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THE PSYCHOLOGY OF LAW

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INTRODUCTION

If the first *Annual Review* chapter on psychology and law (Tapp 1976) could dub itself an "overture," this, the second, might be declared a "crescendo." In the past 6 years, the American Psychology-Law Society has burgeoned to record membership levels, an American Board of Forensic Psychology was created to certify expertise in courtroom matters, and, in 1981, the American Psychological Association conferred official legitimacy on the area by forming Psychology and Law as its 41st Division. It is now estimated that fully one-third of all graduate psychology departments in the United States offer courses related to law (Grisso et al in press). Indeed, the turning of psychologists toward law is an international phenomenon. The British Psychological Society created a Division of Criminological and Legal Psychology in 1977, and Beijing University began developing a curriculum in psychology and law in 1980.

The body of published knowledge in the area has expanded apace. In addition to *Law and Human Behavior*, a specialized journal, publications of more general interest, such as the *Journal of Personality and Social Psychology*, have devoted entire issues to legal topics. It is no longer remarkable to find articles relating psychology to the law in such repositories of mainline scholarship as *Psychological Bulletin* and *Psychological Review.*

Paralleling this growth of psychological interest in the law has been the law's steadily developing acceptance of psychology. In the 1978 *Ballew v. Georgia* jury size case, the U.S. Supreme Court cited numerous psychological studies to justify its decision that juries in state criminal cases must contain at least six members. The use of psychological data rather than legal precedent was defended by a plurality of the Court "because they provide the only basis, besides judicial hunch, for a decision about whether smaller and smaller juries will be able to fulfill the purpose and functions of the Sixth Amendment" (p. 4220). In the 1979 decision of *Addington v. Texas,* the same Court stated that cases involving a question of psychological disorder must be decided not so much on the basis of observable facts "but on the *meaning* of the facts which must be interpreted by expert psychiatrists and psychologists" (p. 1811, italics in original).

To make manageable our task of critical and selective review, we consider here only the psychology of law and not the law of psychology, such as the legal regulation of psychological practice (e.g. Bersoff 1980, Schwitzgebel & Schwitzgebel 1980) or research (e.g. Wilson & Donnerstein 1976). Rather than organize our material according to conventionally defined categories of psychology, such as social or clinical, or of law, such as criminal or civil, or of the relationship between the two, such as law as an independent, dependent, or intervening variable for psychological analysis (Feeley 1976,

Friedman & Macaulay 1977), we have chosen a more functional framework. The contributions that psychology is making to understanding and predicting legal phenomena can be said to cluster in three domains (cf Farrington & Hawkins 1979, Grisso et al in press). Psychology is addressing the validity of assumptions underlying substantive law. It is clarifying the nature of the formal legal process by which disputes regarding the application of these substantive laws are resolved. As well, it is mapping the contours of the informal legal system in which a series of decision makers act in furtherance of the substantive law and within the constraints set by the legal process. While the boundaries between these domains are unmarked at places, we have found this taxonomy useful in organizing a vast literature and for sharpening our own understanding of the psychology of law.

SUBSTANTIVE LAW

Law is based upon "an underlying set of assumptions about how people act and how their actions can be controlled" (National Science Board 1969, p. 35). These fundamentally empirical assumptions are of two types. Some are descriptive of human behavior or personality (". . . how people act"), such as the "facts" that normal people intend their actions, but mentally ill people may not, or that children lack the capacity to make informed decisions about their lives. Other assumptions are of a consequential sort (". . . how their actions can be controlled"). Criminal law assumes that if people expect punishment to follow from certain actions, then they will be less likely to do them. Tax law assumes that if people are allowed to deduct mortgage interest payments, then they will be more likely to buy houses.

In the largest sense, all of psychology is relevant to substantive law, since any aspect of human behavior may be the subject of legal regulation. Basic research in psychopathology, child development, and statistics, for example, may have legal ramifications for the insanity defense, child custody, and employment discrimination. We shall concentrate here on forms of psychological research whose relevance to substantive law is more direct. Studies of competence to make decisions will be taken as illustrative of research bearing on descriptive assumptions, and studies of the effects of the criminal sanction will exemplify research relevant to consequential assumptions.

Competence

"Most children," the Supreme Court observed in *Parham v. JR* (1979, p. 2505), "even in adolescence, simply are not able to make sound judgments concerning many decisions . . . Parents can and must make those judg-

ments." Descriptive assumptions like this regarding the "competence" of two groups, children and the psychologically disordered, at various decision-making tasks, such as making a contract, marrying, or serving on a jury, are common in law. The standard against which competence is measured is usually the decision-making ability of "normal" adults. Recent psychological research on the assumption of competence has focused upon decisions regarding medical and psychological treatment and regarding the waiver of legal rights.

TO CONSENT TO TREATMENT Grisso & Vierling (1978) and Melton (1981), in comprehensive reviews of developmental research on decision-making capabilities, conclude that children under the age of 11 do not give adult-like reasons when deciding upon their medical or psychological treatment. At age 15 and above, however, there is no substantial difference between children and adults. Ages 11–14 appear to be a transition period in the development of cognitive and social abilities, and individual differences are pronounced. In the most sophisticated study to date on the competence of children to consent to treatment, Weithorn (1980) compared 9-and 14-year-olds to adults on four legal standards of competency: 1. capacity to express a treatment preference; 2. capacity to reach a "reasonable" decision (regardless of how the decision was reached); 3. capacity to reason logically in reaching a decision; and 4. capacity to understand relevant information regarding treatment alternatives (Roth et al 1977). She found 14-year-olds to be as competent as adults according to these four standards, and 9-year-olds to be less competent than 14-year-olds and adults in terms of logical reasoning and the understanding of information. The 9-year-olds, however, were as likely to express a preference for treatment as were the older subjects, and the direction of the preferences did not differ among the groups.

Research on the competence of psychologically disordered adults to admit themselves voluntarily to mental hospitals has produced similar findings: they make the "right" choice as judged by others (i.e. they seek treatment), but for reasons that are unclear. Appelbaum et al (1981) found that half of those who had voluntarily admitted themselves to a mental hospital denied that they had mental health problems or needed hospitalization. Only 38 percent of these patients were judged to meet minimal clinical criteria of competence (e.g. appreciating the nature of hospital treatment) and only 14 percent met the more stringent legally oriented definition of competence (e.g. awareness of possible adverse effects of hospitalization). The researchers suggest that rather than a competency-based "informed consent" test for hospital admission (which most psychologically disordered persons could not pass), a less rigorous "assent" procedure be im-

posed, requiring only that the prospective patient "voluntarily" agree to hospitalization, without inquiring into the cognitive processes that mediated the decision.

TO WAIVE RIGHTS In the 1967 *Gault* case, the U.S. Supreme Court stated that judges must take "the greatest care" in evaluating whether a waiver of rights by a child was voluntary "in the sense not only that it was not coerced or suggested, but also that is was not the product of ignorance of rights or of adolescent fantasy, fright, or despair" (p. 55). One of the most comprehensive programs of psychological research on children's competence to waive legal rights has been that of Grisso (1980, 1981). He found that over half of a large sample of incarcerated juveniles aged 11–16 did not comprehend at least one of their *Miranda* rights. The two most common misunderstandings concerned the warning that statements made to the police "can and will be used against you in a court of law" (often understood to mean that disrespect to a police officer would be punished) and the warning of a right to consult an attorney before and during an interrogation (often understood to apply only to future court appearances). Comprehension of rights increased with age through age 13, and began a plateau at age 14, thus paralleling the findings on juvenile competence to consent to treatment. Comprehension correlated strongly with IQ ($r = .47$). Prior experience with the juvenile justice system, however, had no direct effect on comprehension.

