40

41

42 43

98

# pop culture

### The Great Porn Experiment

MARNIA ROBINSON

To the extent that present day conditions are different from ancestral conditions, the ancestral genetic advice will be wrong.

-Richard Dawkins

The collision of widespread internet porn use with man's ancient mammalian brain constitutes one of the fastest-moving, most global experiments ever unconsciously conducted. Consider the following:

In 2009, the Canadian sociologist Simon Louis Lajeunesse had to revise his proposed study to examine the effects of today's porn videos. He couldn't find any "porn virgins" to serve as a control group among the male students at a major university.

Of nearly 100 porn users who competed to give up porn for two weeks, *seventy percent* could not. Contest volunteers reported uncomfortable withdrawal symptoms, not unlike substance abusers.

In 2010, a US Government report revealed that Securities and Exchange Commission officials were viewing porn for hours a day while on the job.

Up to sixty percent of college-age males find aspects of their porn viewing problematic according to a 2009 survey.<sup>1</sup>

With porn, as with drugs and alcohol, "too much" varies from user to user. Nonetheless, adopting an evolutionary perspective, we can safely say that the human brain is especially vulnerable to the extraordinary stimulation of today's porn—with unanticipated and escalating consequences. As the psychiatrist Norman Doidge observes, "pornographers promise healthy pleasure and relief from

POP CULTURE

sexual tension, but what they often deliver is addiction, tolerance, and an eventual decrease in pleasure." Since free porn videos became widely available at high speed some five years ago, heavy porn users increasingly report that they can no longer become aroused by real mates. Some also suffer from an early onset of erectile dysfunction.

Humanity's Great Porn Experiment acquires unsuspecting, eager subjects whenever new computers go online. Unfortunately, our society is currently dithering in debates about free speech, unacceptable content, sexual repression, and harm to third parties. Meanwhile, one of porn's most sinister risks is overlooked: its power to hijack the brain. To understand it better, we have to think about how evolution has shaped our appetites.

Mating and eating are the two primary drives for which our brain evolved its appetitive *go-get-it* circuitry. These drives seem innocuous because they're second nature. If you were having intrusive thoughts about alcohol, you'd suspect you had a problem, but you would probably think nothing of intrusive thoughts about sex. Enthusiasm for sexual stimuli is a genetic program, not unlike a yen for mother's milk. It's nearly universal. In contrast, many people find drugs, nicotine, and alcohol aversive. This difference might well explain why porn users often report being hooked on porn without having previous compulsions.<sup>3</sup> Our brains evolved to push us toward sex and food, not toward addictive drugs, and, "never before, in the history of pornography, has so much been so cheaply available to so many."<sup>4</sup>

We all know how potent today's extraordinarily enticing junk food is: 64 percent of Americans are overweight, and half of those obese. Why would highly stimulating porn be *less* compelling or risky? Sex is why we're here—at least from the perspective of our genes. Desire can override our intellect and urge us to make babies, even at great personal risk. In fact, mammalian brains may generally be wired to binge on especially alluring food and sex—to get as much as possible while the getting is good. Highly valued stimuli *feel* like they will satisfy more, but they can trigger lingering dissatisfaction, which drives us beyond our normal limits—and, sometimes, beyond common sense. Our brain reduces our sensitivity to pleasure, and as a result *it does* 

not register fulfillment. This is why many of us can't easily say, "no." Neither sex nor food is inherently maladaptive. What might well be maladaptive is the combination of our intrinsic wiring and today's super-enticements.

#### SELFISH GENES, INFIDELTIY, AND PAIR BONDING

Once we adopt an evolutionary perspective, the appeal of internet porn is no mystery. The chance to fertilize a novel partner is a genetic bonanza that natural selection does much to encourage. Producing offspring with different mates means that genes flow through diverse immune systems, offering wider resistance and improved odds of genetic immortality. Wandering genitals are so valuable to reproductive success that there are in fact *no* truly monogamous mammal species. Ninety-seven percent of them conduct their love lives according to a simple formula: "Mate to satiety, and lose interest for some time . . . unless a novel mate shuffles into view, in which case, zing!" This "Coolidge effect" is part of the common knowledge among evolutionists. They are perhaps less commonly aware that the effect has been observed in females, too.<sup>5</sup>

In 3 percent of mammal species, humans included, the program favoring a variety of sexual partners coexists with a powerful urge to form pair bonds—at least for a time. This class of mammals is *socially* monogamous, but DNA tests show that all pair bonders still exchange genes on the side. Humans form pair bonds because it furthered the survival of human offspring. While the offspring of other primates can at least cling to their mother at birth, a human baby can't even hold up her head. She has such a large skull that she has to be born, in effect, prematurely. She requires years, and a lot of provender, to develop into a competent adult. In contrast, most mammals need only the mother's mammary glands for a time to make it to adulthood. For humans, having our parents fall in love—at least for long enough to fall in love *with us*—isn't a luxury.

