English - German - French - Dutch - Spanish - Back to main page

BODY PLEASURE AND THE ORIGINS OF VIOLENCE

By James W. Prescott

From "The Bulletin of The Atomic Scientists", November 1975, pp. 10-20

(Introduction of the article in the "Bulletin of the Atomic Scientists":)

James W. Prescott, a neuropsychologist, is a health scientist administrator at the National Institute of Child Health and Human Development in Bethesda, Maryland. He is a member of the Board of Directors of the American Humanist Association. This article appeared in part in the April 1975 issue of *The Futurist*, published by the World Future Society, and is reprinted here with their permission. The views and opinions expressed here are those of the author and do not necessarily reflect the position of the National Institutes of Health.

A neuropsychologist contends that the greatest threat to world peace comes from those nations which have the most depriving environments for their children and which are most repressive of sexual affection and female sexuality.

James W. Prescott

Human violence is fast becoming a global epidemic. All over the world, police face angry mobs, terrorists disrupt the Olympics, hijackers seize airplanes, and bombs wreck buildings. During the past year, wars raged in the Middle East, Cyprus, and Southeast Asia, and guerrilla fighting continued to escalate in Ireland. Meanwhile, crime in the United States grew even faster than inflation. Figures from the Federal Bureau of Investigation show that serious crimes rose 16 percent in the first six months of 1974—one of the largest crime increases since FBI record-keeping began.

Unless the causes of violence are isolated and treated, we will continue to live in a world of fear and apprehension. Unfortunately, violence is often offered as a solution to violence. Many law enforcement officials advocate 'get tough' policies as the best method to reduce crime. Imprisoning people, our usual way of dealing with crime, will not solve the problem, because the causes of violence lie in our basic values and the way in which we bring up our children and youth. Physical punishment, violent films and TV programs teach our children that physical violence is normal. But these early life experiences are not the only or even the main source of violent behavior. Recent research supports the point of view that the deprivation of physical pleasure is a major ingredient in the expression of physical violence. The common as-

p. 11, November 1975, Bulletin of the Atomic Scientists

sociation of sex with violence provides a clue to understanding physical violence in terms of deprivation of physical pleasure.

Unlike violence, pleasure seems to be something the world can't get enough of. People are constantly in search of new forms of pleasure, yet most of our 'pleasure' activities appear to be substitutes for the natural sensory pleasures of touching. We touch for pleasure or for pain or we don't touch at all. Although physical pleasure and physical violence seem worlds apart, there seems to be a subtle and intimate connection between the two. Until the relationship between pleasure and violence is understood, violence will continue to escalate.

As a developmental neuropsychologist I have devoted a great deal of study to the peculiar relationship between violence and pleasure. I am now convinced that the deprivation of physical sensory pleasure is the principal root cause of violence. Laboratory experiments with animals show that pleasure and violence have a reciprocal relationship, that is, *the presence of one inhibits the other*. A raging, violent animal will abruptly calm down when electrodes stimulate the pleasure centers of its brain. Likewise, stimulating the violence centers in the brain can terminate the animal's sensual pleasure and peaceful behavior. When the brain's pleasure circuits are 'on,' the violence circuits are 'off,' and vice versa. Among human beings, a pleasure-prone personality rarely displays violence or aggressive behaviors, and a violent personality has little ability to tolerate, experience, or enjoy sensuously pleasing activities. As either violence or pleasure goes up, the other goes down.

Sensory Deprivation

The reciprocal relationship of pleasure and violence is highly significant because certain sensory experiences during the formative periods of development will create a neuropsychological predisposition for either violence-seeking or pleasure-seeking behaviors later in life. I am convinced that various abnormal social and emotional behaviors resulting from what psychologists call 'maternal-social' deprivation, that is, a lack of tender, loving care, are caused by a unique type of sensory deprivation, *somatosensory* deprivation. Derived from the Greek word for 'body,' the term refers to the sensations of touch and body movement which differ from the senses of light, hearing, smell and taste. I believe that the deprivation of body touch, contact, and movement are the basic causes of a number of emotional disturbances which

Violence against sexuality and the use of sexuality for violence, particularly against women, has very deep roots in Biblical tradition.

include depressive and autistic behaviors, hyperactivity, sexual aberration, drug abuse, violence, and aggression.

These insights were derived chiefly from the controlled laboratory studies of Harry F. and Margaret K. Harlow at the University of Wisconsin. The Harlows and their students separated infant monkeys from their mothers at birth. The monkeys were raised in single cages in an animal colony room, where they could develop social relationships with the other animals through seeing, hearing, and smelling, but not through touching or movement. These and other studies indicate that it is the deprivation of body contact and body movement—not deprivation of the other senses—that produces the wide variety of abnormal emotional behaviors in these isolation-reared animals. It is well known that human infants and children who are hospitalized or institutionalized for extended periods with little physical touching and holding develop almost identical abnormal behaviors, such

as rocking and head banging.

Although the pathological violence observed in isolation-reared monkeys is well documented, the linking of early somatosensory deprivation with physical violence in humans is less well established. Numerous studies of juvenile delinquents and adult criminals have shown a family background of broken homes and/or physically abusive parents. These studies have rarely mentioned, let alone measured, the degree of deprivation of physical affection, although this is often inferred from the degree of neglect and abuse. One exceptional study in this respect is that of Brandt F. Steele and C. B. Pollock, psychiatrists at the University of Colorado, who studied child abuse in three generations of families who physically abused their children. They found that parents who abused their children were invariably deprived of physical affection themselves during childhood and that their adult sex life was extremely poor. Steele noted that almost without exception the women who abused their children had never experienced orgasm. The degree of sexual pleasure experienced by the men who abused their children was not ascertained, but their sex life, in general, was unsatisfactory. The hypothesis that physical pleasure actively inhibits physical violence can be appreciated from our own sexual experiences. How many of us feel like assaulting someone after we have just experienced orgasm?

