

## **Forensic Communication:**

### **Application of Communication Science to Courtroom Litigation**

#### **Chapter X. Effects of Sexually Oriented Messages on Individuals and Communities: A History of Challenging Assumptions in the Courtroom**

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Rule 702 of the Federal Rules of Evidence states that an expert can provide scientific, technical or other specialized knowledge that will assist a judge or jury to understand the evidence presented at trial. My colleagues and I have testified as expert witnesses in cases involving sex communication over the last twenty years. We have offered expert testimony on the effects of pornography on individuals, obscenity and the scientific measurement of community standards, the impact of adult bookstores and exotic dancing establishments on communities and other sex related communication effects.

The testimony described below was the result of a specific request from a given attorney for expert opinions, however, the testimony might also be thought of more broadly as **challenging commonplace legal assumptions** about sex related communication through reliance on empirical evidence. The conflicts that manifest themselves in courtrooms when an expert is called are not about “He said,” versus “she said.” They are about “Everybody knows that...” versus “no way!” Our testimony about nearly always offers an opportunity to challenge conventional wisdom about the effects of sex-related communication.

Informing triers of fact also presents an opportunity to make theoretical and methodological contributions to the sex related communication effects literature.

Consequently, the **implications for communication theory and research** will accompany the description of some of the testimony we have given.

Sex-related communication testimony sometimes involves a “**battle of the experts.**” American law uses an adversarial procedure for settling both criminal and civil disputes (Vidmar, 2005). Both sides are responsible for finding and producing witnesses to bolster their position at trial. The rules of evidence also limit the scope of expert opinions. Trials under the adversary system allow each side to cross-examine witnesses, call opposing witnesses, and make final arguments about the meaning of expert testimony (Damaska, 1986). Research shows that jurors and certainly judges do not automatically defer to the opinions of experts, and that their verdicts appear to be generally consistent with external criteria of performance (Vidmar, 2005).

In an adversarial system judges and juries take from experts what they need to make a decision. This means that, in the end it does not matter if the expert is on the winning or losing side of a case. What is important is that the expert offer the court information based on the best science available so that judges and juries can make informed decisions. A few of these adversarial moments involving debates between experts are described below to illustrate that competing expert testimony may lead to improvements in legal contexts especially when the competing experts exchange *reasons and explanations* for their opinions.

Giving expert testimony is also an opportunity to **provide information to the court about basic science methodology.** As Vidmar (2005) points out experimental studies have raised some questions about juror abilities to understand basic science principles. Jurors are confused by statistical and methodological testimony. Sometimes

the judge protects the jury from confusion, but we should not assume that judges are immune from misunderstandings involving social science methodology (Kovera and McAuliff, 2000). Expert testimony can sensitize fact finders, judges and juries to these issues.

Our expert opinions are based on studies or tests employing empirical observations. There are guidelines available to scientists that allow them to be confident about the reliability of their claims. The expert testimony described here is part of a effort by me to **shift sex communication and First Amendment questions to empirical grounds** so that there is a reliance on social science evidence of harm before fundamental rights are curtailed.

## **CHALLENGING LEGAL ASSUMPTIONS ABOUT SEX RELATED**

### **COMMUNICATION**

#### **Testimony Concerning the Effects of Pornography: Shifting the Debate from Sex to Violence Against Women**

In 1986 Edward Donnerstein and Neil Malamuth, the leading expert witnesses in the effects of pornography, and I, presented testimony to Attorney General Edwin Meese III and the “Attorney General’s Commission on Pornography” (U.S. Department of Justice 1986). The Attorney General’s mandate was to examine the impact of sexually explicit materials on individual viewers and society. The Commission operated on the commonly held assumption that exposure to explicit sex was the problem. But we wanted to make the point that violent films similar to those viewed by our subjects in laboratory experiments and field studies were substantially more harmful than explicit pornography.

We testified that films that portray sexually violent images like rape consistently produce strong antisocial effects on adults. The documented harmful effects included increases in callousness toward rape, negative evaluations of victims of sexual assault, and increased aggression toward women in a laboratory setting (see Linz, Penrod, Donnerstein, 1987; Imrich, Mullin, Linz, 1990; Linz & Donnerstein, 1990; Donnerstein & Linz, 1995, Linz and Malamuth, 1993).

Further, a film does not have to be sexually explicit to contain violence against women. For example, two types of non- sexually explicit films have been identified as problematic: “slasher” films that contain violence toward teenage girls in a sexual context and other R-rated films that depict women as “consenting” to rape. Studies indicated that movies containing violence against women in sexually non-explicit (R-rated) contexts are capable of producing many of the same antisocial effects as do violent pornographic depictions.

The U.S. Attorney General used this testimony and concluded that the level of violence in a film should be emphasized and not just the amount of sexual content. The Attorney General's Commission on Pornography, despite its original assumptions about the harmfulness of sexually explicit materials on individual viewers and society, concluded that violent films may be substantially more harmful than explicit pornography. According to the Commission (p. 329):

"The so-called slasher films, which depict a great deal of violence connected with an undeniably sexual theme but less sexual explicitness than materials that are truly pornographic, are likely to produce the consequences discussed here to a greater extent than most materials available in 'adults only' pornographic outlets."

