup>51</sup> Militarized rape is meant to further the strategic ends of those who orchestrate it.

#### *Rape under Plantation Slavery in the Antebellum United States*

Rape was also a documented and frequent occurrence under plantation slavery in the southern United States before the Civil War. Here the reigning ideology was not ethnic nationalism but private property within a system of chattel slavery. When white slave owners raped and impregnated their African slave women, they thereby increased their property, but *not*, as they saw it, their progeny: "Legally, and in contrast with the patriarchal reckoning of descent for the non-slave population, the children of interracial unions between slave owners and enslaved women were themselves slaves. Although one may assume that slave owners

used rape as a means of wielding power and obtaining sexual pleasure, the economic dimension of the prohibition on miscegenation was also evident: sexual intercourse with enslaved women—in the context of matrilineal descent laws for enslaved people—produced more slaves."<sup>52</sup> While these were certainly reproductive events, understanding who was targeted and why requires understanding the politics and economics of race under American slavery.<sup>53</sup> Here, again, a "natural" history of rape fails to explain very much. Angela Davis writes, "Excessive sex urges, whether they existed among individual white men or not, had nothing to do with this virtual institutionalization of rape. Sexual coercion was, rather, an essential dimension of the social relations between slave master and slave. . . . The right claimed by slave owners and their agents over the bodies of female slaves was a direct expression of their presumed property rights over Black people as a whole. The license to rape emanated from and facilitated the ruthless economic domination that was the gruesome hallmark of slavery."<sup>54</sup> In this context, rape was about property ownership and economic advantage, not an evolutionarily selected drive to ensure males' genetic contribution to the next generation.

With the end of slavery and the failure of Reconstruction, black women continued to be targets of white rape, but this period also saw a huge rise in false accusations of rape against black men (a striking shift, as no black men had been accused of rape during the Civil War). Angela Davis has argued that, as the institutionalized subordination of blacks under slavery ended, some whites began to use the myth of the black rapist and the threat of retaliatory lynching as a terror tactic to prevent blacks from achieving full citizenship and economic equality. When black men continue today to be disproportionately accused and convicted of rape, Davis further argues that this myth has had enduring consequences for writing on rape well into the twentieth century. In perpetuating the notion that black men are more prone to rape than white men—owing to a "culture of poverty" argument or to racist stereotypes of blacks as sexually voracious—some antirape work, Davis suggests, has failed to push for full investigation of unsolved rape cases.<sup>55</sup> The prosecution and prevention of rape in the United States requires attention to how racism distorts the identification of men who rape. An evolutionary view, even if it

demonstrates the bankruptcy of race as a biological category, cannot do this kind of work.

#### *Fraternity Gang Rape*

A book by the anthropologist Peggy Sanday, *Fraternity Gang Rape*, was written in response to a high-profile rape on the university campus where Sanday teaches. She explains how serial rapes of women at fraternity house parties are committed by fraternity brothers as a form of male bonding.<sup>56</sup> Sanday interviewed women and men who witnessed or participated in these events. In the practice of "pulling train," young men have sequential intercourse with a woman who may be drunk or unconscious (which would make this rape under U.S. legal standards, based on lack of consent). This activity, Sanday concludes, bonds the young men through pleasure, excitement, and secrecy. This is a rite of male camaraderie, not male competition (although Thornhill and Palmer might argue a case for sperm competition inside the body of the raped). It can also be described as a ritualized way by which some young men learn—through example, peer pressure, and positive reinforcement—to sexualize and objectify women and to use women to demonstrate heterosexual masculinity in a homosocial environment. In other words, they learn to rape.

Why do Thornhill and Palmer nevertheless insist that a "natural" or evolutionary psychological explanation is somehow better, more plausible, or more useful than one that examines social and historical context? Cultural anthropology can suggest some answers. The two authors' assumption that males are concerned with "paternity reliability" is based on convictions derived from a social context where inheritance is traced through the father's line, a cultural practice that, as anthropologists remind us, is far from a human universal. Thornhill and Palmer project this identification of fatherhood with sperm onto sperm itself, focusing on the role of sperm competition in acts, including rape, that are "about sex." Anthropologists have long recognized, however, that not all people are obsessed with knowledge of paternity.<sup>57</sup> Bronislaw Malinowski famously found that Trobriand Islanders did not have a concept that