The interplay between these two evolutionary programs—the appeal of a bonded mate versus the intoxication of novel genes—creates an uneasy tension. Whatever collateral domestic damage this tension might have produced, it has evidently served our genes well. We are, after all, a

MARNIA ROBINSON

remarkably prolific species. Now, however, porn might be rapidly tipping this delicate balance in a new direction. Earlier this year, for example, musician John Mayer confessed that he now prefers hours of porn to relationships with real women. While preparing this article, I exchanged electronic messages with a number of people who offered testimony about the experience of porn use. As one such interviewee explained, "Porn was easy excitement. I didn't interact with others because it took too much work, I had to think too hard, and interaction was 'boring.' I was numb and my senses were dulled. And I feared they would continue to be that way even after I quit." Months after quitting porn, he added, "I'm dating a woman again, and I'm more attracted to her real body than I ever was to porn girls. I never imagined this would happen, and it is so exciting. The colors are back in my life!"

#### PORN, CRACK, AND KRISPY KREMES

No doubt the evolutionary programming that primes us to exploit opportunities to have sex with novel partners, or binge on sweet or high-fat foods, once worked well enough. After all, calories could be converted to a bit of extra fat for easy storage and transport, and willing strangers were probably not all that plentiful. In short, sparse environments and scanty populations limited our opportunities for overindulgence. Today, however, we're inundated with synthetic, super-potent temptation. Junk food is carefully crafted to goose our primal hankering for fat and sugar. In a single session, porn users can attempt to fertilize more (virtual) novel mates than most of their ancestors laid eyes on in a lifetime. Such supranormal stimulation sets the brain abuzz with a loud, now erroneous, message: "This activity is really valuable because it's causing a mammoth release of exciting neurochemicals. Focus your future attention on everything connected with it. Do it as often as possible!" To ensure we keep doing it, our brains temporarily numb our pleasure response. Normal tastes and normal feelings of satisfaction don't return for weeks after we stop.7 Meanwhile, we're looking around eagerly for something to "hit the spot."

The source of these commands is our primitive reward circuitry, most of which lies just behind the nose in the

limbic system. Our reward circuitry gives rise to our gut feelings, our drives, our urges to gobble sweets, drink when thirsty, and have sex. It plays critical roles in our moods, judgments, and choices between competing priorities. It's a vital part of our emotional attachment mechanism. It bonds us to our offspring, and it causes us to fall in—and out—of love. Finally, it is the epicenter of every addiction.

Throughout the course of evolution, the limbic system has executed its tasks with such blinding efficiency that it hasn't changed very much in over one hundred million years. The same neurochemicals and nerve cell receptors still perform roughly the same functions in all mammals. And indeed, the limbic system has been called the mammalian brain. We tend to rely on our reward circuitry, our inner compass, without thinking about its commands very much. When we're under stress and parts of it are bleeping especially loud, anxious signals, we trust it to steer us to relief. Of course, our brain's more recently evolved frontal cortex can trump such impulses. That's how we exercise willpower or discernment. Yet there are times when it takes so much effort to resist these subconscious commands that it's normal to rationalize giving in. "Everyone else is doing it!" "I need something to take the edge off." Alas, when users attempt to withdraw from heavy porn/masturbation, many suffer debilitating distress for weeks. It's easy to dive back in-and get caught in an escalating porn loop as the evermore-numbed brain seeks greater stimulation to medicate the pain of withdrawal. Jay Phelan is a professor of biology at UCLA and coauthor of Mean Genes.8 When I interviewed him, he made this point:

All excessive stimulations of the reward circuitry of the brain that are not tied to the behaviors for which the circuitry originally evolved are problematic. While this has become appreciated for drug addiction such as cocaine (and for issues relating to food), it is not yet appreciated for porn.

We need to understand who we are as a species and why we have self-control problems. Internet porn is another manifestation of "mismatch," the phenomenon of our modern world

100 POP CULTURE

1

2

3

5

6 7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

3637

38

39

40

41

42

deviating from the world to which we became adapted over evolutionary time.

