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> J. Michael Bailey Aaron S. Greenberg

THE SCIENCE AND ETHICS OF CASTRATION: LESSONS FROM THE MORSE CASE

J. Michael Bailey & Aaron S. Greenberg*

On March 11, 1997, in a Chicago suburb, Jeffrey Morse used a toy gun in an attempt to coerce a 9-year-old girl into his car to touch his penis. The girl escaped, and Morse was apprehended shortly afterwards. He confessed to the police his guilt in this assault and in a similar offense several months before. During his incarceration and prior to making a plea, Morse raised the possibility with his attorney, Paul Wharton, of being surgically castrated. Subsequently, Morse pled guilty to aggravated criminal sexual assault and aggravated criminal sexual abuse. Prior to sentencing, he was granted permission to leave the jail (under armed guard) to undergo castration. He did so on January 20, 1998, and received considerable national attention.¹

Morse's sentencing hearing, on February 24 and March 3, 1998, included the testimony of four expert witnesses, two for Morse and two for the State. These experts testified regarding the evidence that surgical castration reduces sex offenders' recidivism rates, and also about the wisdom of reducing Morse's sentence. Morse's witnesses (including the first author of this Article) testified that Morse was very unlikely to commit another sex crime, and the State's witnesses testified that his risk of reoffending was too high to justify a reduced sentence. Immediately after closing arguments, Judge Donald Hudson announced his decision. Morse was sentenced to 26 years in prison, one more year than he had previously been offered in a plea bargain. The judge emphasized the seriousness of Morse's offense and added that "the trading of body parts for a lesser sentence" would set a "dangerous precedent."

Understandably, the prosecution and families of the victims expressed satisfaction with the sentence. No one other than Morse's attorney publicly decried the harshness of the sentence. Leniency toward child molesters is not currently popular, if it ever was. While the decision may thus be explicable on political and emotional grounds, it was analytically incorrect, and following its precedent would run counter to the purposes of the criminal law. In this Article we address empirical and philosophical objections

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¹ See, e.g., Mike Robinson, Sex Offender Voluntarily Having Himself Castrated, ASSOC. PRESS., Jan. 16, 1998.

raised to considering castration in determining of sex offenders' sentences. Specifically, we argue: First, the empirical evidence, though not perfect, strongly indicates that castration dramatically reduces the probability of sex offender recidivism. Second, reducing castrated sex offenders' sentences in appropriate cases would be consistent with the criminal law's utilitarian purposes and would therefore be good policy. Third, offering sex offenders the opportunity to be castrated in return for a reduced sentence is not ethically problematic coercion. Before proceeding with these arguments, we provide some background about the nature of sex offenses, generally, and child molestation, in particular, and the rationale behind castration as an intervention to prevent recidivism.

I. SEX OFFENDERS: CLASSIFICATION, MOTIVATION, AND REHABILITATION

A. Classification

In common parlance, Jeffrey Morse is a child molester. In more technical terms, he is a hebephile, which is similar to, but slightly different from, a pedophile. Pedophilia is a stable sexual preference for prepubescent children, and hebephilia is a preference for pubescent children, or those just entering adolescence.² Asked during an interview whether he would prefer a Playboy centerfold or an attractive 11-year-old girl as a sex partner. Morse said that he would choose the latter. Both hebephilia and pedophilia are types of paraphilias. Paraphilias are abnormal sexual preferences, in which sexual excitement requires, or is at least maximized by, unusual or inappropriate targets, such as children, or activities, such as torture.³ Paraphilias include some conditions that do not produce victims, such as transvestitism, masochism, and fetishism, as well as some that typically do. including pedophilia and hebephilia, exhibitionism, preferential rape (in which a man would prefer to rape a woman than to obtain consensual sex with her), and sexual sadism (in which inflicting pain is sexually exciting: many serial killers are sexual sadists⁴). Paraphilia is more than an arbitrary social category, because different paraphilias have nonobvious similarities. For example, virtually all paraphiliacs are men, and there is substantial overlap among paraphilias; men who have one tend to have others.⁵ Paraphilias can often be assessed via penile plethysmography, a diagnostic procedure in which the degree of penile erection in response to different kinds of stimuli is measured.

² See James D. Weinrich, Sexual Landscapes 173-74 (1987).

 $^{^3}$ See American Psychiatric Ass'n, Diagnostic and Statistical Manual of Mental Disorders: DSM IV 523-24 (1994).

⁴ See Janet Warren, et al., The Sexually Sadistic Serial Killer, 41 J. FORENSIC Sci. 970, 971 (1996).

⁵ See AMERICAN PSYCHIATRIC ASS'N, supra note 3, at 523-24.

Not all sex offenders have paraphilias. It appears, for example, that men who commit incest are not typically paraphilic. Conversely, many paraphiliaes are not sex offenders, either because the goal of their particular paraphilia is not illegal, for instance, transvestism, or because they do not act upon their forbidden urges. Paraphilic sex offenders are probably more likely than other sex offenders to commit multiple sex offenses, because paraphilias are stable preferences. In order to understand why this is so, it is useful for normal adult-preferring people to imagine being forced to live in a world in which sex with other adults was proscribed and only sex with prepubescent children was allowable. Many people are unable to say that they would never commit a sexual offense in such a world. That world is directly analogous to the world in which the pedophile finds himself.

B. Sexual versus Violent Motivation

Our model of paraphilic sexual offending (and indeed, sexual offending in general) implies that the primary motivation is sexual. That is, some paraphiliacs have sexual preferences that cannot be legally satisfied, and some of these men act on their preferences. This conflicts with the contemporary conventional wisdom that rape and sexual abuse are crimes motivated by aggressive and violent impulses rather than sexual urges. The conventional wisdom is neither conceptually coherent nor empirically supportable.

Consider rape, which is the sexual offense most closely tied to the "violence not sex" position. According to some writers, several facts suggest that sexual motivation is unimportant in rape. These include the facts that many rapists have steady sexual partners, that attempting rapists have a high rate of sexual dysfunction, and that rape victims include women who do not typically provoke sexual interest such as children and the elderly. Each of these findings has an explanation that is compatible with the explanation that rape is typically at least partly sexually motivated. For example, it is not problematic for the sexual motivation position that many rapists have steady partners, because, for instance, many married men enjoy casual sex with partners other than their wives, and indeed are quite motivated to have affairs. Sexual dysfunction may be attributable to such factors as the great stress experienced by both rapists and their victims, and the high incidence of intoxication among rapists. Finally, although rape victims may be any age, the distribution of ages of rape victims is not random

⁶ See, e.g., DAVID FINKELHOR, CHILD SEXUAL ABUSE: NEW THEORY AND RESEARCH (1984).