### **Challenging the Conventional Wisdom that Explicit Sex Depictions are Not Tolerated in the Community**

Despite the potentially greater harmful effects stemming from viewing violence, obscenity law has been universally geared toward sexually explicit materials and the community's acceptance of sexual depictions. With the advent of *Miller v. California* (1973), obscenity law has been cast directly in light of local public opinion. In judging sexually explicit materials that may be obscene the judge or jury must take the viewpoint of an average person applying contemporary *local community standards*.

Prosecutions for obscenity in the United States have involved hardcore sex. Potentially vicious, violent, degrading depictions are fully protected by the First Amendment so long as they do not contain strong sexual content. The basic assumption of obscenity law is that people see explicit sex as filthy, offensive, disgusting and shameful and as a breach of the accepted moral standard. But the assumption is that the community does not feel this way about violence. Obscenity law may draw its legitimacy from the fact that it presumably reflects community values. Certain depictions of sex can be regulated through prosecution because they are intolerable to community members. It is fundamental that the Court be "right" about community disapproval for the law to be just.

Edward Donnerstein and I were asked to testify about findings of a study of adult residents in the Federal Western Division of Tennessee including Memphis, Shelby County, and four other county areas (Linz, Donnerstein, Land, McCall, Shafer, & Graesner; 1995). We designed our study to measure whether community members believed the sexually explicit films charged in the case *United States v. Ellwest of Memphis* (1990) appealed to a shameful, morbid, or unhealthy (prurient) interest in sex and were patently offensive. Community standards for sexually explicit depictions were

measured using a representative sample of Western Tennessee residents. The community residents were then randomly assigned to view sexually explicit films charged in the case, randomly assigned to view violent materials that would never be the target of an obscenity prosecution, or randomly assigned to view other control materials.

We testified that our community study demonstrated that despite the federal prosecutors assumptions, the sexually explicit films charged in the case *did not* appeal to a shameful, morbid, or unhealthy (prurient) interest in sex, and were not patently offensive. It is difficult to know what impact the testimony had on the jury, but we wondered about a larger question: What is the effect of the law being "wrong" about community standards and morals?

We found in our study that while a majority of community members accepted nonviolent sexually explicit films there was no evidence that a majority of community members accepted violent "slasher" films. Or, more to the point, these violent films appeared to exceed community standards, whereas the sexual materials did not. Further, when asked, participants indicated that they believed that the majority of *others* in the community tolerated the violent films they had viewed while they personally did not.

Our data suggested that the law may often be "wrong" about community disapproval of explicit sexual materials. Community members tolerate consenting hardcore sex by an overwhelming majority. They disapprove of sex juxtaposed to violence in "slasher" films. Our findings indicated that to be true to community standards, sex tied to violence should have been the subject of prosecution in western Tennessee and not consenting hardcore pornography.

What are the consequences for the law when persons not considered blameworthy

by the community are punished (pornographers) and those blameworthy (producers of violence) are *not* punished as we found in our study? Discrepancies between the obscenity code and community tolerance may tend to undercut the law's moral credibility, which in turn undercuts the law's power as arbiter of proper conduct in this and other domains.

### **Testimony on the Impact of Indecency on Children: Another Challenge to the Idea of Media Harmfulness**

The Federal Communication Commission (FCC) had for years alleged that Howard Stern's radio programs violate its decency standards and that violation of these standards posed a threat to children listeners. In 1993, the FCC notified the Infinity Broadcasting Corporation that they may be liable for \$600,000 fine for the broadcast of allegedly *indecent* material on the "Howard Stern Show."

In this case we were asked by Howard Stern's counsel to review the social science evidence and give an opinion as to whether the harm done to children listening to the Howard Stern Show justified punitive fines from the government (Donnerstein, Wilson, & Linz, 1992). While the government's interest in protecting the well-being of children is undoubtedly compelling, when it conflicts with fundamental parental rights and First Amendment rights, case law requires that the government show some evidence of harm.

We concluded that children listening to the Howard Stern Show would not understand the vast majority of the references to sex because they were, for the most part indirect or vague. Children under 12 years of age do not fully understand sexual terminology and sexual metaphors. Without such understanding, we reasoned that the

harmful impact of these terms on children's attitudes and behaviors is likely to be quite limited.

At that time, Howard Stern relied on sexual innuendo rather than explicit statements about sex in his radio act. Part of the offending broadcast cited by the FCC as evidence of indecent remarks was a discussion of Pee Wee Herman who had been arrested for indecent exposure in a movie theater in Florida. Stern referred to Pee Wee euphemistically as "spewing his junk." In fact, nearly every reference to sex in the Stern Shows cited by the FCC as indecent was in the form of an innuendo, metaphor, or veiled reference.