The contributions of Freud to the effects of early experiences upon later behaviors and the consequences of repressed sexuality have been well established. Unfortunately time and space do not permit a discussion here of his differences with Wilhelm Reich concerning his *Beyond the Pleasure Principle*.

The hypothesis that deprivation of physical pleasure results in physical violence requires a formal systematic evaluation. We can test this hypothesis by examining cross-cultural studies of child-rearing practices, sexual behaviors, and physical violence. We would expect to find that human societies which provide their infants and children with a great deal of physical affection (touching,

p. 12, November 1975, Bulletin of the Atomic Scientists

holding, carrying) would be less physically violent than human societies which give very little physical affection to their infants and children. Similarly, human societies which tolerate and accept premarital and extramarital sex would be less physically violent than societies which prohibit and punish premarital and extramarital sex.

Cultural anthropologists have gathered exactly the data required to examine this hypothesis for human societies—and their findings are conveniently arranged in R. B. Textor's *A Cross-Cultural Summary* [1]. Textor's book is basically a research tool for cross-cultural statistical inquiry. The survey provides some 20,000 statistically significant correlations from 400 culture samples of primitive societies.

Infant Neglect/Adult Violence

Certain variables which reflect physical affection (such as fondling, caressing, and playing with infants) were related to other variables which measure crime and violence (frequency of theft, killing, etc.). The important relationships are displayed in the tables. The percent figures reflect the relationships among the variables, for example, high affection/low violence plus low affection/high violence. This procedure is followed for all tables.

Societies ranking high or low on the Infant Physical Affection Scale were examined for degree of violence. The results (<u>Table 1</u>) clearly indicated that those societies which give their infants the greatest amount of physical affection were characterized by low theft, low infant physical pain, low religious activity, and negligible or absent killing, mutilating, or

torturing of the enemy. These data directly confirm that the deprivation of body pleasure during infancy is significantly linked to a high rate of crime and violence.

Some societies physically punish their infants as a matter of discipline, while others do not. We can determine whether this punishment reflects a general concern for the infant's welfare by matching it against child nurturant care. The results (<u>Table 2</u>) indicate that societies which inflict pain and discomfort upon their infants tend to neglect them as well. These data provide no support for the prescription from Proverbs (23: 13-14): "Withhold not chastisement from a boy; if you beat him with the rod, he will not die. Beat him with the rod, and you will save him from the nether world."

Adult physical violence was accurately predicted in 36 of 49 cultures (73 percent) from the infant physical affection variable. The probability that a 73 percent rate of accuracy could occur by chance is only four times out of a thousand.

Of the 49 societies studied, 13 cultures seemed to be exceptions to the theory that a lack of somatosensory pleasure makes people physically violent (see <u>Table 3</u>). It was expected that cultures which placed a high value upon physical pleasure during infancy and childhood would maintain such values into adulthood. This is not the case. Child rearing practices do not predict patterns of later sexual behavior. This initial surprise and presumed discrepancy, however, becomes advantageous for further prediction.

The Long-Term Consequences of Infant Pleasure and Pain

Human societies differ greatly in their treatment of infants. In some cultures, parents lavish physical affection on infants, while in others the parents physically punish their infants. A study of anthropological data by the author [2] found that those societies which give their infants the greatest amount of physical affection have less theft and violence among adults, thus supporting the theory that deprivation of bodily pleasure during infancy is significantly linked to a high rate of crime and violence. The tables below show how physical affection—or punishment—given infants correlates with other variables. For example, cultures which inflict pain on infants appear to be more likely to practice slavery, polygyny, etc. In the tables, N refers to the number of cultures in the comparison while P is the probability that the observed relationship could occur by chance which was calculated by the Fisher Exact Probability Test.

TABLE 1

Adult Behaviors in Societies Where Physical Affection is Lavished on Infants

Adult Behaviors	Percent %	N	Probability P
Invidious display of wealth is low	66	50	.06
Incidence of theft is low	72	36	.02
Overall infant indulgence is high	80	66	.0000
Infant physical pain low	65	63	.03
Negligible killing, torturing or mutilating the enemy	73	49	.004
Low religious activity	81	27	.003

TABLE 2

Adult Behaviors in Societies Where Pain is Inflicted on Infants by Parent or Nurturing Person

Percent Probability

Adult Behaviors	%	N P		
Slavery is present	64	66 .03		
Polygyny (multiple wives) practiced	79	34 .001		
Women status inferior	78	14 .03		
Low infant physical affection	65	63 .03		
Low overall infant indulgence	77	66 .000		
Developing nurturant behavior in child is low	67	45 .05		
Supernaturals (gods) are aggressive	64	36 .01		
The coded scales on infancy were developed by cultural anthropologists Barry, Bacon and Child [3]; on sexual behavior by Westbrook, Ford and Beach [4]; and on physical violence by Slater [5].				

p. 13, November 1975, Bulletin of the Atomic Scientists

Two variables that are highly correlated are not as useful for predicting a third variable as two variables that are uncorrelated. Consequently, it is meaningful to examine the sexual behaviors of the 13 cultures whose adult violence was not predictable from physical pleasure during infancy.

Apparently, the social customs which influence and determine the behaviors of sexual affection are different from those which underlie the expression of physical affection toward infants.

When the six societies characterized by both high infant affection and high violence are compared in terms of their premarital sexual behavior, it is surprising to find that five of them exhibit premarital sexual repression, where virginity is a high value of these cultures. It appears that *the beneficial effects of infant physical affection can be negated by the repression of physical pleasure (premarital sex) later in life.*

The seven societies characterized by both low infant physical affection and low adult physical violence were all found to be characterized by permissive premarital sexual behaviors. Thus, *the detrimental effects of infant physical affectional deprivation seem to be compensated for later in life by sexual body pleasure experiences during adolescence.* These findings have led to a revision of the somatosensory pleasure deprivation theory from a one-stage to a two-stage developmental theory where the physical violence in 48 of the 49 cultures could be accurately classified.

