THE PSYCHOLOGY OF CRIMINAL IDENTIFICATION: THE GAP FROM WADE TO KIRBY*

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On June 12, 1967, the Supreme Court of the United States in a trilogy of cases, United States v. Wade, Gilbert v. California and Stovall v. Denno, dealt with the constitutionality of police practices and procedures in obtaining eyewitness identifications. These decisions marked the Supreme Court's first major attempt to confront the "dangers inherent in eyewitness identification and the suggestibility inherent in the context of the pretrial identification." The Court's primary concern was to evolve legal standards and remedies that would substantially reduce erroneous identification. On account of the risk of intentional and unintentional suggestibility at lineups resulting in error and abuse in making identifications, and the concomitant difficulty of reconstructing lineup events for purposes of discrediting a witness' testimony at trial, the lineup was deemed a "critical stage" in the trial process during which suspects were to be protected by the sixth amendment right to counsel. Ambiguities remained as to the scope and meaning of this new right.

Since 1967 state appellate courts and federal courts of appeals have evolved standards and criteria—sometimes rather contradictory—for determining when this aspect of the right to counsel attaches. Although the primary objective of *Wade* was to protect the factfinding process from erroneous identifications, lower courts failed to analyze cases in terms of the basic criteria of the "critical stage" assessment: the risks of suggestibility and the necessity of reconstructing the iden-

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^{1 388} U.S. 218 (1967).

²³⁸⁸ U.S. 263 (1967).

^{3 388} U.S. 293 (1967).

^{4 388} U.S. at 235.

tification at trial to allow meaningful cross-examination.⁵ On June 7, 1972, five years after *Wade*, the Supreme Court in handing down *Kirby v. Illinois*⁶ also ignored the issues that rendered lineups a critical stage.⁷ In *Kirby* the Court followed the most narrow and least frequent of the lower court rulings and limited the *Wade* principle strictly to its facts, *i.e.*, to post-indictment lineups, although *Wade* had not made this distinction in developing "critical stage" standards.⁸

The Kirby decision in its superficial approach created the possibility for increased abuse. While the right to counsel may now be administered by the easy standard of whether or not an indictment has occurred, the Court left "the police in the position to manipulate the applicability of the right to counsel by holding all identification procedures before the indictment, thus defeating the aim of the Wade and Gilbert rulings."9 The incidence of such manipulation (which bears no relationship to defendants' need for counsel to safeguard constitutional rights) is probably rather common. On April 2, 1973, Time magazine's report of two mistaken identifications of an assistant district attornev and a sanitation department chauffeur in connection with a charge of sexual assault served as a reminder of the frequent unreliability of police lineups. The article concluded, "In 1967, Earl Warren's Supreme Court expressed its wariness of lineups by holding that an indicted suspect was entitled to have his lawyer present to prevent at least the obvious inequities. But the Burger Court last year [i.e., Kirby, 1972] cut into that right by refusing to apply it before the

⁵ Comment, The Right to Counsel at Lineups: Wade and Gilbert in the Lower Courts, 36 U. Chi. L. Rev. 830, 839 (1969) [hereinafter cited as Right to Counsel]. For a review of the meaning of "critical stage" for the Wade-Gilbert-Stovall Court and the failure of lower courts to consider cases in terms of the dangers of eyewitness identification, see Note, Pretrial Identification Procedures—Wade to Gilbert to Stovall: Lower Courts Bobble the Ball, 55 Minn. L. Rev. 779 (1971) [hereinafter cited as Pretrial Identification]; Comment, No Panacea: Constitutional Supervision of Eyewitness Identification, 62 J. Crim. L.C. & P.S. 363 (1971) [hereinafter cited as No Panacea].

6 406 U.S. 682 (1972).

⁷ For a discussion of the pre-indictment exception and relevant court decisions, see Quinn, In the Wake of Wade: The Dimensions of the Eyewitness Identification Cases, 42 U. Col. L. Rev. 135, 143-44 (1970). Quinn, in citing especially People v. Fowler, 76 Cal. Rptr. 1 (Cal. App.), vacated on other grounds, 1 Cal. 3d 335, 461 P.2d 643, 82 Cal. Rptr. 363 (1969) (holding right to counsel at lineup applicable before indictment), emphasized that pre-indictment lineups were certainly as "critical" as post-indictment lineups. Most federal and state courts seem to apply Wade broadly and do not read Wade as intending to be limited to its facts. In addition to Quinn, see Dienes, Right to Counsel, 30 N.L.A.D.A. BRIEFCASE 25 (1971); Sobel, Assailing the Impermissible Suggestion: Evolving Limitations on the Abuse of Pre-trial Criminal Identification Methods, 38 BROOKLYN L. Rev. 261, 274-75 (1971); No Panacea, supra note 5, at 364, 365.

⁸ In fact the Court, in defining the lineup as a critical stage, expressly relied on Escobedo v. Illinois, 378 U.S. 478 (1964), which involved the right to counsel before arraignment. Further, the *Wade* Court explicitly stated that it was required to "scrutinize any pretrial confrontation," 388 U.S. at 227.

⁹ Right to Counsel, supra note 5, at 837.

suspect has been indicted. Thus police now often delay formal charges until after the lineup." 10

Thus, while Wade mandated reforms of lineup procedures, subsequent decisions, including Kirby, reveal diminished judicial concern with this area. In light of this withdrawal by the courts from an area essential to the improvement of the criminal justice system, this Article seeks to revive the basic concerns of Wade. Its primary focus is to review and assess the empirical evidence related to reducing identification error and increasing accuracy and to suggest the potential use and limitations of this body of knowledge for remedying the problems of pretrial confrontations.

I. BACKGROUND OF THE PROBLEM

In the words of Judge McGowan, "the vagaries of visual identification [have] been thought by many experts to present what is conceivably the greatest threat to the achievement of our ideal that no innocent man shall be punished." Erroneous identification of criminal suspects has long been recognized by commentators as a crucial problem in the administration of justice. Numerous examples of misidentification have been extensively documented. In fact the lineup procedure itself was developed by the British police because showup confrontation was considered grossly suggestive and unfair. The problem is particularly crucial because potential jurors—and many law enforcement officials and judges—do not regard eyewitness identification with the same skepticism; for them, visual identification is one of the most, if not the most, persuasive kinds of evidence that can

¹⁰ TIME, Apr. 2, 1973, at 59.

¹¹ Lecture by McGowan, Constitutional Interpretation and Criminal Identification, 4th Annual G.B. Sherwell Lecture, Marshall-Wythe School of Law, Oct. 1970, printed in 12 WM, & Mary L. Rev. 235 (1970).

¹² See, e.g., E. Borchard, Convicting the Innocent (1932); J. Frank & B. Frank, Not Guilty (1957); F. Frankfurter, The Case of Sacco and Vanzetti (1927); M. Houts, From Evidence to Proof (1956); J. Marshall, Law and Psychology in Conflict (1966); P. Wall, Eye-witness Identification in Criminal Cases (1965); B. Wentworth & H. Wilder, Personal Identification (1918); J. Wigmore, The Science of Judicial Proof (3d ed. 1937); 3 J. Wigmore, Evidence § 786a (3d ed. 1940); Gorphe, Showing Prisoners to Witnesses for Identification, 1 Am. J. Police Sci. 79 (1930).

¹³ See, e.g., E. Borchard, supra note 12; J. Frank & B. Frank, supra note 12; F. Frankfurter, supra note 12; E. Gardner, The Court of Last Resort (1952); Q. Reynolds, Courtroom (1950); G. Williams, The Proof of Guilt (3d ed. 1963). Time, supra note 10, also reported some recent independent investigation being executed by a New York judge. "[F]or nearly a year he had been using a neat double-check system of eyewitnesses. In ten cases where identification constituted virtually the only evidence, [the judge] permitted defense attorneys to seat a look-alike beside the defendant in court. In only two cases did the previous identification hold up."

¹⁴ P. WALL, subra note 12; Ouinn, subra note 7.

be presented.¹⁵ Therefore, inaccurate identification has been and continues to be a major source of faulty convictions.

A striking example of the popular attitude toward eyewitness identification appeared in the Senate committee hearings on the Omnibus Crime Control and Safe Streets Act of 1968. In response to the Wade, Gilbert, and Stovall rulings, the committee labelled eyewitness testimony "an essential prosecutorial tool," and accused the Supreme Court of having struck "a harmful blow at the nationwide effort to control crime." Evidently, in this area, not only does the commonsense knowledge of laymen conflict with much expert knowledge, but opinions from law enforcement officials, legislators and jurists also conflict. Yet inaccurate identification has been and continues to be a major source of faulty convictions.

This situation only underscores the necessity of improving the quality of pretrial identification proceedings and thus reducing the number of faulty identifications available for use in prosecutions. The Wade trilogy involved two types of pretrial identifications: the lineup, which is the focus of this Article, and, in Stovall, the showup, or formal one-to-one confrontation between witness and suspect. As noted above, the Court in Wade viewed the lineup as a "critical stage" because "the confrontation compelled by the State between the accused and the victim or witnesses to a crime to elicit identification evidence is peculiarly riddled with innumerable dangers and variable factors which might seriously, even crucially, derogate from a fair trial." Among these factors were the well-known "vagaries of eyewitness identification," the potential for improper intentional and unintentional suggestion, and the emotional state of the witness. 19 In addition the Court called upon federal and state legislatures, prosecutors and police departments to design regulations to "eliminate the risks of abuse and unintentional suggestion at lineup proceedings [that] may also remove the basis for regarding the stage as 'critical.' "20 In short, "[b]v creating a new right to counsel but emphasizing that the requirement depends upon the continued categorization of the line-up as a 'critical stage,' the Court could immediately attack the worst abuses while retaining maximum long-run flexibility."21

¹⁵ See, e.g., P. Wall, supra note 12; Sobel, supra note 7; Comment, Erroneous Eyewitness Identification at Lineups—The Problem and Its Cure, 5 U.S.F.L. Rev. 85 (1970) [hereinafter cited as Erroneous Eyewitness].