⁷ See, e.g., Susan Brownmiller, Against Our Will: Men, Women, and Rape (1975).

⁸ See, e.g., LEE ELLIS, THEORIES OF RAPE: INQUIRIES INTO THE CAUSES OF SEXUAL AGGRESSION 57 (1989); Richard B. Felson & Marvin Krohn, Motives for Rape, 27 J. RES. CRIME & DELINQ. 222, 222 (1990); Craig T. Palmer, Twelve Reasons Why Rape is Not Sexually Motivated: A Skeptical Examination, 25 J. SEX RES. 512, 516-19 (1988).

⁹ See Palmer, supra note 8, at 519.

but includes a very high proportion of women in their teens and early twenties. This age distribution is quite different from the distribution of other violent crimes, in which the elderly are overrepresented because of their vulnerability. In contrast, less than five percent of rape victims are over the age of fifty. Of course, by definition, pedophiles molest females of atypical age, but this appears to be due to their unusual sexual preference, and thus is sexually motivated. Many rapists seek young, attractive victims, and sexual motivation often appears to be primary. In

To be sure, rape typically requires the threat or use of violence, and many rapists appear to dislike women. This does not mean, however, that violence toward women is the exclusive or even primary motive of rape. Many rapists are distinguishable by a pattern of sexual arousal that differs from that of nonrapists. Although both rapists and nonrapists are sexually aroused by depictions of consensual sex, rapists are much more aroused than nonrapists by depictions of rape, though most rapists' arousal to rape depictions is no higher than their arousal to consensual sex depictions. Evidently, rapists do not possess the inhibitions to violent sex that most other men have. Dislike of women is plausibly a contributing factor to the failure to become sexually inhibited in situations where women are harmed, but this does not mean that sexual motivation is absent. Increasingly, writers have acknowledged the central importance of the rapist's sexual motivation.

Paraphilic sex offenders are typically even more transparently sexually motivated. They often report a high degree of intrusive sexual fantasies. Morse reported that prior to his arrest, he masturbated more than once per day thinking about young girls. Although child molesters, in particular, often force their victims to engage in sexual activity, this force is usually instrumental. The most vivid exceptions, in which victims are tortured, indicate that perpetrators are sexually sadistic. In these cases, violence per se is sexually motivated. Jeffrey Morse used a toy gun to frighten his victims into compliance. He did not use excessive force, and he did not wish to harm his victims. Morse stated that he would have preferred that his victims had been willing participants.

The idea that sexual offending is "not about sex" is simply inaccurate. To the extent that this belief continues to influence our attitudes toward sex offenders and our responses to them, our policies are likely to be less effective than they could be.

¹⁰ See id.

¹¹ See id.

¹² See, e.g., Gene G. Abel et al., The Components of Rapists' Sexual Arousal, 34 ARCHIVES GEN. PSYCHIATRY 895 (1977); Bethany A. Lohr et al., Sexual Arousal to Erotic and Aggressive Stimuli in Sexually Coercive and Noncoercive Men, 106 J. ABNORMAL PSYCHOL. 230 (1997).

 $^{^{13}}$ See, e.g., ELLIS, supra note 8, at 22-23; FINKELHOR, supra note 6, at 34-35; Palmer, supra note 8.

C. Rehabilitation

A variety of interventions have been attempted with sex offenders generally, and with child molesters specifically. We distinguish two broad categories: psychological and medical interventions. The primary goal of psychological interventions has been to rechannel sexual impulses from inappropriate sexual stimuli, such as children, to more appropriate stimuli; typically, consensual sex with adult women. Evidence that sexual preferences can be changed this way is quite weak. In one large study, child molesters who had received psychological treatment were no less likely to reoffend compared with child molesters who were untreated. An eminent physician has written: "In the present writer's opinion, based on many years of clinical experience, we are not as yet able to achieve a substantial and lasting change in erotic preferences." ¹⁵

Medical interventions have primarily aimed to diminish sex offenders' sexual motivation, or libido. The two main methods by which this has been attempted, and which are most relevant to this Article, are surgical and chemical castration. Surgical castration involves removal of the testes, and chemical castration involves the administration of drugs. Both types of castration aim to reduce libido by drastic diminution of testosterone, which is secreted mainly by the testes. Surgical castration was a common treatment for chronic sex offenders in several European countries during this century, but it has become rarer. The primary reason for this change is not that castration has been found to be ineffective. On the contrary, as we argue in the next Part, castration appears to be a highly effective intervention. Rather, castration has increasingly been seen as ethically problematic. In contrast, in a later Part, we argue that offering castration as an option to sex offenders in exchange for sentence reduction is not unethical, and may in fact be good policy.

Although both the Jeffrey Morse controversy and the most relevant empirical evidence regarding biological sex drive reduction has focused on surgical castration, it is important to address chemical castration because of its increasing popularity. Some state statutes provide that probation for certain kinds of sex offenses can be conditioned on undergoing chemical castration. The drug Lupron reduces testosterone levels as effectively as

See Marnie E. Rice et al., Sexual Recidivism Among Child Molesters Released From a Maximum Security Psychiatric Institution, 59 J. CONSULTING & CLINICAL PSYCHOL. 381, 381 (1991).

Kurt Freund, *Therapeutic Sex Drive Reduction*, 62 (Supp. 287) ACTA PSYCHIATRICA SCANDINAVICA 5, 5 (1980). *But see* Lucy Berliner, *Sex Offenders: Policy and Practice*, 92 Nw. U. L. REV. 2003, nn.47-65 and accompanying text (1998) (arguing that treatment is effective for certain categories of paraphiliacs but not others).

¹⁶ See Reinhard Wille & Klaus M. Beier, Castration in Germany, 2 ANNALS SEX RES. 105-09 (1989).

See Luk Gijs & Louis Gooren, Hormonal and Psychopharmacological Interventions in the Treatment of Paraphilias: An Update, 33 J. SEX RES. 273, 273 (1996).