Non-literal language and metaphors poses special difficulties for children below the age of 12. Studies of children's ability to comprehend metaphoric or indirect utterances show that they do not understand them. We testified that, contrary to common assumptions about harm, there was little evidence that most sexual phrases and innuendos used by Stern would affect children. Even assuming that some of the material could be understood, there was no evidence in the scientific literature that exposure to it contributes to harmful effects such as greater acceptance of sexual promiscuity, promotion of "deviant" sexual behaviors such as homosexuality, or the sexual objectification of women. The prohibition of broadcast indecency was therefore, in our opinion, not justified on the basis of social scientific evidence of harmful effects to the psychological well-being of children.

### **Challenging Legal Assumptions Regarding Sexual Messages and "Content Neutrality"**

If a government restriction on speech is not "content neutral" it must be evaluated

under the Supreme Court's highest standard of scrutiny, in other words, the government may not regulate speech unless it can demonstrate a compelling government interest to justify the regulation. However, in *U.S. v. O'Brien* (1968), the Supreme Court ruled that the government may regulate symbolic speech (behavior) only if the government can assert an important (not compelling) state interest and demonstrate that the regulation is not related to the suppression of free expression. Thus, the *O'Brien* test, is a lower standard of review for courts.

In the *Barnes v. Glen Theatre, Inc.* (1991), the Supreme Court held that government restrictions on public nudity should be evaluated under the framework set forth in *O'Brien* and ruled that the restrictions imposed by an Indiana law banning nudity statewide was not directed at the expressive content of the behavior (erotic dance) and was, therefore, "content neutral." According to Chief Justice Rehnquist "the requirement that the dancers don pasties and a G-string did not deprive the dance of whatever erotic message it conveys."

The Ninth Circuit Court of Appeals in *Colacurcio v. City of Kent* (1999) took the same content neutrality stance when they considered an ordinance to restrict dancers from dancing too close to patrons in Kent Washington. The court said that government restrictions on dancer-patron proximity do not affect the content of messages conveyed by erotic dancers. The Washington State Supreme Court agreed (*Ino, Ino, Inc. v. City of Bellevue*, 1997) also reasoned that a 4-foot distance between the dancer and the patron was sufficient for the patron "to see the dancer's entire body and expressive activity," and thus was not a regulation of the content of the dancer's message. They concluded that precluding nudity and close proximity only affects "non-communicative elements" of a

dance and does not, therefore, impinge upon the content of such erotic expression.

Our expert witness testimony demonstrated that the government's attempt to regulate nudity and distance components of erotic dance violates the First Amendment guarantee of freedom of speech because these regulations are directed at the content of the expression itself. We testified about the results of two field experiments we conducted in which dancer nudity (nude vs. partial clothing) and dancer – patron proximity (4 feet; 6 in.; 6 in. plus touch) were manipulated under controlled conditions in an adult nightclub in Las Vegas. After male patrons viewed the dances, they completed questionnaires assessing affective states and the reception of erotic, relational intimacy, and social messages. These scales were based on social psychological theories concerning nudity, erotic and intimate messages and communication theories of nonverbal behavior.

The results of these studies showed that requiring a dancer to wear pasties and a G-string does, in fact, deprive the dance (symbolic speech) of a statistically significant amount of eroticism and, substantially alters the message conveyed when the dancer is nude. We also observed substantial changes in the relational and social messages of dances performed nude versus those performed clothed. The results of study 2 suggested that keeping performers at a certain distance from the patron also deprives the dance of a significant amount of the “erotic” message that is conveyed. We also observed substantial changes in the reception of “relational” messages of dances when they were performed at 4 feet from the patron compared to 6 inches from the patron. Contrary to the assumptions of the courts about content neutrality, the results of our studies showed that the content of messages conveyed by the dancers was greatly altered by restrictions placed on both

dancer nudity and dancer – patron proximity.

I testified during a preliminary injunction hearing *Entertainment Productions, Inc. v. Shelby County*, 545 F. Supp. 2d 734 (W.D. Tenn. 2008). My expert opinion based on empirical data demonstrated that anti-nudity and distance regulations were based on the content of the communication. Overall, I opined that data from both of our studies strongly suggested that the courts have erroneously concluded that regulating nudity and dancer proximity does not substantially hinder the dancer’s message. Therefore, the court could not assume the regulations were content neutral and had to apply the highest level of scrutiny and would not pass constitutional muster.

The judge disagreed with my testimony because in his opinion plaintiffs could not establish that the no-touch provision banning contact between dancers and patrons was likely to succeed on the merits. Despite our testimony on the results of these studies in several other cases, the Sixth Circuit Court of Appeals has consistently held that no-touch provisions for adult cabarets are not content based and are therefore constitutionally valid, (e.g., *Sensations*, 526 F.3d at 299, *DLS*, 107 F.3d at 403; *Déjà Vu of Nashville, Inc. v. Metropolitan Gov’t of Nashville*, 274 F.3d 377 (6th Cir. 2001); *Kentucky Restaurant Concepts, Inc. v. City of Louisville*, 209 F. Supp. 2d 672 (W.D. Ky. 2002), *Kentucky Restaurants Concepts court*, 209 F. Supp. 2d at 681.