^{16 18} U.S.C. § 3502 (1970).

¹⁷ S. Rep. No. 1097, 90th Cong., 2d Sess. 53 (1968).

^{18 388} U.S. at 228.

¹⁹ Id. 228-35.

²⁰ Id. 239

²¹ Comment, Lawyers and Lineups, 77 YALE L.J. 390, 399 (1967).

The Court did not go so far as to rule that all courtroom identifications of suspects where defense counsel was absent from a lineup must be excluded. Instead, the decision allowed the prosecution "the opportunity to establish by clear and convincing evidence that the in-court identifications were based upon observations of the suspect other than the lineup identification." In practice this independent origins test has been construed by the lower courts to allow the admission of identification testimony in most cases.²³

In Stovall, the Court acknowledged the even greater risks of abuse and suggestion present in a showup. But it refused to forbid all showups or insist on the presence of defense counsel on the grounds that the risks to the suspect in some cases are outweighed by the need for immediate identification (for example, in Stovall, the victim was in critical condition). In a holding which has been applied to both lineup and showup identifications, the Court said, "a claimed violation of due process of law in the conduct of a confrontation depends on the totality of the circumstances surrounding it, and the record in the present case reveals that the showing of Stovall . . . in an immediate hospital confrontation was imperative."24 Likewise, as with the "independent source" test, lower courts have applied the "totality" test with great flexibility. As one set of commentators reviewing the impact of Stovall observed, "[L]ower courts go well beyond the Court's application of the 'totality' test. In the opinion of those courts, a showup may be used any time if external factors lead to the conclusion that the identification was correct."25 They went on to conclude, "If courts continue to find a violation of due process only in the face of flagrant police conduct, the spirit in which Stovall was decided will, in all but a few isolated cases, be effectively throttled."28

While the *Wade* Court explicitly suggested legislative reform,²⁷ there has been little legislative attempt to respond to the Court's call for improvement of lineup proceedings. In fact, the United States Congress repudiated the holdings of the *Wade* trilogy. Title II, section 701(a) of the Omnibus Crime Control and Safe Streets Act of 1968 states, "The testimony of a witness that he saw the accused commit or participate in the commission of the crime for which the accused is being tried shall be admissible in evidence in a criminal prosecution

²² 388 U.S. at 240.

²³ See Quinn, supra note 7, at 140-43; Pretrial Identification, supra note 5, at 815-17; Right to Counsel, supra note 5, at 833 n.14.

^{24 388} U.S. at 302 (emphasis added).

²⁵ Pretrial Identification, supra note 5, at 790.

²⁶ Id. 803.

^{27 388} U.S. at 239.

in any trial court ordained and established under article III of the Constitution of the United States."28 Most commentators, however, have little doubt that this section, if challenged, would be declared unconstitutional.29

For the most part, police regulations promulgated after Wade conformed to the guidelines set forth by the Court. As Read's review of various police lineup procedures³⁰ and the Columbia Journal of Law and Social Problems' empirical survey of police regulations³¹ reveal, Wade stimulated new efforts to formulate standards meeting criteria of "due process" and "fairness." In the main these suggested procedures, though by no means uniformly enforced or of equal caliber, guarantee the right to counsel and respond to the most obvious forms of abusive practice. For example, they typically advise that lineup participants be of generally the same age, sex, height, weight and race, and some stipulate that they must wear similar clothing. These regulations have probably somewhat improved the fairness and reliability of lineup identifications. But they include only the most general references regarding the protection of the accused from suggestive influences, a basic goal of the Wade decision.³²

Groups within the legal profession, which historically has been more skeptical than police officers about the reliability of eyewitness identification, also have developed guidelines for lineup procedures. These, however, tend to be only slightly more sophisticated than most of the police regulations. They typically suggest that no lineup participant be required to speak, model clothing or perform any action unless all other participants are required to do the same, and are stricter about contact among different witnesses.33 But like police guidelines.

^{28 18} U.S.C. § 3502 (1970).

²⁹ See, e.g., Read, Lawyers at Lineups: Constitutional Necessity or Avoidable Extravagance?, 17 U.C.L.A.L. Rev. 339, 360 (1969); Comment, Protection of the Accused at Police Lineups, 6 COLUM. J.L. & Soc. Prob. 345 n.3 (1970) [hereinafter cited as Protection of the Accused]; Right to Counsel, supra note 5, at 830-31. See also Note, Survey of Title II: Omnibus Crime Control and Safe Streets Act of 1968, 18 Am. U.L. Rev. 157 (1968); Note, Title II of the Omnibus Crime Control and Safe Streets Act of 1968, 82 Harv. L. Rev. 1392 (1969); Comment, Title II of the Omnibus Crime Bill: A Study of the Interaction of Law and Politics, 48 Neb. L. Rev. 193 (1968).

³⁰ Read, supra note 29, at 367-75.

³¹ Protection of the Accused, supra note 29, at 360-67.

³² For example, one of the best police department standards was adopted in New York City, T.O.P. 318, July 26, 1967. Rule No. 9 stipulates that "no suggestions, direct or indirect, may be communicated to the witness or victim as to which member of the group is believed to be the culprit or non-culprit." While such a regulation recognizes the problem of suggestibility, it fails to describe the nature of pre- and postlineup suggestive effects or to establish precise guidelines for coping with them.

³³ For a suggested procedure for lineup identification drafted jointly by the District Attorney's Office and the Public Defender's Office in Clark County, Nevada, see 4 Defender Newsletter 55 (1967). See also ALI Model Code of Pre-Arraignment Procedures, § A5.09 (Study Draft No. 1, 1968). Extensive reviews of various procedures appear in Read, supra note 29, at 367-75; Sobel, supra note 7; Pretrial Identification, supra note 5; Protection of the Accused, supra note 29, at 365-75.

they reflect little understanding of the dynamics of suggestive influences and make almost no reference to the problems arising from fallible perception and memory.

The courts which have applied the *Wade* holdings generally have interpreted them to justify many pretrial confrontations which did not conform to even the minimal new police standards. The *Wade* "independent source" rule and the *Stovall* "totality of the circumstances" guideline have often been used to affirm convictions whenever external factors suggest that the identification was correct, no matter how questionable the confrontation procedure.³⁴ "In other words, anything goes as long as he's guilty: an attitude which does little to insure proper respect by law enforcement officials for constitutional rights."³⁵ Thus, at present none of the three branches of government at federal, state or local levels nor the bar have made much progress toward reducing the innumerable dangers or controlling the variable factors present in identification situations.

Identification may be fraught with either of two basic kinds of errors. The first, which has received the most attention, is identification of the wrong person as the criminal; the second is failure to identify the right person.³⁶ The first kind of error may be either more common or somewhat easier to detect, and, in a system of jurisprudence based on the presumption of innocence, it is far more dangerous. But the second type of mistake also unfortunately occurs. The presumption of innocence is not incompatible with a commitment to the prevention of crime. If there is a mistaken identification, the real criminal is still loose, and, whatever may be said about the morality or the utility of punishment, identification of offenders is essential to any plan for crime prevention. The variables we shall examine should be related to increasing overall accuracy and thus should contribute to reducing either kind of error. Both types of error pose serious problems, and ideally procedures and standards should be developed for preventing both.

One of the difficulties in regulating lineup procedures is that the circumstances under which they occur are so variable. It may be useful, however, at this point to describe briefly what a lineup identification involves, and its place in criminal procedure. A lineup can occur from one or two days to weeks or even months after the crime. The witness may be either the victim of the crime or a bystander. He or she

³⁴ Pretrial Identification, supra note 5, passim.

³⁵ Id. 790.

³⁶ These two forms of identification error parallel the error that may emerge in hypothesis testing in statistical analysis. Type I error refers to invalid confirmation or a false positive. Type II error refers to invalid disconfirmation or a false negative.

typically will have been questioned by police soon after the crime, asked to describe the offender, and perhaps also requested to view photos for a possible identification. At that time the police probably will not have a particular suspect in mind unless either the description or the *modus operandi* struck familiar chords, and therefore the potential for improper suggestion usually will be minimal. In the actual lineup, however, the police will almost always have a definite suspect, and there is substantial potential for suggestion.

If the witness identifies a lineup participant as the perpetrator of the crime, he or she will ordinarily be asked to testify to this at the trial, if there is one. The last qualifying clause is crucial; as a substantial body of recent scholarly and popular literature has shown,³⁷ only a small percentage of criminal cases actually come to trial. The great majority are settled by plea bargaining, and because of popular faith in eyewitness identification, it is probable that a "positive" identification often contributes to persuading the suspect and his attorney to accept a guilty plea. Therefore, most often the witness is not challenged by cross-examination, the one procedure which might call the identification into question.

In sum, the identification process has at least three, and sometimes four, steps. First, the witness perceives the crime. Second, the police question the witness. Third, the witness identifies the criminal. Fourth, the witness may testify at the suspect's trial; however, so few cases actually come to trial that the fourth stage may be less crucial for analysis than the preponderant research emphasis on courtroom behavior would suggest. The first stage—witnessing the crime, whether as victim or bystander—involves perception of an event actually occurring. The second stage—answering police questions—involves the witness' memory, or more specifically, free recall of the person(s) and the event. The lineup involves recognition memory and present perception. The phenomena of perception and memory, thus, each come into play more than once in the identification process.