¹⁸ See, e.g., GA. CODE ANN. § 16-6-4 (1997).

surgical castration does, and a recent study found that it was a highly effective treatment for paraphilic sexual arousal. In the study, thirty paraphiliacs (including twenty-five pedophiles) were treated using Lupron. Prior to treatment, the men reported an average of forty-eight deviant sexual fantasies per week. After treatment, the men reported no deviant sexual fantasies. This study had no untreated comparison group, but the dramatic reduction in paraphilic fantasy is extremely unlikely to be due to chance or a placebo effect.

Given current trends, it is likely that most future policy debates will concern chemical rather than surgical castration. Most of the empirical and ethical issues we address herein are equally applicable to both. In our opinion, ethical considerations do not lead to the conclusion that chemical castration is clearly preferable.²¹ The therapeutic and side effects of both are quite similar and, if anything, chemical castration may have more serious side effects. Although surgical castration is irreversible, so is a paraphilic preference. As long as paraphilic sex offenders have significant sexual motivation, they are at relatively high risk for reoffending. Thus, properly applied, chemical castration also may be an essentially permanent intervention.²²

II. CASTRATION: EMPIRICAL ISSUES

During the Morse hearing, expert testimony focused on empirical evidence that castration reduces recidivism rates among sex offenders. The following facts were not, and indeed cannot be, in dispute. First, approximately twenty studies have examined recidivism rates among surgically castrated sex offenders, with the total number of castrated sex offenders included in these studies exceeding five thousand. Second, although there is some variability among the studies, with recidivism rates ranging between zero percent and eleven percent, the rates are generally low, averaging approximately three percent.²³ Third, the empirical evidence is imperfect in

See Ariel Rösler & Eliezer Witztum, Treatment of Men with Paraphilia with a Long-Acting Analogue of Gonadotropin-Releasing Hormone, 338 New Eng. J. Med. 416, 416 (1998).

²⁰ See id

²¹ This contrasts with the official position of at least one organization concerned with the treatment of sex offenders. See Association for the Treatment of Sexual Abusers, Position Statement on Anti-Androgen Therapy and Surgical Castration (visited November 12, 1998) http://www.atsa.com/pages/policy/reducing.html.

²² See, e.g., Florence Thibaut et al., Gonadotrophin Hormone Releasing Hormone Agonist in Cases of Severe Paraphilia: A Lifetime Treatment?, 21 PSYCHONEUROENDOCRINOLOGY 411, 411 (1996).

²³ See V. CHENEY, IS CASTRATION EFFECTIVE? (1993); Freund, supra note 15, at 16-17; Wille & Beier, supra note 16, at 103 (reviewing the castration literature). The 11% figure, from Nikolaus Heim, Sexual Behavior of Castrated Sex Offenders, 10 ARCHIVES OF SEXUAL BEHAVIOR 11 (1981), is, by far, the highest reported in the literature. There were only 39 offenders in the study. Small samples provide the poorest estimate of the true rate, and are more likely than larger samples to be inflated due to sampling error.

several respects. The most serious deficiencies of available studies include lack of an experimental control group, heterogeneity of sex offender type, and uncertainty about the true recidivism rates. Although experts in the Morse case did not disagree that these problems make the evidence less compelling than it would be without them, the two sides differed substantially in how seriously they believed the problems compromised the evidence. We thus consider each scientific limitation in detail.

A. Lack of Experimental Control Group

The ideal scientific evaluation of a psychological or medical intervention requires the comparison of at least two groups, one who received the intervention (the experimental group) and one who did not (the control group). All subjects should be drawn from the same population of potential subjects and randomly assigned to experimental versus control groups. No study has randomly assigned sex offenders to be castrated or not. Indeed, only one study has had a control group, per se, the 1989 study by Wille and Beier.²⁴ Discussion of this important study is deferred to a later section.

Without a control group created via random assignment, one must be cautious in drawing inferences from a study. It is not obvious, in such cases, what an appropriate comparison would be. Two sources of data provide recidivism rates for comparison with castrated sex offenders. First, several of the studies have provided recidivism rates of their subjects prior to castration. Most of these recidivism rates have greatly exceeded fifty percent, probably because recidivists are more likely to be recommended for castration. Second, studies have examined sex offender recidivism directly. The best relevant study of this question followed 136 extrafamilial child molesters (defined as an adult male having sex with a girl below the age of fourteen or a boy below the age of sixteen when at least five years older than the victim and unrelated to him or her), who were released from a Canadian maximum security psychiatric facility.²⁵ Of one hundred and thirty-six subjects followed (over an average of 6.3 years), thirty-one percent were convicted of another sex offense, and an additional twenty-seven percent were returned to the institution due to misbehavior, which was typically sex-related. These figures suggest that the sex offenders in the castration studies would have been likely to reoffend if not castrated, and that the average postcastration recidivism rate of three percent was a substantial reduction.

Because random assignment was not used, it is possible, in principle, that differences in recidivism rates between castrated and uncastrated offenders are at least partly attributable to some unknown factor, such as remorse, which caused only the first group to volunteer for the operation.

²⁴ See supra note 16.

²⁵ See Rice et al., supra note 14, at 381.

This kind of bias is called *selection bias*. However, no one has proposed a plausible, empirically supported, factor that could account for the difference. It is noteworthy that one very large study consisted of a long-term follow-up of sex offenders involuntarily castrated in Germany during the Nazi period.²⁶ During this period, all sex offenders committing certain types of crimes, such as child molestation, were castrated; voluntary consent was not obtained. The recidivism rate in this study, 2.3%, was quite similar to results from studies of voluntarily castrated offenders. Given this evidence, it is difficult to believe that selection bias has seriously distorted findings of the efficacy of castration.

In principle, it is possible to conduct a study using random assignment to evaluate the efficacy of castration. If one were to use as the study population sex offenders willing to be castrated, assigning half to castration and half to control conditions, then we believe there would be no ethical problem vis-à-vis the offenders. However, definitive results would require that the uncastrated sex offenders be released simultaneously with the castrated offenders. Because all indications are that the former would be much more dangerous than the latter, this would be both ethically and politically problematic, and we doubt that such a study can ever be done. Thus, to demand more experimentally rigorous tests of castration's effectiveness in reducing recidivism is unrealistic and, as suggested above, would unduly discount convincing evidence already in existence.