Notably in *Entertainment Productions*, 545 F. Supp. 2d at 745, the court rejected the plaintiffs’ argument that messages conveyed by nude or seminude contact between dancers and patrons are altered by government regulation. The court found that “there is nothing in constitutional jurisprudence to suggest that patrons are entitled, under the First Amendment, to the maximum erotic experience possible” —an admission, perhaps that

some part of the message is missing when dancers are required to wear clothes and keep their distance from patrons.

### **BATTLE OF THE EXPERTS**

Many scholars are concerned about the increasing complexity of jury trials and question whether the testimony of competing experts helps unsophisticated jurors to make informed decisions. Recent research suggests, that competition in the courtroom is actually more elucidating than confusing under the right conditions (Boudreau & McCubbins, 2009). When does the dueling testimony of experts improve fact finders knowledge? The results of the Boudreau & McCubbins study suggest that when we impose penalties for lying or a threat of verification upon the competing experts, as the U.S. court system does, there are dramatic improvements in unsophisticated subjects' decision making abilities. Most importantly for our purposes, the results of their study suggest that similar dramatic improvements occur when the competing experts exchange *reasons for why their statements may be correct*.

When experts' exchanged reasons, they consistently helped unsophisticated subjects to make decisions that are comparable to those of sophisticated subjects. This result is encouraging. It suggests that competing expert testimony may lead to improvements in the information given to judges and juries when experts are careful to give *reasons and explanations* for why their statements may be correct. What is important is that the expert offer the court information good well fleshed out reasons for his opinions based on the best scientific evidence available so that judges and juries can make informed decisions.

### **Pornography in the Workplace**

In an effort to prevent sexual harassment, the Los Angeles Fire Department banned *Playboy* magazine and other sexually-oriented magazines from fire stations. A fire captain sued, claiming he had a First Amendment right to possess, read, and consensually share his *Playboy* magazine at his fire station. I was asked by the defendant in the case, the City of Los Angeles to provide testimony to substantiate the city's claim that reading and viewing pictures in *Playboy* magazine may influence the way male fire fighters treat female fire fighters.

I testified that, in my expert opinion, the reading of *Playboy* in the workplace could lead to discrimination and possibly sexual harassment. The reason reading of *Playboy* leads to sex-role stereotyping is that research has shown that sex-role stereotyping is often the first step to sexual harassment. Further, I said that work in the laboratory indicated that men will treat women as sex objects if they already have gender schematic attitudes and viewed pornography (McKenzie-Mohr & Zanna, 1990).

In our studies we replicated these findings and extended them to situations where men and women work together (Jansma, Linz, Mulac, & Imrich, 1997; Mulac, Jansma, & Linz, D., 2002). In our studies males were shown films which were divided into three categories: sexually degrading, sexually educational (i.e., sexually explicit, but not degrading), and neutral. After watching the film, the men interviewed two female job applicants. The study showed that the sexually degrading films had no effect on the manner in which the men evaluated or remembered the female applicant. At the same time, both the sexually degrading as well as the sexually educational films heightened the possibility that the men would classify the female applicants as untrustworthy, incompetent or incomprehensible.

The plaintiff offered Dr. Neil Malamuth's testimony to rebut my testimony. He testified that claim that there is a connection between the reading of Playboy and "sexual stereotyping" is a viable hypothesis but that based upon the present state of scientific studies, we could not be sure. He gave several reasons for his opinion: 1) the laboratory studies involved films which included explicit intercourse, while Playboy merely contains photographs of nude women; it contains no explicit depictions of intercourse; 2) the studies were based on college-age males, while most male fire fighters are older; 3) the laboratory studies utilized a small number of subjects and used questionable control groups; 4) Finally, Dr. Malamuth pointed out that the two studies offered inconclusive and ambiguous conclusions and that some of these conclusions actually support a finding that the reading of Playboy has no impact on a male fire fighter's treatment of his female coworkers. For example, the study found that pornographic films had no influence on the males' rating of the female job applicant. He concluded that the connection between Playboy and "sexual stereotyping" is not a scientific probability, much less a scientific certainty.

The Court found the testimony of Dr. Malamuth to be credible and persuasive. Accordingly, the Court found that defendants failed to prove that there is a connection between Playboy and "sexual stereotyping," and between "sexual stereotyping" and sexual harassment. Was this right decision? It does not matter. What is important is that the experts offered the court information based on the best scientific evidence available at the time so that the judge could make an informed ruling.