In order to achieve a more scientific and systematized identification process, further improvements are required in all of these stages. As the Supreme Court recognized in *Wade*, citing Wigmore's suggested "scientific method" from several decades ago,³⁸ "the more systematic and scientific a process or proceeding, including one for purposes of identification, the less the impediment to reconstruction of the condi-

³⁷ See, e.g., A. BLUMBERG, CRIMINAL JUSTICE 9-10, 28-32 (1967); Tigar, Foreword: Waiver of Constitutional Rights: Disquiet in the Citadel—The Supreme Court, 1969 Term, 84 Harv. L. Rev. 1 (1970); Life, Mar. 12, 1971, at 56-58.

³⁸ J. WIGMORE, THE SCIENCE OF JUDICIAL PROOF 541 (3d ed. 1937).

tions bearing upon the reliability of that process or proceeding at trial."³⁹ Wall, ⁴⁰ Sobel⁴¹ and other legal scholars⁴² delineate many of the suggestive influences that apparently pervade lineups and that render the consequent identification meaningless. As legal scholars rather consistently acknowledge, we must be more informed about the psychological facts affecting the lineup experience specifically, and pretrial confrontations generally, before greater accuracy in the identification of criminal suspects can be achieved.

Such is the goal of this Article. Its primary aim is to detail a number of psychological phenomena observed in other areas of human behavior and hypothesize their probable effects on lineup identifications. The Wade trilogy provides a useful starting point for discussion not only because it is a landmark effort to describe some of the factors which contribute to faulty identification, but also because it suggests, in a very general way, two possible means for controlling the inherent dangers—the presence of defense counsel and the development of new procedures. As a result of our analysis, we hope (1) to delineate and analyze the variables that affect the accuracy of lineup identifications, (2) to determine to what extent and by what methods these variables might be controlled, (3) to discuss where further observation and research are needed, and (4) to assess constitutional and juris-prudential considerations in light of this examination of psychological variables.

II. STATUS OF PSYCHOLOGICAL RESEARCH

The unreliability of human perception and memory and their susceptibility to suggestive influence are well documented in psychological and legal literature. We all know from our experience—and psychologists from their professional training and practice—that peo-

^{39 388} U.S. at 239 n.30.

⁴⁰ P. Wall, supra note 12, is descriptive, usually drawing heavily on Borchard and Wigmore, and discursive, cautioning courts to attend to the noted but never defined "improper" suggestive procedures in the courtroom, the showup and the lineup. Wall's attention to the aggravated problem of suggestion in the lineup moves him, using American as well as European documentation, to outline a preferable procedure. He speaks highly of the English system and recommends consideration of several measures including police supervision of witnesses.

⁴¹ Sobel, supra note 7. See also N. Sobel, Eye-Witness Identification: Legal and Practical Problems (1972). In reviewing various aspects of the Wade-Gilbert-Stovall holdings, Sobel demonstrates insight into the conditions and consequences of suggestibility during various stages of criminal identification, including lineups, showups, photo identifications, and pre- and postconfrontation encounters.

⁴² See, e.g., J. MARSHALL, supra note 12; Murray, The Criminal Lineup at Home and Abroad, 11 Utah L. Rev. 610 (1966); Read, supra note 29; Quinn, supra note 7. Cf. Protection of the Accused, supra note 29; Comment, 2 U.C.L.A.L. Rev. 552 (1955); Erroneous Eyewitness, supra note 15; Comment, supra note 21.

ple quite often do not see or hear things which are presented clearly to their senses, see or hear things which are not there, do not remember things which have happened to them, and remember things which did not happen. Historically Thucydides recognized the problem when he despairingly noted a "want of coincidence between accounts of the same occurrences by different eyewitnesses, arising sometimes from imperfect memory, sometimes from undue partiality for one side or the other." And recently the lawyer-novelist Erle Stanley Gardner reported an empirical test of the inability of even trained, experienced state police officers to estimate accurately height, weight and age. The respective variations were five inches, twenty pounds and fifteen years.

[A]nd it is to be remembered that these descriptions were furnished not by men who were excited because they were being held up, or by men who were getting a fleeting glimpse of an individual in a dim light—they were sitting there looking directly at [the subject] . . . and they were trained observers, men who made it their business to classify and describe.⁴⁶

An examination of the legal psychology literature discloses that some work has been done demonstrating the unreliability of eyewitness perception; in fact, the psychology of testimony was one of the earliest areas of applied psychological research. But most of the studies occurred before the middle of this century, and, although most of them alluded to suggestive effects in the courtroom context, little reference was made to parallel effects in pretrial identifications. Unfortunately neither the effects of perception nor those of the courtroom on witness behavior were actively pursued.

In sum, our survey of past research applied specifically to legal settings and of research on other phenomena germane to the administration of justice reveals no scientific analyses of police lineups, but a substantial and promising amount of sophisticated and relevant psychological work in such areas as social perception, group behavior and values. Although from legal psychology there is some scientific knowledge about the psychology of testimony, such as the function of memory on witness behavior in the courtroom, there is no information about the behavior of the witness in the pretrial or police lineup con-

⁴³ For one sophisticated account of examples of these phenomena, see Kubie, Implications for Legal Procedure of the Fallibility of Human Memory, 108 U. Pa. L. Rev. 59 (1959).

⁴⁴ THUCYDIDES, COMPLETE WRITINGS bk. 1 (Modern Library ed. 1951).

⁴⁵ E. Gardner, supra note 13, at 81-82. See also Gardner, Need for New Concepts in the Administration of Criminal Justice, 50 J. CRIM. L.C. & P.S. 20 (1959).

⁴⁶ E. GARDNER, supra note 13, at 82.

text. Therefore, we shall have to draw inferences about the dynamics of pretrial identification from the available evidence that is relevant and transferable to, but not directly derived from, lineups. The nature of these data may limit the scope, applicability and validity of the conclusions we can draw, and it makes all of our findings susceptible to refinement and modification on the basis of later empirical research on the psychology of eyewitness identification. However, the present status of psychological knowledge is sufficiently developed to permit some recommendations about identification procedures and suggest directions regarding how research and reform might most profitably proceed.

III. LEGAL PSYCHOLOGY

The facts of human nature, abilities and needs which seem self-evident today were not so evident when the German jurist-criminologist Hans Gross stressed the need for a scientific psychology of testimony in 1911.⁴⁷ Academic psychologists responded early, inquiring experimentally into the process of obtaining testimony in order to discern the impact of legal methods on such processes as perception, memory and emotion.⁴⁸ They investigated the "truth-telling" phenomena so vital to courtroom operations and provided substantial proof of the fallibility of human sense perception, the vagaries of recall, and the unreliability of eyewitness identification.

In Europe and the United States before World War I, there was great interest in studying experimentally the role of memory, thinking and emotion processes on witness behavior. Guy Whipple's excellent summaries⁴⁹ on the unreliability of testimony provided a complete description of the psychological inquiries into legal procedures during this period. The initial landmark effort was made in the United States in 1908 by Hugo Münsterberg's On the Witness Stand. Two years

⁴⁷ Fishman, Some Current Research Needs in the Psychology of Testimony, 13 J. Soc. Issues No. 2, at 60, 67 (1957). See also H. Gross, Criminal Psychology (4th ed. M. Kallen transl. 1911).

⁴⁸ Beiträge zur Psychologie der Aussage (W. Stein ed. 1903-06) [hereinafter cited as Beiträge]; A. Binet, La Suggestibilité (1900); H. Münsterberg, On the Witness Stand (1908); H. Münsterberg, Psychology, General and Applied (1914); W. Stern, General Psychology from the Personalistic Standpoint (H. Spoerl transl. 1938); Whipple, The Observer as Reporter: A Survey of the 'Psychology of Testimony,' 6 Psych. Bull. 153 (1909).

⁴⁹ See, e.g., Whipple, supra note 48; Whipple, Recent Literature on the Psychology of Testimony, 7 PSYCH. BULL. 365 (1910). Whipple's extensive review of the experiments of Varendonck (wherein psychologists gave expert testimony and conducted experiments on the form of questioning) is particularly valuable. See Whipple, Book Review, 4 J. CRIM. L. & C. 150 (1913). Whipple also authored a series of annual reviews on testimony between 1911 and 1917, e.g., Whipple, Psychology of Testimony, 14 PSYCH. BULL. 234 (1917).

after Freud counseled lawyers to use psychologists in ascertaining truth in courts of law, 50 Münsterberg was one of the first psychologists to elucidate the discrepancies between the evidence of the senses and the evidence of the law.⁵¹ He also noted some deficiencies in trial procedures, argued for legal reforms based on scientific experimentation, and advocated that psychologists help in distinguishing reliable from unreliable evidence. 52 Münsterberg's passionate interest in applying psychology to practical courtroom problems produced a series of classroom demonstrations and experiments illustrating that trained observers with generous advance warnings immediately disagreed on such "structural" sensory events as the pitch of a sound, the color of disks and the shape of an inkblot.⁵³ Years later McGehee⁵⁴ again established experimentally the unreliability of auditory recognition, noting that correct recognition varied from eighty-five percent a day later to fifty-one percent in three weeks and fifteen percent in five months.