In short, violence may stem from deprivation of somatosensory pleasure either in infancy or in adolescence. The only true exception in this culture sample is the headhunting Jivaro tribe of South America. Clearly, this society requires detailed study to determine the causes of its violence. The Jivaro belief system may play an important role, for as anthropologist Michael Harner notes in *Jivaro Souls* [6], these Indians have a "deep-seated belief that killing leads to the acquisition of souls which provide a supernatural power conferring immunity from death."

Infant Physical Affection and Adult Physical Violence

Societies that provide infants with a great deal of physical affection ('tender loving care') are later characterized by relatively non-violent adults. In 36 of the 49 cultures studied, a high degree of infant affection was associated with a low degree of adult physical

violence—and vice versa. When the 13 exceptions were investigated, it was found that the violence of all but one (the Jivaro tribe of South America) could be accounted for the presence or absence of premarital sexual behavior.

Touching Lead to Less Violence in Our Society?" by Lionel Gambill, published in *The Truth Seeker*, March/April 1989. Gambill writes:

Subsequent to original publication of this material in *The Futurist* in April 1975, cultural anthropologists informed Prescott of errors in some of the original codings in the reference work on which the comparison was based. When these errors were corrected, no exceptions remained. The Pleasure/Violence Reciprocity Theory, applied to the cultures listed in that reference work, has a predictive validity of 100%.

The original version of the table from the Futurist is available <u>here</u>.

The strength of the two-stage deprivation theory of violence is most vividly illustrated when we contrast the societies showing high rates of physical affection during infancy and adolescence against those societies which are consistently low in physical affection for both developmental periods. The statistics associated with this relationship are extraordinary: The percent likelihood of a society being physically violent if it is physically affectionate toward its infants *and* tolerant of premarital sexual behavior is 2 percent (48/49). The probability of this relationship occurring by chance is 125,000 to one. I am not aware of any other developmental variable that has such a high degree of predictive validity. Thus, we seem to have a firmly based principle: Physically affectionate human societies are highly unlikely to be physically violent.

Accordingly, when physical affection and pleasure during adolescence as well as infancy are related to measures of violence, we find direct evidence of a significant relationship between the punishment of premarital sex behaviors and various measures of crime and violence. As <u>Table 4</u> shows, additional clusters of relationships link the punishment and repression of premarital sex to large community size, high social complexity and class stratification, small extended families, purchase of wives, practice of slavery, and a high god present in human morality. The relationship between small extended families and punitive premarital sex attitudes deserves emphasis, for it suggests that the nuclear Western cultures may be a contributing factor to our repressive attitudes toward sexual expression.

p. 14, November 1975, Bulletin of the Atomic Scientists

The same can be suggested for community size, social complexity, and class stratification.

Not surprisingly, when high self-needs are combined with the deprivation of physical affection, the result is self-interest and high rates of narcissism. Likewise, exhibitionistic dancing and pornography may be interpreted as a substitute for normal sexual expression. Some nations which are most repressive of female sexuality have rich pornographic art forms.

Extramarital Sex

I also examined the influence of extramarital sex taboos upon crime and violence. The data clearly indicates that punitive-repressive attitudes toward extramarital sex are also linked with physical violence, personal crime, and the practice of slavery. Societies which value monogamy emphasize military glory and worship aggressive gods.

These cross-cultural data support the view of psychologists and sociologists who feel that sexual and psychological needs not being fulfilled within a marriage should be met outside of it, without destroying the primacy of the marriage relationship.

Premarital Sex, Physical Violence and Other Adult Behaviors

Premarital sexual freedom for young people can help reduce violence in a society, and the physical pleasure that youth obtains from sex can offset a lack of physical affection during infancy. Other research also indicates that societies which punish premarital sex are likely to engage in wife purchasing, to worship a high god in human morality, and to practice slavery. Other results are shown in the table below.

TABLE 4						
Adult Behaviors in Societies Where Premarital Sex is Strongly Punished						
Adult Behaviors	Percent %	N	Probability P			
Community size is larger	73	80	.0003			
Slavery is present	59	176	.005			
Societal complexity is high	87	15	.01			
Personal crime is high	71	28	.05			
Class stratification is high	60	111	.01			
High incidence of theft	68	31	.07			
Small extended family	70	63	.008			
Extramarital sex is punished	71	58	.005			
Wives are purchased	54	114	.02			
Castration anxiety is high	65	37	.009			
Longer post-partum sex taboo	62	50	.03			
Bellicosity is extreme	68	37	.04			
Sex disability is high	83	23	.004			
Killing, torturing and mutilating the enemy is high	69	35	.07			
Narcissism is high	66	38	.04			
Exhibitionistic dancing is emphasized	65	66	.04			
High god in human morality	81	27	.01			

These findings overwhelmingly support the thesis that deprivation of body pleasure throughout life—but particularly during the formative periods of infancy, childhood, and adolescence—are very closely related to the amount of warfare and interpersonal violence. These insights should be applied to large and complicated industrial and postindustrial societies.

Crime and physical violence have substantially increased over the past decade in the United States. According to FBI statistics, both murder and aggravated assault increased 53 percent between 1967 and 1972, while forcible rape rose 70 percent.

These figures again raise the question of the special relationship between sexuality and violence. In addition to our rape statistics, there is other evidence that points to preference for sexual violence over sexual pleasure in the United States. This is reflected in our acceptance of sexually explicit films that involve violence and rape, and our rejection of sexually explicit films for pleasure only (pornography). Neighborhood movie theaters show such sexually violent films as *Straw Dogs, Clockwork Orange,* and *The Klansman,* while banning films which portray sexual pleasure (*Deep Throat, The Devil in Miss Jones*). Attempts to close down massage parlors are another example of our anti-pleasure attitudes. Apparently, sex with pleasure is immoral and unacceptable, but sex with violence and pain is moral and acceptable.