In short, a potent "Focus on this!" command in response to supernormal stimulation doesn't reliably indicate that the activity or substance is actually worthy of our exaggerated attention—and our consequent inattention to other goals or people in our life.

I'm twenty-five years old and I've been using porn for fourteen years. There was a period of two years though where I couldn't look at it because I was on a government facility where pornographic sites were banned. During those years I was at my peak of creativity: writing poetry, songs, and stories. I also talked to everyone, not shying away from a soul. When I got home I went back to spending the day looking at the nakedness of the Internet. Two years later, I've become an introvert, secluding myself away, and I'm shy and depressed most of the time. —Jason

The brain's reward circuitry can only weigh priorities according to which give off the loudest neurochemical signals. In a brain that is temporarily numbed to pleasure, a hot video easily trumps companionship, flirting, kids, and jobs:

Unnaturally strong explosions of synthetic experience and sensation and pleasure evoke unnaturally strong degrees of habituation. . . . Soon we hardly notice anymore the fleeting whispers of pleasure caused by leaves in autumn, or by the lingering glance of the right person, or by the promise of reward that will come after a long, difficult, and worthy task.<sup>9</sup>

Hot videos offer false-positive results brought about by a surge of dopamine. Humans are better served by securing close, trusted companionship and lots of affectionate touch. Both trigger the release of natural antidepressant, anti-anxiety neurochemicals, which help to keep our brains in balance, our perception clear, and our judgment sound.

I have so much more energy, I'm less moody, I have more enthusiasm and motivation for work, I don't feel drained all the time, and I feel a deeper sense of connection with everything around me. But the biggest change it has made is in my relationship. My girlfriend and I feel much closer to each other already. —Rob

As Doidge observes, "The addictiveness of Internet pornography is not a metaphor" (*Brain*, 106). Today's porn users are seduced into training sessions that meet all the conditions required for plastic change of the brain: rapt attention, reinforcement (sexual arousal), and creation and strengthening of new neural connections. These changes narrow future attention. Other brain changes numb users to life's subtler pleasures, such as the charms of normal partners, soothing affection, and friendly interaction.

#### ADDITION AND TOLERANCE

If today's porn tastes were purely the product of millions of years of evolution, they would be similar, and wouldn't shift with time. Instead, as Doidge notes, "Hardcore pornography now explores the world of perversion, while softcore is now what hardcore was a few decades ago. . . . When pornographers boast that they are pushing the envelope by introducing new, harder themes, what they don't say is that they must, because their customers are building up a tolerance to the content" (Brain, 102). Ironically, porn does not even ease sexual frustration, except in the very short-term, sometimes. Extreme stimulation interferes with feelings of satisfaction. As a consequence, finding "the hottest" porn video to produce the strongest climax leads to less satisfaction soon afterward, not more. It's not uncommon for users to binge because they cannot scratch their itch. Yet most don't even question what's going on until they suffer from erectile dysfunction or find themselves watching things their limbic brains find shocking/stimulating and their rational brains find revolting—just to climax. At the same time, they

MARNIA ROBINSON

101

1

2

4

5

6 7

8 9

10

11

12

13

14

15

16

17

18

19

20

21

2223

2425

26

27

28 29

30

31

32

33

34

35

36

37

38

39

40

41

are hypersensitive to anything their brains associate with "relief," and this vulnerability remains after recovery.

I've noticed that when I do succeed in avoiding porn for a week or two, I don't have any problems with erections. Whereas if I look at porn, I can't get it up without it. Trouble is, each time I get better I believe I'm cured, and go back to daily porn/masturbation. I wish I could stay away from it permanently. —Damon

It is not unusual for some users caught in the porn loop to feel intense social anxiety, depression, despair, apathy, and so forth. Until they completely reboot their brains, life seems meaningless—but for the single-minded pursuit of hotter stimuli. The lengthy withdrawal (often months) required to restore their brains to equilibrium is sometimes so unbearable (shakes, insomnia, despair, cravings, severe headaches, relapses, irritability) that many feel they have no choice but to keep using. They don't realize there is light at the end of the tunnel because it is so long and dark.