Among the early pioneers two others stand out—Alfred Binet and Wilhelm Stern. Binet⁵⁵ developed the "description-of-pictures test" to investigate scientifically pictorial fidelity. On both adult and children samples, a complex picture was shown and two minutes later subjects were asked to write ten-minute descriptions from memory with and without additional observation. Binet concluded that the nature of the child or adult more than that of the objects was the most important criterion in determining report selection. When additional observation was permitted, reports were only slightly longer and more detailed.⁵⁶ This reporting ability still constitutes part of the Stanford-Binet Intelligence Test, suggesting a relationship among recognition ability, intelligence and accurate reporting.

Stern's classic work⁵⁷ in the field of testimony, using picture tests

⁵⁰ S. Freud, Psycho-analysis and the Ascertaining of Truth in Courts of Law (1906), in 2 Collected Papers 13 (J. Riviere transl. 1953).

⁵¹ H. MÜNSTERBERG, ON THE WITNESS STAND (1908).

⁵² These positions are not unlike those recently advocated by psychologist Donald Campbell. See, e.g., Campbell, Legal Reforms as Experiments, 23 J. Legal Ed. 217 (1971). Appreciation of an experimental approach is also pervasive in contemporary writings by lawyers. See, e.g., J. Marshall, supra note 12; P. Wall, supra note 12; Murray, supra note 42; Read, supra note 29.

⁵³ H. Münsterberg, supra note 51, at 21-31.

⁵⁴ McGehee, The Reliability of the Identification of the Human Voice, 17 J. Gen. PSYCH. 249 (1937).

⁵⁵ J. Peterson, Early Conceptions and Tests of Intelligence 126-32 (1925); A. Binet, Description d'un Objet, 3 L'Année Psychologique 296-332 (1897). Peterson gives a full report of Binet's work on description-of-objects and description-of-pictures tests as well as tests of suggestibility. See also A. Binet, supra note 48.

⁵⁶ J. Peterson, supra note 55, at 131-32.

⁵⁷ Beiträge, supra note 48. W. Stern, supra note 48, was a vital contribution toward understanding the impact of psychological processes on legal inquiry.

but adding reality experiments (also known as event tests), resulted in reforms in German law on the admissibility of evidence. His experiments, demonstrating the unreliability of recall for unexpected events, have become the paradigm for subsequent experimental studies of eyewitness reporting by both psychologists and lawvers.⁵⁸ In Stern's reality experiment, subjects witnessed a close-to-life incident, unaware that it was carefully rehearsed, and then were asked to describe the events in detail. A typical incident involved two stooges in a scientific seminar arguing, drawing a gun, threatening to shoot, and then fleeing. Stern used two methods to test the subjects' ability to report: the narrative or free account, presumably unaffected by suggestive influences in the setting, and the interrogatory or cross-examination, presumably affected by the dangers of suggestion. He reported not only on the initial distortions of the original event, but also on the suggestive effects of the cross-examination—and, by implication, of directive questioning in the courtroom and lineup contexts.

The attractiveness and utility of the "reality" experiment paradigm is apparent in Kobler's study of a legal society meeting.⁵⁹ Kobler prearranged a threatening, caustic quarrel between two audience members. Several weeks later two court panels—one of three psychologists and one of three judges—were examined; the results from both groups were similarly condensed, simplified and somewhat distorted. Kobler concluded that excitement and emotion affect observation, and that witness agreement may mean coincident erroneous testimony. Subsequent research supported his points. Illustratively, Beier's experiment⁶⁰ disclosed that anxiety caused a loss of abstract abilities generally and, more specifically, a loss of flexibility in intellectual function and visual coordination. Evidently there is a disparity between psychological and legal doctrine on the accuracy of testimony and identification under emotional stress—as exemplified by the spontaneous exclamation exception to the hearsay rule.⁶¹

After World War I, the legally-trained psychologist William Marston⁶² attempted to meet criticisms directed at earlier investigators

⁵⁸ F. Berrien, Practical Psychology (1946); H. Burtt, Legal Psychology (1931); H. Burtt, Applied Psychology (1st ed. 1948); J. Marshall, *supra* note 12; Berrien, *Psychology and the Court*, in Psychology for Law Enforcement Officials 202 (G. Dudycha ed. 1955).

⁵⁹ Reviewed in Whipple, *Psychology of Testimony*, 12 Psych. Bull. 221 (1915). 60 E. Beier, The Effect of Induced Anxiety on Flexibility of Intellectual

FUNCTIONING (Psych. Monographs No. 326, 1952).

⁶¹ The spontaneous exclamation exception generally holds that certain statements made under stress are sincere because such a circumstance precludes the operation of reflective faculties. See 6 J. Wigmore, Evidence §§ 1745 et seq. (3d ed. 1940).

⁶² Marston, Studies in Testimony, 15 J. Crim. L. & C. 5 (1924); Rouke, Psychological Research on Problems of Testimony, 13 J. Soc. Issues No. 2, at 50, 57 (1957).

here and abroad. Using Stern's paradigmatic event test,63 he employed a judge as the factfinder and an experienced lawyer with a jury of men and a jury of women to analyze the testimony. The results established that of the various methods for eliciting testimony, free narration was less complete and more accurate than direct or cross-examination; direct examination was both more complete and more accurate than crossexamination; and cross-examination's only advantage was in being more complete than free narration. Consistent with Kobler's findings, the study also indicated that, while the judge was better able to give complete testimony than the jury, even he had a considerable margin of error.64 Other psychological features of the trial process were also subjected to systematic, joint inquiry by the lawyer Robert Hutchins and the psychologist Donald Slesinger. 65 In a series of articles, they reviewed legal rules of evidence in terms of psychological findings on perception, memory and emotion, ultimately arguing for more interdisciplinary experimentation and application. Likewise, the very excellent integrative review of the lawyer Dillard Gardner called for further exploration and experimentation to permit better evaluation of witness testimonv.66

Treatises on legal psychology of over thirty years ago, such as Burtt's⁶⁷ and McCarty's, ⁶⁸ also contained information on behavioral processes as applied to the trial context. Münsterberg's precocious advocacy of applying "every chapter and subchapter of sense psychology"69 was amplified in both of Burtt's texts which dealt with data related to sensory defects, distance perception, color vision, time perception, intelligence, attention, stress and suggestion. In each instance

⁶³ BEITRÄGE, supra note 48.

⁶⁴ The judge was John Wigmore; the jurors, college students.

⁶⁵ See, e.g., Hutchins & Slesinger, Some Observations on the Law of Evidence: Spontaneous Exclamations, 28 COLUM. L. Rev. 432 (1928); Hutchins & Slesinger, Some Observations on the Law of Evidence—Memory, 41 Harv. L. Rev. 860 (1928); Hutchins & Slesinger, Legal Psychology, 36 Psych. Rev. 13 (1929).

⁶⁶ Gardner, The Perception and Memory of Witnesses, 18 CORNELL L.Q. 391 (1933). Gardner concluded his article with the following, at 409.

This study of memory has indicated to trial lawyers that faulty memory may be attacked most effectively along three distinct lines: (1) The original perception of the event or detail may have been defective; (2) the details may not have been fixated, may have been forgotten, or imagination may have altered, added to, or changed them; (3) the original perception may have become interwoven with or altered by suggestion from outside sources. Tests directed at the perception of the witness, his retentiveness, imagination, caution, bias, and suggestibility will be most fruitful. The important questions to consider concerning his memory are: Did he perceive as he now recalls it? Has his memory retained, without addition or subtraction, the original perception? Does imagination, bias or suggestion color his present recollection?

⁶⁷ H. BURTT, LEGAL PSYCHOLOGY (1931).

⁶⁸ D. McCarty, Psychology for the Lawyer (1929).

⁶⁹ H. MÜNSTERBERG, supra note 51, at 33.

Burtt tried to show that information possessed by psychologists about natural human processes and human interactions could be brought to bear on discrepancies in testimony. Verifying scientifically the general unreliability of testifying and identifying in legal and academic settings, he systematically described numerous structural conditions affecting perception and memory. For example, about four percent of the male and one percent of the female population are color blind; the absorbable number of simultaneous impressions is limited so that in one-tenth of a second most people read four or five digits and fail with nine; and set, or initial cuing, results in witnesses giving better descriptions. 70 Burtt also reported that the expectative and implicative forms of questioning elicited more wrong responses than straightforward questions, that the objective form was more suggestive than the subjective form, and that double negatives introduced confusion and inaccuracy.71 And, consistent with Kobler's conclusions, Burtt's experiment in a seminar on crime demonstrated that stress was a disorganizing condition operating against effective recall.72

In 1955, Berrien⁷³ revived interest in the field with a short, but well-presented, article, *Psychology and the Court*. In this piece he emphasized the psychological evidence on the creative, selective aspects of testimony (observers fill in details to conform to their meaning of an event) and again took issue with the legal doctrine on exclamations by maintaining that excitement blurs accuracy and subsequent reporting. Although in a cursory manner, Berrien emphasized that the "[s]pecial aspects of identifying persons in a line-up" demand attention. While over fifteen years have gone by, a research response from psychology has not been forthcoming—though in 1960 McCarty reissued a slightly revised version of his 1929 volume.

As noted above,⁷⁶ the legal profession is also concerned about lineup identification problems, but in the current works of lawyers, for

⁷⁰ H. Burtt, Applied Psychology 292-301 (1948). Initial cuing consists of advising a subject that an event which he should concentrate on is upcoming. Thus, Burtt gives the example of a starter at a track meet saying "get set" so that the runners will concentrate on and perceive earlier the firing of the starting gun. *Id.* 301.

⁷¹ An "expectative" type question tends to expect a positive answer: "Was there a cat in the picture?" An "implicative" question asks "What color was the cat?" when there was no cat. A "subjective" question is personalized and contains the word "you," while an "objective" question involves no personal pronouns. For further amplification of these definitions and the experimental findings, see H. Burt, supra note 67, at 119-31.