linked fatherhood to biology. Trobrianders believed that, in order to become pregnant, a woman had to have intercourse more than once, and perhaps with more than one man; intercourse was thought to "open" a woman to enable a spirit or soul to enter her womb, and sperm was viewed as nourishment, not a quickening substance. Thornhill and Palmer might respond that, while these people may have been "ignorant" of paternity, deep down their genes told them to safeguard it, and, unbeknownst to them, sperm were battling for supremacy in women's bodies. But as the anthropologist Emily Martin has argued, culturally shaped views of sperm as active and eggs as passive often powerfully—and *erroneously*—guide how these entities are described even in scientific literature.<sup>58</sup> Spermatozoa, even though they have tails, do not "race." Sperm are *not* little competitive men; ova are *not* itchy-bidisy coy females. For Thornhill and Palmer, the egg appears to be the same inert stuff it was for Aristotle, waiting to be animated by the magic of sperm. They project onto sperm and egg their stereotypical cultural visions of active male and passive female relations, distorting the much more complicated biology of the matter.

Thornhill and Palmer also work from a definition of sex that warrants attention. They argue that American feminists, beginning with Susan Brownmiller, have redefined rape as an act of patriarchal power, and not an act of sex. But to assert this—either rape is about power *or* it is about sex—is to assume that "sex" among humans is fully separable from social and political power, that "sex" is essentially a biological phenomenon aimed always at reproduction and having more in common with copulating scorpionflies than with a civil marriage ceremony, notions of romance, or acts of military conquest. This is where many social scientists today differ most fundamentally with evolutionary psychologists.<sup>59</sup> We agree that rape is sexual, or "about sex," as Thornhill and Palmer insist. It is clear that in human societies, sex and power, pleasure and danger, may be very much related.<sup>60</sup> Where we part company begins with our understandings of what "sex" is. The feminist social scientists dismissed by Thornhill and Palmer make the argument that "sex" is not one single thing: the myriad acts, motivations, emotions, attitudes, reactions, and potential repercussions that together produce "sexual encounters" are not reducible to one

definitive event that may or may not lead to reproduction. It is for this reason that "rape"—coerced sex—also cannot be explained through one underlying unifying theory. Stranger rape, date rape, male rape, homosexual prison rape, rape within slavery, forced impregnation during gang rape as a prisoner of war: all of these might involve forced copulation, but there is no reason to suggest these are all ultimately caused by some hypothetical evolutionary mechanism in males.<sup>61</sup>

We have no reason to doubt Sanday's cross-cultural finding that rape—which she defines, similarly to Thornhill and Palmer, as sexual "coercion"—occurs more frequently in societies where men and women's daily activities are largely segregated, where gender roles are fairly rigid, and where men have more economic and political power than women.<sup>62</sup> Thornhill and Palmer would argue that this is because the "social costs" of rape would be lower in such societies; it seems far more plausible, and useful, to note that in these societies boys and men are trained to view themselves as both different from and superior to women. Nor does this mean that rape only happens when rapists have learned to rape in ways as explicit and ritualistic as those evidenced by fraternity "trains" or genocidal programs in Rwanda. But it does suggest that culture plays a more immediate and relevant role in producing rape behavior than does, say, human sexual dimorphism. Biology unquestionably enables human behavior; however, cultural belief, coercive power, moral values, and historical legacy together exert a stronger pressure than the highly conjectural biology of Thornhill and Palmer when it comes to shaping particular instances of individual human action.<sup>63</sup>

#### "RAPE": WHOSE PERSPECTIVES TELL THE TRUTH?

As we have seen, Thornhill and Palmer do not begin their analysis from the experience of those who have been raped, but rather from what they see as the more objective view of evolutionary biology: a view they believe will be more useful for rape prevention and crisis counseling. One of the key commitments of cultural anthropology, in contrast, has been to understand "the native's point of view"—that is, not to impose

on others' experiences one's own assumptions. Thornhill and Palmer's refusal to take into consideration the native's point of view—the rape survivor's or, for that matter, the rapist's—alongside their resolute insistence on attributing possible evolutionary causes of rape to the neglect of immediate social conditions, leads to some rather odd, even Victorian, policy suggestions for rape prevention:

We envision an evolutionarily informed educational program for young men that focuses on increasing their ability to restrain their sexual behavior. Completion of such a course might be required, say, before a young man is granted a driver's license. Such a program might start by getting the young men to acknowledge the power of their sexual impulses and then explaining why human males have evolved to be that way. . . . It should be emphasized that the reason a young man should know these things is so that he can be on guard against certain effects of past Darwinian selection.<sup>64</sup>

It does not sound to us like a particularly good or useful idea for teachers to inform adolescent boys that they have evolved to dominate women sexually. But apparently for Thornhill and Palmer, as the historian of biology Howard Kaye suggests, evolved traits are much like sins in Calvinist theology: they can be overcome with hard work.<sup>65</sup> Boys learning the gospel in driver's education can join Thornhill and Palmer in their moral clarity: "We are not evolved to understand that our striving reflects past differences in the reproduction of individuals. Such knowledge can come only from a committed study of evolutionary biology."<sup>66</sup>

When it comes to the girls, Thornhill and Palmer are similarly simplistic:

The educational program for young women should . . . address how . . . elements of attractiveness (including health, symmetry, and hormone markers such as waist size), and clothing and makeup that enhance them, may influence the likelihood of rape. This is not to say that young women should constantly attempt to look ill and infertile; it is simply to say that they should be made aware of the costs associated with attractiveness. . . . It should be made clear that although sexy clothing and promises of sexual access may be a means of attracting desired males, they may also attract undesirable ones.<sup>67</sup>

Barbara Ehrenreich assesses this prescription tartly: "As for the girls, Thornhill and Palmer want them to realize that since rape is really 'about sex,' it very much matters how they dress. But where is the evidence that women in mini-skirts are more likely to be raped than women in dirndls? Women were raped by the thousands in Bosnia, for example, and few if any of them were wearing bikinis or bustiers."<sup>68</sup> Could tragedy in Rwanda have been averted if Tutsi women had paid closer attention to their attire? It is hard to imagine that Thornhill and Palmer were unaware of such empirical data that destabilize their assumptions and make their recommendations seem woefully naive. Had they taken seriously the possibility that even local stereotypes of "attractiveness" frequently have no influence on the selection of targets for rape, they might have presented a stronger case.

Their policy suggestions make one wonder about Thornhill and Palmer's concept of human will. Why do they insist that women must respond to the threat of rape through their fashion choices rather than through verbal protest? Thornhill and Palmer deny women the voice that feminists have worked to have heard and respected. This voice is recognized by such legal institutions as the State of Texas Commission on Law Enforcement, which has begun to train its officers to be aware of "social rules" that "may be exploited by a potential rapist"—for instance, that women are often taught "not to make a scene."<sup>69</sup> Instead, Thornhill and Palmer seem to suggest that "No" really cannot be heard by men as "No." They write, "Women need to realize that, because selection favored males who had many mates, men tend to read signals of acceptance into a female's actions even when no such signals are intended."<sup>70</sup> Men seem, to Thornhill and Palmer, able to control their fate, while women cannot.

Thornhill and Palmer's policy suggestions demonstrate a striking lack of knowledge about rape as it occurs among real people. Brownmiller notes that *A Natural History of Rape* "misrepresented my position. I didn't say rape was only about power. I also say it's about humiliation and degradation. When women started to talk about this in the early 70s, the women who had experienced rape said they felt it had been an act of humiliation. They didn't see it as a sex act. But obviously we didn't think this had nothing to do with the sex act; of course it is, sexual organs are

used."<sup>71</sup> Brownmiller points out that she and others writing in the 1970s were primarily concerned to give a voice to women's experiences of rape. Thornhill and Palmer conflate "what feminists say"—an analytic position—with what feminists and others report women victims as saying about rape: that they experienced it as an act of violence and violation, rather than as what they think of as "sex" (a consensual intimacy with another person). Thornhill and Palmer thus override what many rape survivors have reported about rape ("rape is not about sex") with their own dispassionate view of what motivates men to rape. Their critique of feminist analyses of rape, then, is based on comparing women's firsthand reports about the actual experience to their own speculations as to men's unconscious motivations for raping. It is not a persuasive comparison.