For years my erections got weaker and weaker, despite using more and more stimulating porn. Well—for those out there who may not have tried stopping porn—I have *no* erection strength problems anymore [after several months of hellish withdrawal]. I think tonight's is the strongest erection I have had in years. Having all these erections is like being a teen again. As bad as the cravings are right now, I am happy about the renewed strength of my body. —Cory

#### PORN'S IMPACT ON HUMAN ATTACHMENT

Like it or not, humans are tribal, pair-bonding primates. We're wired to thrive on close, trusted companionship and warm affection (as well as exercise, accomplishment, and so forth). Companionship releases healthy levels of dopamine and other "feel good" neurochemicals, such as oxytocin, which help balance us. The gains from connection show up in very real terms. For example, HIV patients with a

partner live longer and develop AIDS less rapidly. Wounds heal twice as fast with companionship as compared to isolation. Warm touch between married couples reduces various measures of stress. Yet the most profound gifts of close connection may be psychological. Close emotional connections are associated with lower rates of addiction and depression. They change the neural patterns and brain chemistry of those who engage in them, bolstering their sense of self and making empathy and socialization possible.

It is getting easier to resist. Porn doesn't have the power it once had over me, nor is it draining my self worth, nor am I a lust ball all day. I can do other things, like socialize. I feel other things. —Ian

Humans cannot regulate their moods on their own, at least not for long. Prisoners in solitary confinement often go insane. In other words, it's *normal* to feel anxious or depressed when isolated. As Philip J. Flores reminds us in *Addiction as an Attachment Disorder*, "Attachment is not just a good idea; it's the law." It's also some of the best health insurance the planet offers.

The stereotypical porn addict used to be a person who, for whatever reason, *couldn't* form healthy relationships. Now, well-adjusted men are succumbing to the crack-like appeal of today's extreme videos. Some are also isolating, seeking medication for unaccustomed depression and anxiety, and experiencing social anxiety.

This porn addiction, all of it, the withdrawals, the weird emotional stuff, is losing its power. I'm unclogging a drain. I'm pulling out one hair, but it's pulling everything connected with it out as well. I wish I had known this one hair was the culprit behind all my mental maladies years ago! —Kyle

Frequent affection is normally very soothing and rewarding for a pair-bonded species—with or without sex. But when we're not able to feel subtle pleasures due to blunted brain sensitivity, affection seems pointless. Instead of tenderness, we may want "space" and extreme stimuli. Mere exposure to images of foxy females can cause a man to devalue his real-life partner. In one study, males rated a partner lower not only on attractiveness, but were also less in love with her. Another study showed that exposure to even nonviolent porn makes men and women more likely to believe that women like submission during sex, and causes them to devalue marital fidelity.<sup>12</sup>

My boyfriend says he's unable to perform sexually due to his porn use. I love him so much but feel absolutely devastated that he felt he had to turn to porn. I always thought we had such a great sex life. I am twenty-six years old and consider myself to be quite attractive, but I now feel like shit. I have no confidence or self-esteem left. —Mia

"With science-fiction strangeness, porn [is] competing with real-life partners, and [is] even emerging as the most important object of some clients' sexual desires," writes sex therapist Wendy Maltz. In short, compulsive porn use can be both a substitute and an obstacle for interpersonal relationships. Until a person relinquishes all addictions, including sex addictions, he cannot tap the "only source of healthy affect regulation that is available to [him]: healthy interpersonal attachment" (*Attachment*, 11). When recovering users force their attention away from their habitual "relief," their reward circuitry looks around for other sources of pleasure. Eventually it finds those it evolved to find: friendly interaction, real mates, time in nature, exercise, accomplishment, and so forth.

After a few days I noticed increased energy, increased attention, and higher self-esteem. After a month—although it took several tries to get there—those improvements were all through the roof. A couple of months later, I was having real sex. It is nice to get aroused by little things, like a revealing blouse or just a woman's flowing, shiny hair and fragrance. —Nick

Under normal circumstances, we humans are driven more by a need for attachment than by other sources of pleasure (*Attachment*, xi). We need this interdependence, not just at key points of our childhood, as Freud postulated, but throughout our lives. For example, connection helps reduce cortisol, which can otherwise weaken our immune system under stress. "It's much less wear and tear on us if we have someone there to help regulate us," explains psychologist/neuroscientist James A. Coan.<sup>14</sup>

## THE GREAT PORN EXPERIMENT AND HUMAN EVOLUTION

Our cultural mind-set is that orgasm and masturbation are such tonics that porn is practically a health-aid.<sup>15</sup> Yet porn can only produce orgasms; it can't meet our evolved needs for human connection. If today's computer literate men weren't using so much porn, it seems likely that they would have less depression and anxiety, greater willingness to approach real mates, more charisma.