A questionnaire I developed to explore this question was administered to 96 college students whose average age was 19 years. The results of the questionnaire support the

connection between rejection of physical pleasure (and particularly of premarital and extramarital sex) with expression of physical violence. Respondents who reject abortion, responsible premarital sex, and nudity within the family were likely to approve of harsh physical punishment for children and to believe that pain helps build strong moral character. These respondents were likely to find alcohol and drugs more satisfying than sex. The data obtained from the questionnaire provide strong statistical support for the basic inverse relationship between physical violence and physical pleasure. If violence is high, pleasure is low, and conversely, if pleasure is high, violence is low. The questionnaire bears out the theory that the pleasure-violence relationship found in primitive cultures also holds true for a modern industrial nation.

Another way of looking at the reciprocal relationship between violence and pleasure is to examine a society's choice of drugs. A society will support behaviors that are consistent with its values and social mores. U.S. society is a competitive, aggressive, and violent society. Consequently, it supports drugs that fa-

p. 15, November 1975, Bulletin of the Atomic Scientists

cilitate competitive, aggressive, and violent behaviors and opposes drugs that counteract such behaviors. Alcohol is well known to facilitate the expression of violent behaviors, and, although addicting and very harmful to chronic users, is acceptable to U.S. society. Marijuana, on the other hand, is an active pleasure-inducing drug which enhances the pleasure of touch and actively inhibits violent-aggressive behaviors. It is for these reasons, I believe that marijuana is rejected in U.S. society. For similar reasons heroin is rejected and methadone (an addicting drug minus the pleasure) is accepted.

The data from my questionnaire support this view. As <u>Table 5</u> shows, very high correlations between alcohol use and parental punishment indicate that people who received little affection from their mothers and had physically punitive fathers are likely to become hostile and aggressive when they drink. Such people find alcohol more satisfying than sex. There is an even stronger relationship between parental physical punishment and drug usage. Respondents who were physically punished as children showed alcohol-induced hostility and aggression and were likely to find alcohol and drugs more satisfying than sex. The questionnaire also reveals high correlations between sexual repression and drug usage. Those who describe premarital sex as "not agreeable" are likely to become aggressive when drinking and to prefer drugs and alcohol to sexual pleasures. This is additional evidence for the hypothesis that drug "pleasures" are a substitute for somatosensory pleasures.

Violence and Pleasure: The Attitudes of College Students

The reciprocal relationship of violence and pleasure holds true in modern industrial nations as well as primitive societies. This theory was tested by means of a questionnaire given to 96 college students (average age: 19). The results showed that students who have relatively negative attitudes toward sexual pleasure tend to favor harsh punishment for children and to believe that violence is necessary to solve problems. The students rated a series of statements on a scale of 1 to 6, where 1 indicated strong agreement and 6 strong disagreement. Through a statistical technique (factor analysis), a personality profile of the violent person was developed. Table 5 shows the degree of relationship among the various statements which reflect social and moral values. The figures at left, known as 'loadings,' are treated like correlation coefficients. They indicate the strength with which each variable contributes to the overall personality description of the

respondent as defined by this specific profile.

TABLE 5

Somatosensory Index of Human Affection Factor 1:66.6%

Violence Approved

- Hard physical punishment is good for children who disobey a lot.
- .81 Physical punishment and pain help build a strong moral character.
- .80 Abortion should be punished by society.
- .76 Capital punishment should be permitted by society.
- .75 Violence is necessary to really solve our problems.
- .74 Physical punishment should be allowed in the schools.
- .69 I enjoy sadistic pornography.
- .54 I often feel like hitting someone.
- .43 I can tolerate pain very well.

Physical Pleasure Condemned

- .84 Prostitution should be punished by society.
- .80 Responsible premarital sex is not agreeable to me.
- .78 Nudity within the family has a harmful influence upon children.
- .73 Sexual pleasures help build a weak moral character.
- .72 Society should interfere with private sexual behavior between adults.
- .69 Responsible extramarital sex is not agreeable to me.
- .61 Natural fresh body odors are often offensive.
- .47 I do not enjoy affectional pornography.
- .42 I often get "uptight" about being touched.

Alcohol and Drugs Rated Higher than Sex

- .70 Alcohol Is more satisfying than sex.
- .65 Drugs are more satisfying than sex.
- .60 I get hostile and aggressive when I drink alcohol.
- .49 I would rather drink alcohol than smoke marijuana.
- .45 I drink alcohol more often than I experience orgasm.

Political Conservatism

- .82 I tend to be conservative in my political points of view.
- .77 Age (Older).
- .51 I often dream of either floating, flying, falling, or climbing.
- .45 My mother is often indifferent toward me.
- .40 I remember when my father physically punished me a lot.

The collaboration of Douglas Wallace, Human Sexuality Program, University of California Medical School, San Francisco, in the questionnaire study is gratefully acknowledged.

This table is a slightly revised version. The original version has been preserved.

Religious Roots

The origins of the fundamental reciprocal relationship between physical violence and physical pleasure can be traced to philosophical dualism and to the theology of body/soul

relationships. In Western philosophical thought man was not a unitary being but was divided into two parts, body and soul. The Greek philosophical conception of the relationship between body and soul was quite different than the Judeo-Christian concept which posited a state of war between the body and soul. Within Judeo-Christian thought the purpose of human life was to save the soul, and the body was seen as an impediment to achieving this objective. Consequently, the body must be punished and deprived. In St. Paul's words: "Put to death the base pursuits of the body—for if you live according to the flesh, you shall die: but if by the spirit you mortify the deeds of the flesh, you shall live" (Romans 8:13). St. Paul clearly advocated somatosensory pleasure deprivation and enhancement of painful somatosen-

p. 16, November 1975, Bulletin of the Atomic Scientists

sory stimulation as essential prerequisites for saving the soul.