Even more arrogantly, they ask, "Why is rape a horrendous experience for the victim?" and declare that "evolutionary theory can help us understand the ultimate reasons why rape is as distressing as it is."<sup>72</sup> Again, their analysis entirely ignores rape survivors' firsthand experiences: "Mate choice was a fundamental means of reproductive success for females in human evolutionary history. Thus, rapists' circumvention of mate choice has had extremely negative consequences for female reproductive success throughout human evolutionary history. The psychological pain that rape victims experience appears to be an evolved defense against rape."<sup>73</sup> Along these same lines, they propose that "women have a special-purpose psychological adaptation that processes information about events that, over evolutionary history, would have resulted in reduced reproductive success."<sup>74</sup> In other words, when women fight off would-be attackers, it is due to a special inborn antirape mechanism that is looking after the well-being of their genetic legacy, rather than, say, their will to avoid suffering the physical and emotional trauma of sexual assault. And indeed, offering us their interpretation of published self-reports about violent rape, Thornhill and Palmer state that "reproductive-age married women [appear to be less] psychologically traumatized when the rape includes violence, thus providing clear evidence to their husbands that copulation was not nonconsensual."<sup>75</sup> This leap from appearance to evidence is purely speculative.

The evidence Thornhill and Palmer do offer is sparse indeed: their only direct example of how women are affected by rape is "an instance in which a woman was raped by a male orangutan."<sup>76</sup> The two authors quote a primatologist, the victim's boss, recalling the victim's husband as saying of the attack, "Why should my wife or I be concerned? It was not a man." The authors argue, "Her husband reasoned that since the rapist was not human, the rape should not provoke shame or rage."<sup>77</sup> This story—about a man's response to the rape of his wife, and hearsay at that—is meant to illustrate the thesis that a female will be more bothered by rape when there is a chance that she will become pregnant by someone besides her husband. What we hear from Thornhill and Palmer about women's experience is filtered through the presumed views of male rapists and the women's chosen mates.

From this vantage point, they propose a definition for rape as follows: "copulation resisted to the best of the victim's ability unless such resistance would probably result in death or serious injury to the victim or in the death [of] or injury to individuals the victim commonly protects."<sup>78</sup> Contrast the assumptions of this definition with a passage written by psychologist Rebecca Campbell, director of the Sexual Assault and Rape Prevention Evaluation Project, Michigan Public Health Institute. Campbell has studied rape and its emotional effects on survivors: "It is the debris, the skin, and the semen that is rubbed into you and all over you, again and again. It is spilled on you, dumped on you, and into you. It is the bacteria and the viruses that could be being mixed into you. It is the diseases, curable and incurable, that might be forced into you. . . . That is what rape is."<sup>79</sup> The two incidences of human rape described in Thornhill and Palmer's book do not come close to demonstrating awareness of this kind of perspective on being raped. The first, an anonymous description of a date rape, comes from "a friend of ours."<sup>80</sup> The second is the orangutan story, in which we never hear a word from the woman in question.

Thornhill and Palmer's Victorian suggestions for rape crisis counseling, based on their claim that they can get to the truth of rape in a way rape survivors cannot, are weak. A more effective means of reducing the incidence of rape might be instead to work toward a society in which

men are not viewed as dominant and not trained to feel superior and entitled, and women are not routinely depicted as vulnerable and voiceless. Insofar as rape is often "about sex," we argue that encouraging boys to respect women, to see beyond a woman's appearance or relative sexiness, and to appreciate her personality, intellect, and humanity will have an impact on rates of rape and attempted rape. We believe too that international politics committed to reconciling differences through diplomatic rather than military means will reduce the numbers of women made to suffer rape worldwide. Without war there is no militarized mass rape.

#### CONCLUSION: SCIENCE OR FAITH-BASED SPECULATION?

In *The Natural History of Nonsense*, Bergen Evans examines the reasons people believe unreasonable things, arguing, "We see what we want to see, and observation conforms to hypothesis."<sup>81</sup> His book did not forward an evolutionary explanation for nonsense, but rather invoked the genre of natural history ironically, in the spirit of humorous reflections on human gullibility. It would be nonsense to seek a natural explanation for the wide variety of things that count as nonsense. And so too with rape. But Thornhill and Palmer's nonsensical analysis uses the frame of natural history seriously. We do not think Thornhill and Palmer are ill meaning; we do take them at their word that they find theirs a compelling explanation. But we suggest that this is precisely because their convictions are based more on faith than on science.