⁷² Id. 71-76. See also text accompanying note 59 supra.

⁷³ Berrien, supra note 58.

⁷⁴ Id. 214.

⁷⁵ D. McCarty, Psychology and the Law (1960); cf. D. McCarty, supra note 68.

⁷⁶ See text accompanying notes 62-66 supra.

example Wall⁷⁷ and Marshall,⁷⁸ no experimental research is extensively described or undertaken. Wall's book, written for the practitioner, builds primarily on legal documents and draws little on cited scientific sources, though it depicts various psychological conditions of suggestibility. The Marshall book, focusing on the activities of the lawyer and the trial process, represents an admirable attempt to apply recent psychological studies to problems of recall for purposes of giving testimony, to conduct interdisciplinary research on unreliable eyewitness perceptions, and to call for a more stringent utilization of psychological findings "which apply directly to and challenge the precepts and practices of our courts." Using a movie of an alleged kidnapping in an experimental study of selective recall, Marshall found that the recall of lower social class subjects was less accurate, that police trainees reported a greater number of nonexistent events, and that person—not action items were least frequently recalled.80 Marshall correctly acknowledged the "selective process" and the "inventive reconstruction" of perception in all environments and stressed the need to attend to the "betting" predilections in witness behavior in classroom, courtroom and lineup situations.81 However, in his own interdisciplinary excursions Marshall extrapolated primarily to the courtroom, not the lineup.

In a recent experiment⁸² Marshall and his associates, Kent Marquis and Stuart Oskamp, dealt further with the psychology of testimony.88 In an effort to determine the effects of different kinds of interrogation on the reliability of testimony, they showed a short film of an automobile accident followed by a scuffle. All subjects gave a free report, then each was questioned by several interrogation methods.84

⁷⁷ P. WALL, supra note 12.

⁷⁸ J. MARSHALL, supra note 12.

⁷⁹ Id. 103.

⁸⁰ Id. 52-58.

 $^{^{81}}$ Id. 9-22. In short, there is always "disparity between even the simplest stimulus . . . and the perception of it." Id. 9. Thus perception is a reconstruction. "Filling gaps in perception is a betting process. We select what we believe will be harmonious with those elements we have perceived . . . The elements that we choose or repress will depend on what bet, or what selection, we make as the likeliest explanation for what we see"

Id. 19 (footnote omitted). For further reference regarding Marshall's orientation, see EXPLORATIONS IN TRANSACTIONAL PSYCHOLOGY (F. Kilpatrick ed. 1961).

⁸² Marshall, Marquis & Oskamp, Effects of Kind of Question and Atmosphere of Interrogation on Accuracy and Completeness of Testimony, 84 HARV. L. REV. 1620 (1971).

⁸³ Other contemporary collaborative attempts by law and psychology continue to emphasize the courtroom setting as a paradigm for testing psychological hypotheses. See Thibaut, Walker & Lind, Adversary Presentation and Bias in Legal Decisionmaking, 86 Harv. L. Rev. 386 (1972); Walker, Thibaut & Andreoli, Order of Presentation at Trial, 82 Yale L.J. 216 (1972). A recent book focuses on witness reliability by aiming to introduce a technology for the assessment and interpretation of witness statements. A. TRANKELL, RELIABILITY OF EVIDENCE (1972).

 $^{^{84}}$ Specifically, the investigators used four types of questions which were related in varying degrees to the methods used in court to elicit testimony. Marshall, Marquis & Oskamp, supra note 82, at 1624-26.

Although accuracy was slightly higher with spontaneous report, the completeness of the testimony increased much more than accuracy decreased under all conditions of interrogation. In other words, all forms of questioning produced a larger body of information than did free account. But considering our focus on criminal identification, it is worth noting that, while interrogation was only slightly less accurate than free recall for action, sound and object content, there was a substantial disparity in index scores for person content. Nevertheless, this experiment suggests that the effects of interrogation upon the reliability of testimony are not uniformly negative. When we add to this the well-documented psychological commonplace that, under most circumstances, recognition memory is superior to recall, 85 we have another reason not to be totally pessimistic regarding lineup identifications.

IV. HUMAN LIMITATIONS ON IDENTIFICATION

A. Perception and Memory

The evidence gathered by these experiments in legal psychology demonstrates beyond doubt the unreliability of perception and memory, phenomena of which none of us is without some personal knowledge. Perception and memory are fallible. But why are they fallible, both in general and in this specific context?

Experimental psychologists agree that perception depends to a great extent on what is already in the mind of the perceiver: one *learns* to perceive, and one learns to perceive selectively. For Perceptual processes involve first organizing discrete elements of a situation into meaningful categories. As Jerome Bruner observed, accurate perception "consists of the coding of stimulus inputs in appropriate categories." Presumably the preexisting categories will vary in appropriateness among different individuals. Learning to perceive, like all learning, is accompanied by the danger of serious error. For example, if the categories developed for judging age and size (two variables obviously important in the present context) are faulty and incomplete, then the age and size of a particular stimulus input is likely to be misjudged.

 $^{^{85}\,} See,~e.g.,~J.$ Adams, Human Memory (1967); C. Luh, The Conditions of Retention (Psych. Monographs No. 142, 1922).

⁸⁶ See, e.g., Gibson, The Theory of Information Pickup, in Contemporary Theory and Research in Visual Perception 662 (R. Haber ed. 1968); Treisman & Geffen, Selective Attention: Perception or Response?, in Information-Processing Approaches to Visual Perception 373 (R. Haber ed. 1969).

⁸⁷ Bruner, On Perceptual Readiness, in Contemporary Theory and Research in Visual Perception 634 (R. Haber ed. 1968). See also J. Bruner, J. Goodnow & G. Austin, A Study of Thinking (1956); Bruner, Social Psychology and Perception, in Readings in Social Psychology 85 (3d ed. E. Maccoby, T. Newcomb & E. Hartley 1958).

Perception is incomplete as well as inaccurate. As Burtt's investigations showed, step the absorbable number of simultaneous perceptions is limited; people can perceive only so much at one time and can code even less. Perception is further limited and often distorted by the vantage point of the particular observer, the intervening stimulus inputs between the observer and the salient stimuli, or the structure of the salient stimuli. The well-known Müller-Lyer illusion on judgments of the relative length of lines is a classic example of this latter phenomenon. Two lines of equal length bound by arrows in opposite directions (inward or outward) create the false perception that the lines are of unequal length. In other words, what one perceives does not always correspond with what is before one—a phenomenon important to consider in evaluating eyewitness perception.

B. Perceptual Selectivity

The selectivity of perceptual processes poses another problem. Perceiving or "experiencing" the physical world in and of itself is an event: "It is not a substance that comes and goes with opening and closing of the eyes." As Gibson and other psychologists have pointed out, we develop what may be called economical perception, the ability "to concentrate on one thing at a time in the face of everything going on in the environment," so that "the information registered about objects and events becomes only what is needed, not all that could be obtained." In short, only a number of simultaneous impressions can be grasped. "For the abiding fact about the process of knowing, of which perceiving is one aspect, is that organisms have a highly limited span of attention and a highly limited span of immediate memory. Selectivity is forced upon us by the nature of these limitations"

In concentrating on what presently appears to be the most important event or aspect of a particular event, the perceiver may fail to note, or absorb only below the level of consciousness, other aspects or events which may be more significant in another context. Even leaving aside for the moment emotional factors which may distort perception, a witness to or victim of a crime may well concentrate, for instance, on stimuli relevant to his or her chances of escaping rather than on stimuli concerning the appearance of the criminal. Alternatively, the

⁸⁸ H. BURTT, supra note 67.

⁸⁹ For a full explanation and illustration of this illusion, see N. Munn, Psychology 501-02 (5th ed. 1966).

⁹⁰ P. Young, Motivation and Emotion 300 (1961).

⁹¹ Gibson, supra note 86, at 677.

⁹² Bruner, Social Psychology and Perception, supra note 87, at 86.

victim may "escape" by trying psychologically to be somewhere else; that is, by absorbing and coding as little information about the unpleasant situation as possible. This phenomenon is termed "perceptual defense." Even if neither of these alternatives occurs, there is no evidence that witnesses will unerringly pick out the most important stimulus inputs for subsequent identification and concentrate on coding those. Although Marshall, Marquis and Oskamp did find some greater completeness in reporting legally relevant material, there was no difference in the accuracy of the legally relevant and nonrelevant. 94

C. Perceptual Readiness and Stress

The potential for error in perception due to inaccuracies and illusions is important to keep in mind. If the witness or victim did not or cannot under a particular set of circumstances perceive correctly, then an accurate subsequent identification cannot be expected. On the other hand, if, for example, the witness has received warning prior to the actual observation ("Watch that man!"), then there is greater probability of an accurate identification. ⁹⁵ A variety of considerations like novelty, size and interest all may affect one's attention. But witnesses to a crime are further handicapped in accurately estimating such characteristics as size and age by their very limited opportunity to observe and their lack of prior knowledge of the criminal.

Generally the more information we have about people, the more accurate we are likely to be in estimating physical characteristics. Casual conversation about past experiences is a useful cue to a person's age, and height and weight can be more easily judged when there is ample opportunity to compare and contrast the stimulus person to others of known body type. A relatively brief and isolated encounter, such as a crime is likely to be, does not give much opportunity for this sophisticated type of estimation. Illustratively, we can recognize even a grossly distorted version of an incumbent President of the United States because he is a common subject for cartoons, we have information about his recent public activities, and we know places where he might be likely to appear. By the same token, we recognize the strangers we pass every day on our way to work not only because their faces look familiar but also because we expect them to be at a particu-

⁹³ The concept was first used by McGinnies in referring to resistance against recognition of "taboo" words as a way of avoiding anxiety. McGinnies, *Emotionality and Perceptual Defense*, 56 PSYCH. Rev. 244 (1949). See also P. Young, supra note 90, at 306-09; Bruner, Social Psychology and Perception, supra note 87, at 90.