"Now concerning the things whereof you wrote to me: *It is good for a man not to touch a woman*" (1 Corinthians, 7:1).

Aristotle did not view a state of war between the body and soul, but rather envisioned a complimentary relationship in which the state of the soul or mind was dependent on the state of the body. In fact he stated that "the care of the body ought to precede that of the soul." (*Politica*)

Aristotle also appreciated the reciprocal relationship between pleasure and pain, and recognized that a compulsive search for bodily pleasure originates from a state of bodily discomfort and pain:

Now, excess is possible in the case of the goods of the body, and it is the pursuit of excess, but not the pursuit of necessary pleasures, that makes a man bad. For all men get some kind of enjoyment from good food, wine, and sexual relations, but not everyone enjoys these things in the proper way. The reverse is true of pain: a bad person does not avoid an excess of it, but he avoids it altogether. For the opposite of an excess is pain only for the man who pursues the excess....

Accordingly, we must now explain why the pleasures of the body appear to be more desirable. The first reason, then, is that pleasure drives out pain. When men experience an excess of pain, they pursue excessive pleasure and bodily pleasure in general, in the belief that it will remedy the pain. These remedial (pleasures) become very intense—and that is the very reason why they are pursued because they are experienced in contrast with their opposite. (*Nichomachean Ethics*, Book 7)

It is clear that the world has only limited time to change its custom of resolving conflicts violently. It is uncertain whether we have the time to undo the damage done by countless previous generations, nor do we know how many future generations it will take to transform our psychobiology of violence into one of peace. In his discussion of the highest good, Aristotle was quite explicit:

"Therefore, the highest good is some sort of pleasure, despite the fact that most pleasures are bad, and, if you like, bad in the unqualified sense of the word." (*Nichomachean Ethics*, Book 7)

It is evident that the Judeo-Christian concept of body pleasure is quite the opposite of that outlined by Aristotle, particularly, the relief of body pain and discomfort through somatosensory pleasure. This denial of somatosensory pleasure in Pauline Christian doctrine has led to alternative forms of 'relief' through such painful stimulations as hairshirts, self-scourgings, self-mutilations, physical violence against others, and in the nonsensory pleasures of drugs.

Experimental animal studies have documented counterparts to these phenomena. For example, animals deprived of somatosensory stimulation will engage in mutilations of their own bodies. Animals deprived of touching early in life develop impaired pain perception and an aversion to being touched by others. They are thus blocked from experiencing the body-pleasure therapy that they need for rehabilitation. In this condition, they have few alternatives but physical violence, where pain-oriented touching and body contact is facilitated by their impaired ability to experience pain. Thus, physical violence and physical pain become therapies of choice for those deprived of physical pleasure.

The question arises as to how Christian philosophy and theology, which borrowed heavily from Aristotle, managed to avoid, if not outright reject, Aristotle's teachings regarding the morality of pleasure. The roots to this question can be found throughout the Old Testament, beginning with the account in Genesis of the expulsion of Adam and Eve from the Garden of Eden. The first consequence of Eve's transgression was that nudity became shameful. This even may well be the beginning of man's hostility toward women and the equating of woman with evil, particularly the evils of the body. This is vividly portrayed in Zechariah (5:5-8) in an angel's description of the flying bushel:

"This is a bushel container coming. This is their guilt in all the land." Then a leaden cover was lifted and there was a woman sitting inside the bushel. "This is wickedness, he said, and he thrust her inside the bushel, pushing the leaden cover into the opening."

Violence against sexuality and the use of sexuality for violence, particularly against women, has very deep roots in Biblical tradition, and is spelled out very early. The nineteenth chapter of Genesis (19:1-11), the first book of the Old Testament, holds that the rape of woman is acceptable but the rape of man is "a wicked thing." This chapter about the destruction of Sodom and Gomorrah describes Lot's hospitality to two male travelers (actually two angels) who were housed with him.

In the evening the townsmen of Sodom came to Lot's house and said to him: "Where are the men who came to your house tonight? Bring them out to us that we may have intimacies with them." Lot went out to meet them at the entrance. When he had shut the door behind him, he said, "I beg you, my brothers, not to do this wicked thing. I have two daughters who have never had intercourse with men. Let me bring them out to you, and you may do to them as you please. But don't do anything to these men, for you know they have come under the shelter of my roof." They replied, "Stand back! This fellow," they sneered, "came here as an immigrant, and now he dares to give orders! We'll treat you worse than them!" With that, they pressed hard against Lot, moving in closer to break down the door. But his guests put out their hand, pulled Lot inside with them, and closed the

p. 17, November 1975, Bulletin of the Atomic Scientists

door; at the same time they struck the men at the entrance of the house, one and all, with such blinding light that they were utterly unable to reach the doorway.

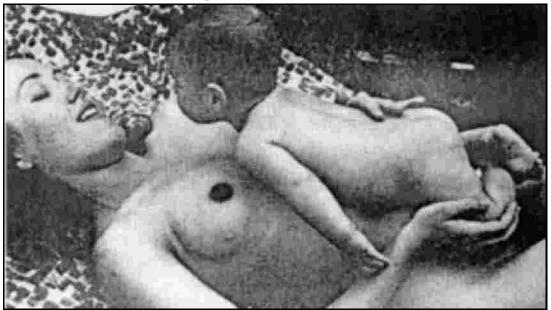
As the story continues, the two angels escort Lot and his family to safety and then destroy Sodom and Gomorrah for their great sinfulness. Yet not a word of reproach is given to Lot for his willingness to hand over his two virgin daughters to be gang raped. This same story is repeated in the books of Ezekiel (23:1-49) and Judges (19:22-30).