In 1996, the Catholic Church held a conference at the Vatican on evolutionary and molecular biology.<sup>82</sup> Catholic theologians are not creationists, nor do they promote fundamentalist readings of the Bible; rather, the theologians at this meeting were interested in reconciling ideas about the creation of human souls by God with the latest findings in evolutionary biology; the adaptationist premises of which these theologians accepted. One contributor to the conference proceedings pointed out that the evolutionary models of sociobiologists were too metaphysical—dependent on premises that could not be proven—to satisfy the condition of being

proper science.<sup>83</sup> He wrote that Richard Dawkins, E. O. Wilson, and others "present something akin to a scientific religion in that they purport to give an overall world-view, sometimes including ethical or pseudo-ethical statements. . . . A hidden metaphysical agenda underlies what is presented to the public as a pure and neutral scientific rendition of nature."<sup>84</sup> Sociobiologists and evolutionary psychologists, the author continued, were too faith based, too unaware of their own metaphysical claims—about the design capacities of natural selection, for example.<sup>85</sup> The Catholic Church, many conferees felt, should not compete with another faith. Ironically, the blindness of the practitioners of sociobiology and evolutionary psychology to their own practices of interpretation leave them in a curiously fundamentalist position, believing their interpretations of genetic code to be the literal truth. Stephen Jay Gould makes exactly this argument about evolutionary psychology: so committed to the adaptationist program is this field that nothing can escape functionalist interpretation, a real problem when inquiring into dynamics from the past that we cannot entirely retrieve and that have many possible shapes.<sup>86</sup> We might say that *A Natural History of Rape* has something in common with Michael Corey's *Natural History of Creation*, a publication that argues that the book of Genesis is "fundamentally identical to the modern evolutionary account."<sup>87</sup>

An unquestioning faith in the adaptationist program is behind the doctrine of this evolutionary psychology. In the family of "natural history" books—their sheer proliferation a sign that marketing and not science might be behind such titles—*A Natural History of Rape* stands out as a particularly stubborn entry. Why have Thornhill and Palmer's arguments been so marketable? The authoritative language of science is often quite persuasive, even if it is deployed in the service of an argument that is logically flawed and supported by dubious evidence. According to Caryl Rivers and Rosalind Barnett, "The blitz of media coverage that accompanied the advance publicity on the book was too often misleading. Reporters quoted well-meaning but scientifically unsophisticated sources such as rape counselors who said things like, 'Well, it may be in our genes but we have to fight against it.' That accepts the premise that, because this notion was presented as 'science' it must be right. Uninten-

tionally, they gave credence to very speculative science, helping to cement it in the public mind."<sup>88</sup>

More important, however, the stories Thornhill and Palmer tell about women and men align with and confirm stereotypes of masculinity and femininity scripted in Western popular culture, from fairy tales to pornography. For all the controversy it generated, this book offers nothing we have not heard before. But, with its logical slipperiness, social naïveté, and disregard of women, this book is potentially hazardous. Brownmiller is concerned that the book "will be used as a defense by lawyers in rape cases. . . . The ones who will benefit will be high-profile rapists who can afford to hire [such lawyers]."<sup>89</sup> No matter how much the authors try to hedge in subsequent interviews and articles, their book does argue that male humans have developed an evolutionary propensity to rape women.

But it does so on the basis of faith, not evidence. Perhaps we could take a page from Daniel Cohen's *Natural History of Unnatural Things* and argue that Thornhill and Palmer's book is an occult artifact,<sup>90</sup> divining the true purpose of nature through recourse to the kinds of self-fulfilling prophecies that characterize the psychic hotline, not the logical, evidentially based protocols that make a coherent evolutionary or psychological study.