⁹⁴ Marshall, Marquis & Oskamp, supra note 82, at 1632.

⁹⁵ This adjustment is termed an "accommodation of attention." See, e.g., H. Burtt, supra note 67, at 62.

lar place at a particular time. If they appear in a new coat or a new hair style, we continue to recognize them because we see them within a familiar situational context. The crucial point is that accurate perception and later recognition depend as well on factors of familiarity and repetition, and a witness to a crime is in a situation particularly impoverished in those respects.

Problems arising from the unexpectedness and brevity of the event (reducing perceptual attention and readiness) are only compounded by the fact that a crime is a stressful situation. Research evidence does not provide a simple equation for predicting whether anxiety will affect perception and memory positively or negatively. Münsterberg's findings⁹⁶ suggested that moderate stress improved the accuracy of testimony, whereas great or little stress hurt. Burtt reported that "considerable excitement seems to militate against accurate observation." None of the later studies have cast any doubt on these conclusions.⁹⁸

Victims of or witnesses to a crime probably suffer anxiety or stress that affects their ability to perceive and remember. Some crimes can reasonably be assumed to produce greater anxiety in witnesses than others, and victims generally are more anxious than bystanders at the same crimes. This anxiety may occur less in cases where the witness does not know he or she is seeing a crime, as is the case with a confidence game, or a situation where a child gets into a car which proves to be that of a kidnapper. In such instances, the effects of anxiety will operate retroactively only. But there is a large gray area where it would be far more difficult to rank the degree of stress people are likely to suffer, where reaction would depend on subtle factors such as the importance of the victim to the witness, the perceiver's emotional idiosyncracies, and a host of other variables.

Further, the lineup or showup itself may be anxiety-arousing. And unfortunately, in an anxiety-arousing situation there may be increased intolerance of ambiguity and increased drive for understanding.⁹⁹ In other words, although under stress the accuracy of an identification may be reduced, the individual's need for identifying may be increased. For example, Smock¹⁰⁰ reported that people in stressful

⁹⁶ H. MÜNSTERBERG, supra note 51.

⁹⁷ H. Burtt, supra note 67, at 72. See text accompanying notes 59, 72 supra.

⁹⁸ See studies cited in Marshall, Marquis & Oskamp, supra note 82, at 1634 nn. 15, 17.

⁹⁹ Berkowitz, Social Motivation, in 3 Handbook of Social Psychology 89 (2d ed. G. Lindzey & E. Aronson 1969).

¹⁰⁰ Smock, The Influence of Psychological Stress on the "Intolerance of Ambiguity," 50 J. Abnorm. & Soc. Psych. 177 (1955).

situations were quicker to categorize ambiguous stimuli. Bruner well summed up the difficulty: "[U]nder stress conditions or under conditions of exigent motivation... the likelihood of erroneous perception increases." Thus, it is particularly crucial to tailor investigatory approaches (including when they are held) with witnesses in ways reflective of the potential impact of stress. As Marshall, Marquis and Oskamp concluded in tackling the effect of stress on testimony: "Further experimental inquiry along these lines might be of great use in evaluating and improving the process of courtroom examination" —likewise criminal identification.

D. Memory

As noted above, the accuracy of memory depends in part upon the accuracy of perception. Although remembering and thinking are cognitive processes, they rest upon perception. Therefore, to the extent that one perceives incorrectly what happens, remembering will be incorrect. But there are other processes involved in memory which add to the possibility of inaccuracy, even when initial perception is correct and complete.

There are three basic psychological theories pertaining to memory. While they are incompatible with one another in many areas, they tend to account for the fallibility of memory in somewhat similar, or at least noncontradictory, ways. Learning theorists have evolved a conception of memory as an active, ongoing process which modifies experience rather than simply registering it. Gestalt psychologists, relying more heavily on unconscious processes, have conceptualized "a continuous subconscious activity of a memory trace, with the whole continually exerting its unifying pressure on the parts, and the parts conforming better and better to the general part of the whole." Implicit in both of these conceptions is the possibility that the "whole" which modifies experience may also distort it. Memory may be rendered inaccurate, then, by processes and forces similar to those that distort perception.

The psychoanalytic approach to memory heavily emphasizes un-

¹⁰¹ Bruner, Social Psychology and Perception, supra note 87, at 91.

¹⁰² Marshall, Marquis & Oskamp, supra note 82, at 1634.

¹⁰³ For a review of conceptions of memory, see J. Adams, supra note 85; J. McGeoch, The Psychology of Human Learning (A. Irion ed. 1952); Hovland, Human Learning and Retention, in Handbook of Experimental Psychology (S. Stevens ed. 1951); Redmount, The Psychological Basis of Evidence Practices: Memory, 50 J. Crim. L.C. & P.S. 244 (1959).

¹⁰⁴ Redmount, supra note 103, at 254. See also D. Katz, Gestalt Psychology ch. 20 (1950); К. Коffka, Principles of Gestalt Psychology chs. 10-11 (1935); W. Köhler, Gestalt Psychology chs. 4, 8-9 (1947).

conscious processes and emotional factors. Freud established that forgetting was a phenomenon of motivation. Later investigators gathered evidence which supported his conclusion that events associated with unpleasant emotions are forgotten. 105 While mildly affective experiences, either positive or negative, are remembered better than neutral experiences, with more pronounced trauma the effect is reversed. This finding is clearly of great significance for identification of criminal suspects. Although one cannot accept without qualification the argument that emotional strain distorts memory, surely it can and frequently does.106

A central factor affecting memory is the phenomenon technically called retroactive inhibition. Retroactive inhibition or RI consists not so much of decay as of "the interference, inhibition or obliteration of the old by the new."107 With the passage of time, new learning is interpolated between the old memory and the effort for recall. These intervening impressions reduce the salience of the memory and inhibit completeness and accuracy. 108 Empirical evidence leaves no doubt that RI is an extremely powerful force, 109 especially with material of little importance to the subject. Further, any advantage for reducing retroactive inhibition which might be gained from the fact that stimulus inputs surrounding a crime are likely to be very important for the subject is quite probably counteracted by the need to forget unpleasant material. Thus, as a general rule, interpolated events and materials are likely to interfere with retention.

In a classic experiment on remembering nonsense syllables Ebbinghaus¹¹⁰ discovered a "curve of forgetting," along which forgetting is initially rapid (within the first half hour) and then becomes more and more gradual. This general trend has been confirmed in subsequent research. The data on recognition memory—and evewitness identifi-

¹⁰⁵ S. FREUD, THE PSYCHOPATHOLOGY OF EVERYDAY LIFE (2d ed. A. Brill transl. 1948); Redmount, supra note 103, at 255; Zeller, An Experimental Analogue of Repression. II. The Effect of Individual Failure and Success on Memory Measured by Relearning, 40 J. Exper. Psych. 411 (1950).

¹⁰⁶ See Kubie, supra note 43. One source of abundant evidence on the distorting effects of stress on perception and memory is the Warren Commission Report on the Assassination of President Kennedy (Bantam ed. 1964).

¹⁰⁷ Redmount, supra note 103, at 253-54. For a detailed experimental example, see Jenkins & Dallenbach, Obliviscence during Sleep and Waking, 35 Am. J. Psych. 605, 612 (1924).

¹⁰⁸ See J. Adams, supra note 85, chs. 3-4; J. McGeoch, supra note 103; Redmount, supra note 103.

¹⁰⁹ For an excellent review of research on retroactive inhibition, see J. Adams, supra note 85, at 258-62. See also Redmount, supra note 103, at 253-54.

¹¹⁰ H. EBBINGHAUS, MEMORY: A CONTRIBUTION TO EXPERIMENTAL PSYCHOLOGY (H. Ruger & C. Bessenius transl. 1913). For a summary of Ebbinghaus' experiments and other research generally verifying the forgetting curve, see N. Munn, *supra* note 89, at 387.

cation is one instance—also show that retention weakens over time. although the curve of forgetting does not appear to be initially as steep. While, as we have indicated, recognition is generally superior to recall, it is far from perfect, Bahrick and Bahrick¹¹¹ found that recognition remained high after two hours, but deteriorated markedly after two weeks. Shepard¹¹² tested for recognition of pictures after intervals of two hours and three, seven and 120 days and found respective median percent retentions of 100, ninety-three, ninety-two, and fiftyseven. These findings confirmed the pattern of forgetting obtained years before by Strong, 113 who discovered that even with stimuli subjects knew they had seen before, recognition dropped to zero after forty-two days. 114 These data, incidentally, indicate that the police practice of holding on-the-scene showups if at all possible within an hour or two after the crime is psychologically sound, at least as far as memory is concerned. Likewise, the more astute of the legal commentators seemed to criticize the use of showup practices as a standard procedure on this basis: "Fresh memory [as a justification for showups] may be valid when the pretrial identification occurred within a few hours of the crime, but when that identification did not occur until days after the crime, little validity can be found in the argument."115

E. Differences in Perceptual and Mnemonic Ability

Various diverse factors may affect visual perception. For example, a nearsighted person has reduced ability to discern distant objects, the amount of illumination (daylight clear visibility is forty or fifty yards as compared to ten or eleven yards in moonlight) affects perception, and visual efficiency is dependent on adaptation (improved vision after adaptation to bright sunlight or darkness). ¹¹⁶ Furthermore, individual witnesses may vary in acuity of observation and reliability and completeness of memory. Ralph Exline ¹¹⁷ found significant sex differences in person perception. Female subjects, significantly more than males, focused on those with whom they interacted, and re-

¹¹¹ Bahrick & Bahrick, A Re-examination of the Interrelations among Measures of Retention, 16 Q.J. Exp. PSYCH. 318 (1964).