### **Alcohol Consumption Combined with Adult Entertainment: Experts Battle Over How Best to Measure Crime**

The Tenth Circuit United States Court of Appeals has ruled that where there are conflicting opinions concerning the crime effects of adult businesses (“negative secondary effects”) thereby creating a “battle of the experts” a trial is required to sort out the facts. In this case *Abilene Retail #30, Inc. v. Dickinson County*, 492 F.3d 1164 (10th Cir. 2007), the court ruled that on the basis of our work debunking the legal myth of negative secondary effects a municipality may not have a sufficient basis to adopt new restrictions on adult businesses. The court said that my expert testimony had sufficiently cast direct doubt on whether the County could have reasonably relied on a set of pre-packaged “studies” from other communities as a basis for enacting restrictions on adult businesses. The court ruled where there are conflicting opinions concerning evidence of secondary effects, thereby creating a “battle of the experts” in credibility determinations, a trial is required to sort out the facts.

One example of battle of the experts sorting out the facts at trial involved expert testimony whether states may legally regulate sex related communication in alcohol serving establishments. The justification for regulation of adult entertainment in taverns and bars businesses is based on the idea that the combination of liquor and erotic dancing leads to more “secondary effects” than either one alone (*California v. LaRue* ; *44 Liquormart, Inc. v. Rhode Island* (1996)). Using this as a justification the Ohio General Assembly passed a law in 2007 closing adult businesses from 12:00 midnight and 6:00 a.m., and restricted nude performances in any establishment that had a liquor permit.

Ohio adult nightclub owners and other adult businesses owners challenged the law in the case United States District Court, Northern District of Ohio Eastern Division. In the case *84 Video/Newsstand, Inc., et al., v. Thomas Sartini, et al.* The adult business

owners sought a preliminary injunction on the basis of secondary effects to stop enforcement of the new law. I was called as an expert on behalf of the adult nightclub owners and testified there were no more secondary crime effects in establishments that combine liquor service and adult entertainment than either one alone. The testimony was supported by a statewide empirical study of Ohio cities Toledo, Columbus, Dayton and Cleveland which demonstrated no correlation between the presence of liquor-serving establishments featuring nude or semi-nude dancing and crime (Linz, Yao, & Byrne, 2007). The results of the study challenged the assumption that the combination of liquor and erotic dancing lead to uniquely harmful secondary crime effects.

Dr. Richard McCleary testified on behalf of the defense and challenged our methodology of measuring crime, specifically, our use of Calls for Service to the police. Dr. McCleary opined that Calls for Service were not a reliable measure of the secondary crime effects of sexually oriented businesses because they are based on 911 and most criminal incidents are not discovered through these calls. He said that the Uniform Crime Reports (UCRs), National Incident Based Reporting System (NBIRS), or Incident Based Reports are the best statistical measure of crime. NBIRS or UCR data measures crime based on crime incident reports, *i.e.*, where a police officer has investigated a crime and filed a report on the crime, which is then entered into the police department's statistical reporting system is a better measure.

There are many ways to scientifically measure crime. Each means has its own advantages. While it is theoretically correct that criminologists often used UCRs in their studies, 10 years of "hands on" real world experience at town hall meetings and legislative hearings in states and local communities across the country have led me to

different conclusion. Calls for Service are an important in the debate about the secondary crime effects of adult businesses. Municipalities and police departments use them as a measure of crime and disturbance. Further, when police are asked to testify before legislatures or a city counsels regarding adult businesses they rely on them for evidence. They, are kind of a raw unfiltered communication between the citizenry and the Police Department. They also measure community disorder and mischief, and lesser levels of crime that would not be reflected by the Uniform Crime Reports.

During this battle of the experts we were able to draw sharp distinctions that informed the Court--by providing explicit justifications for our research choices. The Court noted the competition between expert witnesses and their fundamental disagreement about methodological standards was important in the judge's decision. The evidence I presented shows that the General Assembly of Ohio may have reached a different conclusion regarding the relationship between secondary effects and sexually oriented businesses. The standard is so low that the fact that the legislature did not reach a different conclusion did not vitiate the law. So long as whatever evidence the city relies upon is *reasonably believed* to be relevant to the problem that the city addresses it is sufficient to support the Ordinance, *Renton*, 475 U.S. at 51-52.

## **MAKING METHODOLOGICAL AND THEORETICAL ADVANCES**

### **Using Survey Evidence to Determine What is "Obscene"**

Surveys are often used in criminal prosecutions to establish community standards of obscenity. One criticism of the use of surveys to gauge community standards is that they do not involve responses to the allegedly obscene materials charged by the

prosecution. This is because the survey respondent does not have a chance to look at the materials.

In the case *State of North Carolina v. Cinema Blue of Charlotte, Inc.* (1989) we conducted a study of a of residents Mecklenburg County NC where we were able to make methodological advancements by taking a cross section of residents and randomly assigning them to view sexually explicit materials charged in the case, or a control film (Linz, Donnerstein, Land, McCall, Scott, Klein, Shafer, & Lance, 1991). The results of the study demonstrated the materials viewed by the participants, and charged in the case did not, for the majority appeal to a self-reported shameful, morbid, or unhealthy (prurient) interest in sex; and were not patently offensive.