1. Diane Ackerman, *A Natural History of Love* (New York: Random House, 1994); Susan Allport, *A Natural History of Parenting: From Emperor Penguins to Reluctant Ewes, a Naturalist Looks at Parenting in the Animal World and Ours* (New York: Harmony Books, 1997). See also Joanne Ellison Rodgers, *Sex: A Natural History* (New York: Times Books, 2002); and Olivia Judson, *Dr. Titian's Sex Advice to All Creation* (New York: Metropolitan Books, 2002).
2. Randy Thornhill and Craig T. Palmer, *A Natural History of Rape: Biological Bases of Sexual Coercion* (Cambridge: MIT Press, 2000).
3. *Ibid.*, p. 6.
4. Susan Brownmiller, *Against Our Will: Men, Women, and Rape* (New York: Simon and Schuster, 1975).
5. Randy Thornhill and Craig T. Palmer, "Why Men Rape," *The Sciences* 40 (2000), 30–36. "The initial print run of 10,000 copies sold out by the first week of February [a week after it was released], and at least another 10,000 copies were ordered," "Rape Debate," *News for Women in Psychiatry* 19, no. 2 (spring 2001): 6–7. See also Laura Flanders, "Natural Born Rapists," *In These Times*, March 6, 2000, p. 11.
6. Thornhill and Palmer, *A Natural History of Rape*, pp. xii–xiii.
7. Allied critiques—from evolutionary biology, psychology, and anthropology, among other fields—have recently been collected in *Evolution, Gender, and Rape*, ed. Cheryl Brown Travis (Cambridge: MIT Press, 2003).
8. Thornhill and Palmer, *A Natural History of Rape*, p. 12.
9. Other texts in the tradition of evolutionary psychology include Leda Cosmides and John Tooby, "From Evolution to Behavior: Evolutionary Psychology as the Missing Link," in *The Latest on the Best: Essays on Evolution and Optimality*, ed. John Dupré (Cambridge: MIT Press, 1987), pp. 277–306; A. Figueredo and L. McCloskey, "Sex, Money, and Paternity: The Evolutionary Psychology of Domestic Violence," *Ethology and Sociobiology* 14 (1993): 353–79; Jerome Barkow, Leda Cosmides, and John Tooby, eds., *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (Oxford: Oxford University Press, 1995); Charles Crawford and Dennis Krebs, eds., *Handbook of Evolutionary Psychology: Ideas, Issues, Applications* (Mahwah, N.J.: Lawrence Erlbaum Associates, 1997); David Buss, *Evolutionary Psychology: The New Science of the Mind* (Boston: Allyn and Bacon, 1999).
10. Thornhill and Palmer, *A Natural History of Rape*, p. 17.
11. The germinal text here is Robert Trivers, "Parental Investment and Sexual Selection," in *Sexual Selection and the Descent of Man, 1881–1971*, ed. B. Campbell (London: Heinemann, 1972), pp. 136–79, which builds on the arguments made one hundred years earlier in Charles Darwin, *The Descent of Man and Selection in Relation to Sex* (1871; reprint, Princeton N.J.: Princeton University Press, 1981). Linda Marie Fedigan analyzes how Darwin assumed the very categories—male and female—for which he was seeking an evolutionary genesis; "The Changing

- Role of Women in Models of Human Evolution," *Annual Review of Anthropology* 15 (1986): 25–66.
12. Thornhill and Palmer, *A Natural History of Rape*, p. 40.
  13. *Ibid.*, p. 7.
  14. *Ibid.*, pp. 20–21.
  15. *Ibid.*, p. 16.
  16. *Ibid.*, p. 61.
  17. *Ibid.*, p. 9. There is something odd in the way they lead up to this point: "The challenge in applying an ultimate or evolutionary analysis is not to determine whether an adaptation is a product of selection; it is to determine the nature of the selective pressure that is responsible for the trait. That selective pressure will be apparent in the functional design of the adaptation." If it is apparent, why is it a challenge?
  18. *Ibid.*, p. 3.
  19. Anne Fausto-Sterling, *Myths of Gender: Biological Theories about Women and Men*, rev. ed. (New York: Basic Books, 1992), p. 160.
  20. Thornhill and Palmer, *A Natural History of Rape*, p. 120.
  21. *Ibid.*
  22. *Ibid.*, p. 2.
  23. *Ibid.*, p. 142.
  24. *Ibid.*, p. 44.
  25. *Ibid.*, p. 2.
  26. *Ibid.*, p. 42. Thornhill and Palmer take for granted a preexisting difference between males and females, as did Darwin in *The Descent of Man and Selection in Relation to Sex*. Thornhill and Palmer's discussion of jealous husbands presumes that men have a sexual right over women; this is what Carole Pateman has called the "sexual contract." Pateman, *The Sexual Contract* (Stanford: Stanford University Press, 1988). Indeed, Thornhill and Palmer's discussions of marriage and husbands appear to be based on a presumption that females are the property of males.
  27. Hamish G. Spencer and Judith C. Masters, "Sexual Selection: Contemporary Debates," in *Keywords in Evolutionary Biology*, ed. Evelyn Fox Keller and Elizabeth A. Lloyd (Cambridge: Harvard University Press, 1992), pp. 294–301; quote is on p. 295.
  28. Thornhill and Palmer, *A Natural History of Rape*, p. 63.
  29. *Ibid.*, p. 64–65. In response to other criticisms of this point they write: "We do discuss research on insects called scorpionflies that has identified a clamp on the top of the male's abdomen as an adaptation specifically for rape. This illustrates what an adaptation for rape is, but it does not follow that because scorpionfly males, and males of other non-human species, have an adaptation for rape, that, therefore, men do too"; [www.aec.at/festiva2000/texte/randy\\_](http://www.aec.at/festiva2000/texte/randy_)