Given such a tradition, it is understandable that during the Inquisition only women were charged with having intercourse with the devil and put to death for this crime of pleasure. What man has died at the stake for having slept with Satan? This tradition is maintained in modern cultures where women are punished for prostitution but their male customers are not.

The historical and Biblical acceptance of rape down through the ages has brutalized the psyche of males brought up in this tradition. This is well illustrated in the account of Michael McCusker, a Marine sergeant who witnessed a gang rape in Vietnam. McCusker [7] tells of a rifle squad of nine men who entered a small village.

They were supposed to go after what they called a Viet Cong whore. They went into her village and instead of capturing her, they raped her—every man raped her. As a matter of fact, one man said to me later that it was the first time he had ever made love to a woman with his boots on. The man who led the platoon, or the squad, was actually a private. The squad leader was a sergeant but he was a useless person and he let the private take over his squad. Later he said he took no part in the raid. It was against his morals. So instead of telling his squad not to do it, because they wouldn't listen to him anyway, the sergeant went into another side of the village and just sat and stared bleakly at the ground, feeling sorry for himself. But at any rate, they raped the girl, and then, the last man to make love to her, shot her in the head.

What is it in the American psyche that permits the use of the word 'love' to describe rape? And where the act of love is completed with a bullet in the head!



The first months. Breast-feeding and caressing will help this infant to grow into a nonviolent adult. Denial of such body contact in infancy can have the opposite effect.

Why do men rape women? Researchers report that most rapists have a family background of paternal punishment and hostility and loss of maternal affection. I interpret rape as man's revenge against woman for the early loss of physical affection. A man can express his hostility toward his mother for not giving him enough physical attention by sexually violating another woman.

Another explanation may be that the increasing sexual freedom of women is threatening to man's position of power and dominance over women which he often maintains through sexual aggression. Rape destroys sensual pleasure in woman and enhances sadistic pleasure in man. Through rape, man defends himself from the sensual pleasures of women which threaten his position of power and dominance.

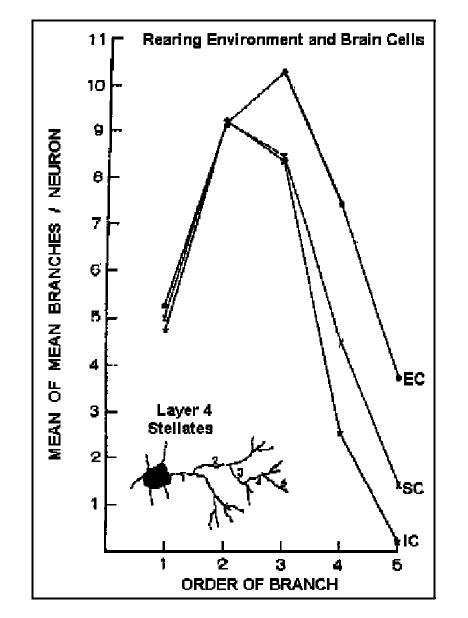
It is my belief that rape has its



Realistic dolls. Swedish paper doll exemplifies the frankness about the human body that is needed to inculcate wholesome attitudes toward sex and violence. In this paper doll, no attempt is made to idealize or de-sexualize the human body; the body is simply accepted as it is.

p. 18, November 1975, Bulletin of the Atomic Scientists

origins in the deprivation of physical affection in parent-child relationships and adult sexual relationships; and in a religious value system that considers pain and body deprivation moral and physical pleasure immoral. Rape maintains man's dominance over woman and supports the perpetuation of patriarchal values in our society.



This figure shows the effects of the rearing environment upon a type of nerve cell (called a stellate) which is found in the fourth layer of a rat's visual cortex. The number of branches of the dendrites is much greater in animals reared in groups in a toy-filled environment (called enriched environmental condition, EC) than the number which occurs when two rats are reared together in an ordinary cage (called social condition, SC) or when rats are reared alone in ordinary cages (called isolate condition, IC).

These data show that extreme conditions of sensory/social deprivation are not necessary to alter brain structure, and that an enriched sensory/social environment can increase the complexity of brain cells. Dendrites, which are usually branched like a tree, are the part of the nerve cell (neuron) which carries the nerve impulse to the cell body; and they are the means by which brain cells communicate with one another. Brain cells with many dendrites can influence and regulate the activity of other brain cells more effectively than brain cells with fewer or abnormal dendrites. It is believed that the complexity of brain cells is related to the ability to solve complex problems both of an intellectual and social nature, and that abnormal dendritic structures underlie abnormal electrical 'spike' discharges in the brain.

Source: Volkmar and Greenough [9].

It is clear that the world has only limited time to change its custom of resolving conflicts violently. It is uncertain whether we have the time to undo the damage done by countless previous generations, nor do we know how many future generations it will take to transform our psychobiology of violence into one of peace.

If we accept the theory that the lack of sufficient somatosensory pleasure is a principal cause of violence, we can work toward promoting pleasure and encouraging affectionate interpersonal relationships as a means of combatting aggression. We should give high priority to body pleasure in the context of meaningful human relationships. Such body pleasure is very different from promiscuity, which reflects a basic inability to experience pleasure. If a sexual relationship is not pleasurable, the individual looks for another partner. A continuing failure to find sexual satisfaction leads to a continuing search for new partners, that is, to promiscuous behavior. Affectionately shared physical pleasure, on the other hand, tends to stabilize a relationship and eliminate the search. However, a variety of sexual experiences seems to be normal in cultures which permit its expression, and this may be important for optimizing pleasure and affection in sexual relationships.