¹¹² Shepherd, Recognition Memory for Words, Sentences, and Pictures, 6 J. Verb. Learning & Verb. Behav. 156 (1967).

¹¹³ Strong, The Effect of Time Interval upon Recognition Memory, 20 PSYCH. Rev. 339 (1913).

¹¹⁴ Studies cited notes 111-13 supra, reviewed in J. Adams, supra note 85, ch. 9.

¹¹⁵ Pretrial Identification, supra note 5, at 789.

¹¹⁶ H. BURTT, supra note 67, at 16-24; H. BURTT, supra note 70, at 292-94.

¹¹⁷ Exline, Exploration in the Process of Person Perception: Visual Interaction in Relation to Competition, Sex, and Need for Affiliation, 31 J. Personality 1 (1963).

lied upon visual cues. Shrauger and Altrocchi¹¹⁸ suggested that men tended to concentrate on physical characteristics such as clothing or size, while women were more likely to emphasize inferred psychological characteristics. However, this conclusion must be qualified because the differences seemed to depend on the sorts of people described and the aggressive or passive tendencies of the perceiver. These two studies taken together suggest that, while women absorb more physical information than do men, they may be more apt to code this information in terms of psychological inferences. If this conclusion is valid, there is no reason to expect women to yield a higher proportion of accurate lineup identifications. Research testing the sex of the witness (matched for the sex of the lineup participants) would be illuminating in this regard both for law and psychology.¹¹⁹

Age, too, may make a considerable difference. Two Australian investigators¹²⁰ found that people over sixty were significantly inferior to those between fifteen and forty-five in both recall and recognition. Memory theorists suggest that the years of greatest development are from three to seven, and that there is significant major growth until about fourteen when a mature level is achieved. 121 Closely related to the issue of age is the relationship between intelligence, if not education, and accurate identification. The Shrauger and Altrocchi essay¹²² supports the relationship between intelligence, recognition ability, and accurate reporting suggested by the Stanford-Binet Intelligence Test. 123 Research on intelligence generally indicates a high correlation between mental functioning and memory. 124 While legal commentators acknowledge this relationship, they simultaneously maintain that those of lower intelligence, though perhaps more limited perceptually, may be more focused and thus no less accurate. 125 Furthermore, the historical findings of such investigators as Kobler and Marston 126 importantly question the accuracy of the observations and recall of even the

¹¹⁸ Shrauger & Altrocchi, The Personality of the Perceiver as a Factor in Person Perception, 62 Psych. Bull. 289, 297-98 (1964).

¹¹⁹ The authors conducted informal interviews with police officers from a major metropolitan police department in March, 1971. While these officers' opinions may be idiosyncratic, they tended to prefer female to male witnesses. They also seemed to feel that educated people remembered better, and that young people made better witnesses than old.

¹²⁰ Harwood & Naylor, Recall and Recognition in Elderly and Young Subjects, 21 Aust. J. Psych. 251 (1969).

¹²¹ See Redmount, supra note 103, at 256.

¹²² Shrauger & Altrocchi, supra note 118. See also J. Marshall, supra note 12, at 42-43.

¹²³ See text accompanying notes 55-56 supra.

¹²⁴ Redmount, supra note 103, at 256.

¹²⁵ F. Berrien, supra note 58, at 427; D. McCarty, supra note 75, at 192-93.

¹²⁶ See Marston, supra note 62; Whipple, supra note 59.

best educated, presumably highly intelligent witnesses. While little can be done about individual limitations of sense perception and memory, criminal identification processes must be able to detect limitations when they exist, and both legal professionals and laymen must be educated about them.

SOCIAL PSYCHOLOGY OF TRENTIFICATION

The foregoing review of theory and research on memory and perception suggests why the potential for error is so great. Valid identification is necessarily restricted by human capacity. The observation that eyewitness identification is potentially fraught with error is supported by findings extracted from psychological investigations. But this review does not account for all of the possibilities for error in perception and memory even in everyday life. These studies were limited in scope to the extent they isolated the individual subject for studying sensory processes. They did not attempt sufficiently to emphasize the social context of perception. Since the criminal identification process necessarily involves an interaction between sensory and social inputs. it may properly be analyzed in social psychological terms, by considering such influences as the motivational nature of perception, the impact of group structure, the pressure of prejudice, the force of witness personality and the potency of authority and prestige.

Although past research indicates that knowing the power of sensory effects on eyewitness identification is crucial, even more significant for identifying the critical aspects of the lineup is assessing the directive weight of social psychological influences on that process. In contrast to classical work in perception, which focused on innate mechanisms, contemporary trends-called the "New Look" in perception-emphasize the impact of such variables as needs, social values, expectancies and cultural background on perceptual organization.127 Henri Tajfel's excellent contemporary review of social and cultural factors¹²⁸ underscores the preeminent importance of the social context of perception. Similarly Floyd Allport's earlier, comprehensive analysis on the theories of perception¹²⁰ also emphasizes the interactive

¹²⁷ Bruner, Social Psychology and Perception, supra note 87, at 88.

¹²⁸ Tajfel, Social and Cultural Factors in Perception, in 3 The Handbook of Social Psychology 315 (2d ed. G. Lindzey & E. Aronson 1969). For an excellent example of a research study on cultural effects, see M. Segall, D. Campbell & M. Herskovitz, The Influence of Culture on Visual Perception (1966). These investigators reach the important conclusion that "[t]he findings we have reported, and the findings of others we have reviewed, point to the conclusion that to a substantial extent we learn to perceive; that in spite of the phenomenally absolute character of our perceptions, they are determined by perceptual inference habits; and that various inference habits are differentially likely in different societies." Id. 214.

¹²⁹ F. Allport, Theories of Perception and the Concept of Structure (1955).

relationship between sensory (structural) and social (functional) inputs on perceptual reporting. An appreciation of this perspective informs our approach.

A. Emotional State

Explorations in the process of person perception¹³⁰ disclose that the significance of an object or an event to the viewer, including its emotional significance, deeply affects the manner in which it is perceived. In summarizing person perception research, Ittelson and Slack¹³¹ noted the difficulty in separating the effects of familiarity from those of emotional significance, a problem compounded by the fact that "important" people receive greater perceptual attention and thus tend to be more "familiar." In three studies Wittreich and Radcliffe¹³² measured the amounts of perceptual distortion experienced by married couples in viewing their spouses and strangers, by Navy recruits in viewing authority and nonauthority figures, and by subjects viewing amputees and physically intact strangers. Spouses, authority figures, and amputees were significantly less distorted. Since in the "authority" experiment the subjects reported after removal of the stimuli from their presence, and in the "mutilation" experiment the amoutees were unknown to the subjects, the resistance to distortion seems related to the emotional significance, not familiarity, of the object. Other work on perception by Asthana¹³³ featured subjects using aniseikonic lenses¹³⁴ to view a liked person (A), a disliked person (B), a stranger (C), physical objects (D), and the self-image in a mirror (E). In this experiment the amount of experienced distortion ranked from most to least was B, D, C, A and E. Thus, positive emotional significance appeared to be crucial in offsetting or resisting perceptual distortion.

¹³⁰ As defined by Tagiuri, Person Perception, in 3 THE HANDBOOK OF SOCIAL PSYCHOLOGY 395 (2d ed. G. Lindzey & E. Aronson 1969), "Person perception refers to the processes by which man comes to know and to think about other persons, their characdifferent from other physical stimuli." Thus, the field of person perception covers a wide range of phenomena from physical characteristics to complex inferences about personality traits.

¹³¹ Ittelson & Slack, The Perception of Persons as Visual Objects, in Person Perception and Interpersonal Behavior (R. Tagiuri & L. Petrullo eds. 1958).

¹³² Wittreich, The Honi Phenomenon: A Case of Selective Perceptual Distortion, 47 J. Abnorm. & Soc. Psych. 705 (1952); Wittreich & Radcliffe, Differences in the Perception of an Authority Figure and a Non-Authority Figure by Navy Recruits, 53 J. Abnorm. & Soc. Psych. 383 (1956); Wittreich & Radcliffe, The Influence of Simulated Mutilation Upon the Perception of the Human Figure, 51 J. Abnorm. & Soc. Psych. 493 (1955).

¹³³ Asthana, Perceptual Distortion as a Function of the Valence of Perceived Object, 52 J. Soc. Psycн. 119 (1960).

¹³⁴ Aniseikonic lenses are lenses that induce optical distortions, such that the retinal images of an object appear to be of unequal size and shape.

Again untainted perception of both persons and objects, particularly those that are unfamiliar, seems problematic.

These studies on the perception of physical characteristics of persons provide an excellent demonstration of the effects of emotions on perception which warrant consideration in a legal context. Although these findings can only be considered tentative, distortion may be reduced with stimuli that arouse positive affect or are familiar. A criminal suspect, however, is not likely to fall into either category. But, beyond suggesting that various emotional factors may operate to affect the degree of distortion, this literature offers very practical implications for pretrial confrontations. Since systematic bias may relate to emotions associated with particular persons or objects at the scene of the crime, it is essential to conduct lineups instead of showups except in strictly and specifically defined circumstances, and to match lineup participants with extraordinary care so that these factors are controlled.