thornhill\_e.htm, accessed on April 27, 2004. This raises the question of why we “must” look in the male psyche at all. Thornhill and Palmer seem to want to have it both ways.

30. Thornhill and Palmer, *A Natural History of Rape*, p. 65.
31. Richard Lewontin, *Biology as Ideology: The Doctrine of DNA* (New York: HarperPerennial, 1991), p. 95.
32. Thornhill and Palmer, *A Natural History of Rape*, p. 51.
33. *Ibid.*, pp. 44, 71, 74. This could be scientifically tested, they suggest, by having men “masturbate to audio and video depictions of rapes and of consensual sex acts”; *ibid.*, p. 74. It is unlikely that a proposal to show people videos of fake rapes, while letting them think these are real, would be approved by a university’s human subjects committee, which, as Thornhill’s employer, the University of New Mexico puts it, seeks to “ensure the safe and ethical conduct of research that ultimately will protect the rights and welfare of human subjects in an atmosphere of mutual trust and scientific integrity in the pursuit of knowledge”, [www.unm.edu/~rcs/itb\\_mission\\_statement.html](http://www.unm.edu/~rcs/itb_mission_statement.html), accessed on April 27, 2004. Moreover, from the point of view of experimental design, we could not assume that men watching a video of a fake rape would identify with the rapist; they might identify with the woman’s husband, or the woman herself.
34. Thornhill and Palmer, *A Natural History of Rape*, p. 103.
35. *Ibid.*, pp. 116–18.
36. Stephen Jay Gould, *The Structure of Evolutionary Theory* (Cambridge: Harvard University Press, Belknap Press, 2002), p. 1264.
37. Lewontin, *Biology as Ideology*. See also Donna Haraway, “Animal Sociology and a Natural Economy of the Body Politic: A Political Physiology of Domination,” in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), pp. 7–20; Haraway, “The Biological Enterprise: Sex, Mind, and Profit from Human Engineering to Sociobiology,” in *Simians, Cyborgs, and Women: The Reinvention of Nature*, pp. 43–68; A. Leah Vickers and Philip Kitcher, “Top Sociobiology Reborn: The Evolutionary Psychology of Sex and Violence,” in *Evolution, Gender, and Rape*, ed. Cheryl Brown Travis (Cambridge: MIT Press, 2003), pp. 139–68; Jerry A. Coyne, “Of Vice and Men: A Case Study in Evolutionary Psychology,” in *Evolution, Gender, and Rape*, ed. Cheryl Brown Travis (Cambridge: MIT Press, 2003), pp. 171–89; Elisabeth A. Lloyd, “Violence against Science: Rape and Evolution,” in *Evolution, Gender, and Rape*, ed. Cheryl Brown Travis (Cambridge: MIT Press, 2003), pp. 235–61.
38. Thornhill and Palmer argue that their explanations are not “just-so” stories, because their evolutionary theory “provides criteria for determining whether a given aspect of an organism . . . is an adaptation”; Thornhill and Palmer, *A Natural History of Rape*, pp. 113–14. However, the criteria used by Thornhill and Palmer in the preceding pages—most of which are about how to

infer adaptation and function—are subjective, as we point out throughout this chapter.