Available data clearly indicate that the rigid values of monogamy, chastity, and virginity help produce physical violence. The denial of female sexuality must give way to an acceptance and respect for it, and men must share with women the responsibility for giving affection and care to infants and children. As the father assumes a more equal role with the mother in child-rearing and becomes more affectionate toward his children, certain changes must follow in our socioeconomic system. A corporate structure which tends to separate either parent from the family by travel, extended meetings, or overtime work weakens the parent-child relationship and harms family stability. To develop a peaceful society, we must put more emphasis on human relationships.

Family planning is essential. Children must be properly spaced so that each can receive optimal affection and care. The needs of the infant should be immediately met. Cross-cultural evidence does not support the view that such practices will 'spoil' the infant. Contrary to Dr. Benjamin Spock, it is harmful for a baby to cry itself to sleep. By not answering an infant's needs immediately and consistently we not only teach a child distrust at a very basic emotional level, but also establish patterns of neglect which harm the

p. 19, November 1975, Bulletin of the Atomic Scientists

child's social and emotional health. The discouragement of breast feeding in favor of bottle feeding and the separation of healthy newborns from their mothers in our 'modern' hospitals are other examples of harmful child-rearing practices.

About 25 percent of marriages in the United States now end in divorce, and an even higher percentage of couples have experienced extramarital affairs. This suggests that something is basically wrong with the traditional concept of universal monogamy. When viewed in connection with the cross-cultural evidence of the physical deprivations, violence, and warfare associated with monogamy, the need to create a more pluralistic system of marriage becomes clear. Contemporary experiments with communal living and group marriage are attempting to meet basic needs that remain unfulfilled in the isolation of a nuclear marriage. We must seriously consider new options, such as extended families comprised of two or three couples who share values and lifestyles. By sharing the benefits and responsibilities of child rearing, such families could provide an affectionate and varied environment for children as well as adults, and thereby reduce the incidence of child abuse and runaways.

The communal family—like the extended family group—can provide a more stimulating and supportive environment for both children and adults than can the average nuclear

family. Communal living should not, of course, be equated with group sex, which is not a sharing, but more often an escape from intimacy and emotional vulnerability.

Openness About the Body

No matter what type of family structure is chosen, it will be important to encourage openness about the body and its functions. From this standpoint, we could benefit from redesigning our homes along the Japanese format, separating the toilet from the bathing facilities. The family bath should be used for socialization and relaxation, and should provide a natural situation for children to learn about male-female differences. Nudity, like sex, can be misused and abused, and this fear often prevents us from accepting the honesty of our own bodies.

The beneficial stimulation of whirlpool baths should not be limited to hospitals or health club spas, but brought into the home. The family bath should be large enough to accommodate parents and children, and be equipped with a whirlpool to maximize relaxation and pleasure. Nudity, openness, and affection within the family can teach children and adults that the body is not shameful and inferior, but rather is a source of beauty and sensuality through which we emotionally relate to one another. Physical affection involving touching, holding, and caressing should not be equated with sexual stimulation, which is a special type of physical affection.

The competitive ethic, which teaches children that they must advance at the expense of others, should be replaced by values of cooperation.

To Love, not Compete

The competitive ethic, which teaches children that they must advance at the expense of others, should be replaced by values of cooperation and a pursuit of excellence for its own sake. We must raise children to be emotionally capable of giving love and affection, rather than to exploit others. We should recognize that sexuality in teenagers is not only natural, but desirable, and accept premarital sexuality as a positive moral good. Parents should help teenagers realize their own sexual selfhood by allowing them to use the family home for sexual fulfillment. Such honesty would encourage a more mature attitude toward sexual relationships and provide a private supportive environment that is far better for their development than the back seat of a car or other undesirable locations outside the home. Early sexual experiences are too often an attempt to prove one's adulthood and maleness or femaleness rather than a joyful sharing of affection and pleasure.

Above all, male sexuality must recognize the equality of female sexuality. The traditional right of men to multiple sexual relationships must be extended to women. The great barrier between man and woman is man's fear of the depth and intensity of female sensuality. Because power and aggression are neutralized through sensual pleasure, man's primary defense against a loss of dominance has been the historic denial, repression, and control of the sensual pleasure of women. The use of sex to provide mere release from physiological tension (apparent pleasure) should not be confused with a state of sensual pleasure which is incompatible with dominance, power, aggression, violence, and pain. It is through the mutual sharing of sensual pleasure that sexual equality between women and men will be realized.

The sensory environment in which an individual grows up has a major influence upon the development and functional organization of the brain. Sensory stimulation is a nutrient that the brain must have to develop and function normally. How the brain functions determines how a person behaves. At birth a human brain is extremely immature and new brain cells develop up to the age of two years. The complexity of brain cell development continues up to about 16 years of age. Herman Epstein of Brandeis University has evidence that growth spurts in the human brain occur at approximately 3, 7, 11, and 15 years of age. How

p. 20, November 1975, Bulletin of the Atomic Scientists

early deprivations affect these growth spurts has yet to be determined; however, some data suggest that the final growth spurt may be abolished by early deprivation.

W. T. Greenough, a psychologist at the University of Illinois, has demonstrated that an enriched sensory environment produces a more complex brain cell in rats than an ordinary or impoverished sensory environment (see figure). His studies show that extreme sensory deprivation is not necessary to induce structural changes in the developing brain. Many other investigators have shown that rearing rats in isolation after they are weaned induces significant changes in the biochemistry of their brain cell functioning. Other investigators have shown abnormal electrical activity of brain cell functioning in monkeys reared in isolation. I have suggested that the cerebellum, a brain structure involved in the regulation of many brain processes, is rendered dysfunctional when an animal is reared in isolation and is implicated in violent-aggressive behaviors due to somatosensory deprivation. It has been shown that cerebellar neurosurgery can change the aggressive behaviors of isolation-reared monkeys to peaceful behavior. Predatory killing behavior in ordinary house cats can be provoked by stimulating the cerebellar fastigial nucleus, one of the deep brain nuclei of the cerebellum.