I feel again. I feel emotions again. My interest in women is heightened, my confidence is up and gives me motivation again. I'm twenty-eight now, and until the last couple of years I felt I had the maturity of a fifteen-year-old. But as I heal and recover from this addiction, I've felt emotions I've never had to deal with before. It has helped me grow up. —Adrian

It's unfortunate that research can seldom furnish an accurate picture of a rapid trend. For example, experts once assured us that marriage contentment improved in later years. Finally, a team reexamined the data and realized that the improvement was an illusion. In fact, people in earlier generations were actually happier throughout their marriages. They had different expectations about marriage, and perhaps significantly, less exposure to the growing snowball of increasingly compelling synthetic sexual stimuli.

Will the link between super-stimulating internet porn, numbed brains, and side effects like "copulatory impotence" finally motivate frequent porn users to go through the discomfort of returning their brains to normal sensitivity?<sup>17</sup> Or will future generations conclude that The Great Porn Experiment radically altered the course of human evolution?

MARNIA ROBINSON

40

41

42

43

1

2

#### BIBLIOGRAPHY

- Bridges, A. J. "Pornography's Effects on Interpersonal Relationships." http://www.winst.org/family\_marriage\_and\_democracy/social\_costs\_of\_pornography/Bridges%20-%20Pornography%27s%20Effects%20on%20Interpersonal%20Relationships.pdf.
- Burnham, Terry, and Jay Phelan. Mean Genes: From Sex to Money to Food: Taming Our Primal Instincts. New York: Penguin Putnam, 2000.
- Detilliona, C. E., Tara K. S. Craft, Erica R. Glasper, Brian J. Prendergast, and A. Courtney DeVries. "Social Facilitation of Wound Healing." *Psychoneuroendocrinology* 29 (2004): 1004–11.
- Doidge, Norman. The Brain That Changes Itself. New York: Penguin Group, 2007.
- Fidelman, Charlie. "Study Spoiled by Scarcity of 'Porn Virgins." *Montreal Gazette*, December 7, 2009, http://www.van-couversun.com/life/Study+spoiled+scarcity+porn+virgins/2298048/story.html.
- Flores, Philip J. Addiction as an Attachment Disorder. Lanham, MD: Jason Aronson, 2004.
- Heinrichs, M., T. Baumgartner, C. Kirschbaum, and U. Ehlert. "Social Support and Oxytocin Interact to Suppress Cortisol and Subjective Responses to Psychosocial Stress." Biological Psychiatry 54 (2003): 1389–98.
- Holt-Lunstad, J., W. A. Birmingham, and K. C. Light. "Influence of a 'Warm Touch' Support Enhancement Intervention Among Married Couples on Ambulatory Blood Pressure, Oxytocin, Alpha Amylase, and Cortisol." *Psychosomatic Medicine* 70 (2008): 976–85.
- Johnson, Paul M., and Paul J. Kenny. "Dopamine D2 Receptors in Addiction-Like Reward Dysfunction and Compulsive Eating in Obese Rats." *Nature Neuroscience* 13 (2010): 635–41. http://www.nature.com/neuro/journal/v13/n5/ pdf/nn.2519.pdf.
- Kalman, Thomas P. "Clinical Encounters with Internet Pornography." Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry 36 (2008): 593–618.
- Karl, Jonathan. "SEC Porn Problem: Officials Surfing Sites During Financial Crisis, Report Finds." *ABC: Good Morning America*, April 23, 2010, http://abcnews.go.com/GMA/sec-pornography-employees-spent-hours-surfing-porn-sites/story?id=10452544.
- Kenrick, D. T., S. E. Gutierres, and L. L. Goldberg. "Influence of Popular Erotica on Judgments of Strangers and Mates." *Journal of Experimental Social Psychology* 25 (1989): 159–67.