39. *Ibid.*, pp. 59–60.
40. *Ibid.*, pp. 64–65.
41. See Heather Paxson, “Rationalizing Sex: Family Planning and the Making of Modern Lovers in Urban Greece,” *American Ethnologist* 29, no. 2 (2002): 307–44.
42. We do not try to argue that there have been “rape-free” human societies; this would assume that rape is the same thing everywhere. Though for quite different reasons from Thornhill and Palmer we also find ourselves unpersuaded by the universalist arguments made in Peggy Reeves Sanday, *Female Power and Male Dominance: On the Origins of Sexual Inequality* (Cambridge: Cambridge University Press, 1981).
43. Claudia Card, “Rape as a Weapon of War,” *Hypatia* 11, no. 4 (1996): 5–18.
44. Susan Gal and Gail Kligman, *The Politics of Gender after Socialism* (Princeton, NJ: Princeton University Press, 2000), p. 27.
45. “Sexual Violence as a Weapon of War,” part of the United Nations Children’s Fund 1996 report *The State of the World’s Children, 1996*, [www.unicef.org/sowc96pk/sexviol.htm](http://www.unicef.org/sowc96pk/sexviol.htm), accessed on April 27, 2004.
46. Marlise Simons, “For the First Time, Court Defines Rape a War Crime,” *New York Times*, June 28, 1996.
47. “Sexual Violence as a Weapon of War.”
48. Alexandra Stiglmayer, ed., *Mass Rape: The War against Women in Bosnia-Herzegovina*, trans. Marlon Faber (Lincoln: University of Nebraska Press, 1994).
49. Veena Das, “Language and Body: Transactions in the Construction of Pain,” in *Social Suffering*, ed. Arthur Kleinman, Veena Das, and Margaret Lock (Berkeley: University of California Press, 1997), pp. 67–91; quote is on p. 83.
50. Rwandan President Paul Kagame, quoted in Peter Landesman, “A Woman’s Work,” *New York Times Magazine* (September 16, 2002).
51. Thornhill and Palmer, *A Natural History of Rape*, p. 17.
52. Ruth Frankenberg, *The Social Construction of Whiteness: White Women, Race Matters* (Minneapolis: University of Minnesota Press, 1993), p. 73.
53. Angela Davis, “Rape, Racism, and the Myth of the Black Rapist,” in *Women, Race, and Class* (New York: Vintage, 1981), pp. 172–201.
54. *Ibid.*, p. 175.
55. “The myth of the black rapist . . . [must bear a good portion of the responsibility] for the failure of anti-rape theorists to seek the identity of the enormous numbers of anonymous rapists who remain unreported, untried, and unconvicted,” *ibid.*, p. 199.
56. Peggy Reeves Sanday, *Fraternity Gang Rape: Sex, Brotherhood, and Privilege on Campus* (New York: New York University Press, 1990).

57. Carol Delaney, "The Meaning of Paternity and the Virgin Birth Debate," *Man* 21, no. 3 (1986): 494-513.
58. Emily Martin, "The Egg and the Sperm: How Science Has Constructed a Romance Based on Stereotypical Male-Female Roles," *Signs* 16 (1991): 485-501.
59. See, for example, Beth Gerstein, "Survivorship: Bay Area Rape Crisis Counselors' Narratives of Rape, Sexuality, and Identity" (Ph.D. diss., Department of Anthropology, Stanford University, 1998). See also Cathy Winkler, *One Night: Realities of Rape* (Walnut Creek, Calif.: AltaMira Press, 2002).
60. Carole S. Vance, "Pleasure and Danger: Toward a Politics of Sexuality," in *Pleasure and Danger: Exploring Female Sexuality*, ed. Carole S. Vance (Boston: Routledge and Kegan Paul, 1984), pp. 1-27.
61. On male rape, see Riche J. McMullen, *Male Rape: Breaking the Silence on the Last Taboo* (London: GMP Publishers, 1990); Michael Scarce, *Male on Male Rape: The Hidden Toll of Stigma and Shame* (New York: Insight Books, 1997).
62. Sanday, *Female Power and Male Dominance*. Psychoanalytic theorists might suggest on this evidence that, if there is any sort of analogy in the human male psyche to the "rape clamp" of the male scorpionfly, it would be the phallus, the symbolic complement to the penis that imbues maleness with a sense of authoritative power; however, this would be an ethnocentric view of human nature.
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