The legal outcome of this case was peculiar. The judge said that the jury could determine what the community standard was without expert testimony. Consequently, the defense attorneys could *not* use our study as evidence and the defendant was convicted and went to jail. The case was appealed to the federal court in *St John v. State of North Carolina Parole Commission*, 764 F. Supp.403 (W.D.N.C 1991) and now, ironically stands for the proposition that it is appropriate to exclude survey evidence on community standards because “the jury brings to the trial the community standard and no evidence is necessary to establish it, *aff’d*, 953 F.2d 639 (4<sup>th</sup> Cir), *cert. denied*, 506 U.S. 825 (1992).

What would have happened had the jury been able to hear about our study and the fact that a cross section of the community did not find the materials at trials obscene? Obscenity cases are unique criminal proceedings in that they are virtually the only cases where a jury is asked to take into account the consensus of the community before making a judgment. Jurors by law have the burden of articulating community standards, not even

local or state legislative bodies are allowed to usurp this function (*Smith v. United States* 1977).

As social science experts we know that there is no guarantee that once a jury is ultimately selected for participation in the trial it is representative of the average person in the community. Our study showed the average person's opinion can be calculated by randomly selecting people from the community, having them view the materials being prosecuted and taking an "average" of their responses. Because they are called upon to make a sociological assessment of the standards of the community, it is imperative that the jury have access to this social science methodology. Our study should not override the jury's final determination, but the methods used to collect our calculation of the "average" person, should be considered by the jury to determine whether the materials are obscene.

### **A Theoretical Contribution**

Interestingly, when we asked the individuals in our study what they thought the community at large tolerated, they believed others did *not* tolerate the materials they just viewed despite the fact they personally did tolerate the materials. The belief in empirically false propositions about others in the social world found in our study is an example of theoretical concept of "pluralistic ignorance" (O'Gorman 1988). Usually, people are motivated to *overestimate* support for their values among others (e.g., Fields and Schuman 1976-77)-an effect known as the "egocentric bias." However, we found individuals perceiving *less*, rather than more, support for their beliefs about sexually explicit materials.

By what process might the social environment have misinformed its inhabitants?

We proposed that the discrepancy between perceptions of the community standard, and the individual adults' own standards was the result of recent legal events in Mecklenburg County. During the two years before the trial several arrests for obscenity were made and defendants were tried and found guilty in well-publicized trials. Community members in our study may have assumed that, since there had been a large number of arrests and several guilty verdicts, most people in the community did not tolerate these types of materials (a phenomenon we call "prosecution- induced intolerance"). The greater the attention by the media attention to obscenity prosecutions in a community, the more the average observer may assume that citizens of the community are intolerant. However, when members of the community are individually questioned, they may express a much higher level of tolerance.

This misperception may also have consequences for interpersonal interactions, which in turn also influence perceptions about community beliefs. The erroneous belief in lack of tolerance for sexually explicit materials in the community may lead people to be hesitant to speak out honestly about their own opinions. Here, another theory of public opinion may come into play. This unwillingness to speak out may be an example of the more general tendency toward a "spiral of silence" whereby a silent majority falsely perceives itself to hold a minority opinion and, thus, remains quiet in order to avoid personal ridicule (Noelle-Neumann 1974 and 1984).

### **PROVIDING COURTS WITH BASIC SCIENTIFIC PRINCIPLES**

Research indicates that in many instances judges do not know how to distinguish reliable from unreliable expert testimony. Kovera and McAuliff (2000) for example, provided a sample of 144 Florida circuit judges with the abbreviated version of an award-

winning sexual harassment study. Most of the judges were not sensitive to factors that affect the validity of such research. Judges who had had some training in scientific methods tended to perform better than those who did not, but even many of them were not sensitive to such obvious methodological problems as lack of control groups or experimenter bias.

Much of our testimony has been about informing judges and juries about basic science and its power in asking and answering questions. In the case *City of Erie, et al., v. PAP's a. m.* the Supreme Court held that cities and states may ban nude dancing as a way of combating the crime and other "negative secondary effects" associated with adult establishments. The decision was horribly fractured, as many are in the area of sex communication. A plurality (four justices, Justice O'Connor, joined by The Chief Justice, Justice Kennedy, and Justice Breyer) said a city may rely on the experience of (i.e., "studies" done by) other cities as evidence of these harmful effects.

Justice *Souter*, dissented. Previously, in the case, *Barnes v. Glen Theatre*, 1991 he stated the government could essentially assume that "pernicious secondary effects" would result from the presence of nude dancing establishment. But he changed his mind. Justice Souter stated now that cities must prove that nude dancing is actually causing them harm (secondary effects).

In explaining his change of mind, Justice Souter deflected the potential embarrassment of a public recantation by a graceful turn of phrase (Greenhouse, 2000). "I should have demanded the evidence then, too," Justice Souter said, "and my mistake calls to mind Justice Jackson's foolproof explanation of a lapse of his own, when he quoted Samuel Johnson, 'Ignorance, sir, ignorance.' " Justice Souter said of his own new position.

His revised position was a city should have to provide evidence both of "the seriousness of the threatened harm" and "the efficacy of its chosen remedy." Because Erie failed to provide this evidence, the case should be sent back to the lower courts to permit the city to do so.