Psychological research on competence to consent to treatment and to waive rights is of very recent origin and has yet to capture the attention of the courts. Research on competence can both validate and refine substantive law, and serves as an exemplar of the contribution psychology has to make in analyzing other descriptive assumptions of the law, such as the assumption that mental health professionals can predict violent behavior (Shah 1978, Monahan 1981) or that various groups of people "intend" the consequences of their acts (Keasey & Sales 1977; cf Nisbett & Ross 1980).

The Criminal Sanction

While Gibbs (1975) has identified numerous consequences of the criminal sanction, most accounts focus on three of them. The punishment of a criminal offender may (*a*) *deter* both the offender in question ("special deterrence") and other persons ("general deterrence") from engaging in prohibited behavior in the future; (*b*) *incapacitate* the offender in prison, thus making certain crimes temporarily impossible (or permanently so, in the case of a life or death sentence); or (*c*) *rehabilitate* the offender, so that he or she will not be motivated to commit additional crime. Recent psychological research has focused upon the first and last of these consequences.

It should be noted that there is another assumption underlying the existence of the criminal sanction that is not consequential in nature, but rather reflects explicitly moral considerations. The assumption is that people who commit crime should be punished because they deserve it, regardless of any utilitarian consequences (Vidmar & Miller 1980). Modern retributive theories, such as the currently influential "just deserts" model (von Hirsch & Hanrahan 1979), however, incorporate deterrence as a limiting principle (i.e. punish only because offenders deserve it, but punish no more than necessary to deter others.)

DETERRENCE A major development in the study of deterrence has been the report of the National Academy of Sciences Panel on Research on Deterrent and Incapacitative Effects (Blumstein et al 1978; cf. Ehrlich 1979). The Panel noted four obstacles in interpreting as "deterrence" the frequently found negative correlation between crime rates and the probability of punishment: 1. common third causes (e.g. a changing age distribution in society might influence both crimes and sanctions); 2. error in measuring crimes (many crimes are not reported); 3. the confounding of deterrence and incapacitation (imprisoning offenders can lower the crime rate through incapacitation without any deterrent effect); and 4. simultaneous effects (the crime rate may affect the level of sanction, rather than vice versa, due to an overburdening of police and court resources). While observing that "the evidence certainly favors a position supporting deterrence more than it favors one asserting that deterrence is absent" (p. 7), the Panel concluded that given the above methodological problems, the general question of deterrent effects is still an open one. In particular, the Panel stressed that "the available studies provide no useful evidence on the deterrent effect of capital punishment" (p. 9). Since it is intuitively clear that some criminal sanctions do deter some criminal behavior by some people (as anyone who has ever lightened a foot on a gas pedal after observing a police car in the rear-view mirror can attest), the question for research is best put as what sanctions deter what crimes by what people, under what conditions, and how much.

Carroll (1978a), in one of the few explicitly psychological studies of deterrence, found that both offenders and nonoffenders evaluated the desirability of crime opportunities along simple dimensions, with those dimensions varying greatly across subjects. Both offenders and nonoffenders were generally more responsive to changes in the rewards produced by crime than in the punishments for it if caught. "This suggests that social policies might be directed toward the relative profits of criminal and noncriminal activities as well as toward traditional punitive ends" (p. 1520).

REHABILITATION The National Academy of Sciences followed its Panel on Deterrence with another on Research on Rehabilitative Techniques (Sechrest et al 1979, Martin et al 1981). Rehabilitation was defined as "the result of any planned intervention that reduces an offender's further criminal activity, whether that reduction is mediated by personality, behavior, abilities, attitudes, values, or other factors" (p. 4). The effects of maturation and the effects associated with "fear" were specifically excluded, lest long or cruel sentences be viewed as "rehabilitative" per se (cf Wilson 1980). This group took as its starting point the work of Lipton et al (1975, see also Greenberg 1977), which spawned the now common wisdom that "nothing works" in criminal rehabilitation. While concluding that Lipton et al (1975) were "reasonably accurate and fair in their appraisal of the rehabilitation literature" (p. 5), the Panel noted two qualifications to the "nothing works" interpretation: the interventions studied to date have been insipid and poorly implemented (Quay 1977), and there are "suggestions" among the mass of negative results that some treatments may be effective for some groups of offenders. Specifically, work and financial support programs for certain types of released offenders were targeted as promising approaches. Others (e.g. Ross & Gendreau 1980) read the research more cheerfully.

The rehabilitative consequence of the criminal sanction is a maturing area of research, but psychological analysis of deterrence is in its infancy and of incapacitation is as yet unborn. Given the recognized limitations on the use of aggregate data, and the need for analyses of these topics at the level of the individual (Blumstein et al 1978), psychological approaches to deterrence and incapacitation can be expected to come of age in this decade. As Carroll (1978a, p. 1520) has noted, "the debate between sociologists and economists has now become a forum." In addition to analyzing the effects of the criminal sanction, this forum is addressing many other consequential assumptions of substantive law, such as the effect of school desegregation on student attitudes and achievement (Stephan 1978).

THE LEGAL PROCESS

Research on the legal process considers the more formal aspects of how the law resolves conflicts between individuals (as in contract or tort law) or between an individual and the state (as in criminal or administrative law) in the application of substantive legal principles. Its primary focus, therefore, is on the trial as the ritualized crucible in which conflicts are resolved, rather than on less formal or rule-bound procedures such as police discretion, out-of-court negotiation, or parole (Wrightsman 1978, McGillis 1980, Elwork et al 1981).

While relatively few cases that enter the legal system ever reach the stage of a formal trial—an observation that can be taken either as testimony to the sufficiency of informal mechanisms of resolution (Saks & Hastie 1978) or as an indictment of duplicity in the law (Haney & Lowry 1979)—in absolute terms the numbers are large. An estimated 2 million persons serve as jurors in some 200,000 civil and criminal cases each year (Abraham 1980). The reason that trial processes have so captured the attention of both lay and scholarly audiences, however, has more to do with their symbolic than their numeric importance (Nemeth 1976). Through its ability to establish legal precedent, one trial whose verdict is appealed may have consequences vastly more far reaching than many cases informally disposed (Silberman 1978). As well, the behavior of prosecutors and defense attorneys in plea bargaining and of opposing counsel in private disputes is heavily influenced by expectations of what would happen if negotiation broke down and trial had to be invoked (Heumann 1978).

While some pioneering studies have addressed the role of judges (e.g. Ryan et al 1981) and lawyers (e.g. Partridge & Bermant 1978) at trial, most recent research on the legal process has converged on two role components —jurors and defendants—and three process components—evidence, procedure, and decision rules.

Role Components

JURORS Juror characteristics have been studied both in their own right —with numerous reports that the more similar the juror to the defendant in race, gender, occupation, or attitudes, the more lenient the treatment accorded (Nemeth in press)—and for their relevance to jury selection procedures (Bermant & Shapard 1981). They have studied in the latter context for two seemingly contradictory reasons. On the one hand, surveys and demographic data have been analyzed to demonstrate that the pool from which jurors were selected *was biased* in either its racial (McConahay et al 1977) or attitudinal (Vidmar & Judson 1981) composition. On the other hand, some proponents of "scientific jury selection" have researched the relationship between the characteristics of jurors and the decisions they reach in order *to bias* the jury in favor of a desired decision (see Saks 1976). This second enterprise has generated much empirical debate, with Saks & Hastie (1978, p. 66, cf Hepburn 1980) concluding that the composition of a jury is "a relatively minor determinant" of the verdict reached, especially in comparison with the evidence presented to the jury. It has also engendered ethical concerns (e.g. Herbsleb et al 1979) focusing upon the potential imbalance created when only one side has access to psychological technology.