Abnormally low levels of platelet serotonin have been found in monkeys reared in isolation and also in institutionalized, highly aggressive children. These findings suggest that somatosensory deprivation during the formative periods of development significantly alters an important biochemical system in the body associated with highly aggressive behaviors. A number of other investigators have documented abnormalities in the adrenal cortical response system in rodents who were isolation-reared and who developed hyperactive, hyperreactive, and hyperaggressive behavior. Thus another important biochemical system associated with aggressiveness is known to be altered by somatosensory deprivation early in life.

It needs to be emphasized here that I advocate somatosensory pleasure stimulation as a therapeutic procedure to correct the abnormalities due to somatosensory pleasure deprivation. Such sensory stimulation can influence brain functioning and it does not appear necessary, except in *rare* circumstances, that brain surgery or electrical stimulation of the brain is required to alter pathological, violent behaviors. Unfortunately, therapeutic programs of somatosensory pleasure have yet to be established to determine the effectiveness of this therapy at the human level. The success of somatosensory therapy in isolation reared monkeys reported by Harry F. Harlow and Stephen Suomi [8] when other forms of therapy have failed in these animals, provide further encouragement and support for the utilization of touch and body movement therapies in the treatment of emotional disorders.

On the contrary, our prisons have been designed to maximize those conditions that are responsible for the violence and imprisonment of the social offender. It is not surprising that physical violence in such prison environments is a major problem. The acceptance of somatosensory pleasure as a form of somatic therapy will be difficult for our society to accept, as the opposition to massage parlors in many communities indicates. Clearly, if we consider violent and aggressive behaviors undesirable then we must provide an enriched somatosensory environment so that the brain can develop and function in a way that results in pleasurable and peaceful behaviors. The solution to physical violence is physical pleasure experienced within the context of meaningful human relationships.

For many people, a fundamental moral principle is the rejection of creeds, policies, and behaviors that inflict pain, suffering and deprivation upon our fellow humans. This principle needs to be extended: We should seek not just an absence of pain and suffering, but also the enhancement of pleasure, the promotion of affectionate human relationships, and the enrichment of human experience.

If we strive to increase the pleasure in our lives this will also affect the ways we express aggression and hostility. The reciprocal relationship between pleasure and violence is such that one inhibits the other; when physical pleasure is high, physical violence is low. When violence is high, pleasure is low. This basic premise of the somatosensory pleasure deprivation theory provides us with the tools necessary to fashion a world of peaceful, affectionate, cooperative individuals.

The world, however, has limited time to correct the conditions that propel us to violent confrontations. Modern technologies of warfare have made it possible for an individual or nation to bring total destruction to large segments of our population. And the greatest threat comes from those nations which have the most depriving environments for their children and which are most repressive of sexual affection and female sexuality. We will have the most to fear when these nations acquire the weapons of modern warfare. Tragically, this has already begun.

Notes

1. R. B. Textor, *A Cross-Cultural Summary* (New Haven, Conn.: Human Relations Area Files (HRAF) Press, 1967).

2. J. W. Prescott, "Early Somatosensory Deprivation as an Ontogenetic Process in Abnormal Development of the Brain and Behavior," *Medical Primatology*, edited by I. E. Goldsmith and Moor-Jankowski (Basel: Karger, 1971), 357-375; and Prescott, "Cross-Cultural Sludies of Violence," in *Aggressive Behavior: Current Progress in Pre-Clinical and Clinical Research*, Brain Information Report No. 37 (Los Angeles, Ca.: University of California, Aug. 1974), pp. 33-35.

3. M. K. Bacon, I. L. Child and H. A. Barry, III, "Cross-Cultural Study of Correlates of Crime," *Journal of Abnormal and Social Psychology*, 66 (1963), 291-300; and Barry, Bacon and Child, "Definitions, Ratings, and Bibliographic Sources for Child-Training Practices of 110 Cultures," in *Cross-Cultural Approaches: Readings in Cooperative Research*, edited by C. S. Ford (New Haven: HRAF Press, 1967).

4. J. T. Westbrook, Ford, and Beach, in *A Cross-Cultural Summary*, edited by Textor (New Haven: HRAF Press, 1967).

5. P. E. Slater, "Killing, Torturing or Mutilating the Enemy," in *A Cross-Cultural Summary*, edited by Textor.

6. Michael Harner, Jivaro Souls.

7. Vietnam Veterans Against the War, statement by Michael McClusker in *The Winter Soldier Investigation:* An Inquiry into American War Crimes (Boston: Beacon Press, 1972).

8. S. J. Suomi, and H. F. Harlow, "Social Rehabilitation of Isolate-Reared Monkeys," *Developmental Psychology*, 6 (1972), 487-496.

9. F. R. Volkmar and W. T. Greenough, "Rearing Complexity Affects Branching of Dendrites in the Visual Cortex of the Rat," *Science*, 176 (June 1972), 1445-1447; and M. Coleman, "Platelet Serotonin in Disturbed

Monkeys," Clinical Proceedings of the Childrens Hospital, 27 (1971). 187-194.

Text republished with the kind permission of James W. Prescott. Originally appeared in THE FUTURIST magazine (April 1975). Reproduced with permission of the <u>World Future Society</u>, 7910 Woodmont Avenue, Suite 450, Bethesda, MD 20817 USA. WFS is a nonprofit educational and scientific association with 30,000 members in 80 countries. It serves as a neutral forum and clearinghouse for information and ideas about current trends and possible future developments.

OCR and HTML by <u>Erik Möller</u>. Please tell me about any spelling or OCR mistakes you find. If you know of any other translation besides English, German and French, or if you want to write one, please contact me. I am also interested in more material on the same subject.