B. Heterogeneity Among Castrated Offenders

Samples of sex offenders in castration studies have invariably been heterogeneous. Most have included both pedophiles and rapists of adult women, but some have also included schizophrenic or mentally retarded sex offenders, exhibitionists, and even normal homosexual men whose behavior has sometimes been classified as a sex offense. One possible objection to applying the studies' aggregate results to particular cases, such as that of Jeffrey Morse, is that in principle, castration might be differentially effective with respect to different conditions. Perhaps pedophiles are especially immune to its effects. Furthermore, State experts in the Morse case asserted that the effectiveness of castration is moderated by other factors, such as age.

Unfortunately, most studies have not distinguished recidivism rates among different types of offenders. This probably results from several factors. First, no established theory predicts that castration would be differentially effective depending on type of offender. Second, recidivism rates have been so low that comparisons among offender types could not have

See Freund, supra note 15, at 17 (reviewing A. LANGELÜDDEKE, DIE ENTMANNUNG VON SITTLICHKEITSVERBRECHERN (1963)).

It would be possible, in principle, to request volunteers for castration just prior to scheduled release. We doubt that many sex offenders would agree to have the operation under that circumstance.

provided reliable, statistically significant results. Third, although we cannot be certain, we suspect that most investigators failed to report different recidivism rates because they saw no reliable trends in their data.

What kind of analysis would be necessary to determine whether certain subtypes of castrated offender have much higher recidivism rates? It would not be sufficient merely to look at a study's recidivists by diagnostic category or characteristic, and assume that differences among rates are meaningful: indeed, this would be scientifically illegitimate. Even if all castrated sex offenders had precisely the same probability of becoming recidivists, a sample of offenders of a certain type would have a rate that varied somewhat from that probability, due to statistical sampling error. In order to demonstrate convincingly that a particular type of offender has a higher recidivism rate, the difference between rates must achieve statistical significance (a conventional test meaning that results were unlikely to have arisen by chance due to sampling error). Furthermore, differences should be predicted a priori; otherwise, tests of statistical significance must be adjusted in a way that makes findings of significance much less likely. Otherwise, one might attribute significance to characteristics that happen to differentiate recidivists and nonrecidivists in a particular sample, due to chance, but do not in general distinguish the two groups. (One could imagine a sample in which blond sex offenders had higher rates of recidivism than nonblonds. because of the "luck of the draw.") Neither type of offender nor any characteristic of an offender has been adequately demonstrated to affect the likelihood of recidivism after castration. Expert testimony that Morse was at increased recidivism risk because he was relatively young was not based on appropriate analysis and is inconsistent with some reports.²⁸

C. Uncertainty about True Recidivism Rates

Because not all sex offenses result in arrest, studies that rely on police records will tend to underestimate the true recidivism rate. Because it is typically in sex offenders' interest to conceal their crimes, we cannot conceive of an empirical strategy that could yield the true recidivism rate of castrated or uncastrated sex offenders. There is no reason, however, to expect that castrated sex offenders' recidivism rates would be especially underestimated compared with recidivism rates of uncastrated sex offenders.

See, e.g., GEORG K. STÜRUP, CASTRATION: THE TOTAL TREATMENT, excerpted in H.L.P. RESNIK & MARVIN WOLFGANG, SEXUAL BEHAVIORS: SOCIAL, CLINICAL, AND LEGAL ASPECTS 182 (1972).

They may not invariably underestimate recidivism. Known sex offenders are sometimes arrested for sex offenses under ambiguous circumstances, due to the suspicion that any physical interaction with a child is sexually motivated. In some cases, they may be falsely accused or even convicted. See, e.g., Fred S. Berlin & H. Martin Malin, Media Distortion of the Public's Perception of Recidivism and Psychiatric Rehabilitation, 148 Am. J. PSYCHIATRY, 1572, 1573 (1991).

Thus, although it may be impossible to know the precise probability that a castrated sex offender will reoffend, the *difference* between castrated and uncastrated sex offenders' recidivism rates can be estimated without bias. We have reviewed evidence that this difference is very large, although the evidence we have reviewed so far has been limited by the fact that recidivism estimates for castrated and uncastrated offenders were not obtained within a single study, but rather, in different studies using slightly different criteria. One study, however, examined recidivism rates for both castrated and uncastrated offenders. For this reason, and because of its detailed description of the effect castration had on sex offenders' sexuality, this study is particularly important, and thus we consider it in more detail.

D. The Wille and Beier Study

During the 1970's in the Federal Republic of Germany, recidivist sex offenders could apply to be surgically castrated in exchange for sentence reduction. Researchers Wille and Beier studied one hundred and four sex offenders who were surgically castrated (representing twenty-five percent of all castrations performed in the country between 1970 and 1980) and fifty-three sex offenders who applied to be castrated but then changed their minds, remaining uncastrated. The predominant diagnosis (seventy percent) was pedophilia, and offenders were followed for eleven years, on average. Recidivism was assessed via police and medical records and appears to have been quite thoroughly investigated, because at least twenty-two offenses were detected that had not led to conviction.

Postoperative recidivism rates were three percent for the castrated group compared with forty-six percent for the uncastrated group.³¹ These figures are remarkable in at least two respects. First, the difference between them is enormous. Second, they are very similar to estimates provided by other studies, even though the latter were less methodologically standardized. This suggests that available studies are accurate, and that differences between castrated and uncastrated offenders are quite robust.

The study surveyed castrated men about both their sexuality and their satisfaction with the operation. While these reports depend on the honesty of the respondents, there is no obvious reason why the men should have been motivated to lie or otherwise minimize their sexual responsiveness. All castrated men reported a decline in their libido following the operation. In about two-thirds of cases, libido and sexual activity were practically extinct within six months.³² In another twenty percent of cases, libido and sexual activity were possible only with intensive stimulation and did not occur spontaneously.³³ In the remaining cases, sexual motivation was re-

³⁰ See Wille & Beier, supra note 16.

³¹ See id. at 125.

³² See id. at 127.

³³ See id.

duced less substantially. It is noteworthy that although twenty-five percent of the castrated men reported that they were still capable of sexual intercourse four years after the operation, the recidivism rate was far less than twenty-five percent.³⁴ Evidently, the reduction of libido typically was sufficient to prevent reoffending even when sexual capacity persisted. These results are generally consistent with those of another study that examined castrated offenders' sexuality.³⁵ Approximately seventy percent of respondents were satisfied that they had the operation, twenty percent were undecided, and ten percent were dissatisfied.³⁶ The most common complaint was the stigma of empty scrota, a problem that is now easily remediable with the implantation, by plastic surgeons, of testicular prostheses (which are similar in composition to breast implants).