Jury size is a second topic that has captured much psychological research attention (Davis et al 1977, Suggs 1979) with studies tending to show that the smaller the jury, the less adequate the deliberation and the greater the probability of convicting an innocent person. The use of this research, particularly that of Saks (1977), by the U.S. Supreme Court in the *Ballew v. Georgia* (1978) case has been subjected to a barrage of criticism. The research, for example, showed 12-person juries superior to 6-person juries and not, as the Court claimed, 6-person juries superior to 5-person juries (Lermack 1979, Kaye 1980).

DEFENDANTS A highly popular research topic in the legal process, particularly with social psychologists, has been the effect of defendant characteristics upon juror (sometimes jury) judgments (Izzett & Sales 1981, Greenberg & Ruback in press). Both factors relevant to one's status and history with the law, and factors presumed by the law to be irrelevant have been studied. Among the law-related defendant characteristics that have been found to raise the probability of guilty verdicts by simulated jurors are being in custody, rather than free on bail (Koza & Doob 1975); having evidence of extenuating circumstances offered personally by the defendant rather than by an impartial witness (Frankel & Morris 1976; cf Suggs & Berman 1979); and protesting innocence too severely (Yandell 1979).

Research on extralegal characteristics has not found defendant sex, race, or socioeconomic status consistently to affect simulated juror decisions. The one extralegal variable that has preoccupied simulation researchers has been the defendant's physical or social attractiveness. The modal finding is that attractive defendants receive more lenient treatment than unattractive ones. Exceptions to this tendency are found when the defendant is perceived to have used his or her attractiveness to further criminal aims, as in swindle cases (Sigall & Ostrove 1975) or in cases of physicians using their role to facilitate murder (Bray et al 1978). The few nonsimulation studies investigating attractiveness, however, find that it has little (Kalven & Zeisel 1966) or no effect (Konečni & Ebbesen 1982a) on the treatment of defendants.

Process Components

EVIDENCE Recent research on the evidence introduced at civil and criminal trials and its effect on jury decision making has centered on the mode (e.g. live versus videotaped) by which evidence in general is presented to the jury and the adequacy of evidence produced by eyewitnesses in particular. Other studies have found that jurors do not ignore evidence they have heard that is later ruled inadmissible (Fontes et al 1977, Thompson et al in press),

give reduced weight to witnesses who qualify their speech (Erickson et al 1978), and are affected by pretrial publicity (Loftus 1979a).

Changing the mode by which evidence is presented to the jury from "live" participants to videotape would facilitate the testimony of witnesses (e.g. when they are ill) and reduce the probability of a mistrial, since inadmissible evidence would be edited from the tape before it was played to the jury (Jacoubovitch et al 1977). Research generally has been supportive of the use of videotape. It has been found to be more effective than written transcripts in affecting juror judgments (Farmer et al 1977) and as effective as live testimony in keeping the jurors' interest and motivation and in fostering witness credibility (Miller 1976).

With its solid grounding in the fields of perception and memory, research on evidence produced by eyewitnesses to an event is among the most systematic and theoretically developed in the psychology of law (Clifford & Bull 1978, Loftus 1979b, Yarmey 1979, Penrod & Loftus in press, Wells 1980). Among the factors that have been found to affect the reliability of eyewitness identifications are age, with adults being more accurate than children or the elderly (Smith & Winograd 1978), and race, with crossracial identifications being poorer than same-race ones (Goldstein 1979). The manner of questioning by which a recognition is elicited can have a great effect on its reliability (Loftus et al 1978), while training witnesses in recognition techniques does not appear to be effective (Woodhead et al 1979). Despite the fact that jurors give great weight to the "confidence" of an eyewitness in assessing his or her credibility, confidence in recognition has been found unrelated to accuracy of recognition (Deffenbacher 1980).

A substantial discrepancy, therefore, exists between the research literature, which has demonstrated the frequent unreliability of eyewitness identification, and the traditions of the legal process, which highly value such evidence (Wells et al 1979, Hatvany & Strack in press). This discrepancy has led to the increasing use of eyewitness researchers as expert witnesses in trials that revolve around issues of perceptual accuracy (Fishman & Loftus 1978, Woocher 1977, Loftus 1980, Wells et al 1980). The question of "who to believe"—the eyewitness or the eyewitness researcher—is then left for the jury to decide.

PROCEDURE The towering figures in the psychological study of how procedures affect the resolution of legal disputes have been Thibaut & Walker (cf Hayden & Anderson 1979). The early research (Thibaut & Walker 1975) contrasted an "adversary" model, in which the parties to a dispute controlled the procedures for its resolution, to an "inquisitorial" model (common in some European countries), in which procedural discretion rested with a third-party decision maker. Results indicated that people

both in the United States and in Europe perceived the adversarial model to be more "fair" than the inquisitorial one (La Tour et al 1976).

More recent studies have distinguished between process control (i.e. control of the presentation of information) and decision control (i.e. control of the ultimate judgment), and between the objective of establishing truth (i.e. a correct view of some set of facts) and that of providing justice (i.e. an equitable distribution of resources or losses). Where the primary disagreement concerns the distribution of resources or losses, as in most legal disputes, justice is the goal and it is best obtained by a procedure that places control of the process in the hands of the disputants and control of the decision in the hands of a third party (e.g. a judge). When the disagreement concerns the nature of facts rather than the distribution of resources or losses, as in many scientific or technological disputes, the goal is truth, and it is best achieved when both process and decision control are in the hands of a third party. Cases in which there is a significant conflict about both facts and the distribution of resources, as in some environmental disputes, may require a two-stage resolution in which truth is first determined and justice then pursued (Thibaut & Walker 1978, Lind et al 1980).

Finally, Walker et al (1979) have investigated the relationship between perceptions of the fairness of a procedure and the perceptions of the fairness of an outcome reached through that procedure. Perceptions of the fairness of a procedure were found to enhance perceptions of the fairness of outcome, but only when subjects actually participated in the decision-making process. The relationship did not obtain for observers nor for persons affected by the decision but not participating in the process of reaching it.

DECISION-RULES Before they retire to deliberate on civil or criminal cases, jurors are presented by the judge with what are in effect decision-rules concerning how the law applies to the factual issues before them (Kerr et al 1976, Kassin & Wrightsman 1979, Penrod & Hastie 1979, 1980, Levine et al 1981). Several studies have found these instructions almost wholly incomprehensible to jurors. Strawn & Buchanan (1976) reported that only half the jurors instructed in the burden of proof in a criminal trial understood that the defendant did not have to prove his or her innocence. Likewise, Charrow & Charrow (1979) found jurors to understand only half of what was explained to them, largely due to the prolix construction of what passes in the law for prose. Multiple negatives, as in "innocent misrecollection is not uncommon," were a frequent obstacle to comprehension. Happily, studies have found that when instructions are rewritten with attention to clarity, comprehension markedly improves (Elwork et al in press).