Justice Souter said that there was arguably no relationship between adult businesses and crime. He said harmful secondary effects cannot be presumed to exist from past studies. The city's failure to investigate this is made all the more by an amicus briefs we submitted largely devoted to the argument that scientifically sound studies show no such correlation. See Brief for First Amendment Lawyers Association as Amicus Curiae 16—23; *id.* at App. 1—29. This friend of the court brief contained our expert testimony concerning the quality of the data collection and the reliability of findings of the studies done by other cities as evidence of secondary effects (Linz, 1999).

In that expert testimony we that argued that many of the studies commonly used by cities to justify their regulations were methodologically flawed and inconclusive. We collected over one hundred and twenty "studies," and analyzed them both in regard to the their conclusions and their "methodological rigor." We found that with few exceptions, the most frequently used studies are seriously and often fatally methodologically flawed. These studies, relied on by communities throughout the country, do not adhere to professional standards of scientific inquiry, and nearly universally fail to meet the basic assumptions necessary to calculate an error rate—a test of the reliability of findings in science.

We also developed a list of criteria for evidence of adverse secondary effects to be objectively sound. Most important was the idea that quasi-experimental designs or

equivalent procedures should be used to ask a critical question: “Compared to what?” Since most studies of secondary effects attempt to uncover increases in crime or neighborhood economic deterioration, we argued that professional standards dictate that control (non-adult) and study (adult) sites must be compared with regard to crime and neighborhood deterioration and that before/after time series designs should be employed when possible.

The plurality (Justice O'Connor, joined by Chief Justice Rehnquist, Justice Kennedy, and Justice Breyer) rejected Justice Souter's dissenting opinion that empirical proof must be required. They said our methodological suggestions amounted to a Dauber-based secondary effects standard and that was too strict, 1999 WL 805047, app at A.1. The plurality “flatly rejected” the idea that legislatures must invoke “academic studies said to indicate that threatened harms are not real” 529 U.S. at 300 (quoting *Nixon v. Shrink Missouri Gov't PAC*, 528 U.S. 377, 394 (2000)).

But the Court did come to the conclusion in a later decision that the evidence of secondary effects relied upon by municipalities must be held up to some minimal standard (*City of Los Angeles vs. Alameda Books, Inc.* 2002). In this decision the Court reiterated that governments may regulate sexually oriented businesses on the basis of studies done in other communities, however, the cities may not engage in shoddy data collection or reasoning in coming to the conclusion that adult businesses cause these effects. They added that if plaintiffs succeed in casting doubt on a municipality's rationale in either manner, the burden shifts back to the municipality to supplement the record with evidence renewing support for a theory that justifies its ordinance.

By the time he wrote his dissenting opinion in *Alameda* Justice Souter was so convinced as to the value of empirical research he argued for a standard based entirely on

it. Further tests of this assumption on a community-by-community basis are not tremendously difficult Justice Souter noted and:

. . . stress should be placed on the point that requiring empirical justification of claims about property value or crime is not demanding anything Herculean. Increased crime, like prostitution and muggings, and declining property values in areas surrounding adult businesses, are all readily observable, often to the untrained eye and certainly to the police officer and urban planner. These harms can be shown by police reports, crime statistics, and studies of market value . . .

And precisely because this sort of evidence is readily available, Justice Souter noted:

Reviewing courts need to be wary when the government appeals, not to evidence, but to uncritical common sense in an effort to justify such a zoning restriction. It is not that common sense is always illegitimate in First Amendment demonstration. The need for independent proof varies with the point that needs to be established, and zoning can be supported by common experience when there is no reason to question it. But we must be careful about substituting common assumptions for evidence, when the evidence is as readily available as public statistics and municipal property valuations, lest we find out when the evidence is gathered that assumptions are highly debatable.

In fact, in the *Alameda* case, Justice Souter has formulated a legal test based on empirical verification. He argues that the weaker the empirical evidence concerning secondary effects, the more likely the governmental action is not content neutral. He states:

. . . The lesson is that the lesser scrutiny applied to . . . zoning restrictions is no excuse for government failure to provide a factual demonstration for claims it makes about secondary effects; on the contrary, this is what demands the demonstration. And finally the weaker the demonstration of facts distinct from disapproval of the adult viewpoint, the greater the likelihood that nothing more than condemnation of the viewpoint drives the legislation. The danger is that without empirical verification the city has a right to experiment with a First Amendment restriction in response to a problem of increased crime that the city has never shown to be associated with adult businesses.

In the next section I suggest there is evidence that lower courts are taking Justice Souter's advice to consider scientific evidence presented by experts seriously.

## **SHIFTING FIRST AMENDMENT**

### **QUESTIONS TO EMPIRICAL GROUNDS**

The Seventh Circuit Court of Appeals has directly tackled the implications of *Alameda* and the standard of proof for secondary effects in an opinion written by Chief Judge Frank H. Easterbrook. Easterbrook is noted for his depth of knowledge and sophistication in the area of social science and economics and is one of the most cited appellate judges in the U.S. The opinion provides a set of methodological requirements or principles for determining when an empirical link between the presence of an adult business in a community and adverse secondary crime effects has been reliably demonstrated. The central question regarding the presence of crime in and around adult businesses is, according to the court, “compared to what?”