E. Other Empirical Issues

In this Part we consider several other empirical issues in connection with castration's effects that were raised either in the Morse hearing or in this symposium. In his remarks in this symposium conference, John Mulhall, director of the Center for Male Sexual Health at Loyola University Hospital, argued that much of the castration literature is suspect due to its age, most studies having been published more than thirty years ago. This factor is irrelevant. No one has suggested that either the nature of particular sex offenses, such as pedophilia, or the effects of castration have changed in recent years, and thus, there is no reason to worry that results of older studies may not generalize to the present. Furthermore, results from the more recent Wille and Beier study were virtually identical to the results of older studies.

Experts for the State testified that if released, Morse was likely to seek exogenous testosterone to revive his libido, and thus to become dangerous again. In principle, this could occur. Testosterone injections could completely reverse the changes induced by castration. However, we are familiar with only one case in which a surgically or chemically castrated paraphilic man has sought exogenous androgens to renew his sex drive. This case, from Wille and Beier's sample, was quite dramatic. The man, a sadistic pedophile, raped and murdered a young boy. Nevertheless, to characterize this as a "likely" event seems an exaggeration, given that it occurred only once out of several thousand castrations. One reason that castrated sex offenders might be unlikely to seek exogenous androgens is that many paraphilic men experience their sexual urges (and certainly social and legal consequences of those urges) as unwanted and would experience their diminution as a relief. For instance, Morse cited this as a primary mo-

³⁴ See id. at 128.

³⁵ See Heim, supra note 23, at 13-16 tbls. I-IX.

³⁶ Wille & Beier, supra note 16, at 128.

³⁷ See AM. PSYCHIATRIC ASS'N, supra note 3, at 523-24.

tive to be castrated. Mulhall has argued that exogenous androgens have become much more available in recent years. This may be so, though powerful androgens remain available in the United States only via prescription, and relevant policy should allow for the possibility that some sex offenders may seek such drugs. For example, castrated sex offenders judged most likely to seek exogenous androgens could be subject to random blood tests, which could detect excess testosterone. In any case, at this point it is unreasonable to refuse to consider castration an appropriate preventive measure because of the highly speculative concern that paraphiliacs would often seek exogenous androgens.

Both experts testifying in the Morse trial and Mulhall, at this Symposium, asserted that even if castration reduced sexual motivation, it would leave an underlying "personality disorder" untreated. Without appropriate psychological or psychiatric treatment, they asserted, castrated offenders like Morse would remain at high risk of recidivism. It is true that castration does not affect personality or psychopathology except insofar as these depend on sexual motivation, and paraphilic sexual preference also is unaffected by castration. Jeffrey Morse will probably remain a hebephile in terms of his sexual preference. He is, however, unlikely to act on that preference. There is simply no basis for the assertion that psychological treatment is relevant to castrated offenders' likelihood of reoffending. No study has demonstrated such relevance, and we do not believe there is a sound theoretical basis for expecting lack of psychological treatment to affect recidivism rates among castrated sex offenders, especially given that psychological treatment has been unable to affect sexual preference. Castrated sex offenders are at greatly reduced risk of reoffending because they have low sex drive, and this appears to be true regardless of underlying personality issues.

III. CASTRATION: ETHICAL CONSIDERATIONS

Although the available evidence strongly suggests that castration greatly reduces the likelihood of recidivism, we are unlikely, in the foreseeable future, to have definitive information about the precise degree of that reduction. Even if we did have such information, and even if that information told us that castration completely eliminates recidivism in 100% of the cases, we would still have to face the question of the appropriate effect to be given to castration in determining criminal punishment of child molesters. Because criminal punishment has purposes other than the incapacitation of the offender; indeed, most would agree that incapacitation is of subordinate importance to certain other purposes, and because factors other than the purposes of criminal punishment, such as ethical considerations, may be relevant, it is not obvious that castration, even if completely effec-

³⁸ See Rice et al., supra note 14.

tive, should reduce or eliminate the criminal punishments that child molesters would otherwise receive.

There is, of course, a huge body of literature on the topic of the purposes of criminal punishment, and we will not attempt to review that literature here. For the purposes of this discussion, we will address the two general purposes most frequently considered to justify such punishment: (1) a morality-based, retributive purpose; and (2) a more utilitarian purpose, typically seeking to deter future criminal conduct of the offender himself and others, and reduce other societal costs.

A. Castration and the Retributive Model

That moral retribution is the primary purpose of the criminal law seems to us to be highly implausible. Although this discussion is not the appropriate forum for an analysis of that question, we would note the following. First, we can certainly imagine a system of criminal law under which every offender who deserved punishment received it, but crime was nevertheless rampant. For example, this might be the case if the public were not informed that these punishments were being carried out. We do not think (and we do not believe most others would think) that such a system would be a success, notwithstanding the fact that it would be functioning perfectly from a moral retribution standpoint (every deserving offender would be punished). In fact, most, if not all, people would undoubtedly consider such a state of affairs to be an indication of the abject failure of the criminal law system. Similarly, if the abolition of the criminal law were proposed, we would expect the vast majority of objections to concern themselves with the prospect of an enormous increase in the crime rate, not with the fact, in itself, that morally bad people were escaping punishment.

Nevertheless, because moral retribution is often cited as a primary purpose of criminal punishment, we will consider the relevance of castration in that context. If we indeed punish criminals because, and to the extent that, they are morally culpable, the relevant question in assessing the effect that we ought to give to voluntary castration is this: Does voluntary consent to castration by an offender after his conviction reduce his moral culpability for the crime he has committed? In answering this question, we immediately face several difficulties.

First, the criteria for moral blameworthiness are subjective and hence variable. No one can objectively demonstrate that certain factors aggravate blameworthiness and that others mitigate it. Still, most people in our culture share certain broad moral principles, many of which are reflected to some degree in the law. The relevant principle here is that remorse for one's bad acts may reduce one's moral (and legal) culpability for those acts. To the extent that voluntary castration after conviction affects moral blame, it would seem to be because such castration might reflect remorsefulness on the offender's part.