Comprehension, however, is not the only issue in instructing juries. Borgida (in press; see also Borgida 1979, 1980) found that simulated jurors in

a rape case who were explicitly instructed that admission of prior sexual history on the part of the victim did not prove that she consented to the act at issue were *less* likely to convict the defendant than jurors who were not so instructed. He hypothesized that the more explicit the judicial instruction, the stronger the threat to the jury's decision freedom, and thus the development of a reactance response.

THE LEGAL SYSTEM

Studies of the legal process have tended to focus on formal rules, to employ a variety of theoretical frameworks, and to favor simulation methods. In contrast, recent research on the legal system—on the ways in which the law actually disposes of individual cases—has been characterized by an emphasis upon informal discretion, a reliance upon decision making as the analytic framework of choice, and a preference for naturalistic rather than laboratory settings. While many discrete "systems" of law are now receiving research attention (e.g. Arvey 1979 on employment law; Clingempeel & Reppucci in press and Mulvey in press on family law), most recent scholarly activity has been clustered in the criminal justice system, the mental health system, and that hybrid system in which the jurisdictions of criminal law and mental health law overlap.

Criminal Justice System

Surely "criminal justice" has been the mainstay of psychological research on the legal system (Bickman & Rosenbaum 1977, Sales 1977, Toch 1979, Cohn & Udolf 1979), deriving in part from psychologists' long-standing interest in crime and delinquency as forms of abnormal behavior (Feldman 1977, Farrington 1979, Nietzel 1979, Monahan & Splane 1980). While psychologists have been active in studying law enforcement (Bard & Connolly 1978, Novaco 1977, Stotland & Berberich 1979, Mulvey & Reppucci in press) and corrections (Toch 1977, Reppucci & Clingempeel 1978, Brodsky & Fowler 1979, Megargee & Bohn 1979, Bukstel & Kilmann 1980), they have focused in greatest depth upon judicial and quasi-judicial (e.g. Parole Board) decisions regarding whether and for how long an offender should be confined.

The perceived problem that has given rise to much of this research has been that of disparity. Findings that persons convicted of the same offense, with similar criminal histories, receive drastically different sentences (e.g. Diamond & Zeisel 1975) have motivated a search for the sources of this disparity and for methods to reduce it.

Diamond (1981) has characterized sentencing decisions as highly complex. Disparity may occur because judges differ in their overall levels of severity, in how they weight particular aspects of a case, or simply because

they are inconsistent in applying their own decision rules. Ebbesen & Konečni (1981), on the other hand, report that judges employ a simple decision strategy in sentencing. They found that the severity of the offense for which an individual was convicted, the extent of the individual's prior record, and whether he or she was released or remained in jail during the period between arrest and conviction largely determined the probation officer's recommended sentence. This, in turn, was generally rubber-stamped by the judge. Such "disparity" as existed was accounted for more by different judges receiving different types of cases than by disagreements among judges on how to decide them.

Despite the growing movement in the United States to substitute sentences of a determinate length, such as 5 years, for sentences of relatively indeterminate duration, such as 1 to 10 years, the precise length of time an offender spends in prison is still usually fixed by an administrative parole board. Here, too, concern with disparity or "unfairness" has been intense (Berman 1977). Carroll, in a systematic series of studies (e.g. 1978b; Carroll & Payne 1977), found that decision making in the context of parole differed from that employed in sentencing in that parole decisions were primarily predictive in nature rather than concerned with punishment for past behavior. Ratings of disciplinary infractions in prison, which could be viewed either as a justification for punishment or as a predictive variable, were strongly related to parole decisions.

Likewise, Gottfredson, Wilkins, and their colleagues (e.g. Gottfredson et al 1978) have studied the decision making processes of the U.S. Board of Parole and concluded that three factors, parole prognosis, institutional behavior, and offense seriousness could account for time served in prison. (That "offense seriousness" was a factor in these studies but not in Carroll's reflects the fact that in the federal system inmates were eligible for parole almost immediately, whereas in Carroll's state system the parole board did not receive cases until inmates had already served a minimum sentence based on the seriousness of their offense.) Gottfredson & Wilkins then fed their information back to the decision makers in the form of a matrix that made explicit the factors and weights that had previously been the implicit bases of their judgments. Decisions made with the use of this informational device were substantially more uniform than those made without it. The "guidelines" approach to structuring discretion has now become a major researched-based approach to parole and sentencing reform.

Mental Health System

Since the late 1960s, 48 states have changed the legal criterion for involuntary mental hospitalization from one emphasizing a professional judgment that a "need for treatment" exists to one focusing upon a prediction that a person found to be mentally ill is "dangerous" to him or herself or to

others (Schwitzgebel & Schwitzgebel 1980). As well, courts have promulgated a wide variety of both "positive rights," e.g. the right to treatment, and "negative rights," e.g. the right to refuse certain treatments, for committed persons (Monahan, in press). These wholesale shifts in policy have been the subject of vigorous political and professional debate (Roth 1979, 1980, Wexler 1981) and the object of active research attention.

Nowhere is the "gap problem" approach (Abel 1980) to social science research on law better illustrated than in civil commitment. Without exception, each study lays claim to the discovery of a new discrepancy or "gap" between the legal rhetoric of increased patient autonomy and improved patient care, and the reality encountered by those in contact with the mental health system (Bloom & Asher in press). Attorneys, for example, tend not to act as advocates for patients at commitment hearings, but rather to defer to the decisions of mental health professionals (Stier & Stoebe 1979), which are made on the traditional grounds of a perceived need for treatment (Lipsitt 1980). Training attorneys in techniques for challenging mental health professionals appears not to increase the likelihood that they will do so (Poythress 1978). Judges, in turn, confirm the decisions that mental health professionals have reached, seemingly without regard to whether these decisions comport with statutory requirements (Warren 1977).

If there is one overarching impression to be gleaned from the research of psychologists and others on the mental health system, it is the difficulty of achieving fundamental change through law in a system where decisions—of psychologists and psychiatrists and of judges and attorneys—are so unstructured and inaccessible to direct legal regulation. Saks & Miller (1979, p. 80) are correct when they state that "it is not true that we cannot legislate behavior change; it is only that the legislation must change the conditions that maintain the behavior in question." In the case of initiating civil commitment, however, these conditions appear entrenched. Zwerling et al (1978), in this regard, persuaded the staff at a mental health center to agree to abstain from involuntarily committing anyone for a one week experimental period. Only one exception was allowed: if a prospective patient was believed to be one of the rare cases in clear danger of immediate suicide or other violence, a staff member could ask for approval from his or her superior, and, if they both agreed, commitment would be permitted. Results showed that there were no differences between the number of persons committed during "no commitment week" and the weeks prior and subsequent to it! *Every* prospective patient was found to be the "rare" exception that clearly demanded commitment.

The "guidelines" approach, so successful in structuring decision in the context of sentencing and parole, has yet to be applied to decision making in the mental health system, perhaps due in part to the traditional antipathy

of mental health professionals to placing statistical constraints upon clinical judgment (Meehl 1973).

Interactions Between Criminal Justice and Mental Health

Penrose observed in 1939 that rates of imprisonment and rates of mental hospitalization were inversely correlated, with the total volume of institutionalization remaining constant (cf Grabosky 1980). Work on the interaction of the two systems remained dormant for several decades while researchers examined each in isolation. The past several years, however, have seen an awakening of interest in their relationship, first by sociologists (Scull 1977) and now by psychologists as well (Monahan & Steadman in press, 1982). Research has congealed upon how judges decide which individuals should be hospitalized before trial or instead of trial and how juries decide which offenders after trial should be sent to a hospital rather than a prison.