In this decision the Seventh Circuit Court of Appeals struck down an amendment to an ordinance in Indianapolis as unconstitutional that required certain time, place and manner restrictions upon adult business because the City of Indianapolis relied on inconclusive evidence when drafting the regulation.

In this opinion, Judge Easterbrook provides the standard for a sound methodological demonstration of adverse secondary effects. Specifically, Judge Easterbrook stated that in order for the ordinance to be constitutional, the city must provide evidence that these restrictions actually have public benefits great enough to justify any curtailment of speech. And, this evidence must be more than just the government’s “reasonable” belief that secondary adverse effects exist in relation to adult businesses. In his opinion in *Annex Books* he states:

“Indianapolis has approached this case by assuming that any empirical study of morals offenses near any kind of adult establishment in any city justifies every possible kind of legal restriction in every city. That might be so if the rational relation test governed, for then all a court need do is ask whether a sound justification of a law may be imagined. But because books (even of the “adult” variety) have a constitutional status different from granola and wine, and laws

requiring the closure of bookstores at night and on Sunday are likely to curtail sales, the public benefits of the restrictions must be established by evidence, and not just asserted.”

The court also said that studies of secondary effects couldn’t be simple cross-sectional studies because such studies do not allow for a high level of internal validity—the ability to establish a causal relationship. The Court said with regard to the evidence introduced by the City:

“Nor do the studies show that an increase in adult businesses’ operating hours is associated with more crime; the studies are simple cross-sectional analyses that leave causation up in the air. (In other words, they may show no more than that adult businesses prefer high-crime districts where rents are lower.)”

The Court said that before/after time series designs are especially helpful in determining if adult businesses are a source of criminal activity because they allow for the deduction of causality. Referring to the Los Angeles study at issue in the *Alameda Books* case (discussed above) the court notes:

“But the fact that *crime rose as adult establishments entered the area* (see 535 U.S. at 435 (describing the study)) implied that the causal arrow ran from adult businesses to crime, rather than the other way. That could happen because adult establishments attract a particular kind of clientele that is emboldened by association with like-minded people, so that prostitution and public masturbation (for example) are more acceptable near a congeries businesses than they would be elsewhere.”

“Plaintiffs (in the Annex Books case) offered a study by Daniel Linz, a professor at the University of California, Santa Barbara. Linz first examined the relation between crime and adult establishments in Indianapolis...He found little relation—and he added a time series, while the City relied on a cross section.”

“In other words, Linz conducted the same kind of analysis as the Los Angeles study in *Alameda Books*, asking whether crime went up in a given census tract when new adult establishments opened, or down when they closed. Linz concluded that these openings and closings did not materially affect crime.”

Most importantly, the court insisted that the “compare to what” question be asked.

The court required that a comparative analysis be undertaken so that crime in and around

adult businesses could be put into some perspective relative to crime at other businesses in the community. The Court even went so far as to suggest that alcohol-serving businesses would serve as the best control or comparison points. The Court noted:

“Nor can we tell whether 41 arrests at one business over the course of 365 days is a large or a small number. *How does it compare with arrests for drunkenness or public urination in or near taverns*, which in Indianapolis can be open on Sunday and well after midnight? If there is more misconduct at a bar than at an adult emporium, how would that justify greater legal restrictions on the book- store—much of whose stock in trade is constitutionally protected in a way that beer and liquor are not.

Finally, Judge Easterbrook made a specific recommendation for statistical analysis noting that multivariate regression analysis may provide a better foundation for determining secondary crime effects than either a time series or a cross sectional analysis.

The court notes:

“One may doubt that Linz’s work is the last word; a multivariate regression would provide a better foundation than either a time series or a geographic cross-section. See Daniel L. Rubinfeld, *Reference Guide on Multiple Regression*, Reference Manual on Scientific Evidence (2d ed.) (Federal Judicial Center 2000).

Judge Easterbrook said send it back to the lower courts and let the empirical findings fall where they may. Specifically:

“Counsel for Indianapolis conceded at oral argument that none of the studies that the City has offered in defense of its ordinance deals with the secondary effects of stores that lack private booths. Nor do the studies assess the effects of stores that sell as little as 25% adult products. These shortcomings, plus Linz’s work, call the City’s justifications into question and require an evidentiary hearing at which the City must support its ordinance under the intermediate standard of *Alameda Books*. See also *Abilene Retail #30, Inc. v. Dickinson County*, 492 F.3d 1164 (10th Cir. 2007) (reaching the same conclusion on a similar record).”

The expert testimony provided to the court in *Annex Books* was helpful in shifting sex communication and First Amendment questions to empirical grounds. This represents a long-standing effort to provide the court with social science evidence of harm before

fundamental rights of speech are curtailed.

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