Given that the moral relevance, if any, of voluntary castration would be its possible reflection of remorse, we must ask at this point whether there is any reason to believe that such castration would ever indeed constitute plausible evidence of remorse. Two kinds of behavior would seem to offer credible evidence of remorse. First, and most obvious, would be behavior that directly reflects the mental state of remorse, such as verbal expressions of remorse. Castration clearly is not in this category. The second type of behavior that might furnish plausible evidence of remorse is behavior which involved a relevant and significant sacrifice on the part of the offender. For example, a large monetary gift by a person to someone he had unjustifiably hurt might pass the relevance and significance tests. It is relevant because its effect could be to mitigate the harm to the victim and it could be a significant sacrifice if the amount is meaningful given the payer's financial condition. In contrast, a gift to an unrelated third party or a gift to the victim of a very small amount would not plausibly reflect remorse, as it would fail the relevance test or the "significant sacrifice" test.

Would voluntary castration pass these tests? With regard to relevance. the question seems to be its effectiveness in reducing recidivism. We would not consider a voluntary tonsillectomy to be evidence of remorse because it would not be relevant to the offender's past or possible future bad acts. If, however, as argued above, castration significantly lessens the likelihood of recidivism, the relevance test would seem to be satisfied. The "significant sacrifice" test is somewhat more problematic. It is at least arguable that castration does not constitute a very significant sacrifice. The procedure itself is not particularly painful and has few side effects. The result of the procedure, when successful, is that sexual desire is reduced. Certainly, losing the ability to fulfill a strong desire while retaining the desire itself would constitute a sacrifice, but losing the desire itself might not be so bad. If one no longer desires something, presumably one is less bothered by his inability to attain it. In fact, a large majority of individuals who have undergone the procedure report that they are satisfied with the results.³⁹ Still, giving up the potential to experience sexual pleasure, even if one's desire for that pleasure is greatly reduced, does seem to constitute a sacrifice of some significance.

In any case, even if we agree that castration can constitute plausible evidence of remorse, there is no reason to think that it would constitute such evidence in every case. In answering the question of whether voluntary castration reduces moral culpability in a particular case, we need to pay close attention to the actual motives of the offender in consenting to castration. As noted above, the morally mitigating effect of such consent would seem to be greatest when the offender, quite apart from any selfish consideration of a possible sentence reduction, wishes to be castrated because he feels remorse for his actions and wishes to insure, to the extent possible,

³⁹ See Wille & Beier, supra note 16.

that he will not harm anyone else. At the other extreme of the range of possible motives would be the offender who agrees to be castrated solely to receive a reduced sentence and not, to any degree, out of feelings of remorse. Such an offender would appear not to be entitled to any moral sympathy due to his voluntary castration. The temptation here is, of course, to argue that regardless of remorse, if castration significantly reduces recidivism, it should be encouraged by more lenient sentences so as to reduce the likelihood of future molestations. This argument, however, appeals to utilitarian rather than retributive goals and so carries little or no weight in a retribution-based analysis.

The problem, of course, is placing a given offender at the appropriate point on this spectrum of morally relevant motives. Reliably assessing those motives would undoubtedly be difficult in the vast majority of cases and virtually impossible in many cases. The offender's true motives would be known with certainty only to him and, regardless of those true motives, he would naturally have a strong incentive to represent himself as remorseful. In fact, the only circumstance under which we could hope to know with complete confidence what the offender's actual motives were would be if there were no advantage to be gained by castration; that is, if castration could not be taken into account in sentencing. But then, of course, we would no longer be interested in learning those motives for this purpose, having already answered our main question by eliminating castration as a sentencing factor.

Nevertheless, this difficulty in assessing the motives behind the offender's consent to be castrated should not necessarily result in ignoring his castration under a retributive model. The offender's level of remorse is a common consideration in many ordinary sentencing contexts, notwithstanding the difficulties inherent in reliably assessing the offender's mental state. And such reliability in the castration context can be increased to at least some degree by tools routinely employed by judges and juries in evaluating evidence, such as corroboration and other means of assessing witness credibility, including demeanor and cross-examination.

Under a morality-retribution model, then, it would appear to make sense to take voluntary castration into account in sentencing child molesters according to the following reasoning: First, remorse reduces moral blameworthiness, a generally accepted moral and legal principle. Second, voluntary castration can constitute plausible evidence of remorse, given its probable relevance to the offender's bad acts and the aversive nature of the inability to experience sexual pleasure. Third, in a given case, the relevant evidence may sufficiently establish that remorse was in fact the motivation for the castration, though this of course depends upon the evidence in the case in question.

⁴⁰ See, e.g., Fla. Stat. chs. 921.0016, 921.0026 (1998); Cal. Penal Code § 502 (1998); Okla. Stat. tit. 22, § 982 (1998).

B. Castration and the Utilitarian Model

The second common justification for criminal punishment is that it serves certain utilitarian ends quite apart from its moral function, if any. In particular, proponents argue that such punishment deters others from committing crimes and incapacitates the offender himself, at least for the period of his incarceration. According to this conception of the criminal law, the very substantial cost of apprehending, trying and punishing criminals is the price society pays to buy deterrence of others and incapacitation of the offenders themselves. Under such a utilitarian scheme, therefore, in evaluating the desirability of a particular type or degree of punishment, one would want to compare the expected costs of that punishment with its expected benefits, namely, the value of the deterrence and incapacitation that the punishment would likely "purchase."

What, then, would be the relevant costs and benefits of reducing a child molester's sentence in return for voluntary castration, under such a utilitarian model? For convenience, let us assume that an uncastrated offender would receive a twenty-year sentence, while voluntary castration would reduce the sentence to five years. In addition, we need to assume that castration would to some degree reduce the likelihood of recidivism, or there would be no utilitarian reason to reduce the sentence of castrated offenders due to castration. There are two primary factors on the cost side and two on the benefit side.

The chief expected benefits of reducing the sentence of a castrated child molester would be as follows. First, it would eliminate the costs of incarcerating the offender in years six through twenty. Second, it would reduce the likelihood of recidivism for the offender during the period after he would have been released following the longer sentence (in our example, year twenty-one and thereafter). On the other side of the ledger, the chief expected costs of such reduced sentences would be as follows. First, there would be an increased likelihood of recidivism in years six through twenty, when the offender would otherwise have been in prison, assuming that castration would not reduce the expected rate of recidivism to the in-prison rate, approximately zero. Second, there is a possibility that deterrence of others considering child molestation would be reduced by the availability of castration with a shorter sentence as a more desirable alternative to a longer sentence without castration.