Judges become involved in deciding between mental health and criminal justice processing when confronted with a defendant who alleges or appears to be incompetent to stand trial, or one who may qualify by virtue of the crime charged and the state of mind present during it as a "mentally disordered sex offender." Research on incompetence to stand trial repeatedly has found, as did research on commitment, that judges rubber-stamp the conclusory opinions of psychologists and psychiatrists, whose opinions are strongly affected by a diagnosis of psychosis or a history of mental hospitalization (Roesch & Golding 1980). The question of a defendant's competence to stand trial is often raised as a matter of trial strategy rather than a genuinely perceived issue in its own right. Defense attorneys raise it to assist in plea bargaining or to test the court's receptivity to an insanity plea. Prosecutors raise it to lengthen the period the defendant will be institutionalized, since the examination itself may entail several months of hospitalization. Persons charged with violent felonies are highly overrepresented in findings of incompetence, indicating either that such persons are, in fact, more likely to be incompetent or that incompetency procedures are more likely to be used as legal maneuvers in cases where long sentences are possible (Steadman 1979).

The recent literature on judicial decision making in mentally disordered sex offender cases parallels in several ways that on incompetence to stand trial. Raising the issue of mental disorder at all is often a question of legal strategy; judges tend overwhelmingly to endorse the decisions of the examining mental health professionals, and the decisions of these psychologists and psychiatrists are predictable from knowledge of a few simple variables. To illustrate, Konečni et al (1980) found that the existence of convictions for prior sex offenses almost invariably led to a positive clinical evaluation

of mentally disordered sex offender status, with which the judge routinely concurred.

Jury decision-making studies on the relationship between the criminal justice and the mental health systems have focused on the insanity defense. Despite the public impression that the use of the insanity plea is widespread, it is actually raised in only about 1 percent of criminal cases brought to trial, and it is usually unsuccessful in persuading jurors to decide for "acquittal." Those who raise the insanity plea tend to be older, more often white, and more often female than the general population of offenders, but to have relationships with their victims similar to defendants who do not plead insanity, i.e. they are often related or acquaintances (Pasewark & Pasewark in press).

Much of the recent research on decision making in insanity cases has been descriptive in nature. One theoretical notion that has been advanced is that the degree to which decision makers have adopted a general "mental health ideology," rather than any specific legal provisions, accounts for variations in the use and success of the plea (Pasewark & Pasewark in press). Perhaps more intriguing is the hypothesis of Pasewark et al (1979) to explain their finding that mothers who committed infanticide and police officers involved in off-duty killings are overrepresented in insanity acquittals. They suggest that decisions by jurors in these cases represent a collective need to idealize certain archetypal role relationships. In order to preserve the concepts of "mother love" and "police protection," jurors selectively turn their attention from the facts that a child is often the most available victim of a mother's aggression and that providing weapons to a police officer may increase the probability of the weapons being used to resolve an officer's personal conflicts. Instead, people categorize such individuals as "insane" and thereby exclude them from the population of "normal" mothers and police officers who, they may continue reassuringly to believe, behave in the idealized manner.

RECURRING ISSUES

Certain issues arise with regularity in recent studies in the psychology of law, regardless of the specific topic under investigation. We have been able to distill three of them, which we believe are the core concerns with which the field must come to terms in the 1980s. They involve the theoretical integrity, methodological orthodoxy, and policy influence of the psychology of law.

Questions of Theory

The contributions of psychology to the study of law, we have suggested, inhere in its analysis of the law's substantive assumptions, procedural rules,

and systemic relationships. But what is the precise nature of these contributions? What, put another way, should psychologists set out to accomplish when they study legal phenomena?

Let us approach this question by considering in some detail two exemplars of sophisticated, meticulous, and programmatic research efforts in the field, the procedural justice studies of Thibaut, Walker, and their colleagues, and the legal decision-making studies of Ebbesen & Konečni. Since much of this research has been discussed earlier, we now consider only their respective approaches to studying problems in the psychology of law.

The research of the Thibaut-Walker group has a clear purpose: testing theory. They begin by extracting and articulating theories of human behavior that are implicit in the law, such as the theory of "adversariness." They then subject deductions from these theories to empirical test (see also Austin 1979).

The research of Konečni & Ebbesen has an equally clear but seemingly very different purpose: predicting behavior. Rather than test (or develop) a theory relevant to law, their goal is "to account for the greatest percent of the variance of the processing of cases through the [legal] system as a whole" (1981, p. 494).

Konečni & Ebbesen criticize theory-testing research such as that of Thibaut and Walker on the grounds that its procedures are chosen "not because they provide externally valid representations of processes in the real-world legal system, but because they may result in internally valid tests of hypotheses," whereas their own strategy emphasizes "the actual operation" of the intact legal system in a manner that can be "invaluable from a predictive point of view" (1981, p. 484). Unlike Thibaut & Walker, who would prefer to account for less of the variance in legal behavior in a theoretically satisfying manner than more of it without recourse to theory, Konečni & Ebbesen seek to maximize predictive efficiency using whatever "concrete and low level" (1979, p. 66) factors best accomplish that task.

The choice of research objectives—testing theory or predicting behavior—is of great importance for the selection of research methods (see below). But it is even more important in its own right, for it determines the criteria against which scholarship is to be evaluated.[1]

While space precludes an extended discussion of issues in the philosophy of science, our own view is that social science, like all science, has dual goals. The goals are prediction and understanding (Brody 1970). Prediction

[1]There may be a third objective of research in the psychology of law as well. "Descriptive" (Friedman & Macaulay 1977) or "exploratory" (Lind & Walker 1979) research that is neither driven by an explicit theory nor concerned with the prediction of specific target behaviors may also be of scientific value, particularly in the early stages of investigation. Such research may identify the parameters of a problem and unearth basic relationships that give rise to later theoretical and predictive studies.

without understanding may lead to effective interventions [as it did in the prevention of cholera (Caplan 1964)]. Understanding without prediction may also be of great scientific value [as it was in Copernican astronomy (Kuhn 1970)]. But ultimately, science must embrace both objectives. Indeed, the two are inextricably linked. Recall Lewin's (1935) dictum that "there is nothing so practical [in predicting behavior] as a good theory." Likewise, unexplained predictions are the principal impetus to theoretical development and ultimately to "paradigm shifts" (Kuhn 1970).

Rather than seeing Thibaut & Walker's emphasis on testing theory and Ebbesen & Konečni's emphasis on predicting behavior as alternative research strategies for the psychology of law, therefore, we would view them as complementary. What the disagreement comes down to is not one of objectives. Thibaut & Walker see their theory-testing research as having implications for predicting behavior. Those implications would come, however, *after* a theory has been developed and shown to be internally valid (Lind & Walker 1979, p. 8). Likewise, Konečni & Ebbesen state that they wish only "to *begin* a research program by doing real-world [i.e. predictive] studies" (1979, p. 65, italics in original). The disagreement is, or should be, one of research strategy. Is it most fruitful to develop a theory first and test the internal validity of the hypotheses deduced from it, and only then to investigate its real-world predictive power, as Thibaut & Walker hold? Or is more to be gained by initially attempting to predict as much externally valid legal behavior as possible before inductively generating and testing a theory that allows for understanding, as Ebbesen & Konečni suggest? On this question psychologists of law with equal commitment to the scientific method will differ.