- Lester, G. L., and B. B. Gorzalka. "Effect of Novel and Familiar Mating Partners on the Duration of Sexual Receptivity in the Female Hamster." *Behavioral and Neural Biology* 49 (1988): 398–405.
- Lewis, Thomas, Fari Amini, and Richard Lannon. A General Theory of Love. New York: Vintage, 2001.
- Maltz, Wendy. "Is Porn Bad for You?" *AlterNet*, May 23, 2010, http://www.alternet.org/sex/146957/is\_porn\_bad\_for\_you?page=entire.
- Manning, J. C. "The Impact of Internet Pornography on Marriage and the Family: A Review of the Research. Sexual Addiction and Compulsivity 13 (2006): 131–65.
- Mayer, John. "*Playboy* Interview: John Mayer." *Playboy*, March 2010, http://www.playboy.com/articles/john-mayer-playboy-interview/index.html.
- Parker-Pope, Tara. "Is Marriage Good for Your Health?" *New York Times*, April 12, 2010, http://www.nytimes.com/2010/04/18/magazine/18marriage-t.html.
- Robinson, Marnia. Cupid's Poisoned Arrow: From Habit to Harmony in Sexual Relationships. Berkeley: North Atlantic Books, 2009.
- Ross, Catherine E. "Reconceptualizing Marital Status as a Continuum of Social Attachment." *Journal of Marriage and the Family* 57 (1995): 129–40.
- Sapolsky, Robert M. Why Zebras Don't Get Ulcers. 4th ed. New York: Henry Holt, 2004.
- Twohig, Michael P., Jesse M. Crosby, and Jared M. Cox. "Viewing Internet Pornography: For Whom Is It Problematic, How, and Why?" Sexual Addiction and Compulsivity 16 (2009): 253–66.
- Van Laningham, Jody, David R. Johnson, and Paul R. Amato. "Marital Happiness, Marital Duration, and the U-Shaped Curve: Evidence from a Five-Wave Panel Study." Social Forces 79 (2001): 1313–41.
- White, Helene Raskin, Allan V. Horwitz, and Sandra Howell-White. "Becoming Married and Mental Health: A Longitudinal Study of a Cohort of Young Adults." *Journal of Marriage and the Family* 58 (1996): 895–907.
- Wong, David. "The 10 Steps to Porn Addiction: Where Are You?" \*Cracked.com, http://www.cracked.com/article\_15725\_10-steps-porn-addiction-where-are-you.html.
- Young, Jim, Sabina De Geest, Rebecca Spirig, Markus Flepp, Martin Rickenbach, Hansjakob Furrer, Enos Bernasconi, Bernard Hirschel, et al. "Stable Partnership and Progression to AIDS or Death in HIV Infected Patients Receiving Highly Active Antiretroviral Therapy: Swiss HIV Cohort Study." *BMJ* 328 (2004): 15.

104 POP CULTURE

Zillman, D., and J. Bryant. "Effects of Prolonged Consumption of Pornography on Family Values." *Journal of Family Issues* 9 (1988): 518–44.

#### **FILMOGRAPHY**

Adult Entertainment: Disrobing an American Idol. Director Lance Tracy, 2007. http://www.1726entertainment.com/.

#### **NOTES**

- 1. Fidelman, "Study Spoiled"; Wong, "Porn Addiction"; Karl, "SEC Porn Problem"; Twohig, Crosby, and Cox, "Internet Pornography."
  - 2. Doidge, Brain That Changes, 107; hereafter cited as Brain.
  - 3. Manning, "Impact."
  - 4. Kalman, "Clinical Encounters."
  - 5. Lester and Gorzalka, "Female Hamster."
  - 6. Mayer, interview.
  - 7. Johnson and Kenny, "Dopamine D2 Receptors."

- 8. Burnham and Phelan, Mean Genes.
- 9. Sapolsky, Zebras, 133.
- 10. Young et al., "Stable Partnership"; Detilliona et al., "Social Facilitation"; Holt-Lunstad, Birmingham, and Light, "'Warm Touch'"; White, Horwitz, and Howell-White, "Becoming Married"; Ross, "Marital Status."
- 11. Flores, Addition as an Attachment Disorder, hereafter cited as Attachment. Flores is citing Lewis, Amini, and Lannon, General Theory of Love.
- 12. Kenrick, Gutierres, and Goldberg, "Influence of Popular Erotica"; Zillman and Bryant, "Prolonged Consumption." Also see the documentary film *Adult Entertainment*.
  - 13. Maltz, "Is Porn Bad?"; Bridges, "Pornography's Effects."
- 14. Heinrichs et al., "Social Support"; Coan in Parker-Pope, "Marriage."
  - 15. Robinson, Cupid's Poisoned Arrow, 221-29.
  - 16. Van Laningham, Johnson, and Amato, "Marital Happiness."
- 17. Copulatory impotence is a term coined by the Onanians, www.onania.org (chronic/compulsive masturbation).

MARNIA ROBINSON

1/17/11 11:3