Actually quantifying these costs and benefits, both in general and in a particular case, would be exceedingly difficult. One would have to determine and take into account such factors as the projected costs of incarceration many years in the future (reduced, presumably, by the possibility of parole), the likely reduction in recidivism due to castration, the average expected cost of an incident of child molestation, the offender's life expectancy and the portion of that life expectancy during which he would be likely to remain sexually active, and the estimated deterrent effect of longer

sentences as compared with that of shorter sentences plus castration. Obviously, making these determinations with any precision would range from very difficult to virtually impossible.

Still, if the purpose of the criminal law is primarily utilitarian, and we believe it is, these are the types of determinations at least implicitly made in every range of punishments the law provides for a given offense and in every sentence imposed in an actual case. It perhaps goes without saying that in most, if not all, cases, these determinations are made very roughly and are based on intuition and reasonable (one would hope) guesswork rather than reliable empirical evidence. But it is clear that punishments do, to one degree or another, deter and incapacitate, on the one hand, and involve significant costs, on the other. If we are going to have a criminal justice system, we have no choice but to decide how severely to punish criminal offenses. This being the case, we must do the best we can to reach rational conclusions based on the limited information available to us.

It does seem clear that, if castration reduces recidivism to any significant degree, at least some reduction in sentences in some cases would be warranted. It would be very difficult to argue against, for example, reducing a 25-year-old child molester's sentence by one month if he agreed to be castrated. The primary cost in such a case would be the increased likelihood that the offender would molest again during the one month he would otherwise have been in prison. The prospect of a one-month shorter sentence seems very unlikely to affect deterrence of others. The primary benefit would be many years of fewer expected molestations. It seems clear that in a case such as this, the expected benefits greatly outweigh the expected costs. And of course, the greater the expected reduction in recidivism, the stronger the case for sentence reduction, particularly given the high cost of incarceration.

Real cases will not be this easy, primarily because we would not expect many child molesters to agree to castration in return for mere one-month reductions in their sentences. Nevertheless, the principles remain the same as in the easy case. It is rational, hence desirable, under a utilitarian model, to consider reducing a child molester's sentence in return for his consent to be castrated. To argue that castration should be taken into account only if it reduces recidivism to zero, is, at least from a utilitarian standpoint, arbitrary and irrational. The question is not whether molestation will be eliminated. Rather, the question is at what point molestation is reduced enough so that what we give up in increased molestation during the early release period and in decreased deterrence of others is outweighed by what we gain in decreased molestation during the period of the offender's life following the early release period and in reduced incarceration costs. When our best

A similar analysis would apply under the "sex predator" statutes recently enacted in several jurisdictions. See, for example, the Kansas Sexually Violent Predator Act, KAN. STAT. ANN. § 59-29a01 (1994), the constitutionality of which was confirmed by the United States Supreme Court in Kansas v.

guess is that societal benefit would in this way be maximized by reducing an offender's sentence in exchange for castration, which is particularly plausible if, as discussed above, castration greatly reduces the likelihood of recidivism and the offender in question is relatively young, we should do it.

C. The "Coercion" Objection to Castration

A common objection to the idea of reducing a child molester's sentence in exchange for voluntary castration appeals not to the purposes of criminal punishment but to what is perceived as an ethical limitation on criminal punishment. According to this objection, if an offender consents to castration in return for a shorter sentence, the voluntariness of that consent is inherently suspect. That is, because the offender agrees to be castrated only because he will receive a lengthy sentence if he does not, he is not acting in a truly voluntary fashion. And, according to an often tacit but crucial premise of this argument, nonvoluntary castration is ethically unacceptable.⁴²

Weighing coercion against voluntariness is not a productive way to analyze the acceptability of reducing a child molester's sentence in exchange for his consent to be castrated. The concepts of coercion and voluntariness are very vague. Unless we are talking about an action taken with no conscious intent on the part of the actor, for example, a reflex, it becomes very difficult to determine which actions are voluntary, in the sense of entirely uncoerced, and which are not. Virtually all intentional, conscious actions are done in response to the actors' assessments of the costs and benefits of those actions. In this sense, all actions are performed as the actor's best way of dealing with the situation in which he finds himself. This applies equally to a person trying to decide between a hot dog and a more expensive steak, between castration and a longer prison sentence, and between taking a bullet in the head and being robbed. So, someone arguing that a particular action is not voluntary because it is coerced cannot rely solely on the fact that the action was taken in response to incentives, because all actions are. Conversely, all actions taken in response to even the strongest incentives ("I'll shoot you if you don't") are conscious and inten-

Hendricks, 117 S. Ct. 2072 (1997). Under these statutes, certain particularly dangerous sex offenders, after the expiration of their prison terms, may be confined in psychiatric institutions until they are found to no longer be dangerous. Although the analysis would be complicated by the fact that the period of confinement under such laws is indefinite, the argument for taking castration into account is strengthened by two factors. First, confinement in the institutions specified by these laws may be even more costly than confinement in prison. See Eric Janus, Foreshadowing the Future of Kansas v. Hendricks: Lessons from Minnesota's Sex Offender Commitment Litigation 92 Nw U. L. REV 1279. Second, statutes such as the Kansas act explicitly contemplate the release of individuals who are no longer dangerous. If, as we argue above, castration greatly reduces the dangerousness of sex offenders, it would appear that, even putting aside broad policy considerations, castration should, as a strictly legal matter, be a possible ground for release under these statutes.

⁴² See Andrew Vachhs, No: Pragmatically Impotent (Sex Offenders: Is Castration an Acceptable Punishment?), 78 A.B.A. J., July 1992, at 43.

tional. So one cannot argue that coerced actions are actions that are not voluntary because, due to very strong incentives, they are not conscious or not intentional. They are both.