While each strategy has clear advantages over the other (conceptual elegance in the case of theory testing; practical applicability in the case of behavior predicting), each has its own liabilities. Theory testing may be forced to employ concepts at such high levels of abstraction that their relevance to the legal phenomena of interest becomes strained. Behavior predicting may be left without overarching constructs to explain discrepant findings. If judges in Virginia, for example, are found to take community ties into account in setting bail and judges in California are not (Ebbesen & Konečni 1982), what does one conclude? That there are California judges and there are Virginia judges? Perhaps there are, but without the attempt to develop a theory to help us understand the nature of these differences, the observation itself is unsatisfying. Taking into account these assets and liabilities, it is entirely possible for a psychologist of law to prefer theory testing as the initial strategy of choice for one problem and behavior prediction as the initial strategy of choice for another, depending, perhaps, on the existing state of theory development and the existing state of predictive accuracy.

Questions of Method

There can be little doubt that the bedrock methodological issue confronting the psychology of law in the 1980s is the external validity of laboratory simulations. (Anderson & Hayden 1980, Houlden 1980). The intense questioning of "analog" research in the psychology of law reflects similar concerns regarding its appropriateness in other areas of psychology (Tunnell 1977, Kazdin 1978, Bem & Lord 1979). Since most of the recent contributions to this debate in the psychology of law have focused on the study of jury behavior, we shall take this area as illustrative of the more general issue [cf Ellis (1980) on eyewitness research.]

Simulation is only one of several methods researchers have used to study jury decision making (Baldwin & McConville 1979, in press), but it is far and away the preferred method of psychologists. The reasons for the domination of simulation methods in the psychological studies of juries are not hard to come by. Simulation allows for 1. randomization of experimental variables, thus assuring high internal validity; 2. replication of procedures, again assuring high internal validity; 3. access to a process (i.e. deliberation) that is legally inaccessible in the natural environment; and 4. substantial savings in the time and money necessary to do research.

Bray & Kerr (1979) examined the procedures used in jury simulation studies and concluded that while some of them were "realistic" or face valid representations of actual jury process, most were not. An example of the former would be Zeisel & Diamond's (1978) research in which persons from the jury rolls sat in court and observed an actual and entire trial and then deliberated at length until reaching a verdict. Regarding the latter, "unrealistic" simulations, Konečni & Ebbesen (1981, p. 488) have noted that "finding oneself in a 2X3X4 within-subjects simulated-jury experiment and making the guilty/not guilty decision 24 times in a row within 10 minutes on a 100-mm scale is clearly somewhat different from being in a jury once in a lifetime, watching a 7-day trial, and deliberating for 2 days behind closed doors with 11 complete strangers." The preponderance of these latter studies that lack "verisimilitude" in terms of the structure and functioning of actual juries (Bermant et al 1974) and that fail to use concepts of actual relevance to the law has led Vidmar (1979, p. 96) to state that the entire area of jury simulation research "can be fairly described as marked by (*a*) legal naivete, (*b*) sloppy scholarship, and (*c*) overgeneralization combined with inappropriate value judgments."

Simulation studies tend to be characterized by their authors as having either applied value in predicting actual jury behavior, or theoretical value in testing conceptual frameworks of relevance to psychology or to the law (although even here applied "implications" have flowed freely). In a perceptive review assessing both claims, Weiten & Diamond (1979; cf Vidmar

1979) have noted several major threats to the external validity of simulation research (see also Davis et al 1977, Gerbasi et al 1977). Most simulation studies have employed inadequate sampling in using subjects—undergraduates—who are unrepresentative on numerous dimensions of the population selected for jury duty. They have presented inadequate trial simulations that omit integral elements of an actual trial. In particular, many studies have lacked jury deliberation and therefore are investigations of "juror" rather than "jury" decision making. This is despite the fact that other research has shown deliberation to have a substantial effect upon trial outcome (McGuire & Bermant 1977, Bray & Noble 1978, Kaplan & Scherscing 1981). Further, jury simulation studies have used inappropriate dependent measures, such as continuous rather than dichotomous ratings of guilt, and have lacked corroborative field data that would allow an assessment of the success of the simulation in mimicking the real world.

The "most crucial difference" and "the gap most difficult to close" (Weiten & Diamond 1979) between actual and simulated juries, however, is the difference in the perceived consequences of the two decision tasks. In a series of experiments, Wilson & Donnerstein (1977) presented undergraduate subjects with material concerning a fellow student accused of stealing and distributing an examination. Half the subjects were led to believe that their decision would have real consequences for the student in question, and the others were told to act "as if" they were jury members. In two of their three studies, "real" jurors were significantly more likely to convict than those who knew they were in a simulation. A study by Zeisel & Diamond (1978), on the other hand, found simulated juries less likely to convict than actual ones, and Kerr et al (1979) found no effect of perceived real or hypothetical decision consequences. While a main effect of role-playing, if one exists, could be taken into account in interpreting the results of a simulation, the possibility that role-playing interacts with other variables poses more serious difficulty. Wilson & Donnerstein (1977), for example, found that juror role-playing status interacted with defendant characteristics in producing judgments of guilt.

While simulation has borne the brunt of recent methodological criticism in the psychology of law, field methods have not gone unscathed. The principal liability of naturalistic research, of course, is that "nature" is often illegal, unethical, or impossible to control in order to provide the opportunity for internally valid research. But there are other problems as well. Gertz & Talarico (1977), in a study of the reliability of archival data in the criminal justice system, note the frequency of clerical carelessness (e.g. records revealing a defendant to have been convicted before having been arrested) and problems of shifting crime definitions. These problems are compounded when the research assumes not only the reliability but the validity of archival measures as estimates of actual behavior, rather than

simply as pieces of information that influence decision makers (Gottfredson & Gottfredson 1980a,b). The manipulation of crime data and other "social indicators" for political purposes is well known. In addition, the pervasiveness of plea bargaining and prosecutorial discretion makes the offense of which a subject is convicted bear only the most metaphoric resemblance to the behavior actually performed.

Our own view of the laboratory-versus-field debate in the psychology of law is that the relative merits of alternative research methods can be evaluated only in the context of the purpose for which the research is undertaken. Where the investigator's primary concern is with the application of research findings to the real-world legal process or system—which is to say, with predicting the behavior of actual legal decision makers—the issue of external validity weighs heavily. Here in vivo naturalistic designs, such as those of Konečni & Ebbesen (1982b) or very close simulations, fulfilling the stipulations set by Weiten & Diamond (1979) and Vidmar (1979), would seem to be the methods of choice. However, where the investigator's primary purpose is to test legal or psychological theory, concern with internal validity looms. "So long as the study meets the specifications of the theory and provides a reasonable test of some logical consequence of the theory, the study is valid. Unless the theory places some explicit restriction on the situations, settings, or subject populations to which it is intended to apply, the study is not properly criticized on these grounds" (Lind & Walker 1979, p. 8). Research of this kind legitimately may employ simulations that lack a high degree of external validity with regard to the intact legal system.

Can "unrealistic" simulations ever provide results that are useful in predicting the behavior of actual legal decision makers? Perhaps. Bem & Lord (1979) have stated that the external or "ecological" validity of simulation research in any area of psychology "requires that the *relationships* between situational variables and the behavior in the [simulated] setting replicate the relationships between situational variables and the behavior outside the laboratory" (p. 841, italics in original). To establish the generalizeability of a simulation, therefore, it is necessary to establish an equivalence between the relationships created in the laboratory and the relationships that exist in the natural environment. Put another way, to use simulation results to predict real-world behavior it is necessary to verify empirically that the decision-rules invoked by the subjects in the simulation correspond to the decision-rules invoked by the makers of actual legal decisions (V. J. Konečni & E. B. Ebbesen, personal communication). This correspondence could be established only by studying real-world as well as simulated settings.

One can in this light view more clearly the frequently given analogy between laboratory research in psychology and in the biological and physical sciences. Bray & Kerr (1979, p. 116), for example, state that "[e]ven if

saccharin is not a major cause of human bladder cancer, demonstrating that massive saccharin doses reliably lead to bladder cancer in rats can alert us to possible risks and can guide future research. Demonstrations that artificially powerful treatments reliably affect mock juror/jury judgments can serve similarly valuable functions."

Whether the relationship between saccharin and the rat bladder, however, is equivalent to the relationship between saccharin and the human bladder, no less than whether the relationship between attractiveness and mock jury judgments is equivalent to the relationship between attractiveness and the judgments of actual juries, is an empirical question. In either case, the equivalence may or may not obtain (e.g. saccharin may interact with a substance found in rat bladders, but not in human bladders, in producing cancer). Should this reasoning be accepted, methods to establish the equivalence between simulated and naturalistic relationships in the psychology of law would seem to warrant a high priority on the agenda of those simulation researchers interested in the external validity of their findings.

There is one other purpose of research for which the use of "unrealistic" laboratory simulations may be appropriate. By virtue of its ability to combine variables in novel ways, simulation can allow the "discovery" of relationships that do not exist in the natural environment. Much may be learned, for example, about how to improve the comprehension of jury instructions by actual jurors from studies that present alternative instructions to simulated jurors. Naturalistic research could not address this problem, since the alternative instructions do not exist in the naturally occurring legal environment. "Whenever a potentially beneficial effect is observed in the laboratory, the objective might be *to make the external world match the laboratory, not to make the laboratory match the external world*" (Henshel 1980, p. 475, italics in original). Matching the external world to the laboratory, however, must be done in an experimental manner, to verify that the "potentially beneficial effect" discovered in the laboratory is realized in the field.

What we find to be methodologically problematic are studies that use theory-testing procedures for behavior-predicting purposes. Studies that employ very unrealistic jury simulations to answer very applied questions of jury behavior trade off external validity for little corresponding gain in the internally valid testing of theoretical hypotheses. A distressingly large portion of jury research appears to fall into this category of generating theoretically uninteresting and predictively useless "findings" (Weiten & Diamond 1979, p. 75). Given that a single piece of research may have multiple purposes, we would offer that to the extent the research proffers applied "implications," it legitimately is subject to scrutiny on the grounds

of external validity. To the extent the research emphasizes theoretical integrity, it legitimately is subject to scrutiny on the grounds of internal validity. To the extent the research emphasizes neither, its value to psychology or to the law is in doubt.

Questions of Influence

There has been much concern to increase the influence of psychology upon the law. Saks (1980) has distinguished the participation of psychologists in the determination of clinical or "case facts" regarding an individual litigant from his or her role as provider of "social facts" based upon research findings. Clinical psychologists have for some time been actively involved in case evaluations for many legal purposes (Haward 1981). All indications are that the law is now becoming increasingly receptive to psychologists as purveyors of "social facts" to the legislative (Saks 1978), judicial (Tanke & Tanke 1979), and executive (Etzioni 1980) branches of government.

It is less clear that this growing quantity of psychological input is improving the quality of legal decisions. Whether a cited piece of research, for example, helped to shape a judicial decision or was added after the fact to give scientific gloss to a judgment arrived at on other grounds is largely unknowable. This is brought out most clearly in the unanimous U.S. Supreme Court decision in the *Ballew v. Georgia* (1978) jury-size case, in which several justices said they based their opinion on the findings of social psychological research, several other justices said they employed constitutional principles having nothing to do with what they fobbed off as "numerology," and the remaining justices signed the decision without addressing the scientific issue at all (Loftus & Monahan 1980).

There are indeed substantial jurisprudential reasons to suggest caution in relying too heavily upon social science research in deciding cases (Loh 1979, Suggs 1979, Saks & Baron 1980). Thus, the first case in which the U.S. Supreme Court was urged to consider "social facts" concerned the validity of an Oregon statute limiting the number of hours per day women could be made to work in factories and laundries (Muller v. Oregon 1908). Louis Brandeis was supported by contemporary feminists when he represented Oregon in defending the statute. In this original social science "Brandeis brief," however, he cited "scientific" research documenting the "periodical semi-pathological state of health of women" (p. 87), the existence of "general 'female weakness' " (p. 38), and the fact that "the particular construction of the knee and the shallowness of the pelvis, and the delicate nature of the foot" (p. 19) made women less able than men to work long hours. Were Brandeis representing modern day feminists in the fight for equal rights in the workplace, he no doubt would choose different sources of scientific authority. More recently, Kenneth Clark's (1950) study finding

that black children from segregated schools chose dolls of a lighter shade than their own skin color was cited in "the most controversial footnote in American constitutional law" (Rosen 1980) in the *Brown v. Board of Education* (1954) school desegregation case. If a replication should now find that black children in predominately black schools chose dolls of the same shade as their own skin, what should the courts do? Call for an end to busing? If not, why was the research cited in the first place?

As long as legal decisions are made in part on the basis of factual assumptions, however, the law has no choice but to be open to any refinement of these assumptions that social science can bring to bear (Schlegel 1979, Davis 1980, Saks & Kidd 1981). It may be, in this regard, that social science research can most influentially be applied to cases of "the middle range" (Kalven 1968), that is, cases in which deeply held values do not predominate and in which the facts are not so generally known as to make research superfluous (Bermant 1975). Also the law may be receptive to social science input when resolutions reached on traditional legal grounds have failed. Ellsworth & Getman (in press) have observed that courts are more willing to consider social science in the criminal law than in other areas such as labor law. This may reflect a general belief that the criminal justice system has failed and that new approaches are needed. There may be less willingness to be "experimental" about labor law because there is a general belief that the current legal approach is adequate. Finally, research that suggests a feasible alternative to an existing policy may rise to influence. Many studies in the psychology of law appear to be unconstructively negative. "People are, it seems, worse than is generally assumed at remembering, recognizing, understanding and processing information according to legal criteria" (Farrington et al 1979, p. xvi). Without suggesting alternatives that take into account these failings, research is unlikely to have "impact."

The first problem that confronts a psychologist of law desirous of having his or her research used by legal decision makers is making them aware of the existence of the research. Tanke & Tanke (1979) have suggested three steps toward this end. Psychologists should (*a*) identify empirical issues in the legal process through legal publications and interest groups; (*b*) consult with lawyers in carrying out research and in criticizing and summarizing the research of others; and (*c*) present their research to the courts by publishing in legal journals, working with parties to appellate cases, filing *amicus curiae* briefs, and participating as expert witnesses at trial. Prescriptions on how clinicians can best inform judges regarding "case facts" at trial are provided by Brodsky (1977) and Poythress (1980).