Therefore, if one wishes to claim that a particular action was not voluntary because it was coerced, one needs to do three things. First, one must give a defensible definition of "voluntary" that differs from its literal meaning—something like "conscious and intentional"—while still preserving the moral relevance of voluntariness. Second, one must show that at some point incentives can become so strong that a person's voluntariness under that definition is taken away. Third, one must show that in the action in question the incentives were indeed at least that strong. This is not easy to do and those who argue that certain actions are coerced typically do not even attempt it. The question of at what point, if any, the relevant incentives become so strong that the person's voluntariness in some less literal, but still morally relevant, sense is taken away is very difficult and unproductive.

The ethical concept of coercion has two functions. First, in a situation in which the coerced action would otherwise be morally blameworthy, it eliminates or reduces the moral blame of the actor for the action. Second, it assigns moral blame to whoever put the actor in the situation giving rise to that action. Because getting oneself castrated presumably is not a morally blameworthy action, we are not concerned here with whether the actor should be blamed. Instead, we are concerned with the second function of the coercion analysis, namely, to what extent it would be wrong for our legal system to offer reduced sentences in exchange for castration. We can best analyze this question not as the difficult, perhaps insoluble, question of whether the offender would be acting voluntarily, but instead by asking simply whether it is morally acceptable to put the offender in the position of being subjected to one or the other of these alternatives, as he chooses.

Now, the case involving the choice between getting robbed and getting shot is easy—it is morally repugnant to do either of those things to someone. The choice between castration and longer prison sentences is obviously different. First of all, we are assuming that the punishment given to the uncastrated offender is morally acceptable. If it is not, we have an entirely different issue on our hands. This being the case, it is difficult to see why we should have any moral objection to the offering of any alternative. If it is fair to impose the prison sentence, why would it be unfair to the offender to offer to shorten it, or even waive it entirely, if the offender is willing to do anything else? Suppose we let offenders off with no prison time if they agree to be tortured for the rest of their lives. We are giving them the choice between a fair punishment and (let us assume) an unfair one. But so long as a fair one is offered, who but the offender himself is morally responsible if the unfair one is chosen? Far from decreasing the offender's freedom, all adding castration (or anything else) as an option does is increase his freedom. If he prefers castration to serving the full prison

sentence, he will do it and presumably be better off than if castration had not been offered (at least given his own preferences, and who are we to disagree?). If he prefers the full prison sentence to castration, he will refuse castration and will be in exactly the same position as if it were never offered. His position with the castration alternative will be better than or the same as, but never worse than, his position without the alternative.

In addition, it is by no means clear to us that castration is a morally unfair punishment for certain sex crimes, even if imposed without the offender's consent. If a person commits such a crime at a time when the possible punishments include castration (an ex post facto imposition of a new punishment would of course be unconstitutional as well as morally suspect), then castrating him as punishment would seem to be morally objectionable only if it were considered to be significantly out of proportion to the crime committed. But at least some sex crimes are very serious wrongs that presumably deserve a very serious punishment, and a punishment that may greatly reduce the chance of recidivism seems particularly appropriate. Perhaps castration is morally too harsh a punishment for certain or all sex crimes, but it at least seems arguable that in some cases it is not.

There are, of course, all sorts of reasons why it might be morally wrong to encourage offenders to take certain actions as alternatives to fair punishments. For example, the action encouraged might be morally wrong in itself; for instance, reducing sex crime sentences in exchange for killing a child. Alternatively, the result of the choice offered might grossly impair the deterrent effect of the criminal law; for instance, reducing sex crime sentences upon request. But the coercion objection goes only to the fairness of the offer from the offender's standpoint. One would not criticize the "kill-a-child" or "request" arrangements on the ground that they are coercive, but instead on the grounds that they are harmful to society. In short, we can see no reasonable ethical objection on coercion grounds to offering an offender the choice between a longer, but still ethically acceptable, sentence and a shorter sentence with castration.

IV. CONCLUSIONS AND FUTURE DIRECTIONS

To judge by the attention of state legislatures and the press, protecting society, especially children, from sex offenders has become a national priority. The recognition that at least some types of sex offenders are likely to commit multiple offenses as long as they are free has led to laws and policies aimed at removing them from society for as long as possible. This goal is not without substantial costs, however. Prison space is expensive, and psychiatric incarceration of offenders considered too dangerous to release at the end of their terms costs even more. Resources devoted to incarcerating sex offenders cannot be spent on other worthy goals. We have argued that surgical and chemical castration are effective, rational, and ethical alternatives to long term incarceration, at least under some circumstances. Poli-

cymakers who wish to pursue these alternatives must consider several outstanding issues.

First, if castration is ultimately going to remain the choice of the offender, it is important to know how many sex offenders would choose to have the operation and under what conditions. It would be desirable to study, for example, whether incarcerated sex offenders would in fact con-

sider castration in exchange for sentence reduction.

Second, many urologists who would typically perform surgical castration are very reluctant to perform the operation on sex offenders, primarily due to fear of being sued by patients who come to regret having had the operation. Notably, the first author of this Article attempted to find a physician who would surgically castrate Morse, and was unable to do so. Physicians' reluctance undoubtedly also reflects the unusual nature of the procedure. A substantial number of urologists opined that surgical castration of sex offenders is a good idea but that they did not want to become involved because of fear of bad publicity or lawsuits. As is the case in most elective medical procedures, surgical or chemical castration would require the patient's informed consent, which may be sufficient to protect physicians from liability. However, it may also be desirable to consider legislation that explicitly limits the rights of castrated sex offenders to sue surgeons or other physicians involved in castrations.

Third, surgical or chemical castration will require some outpatient medical infrastructure. For example, chemical castration will require periodic injections as well as physical examinations. Furthermore, as we have already noted, it is conceivable that some castrated offenders may try to revive their libidos by obtaining exogenous androgens. Thus, it may be advisable to periodically assess the testosterone levels of certain offenders.

Finally, it will be important for states to closely monitor the outcomes of castrated sex offenders who are released into the community. We expect that there will be very few failures, but failures there will be. This is no different than for other categories of criminals, except that castrated sex offenders are probably much less dangerous. As we have argued, the castration option should not be required to meet a standard of perfection. Recognizing this ahead of time may diminish the chance that highly publicized failures will irrationally distort reaction to a policy that works well on average. Of course, it is important to evaluate whether releasing castrated sex offenders works sufficiently well to justify the practice. Available evidence suggests that it probably does, and better evidence will not exist until it is tried on a more extensive basis.

⁴³ See, e.g., GA. CODE ANN. § 16-6-4 (1997).