Assuming they can be made aware of its existence, judges must then be made to comprehend research procedures and findings. One court, when presented with a social science brief, found it to be "an overgrown garden

of numbers and charts and jargon like standard deviation of the variable, statistical significance, and Pearson product moment correlations" (*Hobson v. Hansen,* 1971). While one can agree with the U.S. Supreme Court in *Craig v. Boren* (1976) that "it is unrealistic to expect either members of the judiciary or state officials to be well versed in the rigors of experimental or statistical technique," one can also wonder how research findings intelligently can be used by courts or legislatures until the inhabitants of those chambers are educated at least to the nonrigorous level of knowing what "statistical significance" means. Without such education, judges are likely to continue in evaluating either the expert him or herself or the general field of inquiry—with credibility being given to the famous and to all physicists (Saks 1980)—rather than the specific research or clinical methods used to produce the findings offered in evidence.

There are indications that at least some actors in the legal system are beginning to acquire the rudiments of social science methodology. Rossi (1980), for example, noted that before he testified in an Administrative Law Court in a deceptive advertising case against the manufacturer of Anacin, the attorney defending the manufacturer took an advanced course in multivariate analysis, the better to cross-examine him. This attorney also had a battery of statisticians behind him in court passing notes with questions to be asked. Rossi was on the stand for 3 days. As Moynihan (1979, p. 30) has noted, "lawyers with no more than a good undergraduate grounding in social-science methodology could have quite an impact in this area simply by establishing standards of cross-examination which are infrequently attained today. This would be no small thing."

Questions of the influence of the psychology of law cannot fully be answered—indeed, cannot begin to be answered—without attending to questions of the values of the field (Haney 1980). Morse (1978; see also Gass 1979) for example, articulately argues for restricting the participation of clinical psychologists and others in mental health law on the grounds that the issues to be decided are moral rather than empirical in nature, and thus outside the realm of scientific expertise. Bonnie & Slobogin (1980; cf Morse in press), in contrast, argue with equal conviction for improving the quality rather than precluding the admission of clinical testimony. The latter course, they hold, ineluctably would work to the disadvantage of a defendant who has a moral claim to reduced culpability for criminal behavior. In the research area, Saks & Hastie (1978) are disparaged by Luginbuhl & Mullin (1980, p. 153) as "dispassionate observers"—a compliment in other areas of scholarship—because their jury research does not focus upon the "[r]acism, classism, and preformed opinions about defendants [that] plague the courtroom." Likewise, Haney & Lowy (1979, p. 648) castigate Heumann's (1978) study of plea bargaining as legitimating an immoral proce-

dure that serves to "avoid the socioeconomic restructuring required to achieve a meaningful reduction in crime."

Three broad positions on the role of values in the psychology of law can be discerned (cf Friedman & Macaulay 1977). The *instrumental* position (e.g. Stier & Stoebe 1979) holds that the psychologist should assist in the achievement of the values that are espoused by the law. The *natural law* position (e.g. Hickey & Scharf 1980) is to promote values that are perceived by the psychologist as in some sense "natural" or "absolute." The *positivist* position (e.g. Konečni & Ebbesen 1982b) would have the psychologist not attempt to further values of any sort, but rather simply to array the facts as they are found.

Each position has appealing attributes. Instrumentalism has a pragmatic, useful quality to it, with a ring of humble subservience to the legislative and judicial processes. The natural law position affirms the righteousness of the scholar as an independent moral being. Positivism is associated with an image of the objective scientist who lets chips fall where they may. Each also has a darker side. Instrumentalism may inculcate a technocratic and reactive approach to problem solving. Natural law may legitimize the arrogant imposition of personal predilection in the name of principle. Positivism may foster an asceptic aloofness from the human problems with which the law attempts to deal.

While we are unable to recommend for the psychology of law among these three positions—our own work has at different times reflected each of them—we believe that as much attention should be given to "value" as to "influence" issues in graduate education, research, and practice in the field. We take heart in the fact that the literature on this aspect of the psychology of law has burgeoned in the past few years (American Psychological Association 1978, Anderten et al 1980, Monahan 1980).

CONCLUSION

We have structured our synthesis around the question of how psychology can increase our understanding of law. Yet what of the other side? Does the study of law have any contribution to make to our understanding of human behavior more generally, or is it just one more "applied" field of psychological inquiry?

One might say that there are two psychologies of law. The first takes as a priority the study of law as an end in itself, without regard to whether the theories developed or the behaviors predicted have more wide-ranging application. The second studies law primarily to illustrate the operation of general principles of human behavior, and so to assist in the development of those principles. While there is no bright line separating the two psy-

chologies of law, the difference in their emphases is striking, and is reflected both in their research topics and in their research methods.

To which psychology of law does the distribution of recent research most closely correspond? Beyond question, psychologists are using law as grist for the mills of "general" theory. The disjuncture between the legal topics that psychologists study and the topics that have importance to the law itself reflect this. Less than 10 percent of the course offerings at all major law schools concern criminal law, and less than 5 percent of American attorneys handle more than an occasional criminal case (Wice 1978). A substantial majority of research in the psychology of law, however, has dealt with criminal law and most of this was concerned with criminal trials (Loh 1981). While we have acknowledged that trials can have important effects throughout the criminal justice system, the fact is that up to 97 percent of criminal convictions are achieved by means of negotiated guilty pleas, without trial (Miller et al 1978). Yet a bibliography of over 400 articles on plea bargaining (Matheny 1979) lists none published in a psychological journal (cf Gregory et al 1978).

Why such a pronounced skew? Much of the reason may lie in the newness of the field. Many interested researchers may have been reluctant to get "too involved" with an uncharted area lest their careers wind up on the shoals should the tide of scholarly fashion recede. With its growing "mainstream" legitimacy, perhaps the law will now receive their undivided attention. Other factors may be operating as well. Education in law has not been a part of education in psychology. The exposure to law of many psychologists appears restricted to the popular media, which emphasizes criminal cases and jury drama. Perry Mason, along among attorneys, never bargained a plea. Perhaps the dramatic growth of formal educational opportunities in the psychology of law (Fowler & Brodsky 1978, Poythress 1979, Levine et al 1980) will rectify this situation.

A final and more subtle bias may be reflected in the "criminalization" of the psychology of law (Tapp 1980). The virtual nonexistence of psychological research on such topics as contracts, torts, and tax law may be traced at least in some part to the traditional antipathy of "liberal" social scientists to questions that smack of "business" (Moynihan 1979). We believe this bias to be seriously mistaken both for the development of a comprehensive psychology of law and for the furtherance of those very values. A change in tax law—which is to say, in the distribution of resources in society—or in statutes governing corporate liability for harmful decision making (Monahan & Novaco 1980) may have vastly more beneficial or adverse impact on the fabric of society than a change in jury size. In our opinion, the study of "private law" (e.g. contracts, torts) and of noncriminal public law (e.g. administrative law, tax) is among the most pressing research priorities in the field.

Yet we would not make too strongly the point that the psychology of law should be as concerned with law as it is with psychology, for at the most fundamental level the dichotomy between the two fields begins to crumble. Law, as Kelson (1945, p. 1) stated, is "an order of human behavior. An order is a system of rules." The system of rules that people have generated over the centuries to structure their interactions is surely the source of many insights into the nature of human beings in social context. The analysis of "legal reasoning" may well reveal important features of *all* reasoning, and not just things particular to the law (Hamilton 1980). As Scriven (1970, p. 192, italics in original) has noted with regard to the two fields of our concern, "*extremely wide ranging subjects,* concerned with *human behavior,* in which a *systematic rational approach* is employed, aimed in part at yielding *socially useful results,* exhibit a great similarity of method." It is this fundamental similarity in a sea of surface differences that lures together psychology and law.

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