B. Motivational State

Many studies in perception have documented the complexity of the processes by which the viewer selects from the evidence of his senses. The early memory research of Frederic Bartlett¹³⁵ isolated three psychological steps in identification: perception, remembering and reporting. Using a serial reproduction technique with storytelling and picture drawing, Bartlett demonstrated experimentally that memory was a constructive, not a reproductive, process, in which attitudes and expectations played a crucial role. Perceptions were distorted as well by leveling, sharpening and assimilating processes, ¹³⁷

 $^{^{135}}$ F. Bartlett, Remembering: A Study in Experimental and Social Psychology (1932).

¹³⁶ For example, there would be a progression of pictures in which the form of an owl changed to that of a cat.

owl changed to that of a cat.

137 Leveling, sharpening and assimilating are the processes involved in the transmission of rumor. See G. Allport & L. Postman, The Psychology of Rumor, in Readings 199 (1947). See also Allport & Postman, The Basic Psychology of Rumor, in Readings in Social Psychology 58-61 (3d ed. E. Maccoby, T. Newcomb & E. Hartley 1958). Leveling is the reduction of detail as the rumor is transmitted. Sharpening is the inevitable reciprocal of leveling. It is the bringing into prominence of the remaining details; "the selective perception, retention, and reporting of a limited number of details from a larger context." Assimilation is the force accounting for this reception and modification exerted by one's beliefs, prejudices, values, interests or sentiments. Eyewitness identification—witnessing an event and then recalling it—is comparable in many respects to the transmission of rumor. Both are susceptible to many of the same causes of inaccuracy. Thus, some of the methodologies for understanding the nature of rumor should have utility in educating legal professionals regarding the potential inaccuracy of identification. See, e.g., J. Tapp, A Technique for Understanding Rumor among Children (1952) (unpublished Master's thesis in University of Southern California Library); Tapp, Every Person Adds Something Else . . . "That Aren't Always True," 32 Educ. Screen 20 (1953).

as subjects condensed or elaborated to achieve a simpler, more significant configuration congruent with their needs rather than "reality."

Even physical needs affect accurate reporting. McClelland and Atkinson¹³⁸ studied 108 men who had not eaten for one, four or sixteen hours. In one instance, they flashed before subjects vague pictures of a "hamburger" and "ashtray." Among those who had not eaten in sixteen hours, seventy-five percent saw the hamburger as larger. In an experiment by Levine, Chein and Murphy, 139 subjects shown meaningless inkblots more frequently verbalized associating the ambiguous drawings with some type of food three and six hours after food deprivation, though not after nine. In comparison, a control group shown the pictures on a series of occasions after eating indicated no trend toward increased food responses. Yet, in a parallel study by Brozek, Guetzkow and Baldwin, 140 conscientious objectors experienced no increased food associations with deprivation. On the basis of these studies, Bruner concluded that "there is now enough evidence before us to suggest that not the amount of need but the way in which a person learns to handle his needs determines the manner in which motivation and cognitive selectivity will interact."141

In addition to physiological needs, psychological motives can be particularly powerful and may have a considerable influence on identification accuracy. Shrauger and Altrocchi¹⁴² found that person perception was affected significantly by the personality needs of the perceiver in ways that varied with the status of the stimulus person. For example, authoritarians described their peers more favorably than nonauthoritarians, but with strangers the effect was reversed—suggesting that authoritarian intolerance for ambiguity may have resulted in response rigidity.¹⁴³ Similarly, a great deal of research has indicated that individuals, demonstrating consistency needs in attitudes and actions, variously reduce any dissonance or incongruity that may be provoked by the social context. Therefore, theories of cognitive dissonance, consistency and balance have implications for identification.¹⁴⁴ This becomes particularly apparent when other studies on

¹³⁸ McClelland & Atkinson, The Projective Expression of Needs: I. The Effect of Different Intensities of the Hunger Drive on Perception, 25 J. PSYCH. 205 (1948).

¹³⁹ Levine, Chein & Murphy, The Relation of the Intensity of a Need to the Amount of Perceptual Distortion: A Preliminary Report, 13 J. PSYCH. 283 (1942).

¹⁴⁰ Brozek, Guetzkow & Baldwin, A Quantitative Study of Perception and Association in Experimental Semi-starvation, 19 J. Personality 245 (1951).

¹⁴¹ Bruner, Social Psychology and Perception, supra note 87, at 89.

¹⁴² Shrauger & Altrocchi, supra note 118.

¹⁴³ See also studies reviewed in F. Allport, supra note 129, at 315-17.

¹⁴⁴ See generally R. Abelson, E. Aronson, W. McGuire, T. Newcomb, M. Rosenberg & P. Tannenbaum, Theories of Cognitive Consistence: A Sourcebook (1968); L. Festinger, A Theory of Cognitive Dissonance (1951).

person perception are examined. Secord¹⁴⁵ in a review of many of these investigations found ample support for the proposition that people interpret certain physiognomic characteristics to represent personality traits. Thus, dark skin, of whatever race, is associated with such characteristics as hostility, dishonesty, unfriendliness and slyness. It is not too extreme to suggest that in a threatening situation such as a crime, people may reduce cognitive dissonance by unintentionally assigning to the attacker physical features associated with aggression, violence or lawlessness. Allport and Postman provide a striking example of such a misperception.¹⁴⁶ They reported a series of experiments in which subjects were shown a picture of a white man holding a razor and arguing with a black. Over half of the subjects described the black man as holding the razor, and often as brandishing it threateningly.

What are the implications of these findings? It is difficult to draw immediate analogies from the identification of such ambiguous stimuli as food by hungry subjects to the effect of particular needs of the witness on his or her perception of the criminal. But, taken together, these studies on psychological and physical needs establish that motivation does affect perception. Therefore, although we cannot easily identify or control for certain kinds of needs, it is important for the criminal justice system both to note and to stress that motivations may distort the process of perception from the outset. Later, we shall examine some additional ways in which motivational state may affect identification accuracy at the lineup itself.

C. Stereotypes and Prejudice

Research on stereotyping and prejudice similarly demonstrates that identification may be riddled with inaccuracy. For example, the relative inability to recognize persons from another group—racial, ethnic or religious—has obvious implications for the identification process. Seeleman¹⁴⁷ found that prejudiced subjects, minimizing intergroup differences, were less accurate in recognizing individual blacks from photographs. Malpass and Kravitz¹⁴⁸ reported that subjects had greater acuity for faces of their own race. In a study by Pettigrew,

¹⁴⁵ Secord, Facial Features and Inference Processes in Interpersonal Perception, in Person Perception and Interpersonal Behavior 300, 301 (R. Tagiuri & L. Petrullo eds. 1958).

¹⁴⁶ G. Allport & L. Postman, supra note 137, at 70-72, 99-100, 111-12.

¹⁴⁷ Seeleman, The Influence of Attitude upon the Remembering of Pictorial Material, 1940 Archives Psych. No. 258.

¹⁴⁸ Malpass & Kravitz, Recognition for Faces of Own and Other Race, 13 J. Personality & Soc. Psych. 330 (1969).

Allport and Barnett, 149 identifying racial membership under conditions of considerable ambiguity. Afrikaner subjects more frequently than other ethnic groups assigned composite faces to either "European" or "African" categories, rather than to categories of mixed physical shade. Scodel and Austrin¹⁵⁰ similarly found that prejudiced people, both Tewish and non-Tewish, were more likely to label photographs Jewish. Subjects were classified as prejudiced based on their responses to the California F Scale which indirectly measures antiminority attitudes. 151 The general inference is one of predictable difference between the perceptions of prejudiced and nonprejudiced subjects, but the matter is not quite that simple. Malpass and Kravitz's findings suggest that members of another race may "all look alike" for viewers even when prejudice is not controlled and that white faces are generally more discriminable than black faces. 152

These findings have important implications for any identification procedure which combines two factors: the values or emotions of the individual, and cues too suggestive, too complex or insufficient to permit an unambiguous identifying decision. The context of the lineup is a case in point. For, in particularly complex or ambiguous situations. individuals will necessarily structure events to make them understandable, and in cases of ambiguity may be guided more by past experiences, needs and expectations than by the stimuli themselves. The Allport and Postman findings, 153 along with the literature on person perception, 154 indicate that the problem of the effects of prejudice on perception goes far beyond the phenomenon of "they all look alike to me." The very same process on the part of prejudiced people may occur in other areas of social judgment—for example, in attributing crime to various social groups. To the extent that, to many people, certain ethnic groups are associated with lawlessness and violence, and perceptions are edited to conform to personal interpretations of reality. fundamental perceptual and mnemonic errors may be made necessitating more sophisticated efforts for their discovery and correction.

LINEUPS AS A SOCIAL PSYCHOLOGICAL CONTEXT Without doubt the impact of social psychological variables on the

 ¹⁴⁹ Pettigrew, Allport & Barnett, Binocular Resolution and Perception of Race in South Africa, 49 Brit. J. Psych. 265 (1958).
 150 Scodel & Austrin, The Perception of Jewish Photographs by Non-Jews and Jews,
 54 J. ABNORM. & Soc. Psych. 278 (1957).

¹⁵¹ Id. 278.

¹⁵² Malpass & Kravitz, supra note 148.

¹⁵³ G. Allport & L. Postman, supra note 137.

¹⁵⁴ See, e.g., Secord, supra note 145; Shrauger & Altrocchi, supra note 118; Tagiuri, supra note 130.

perception and memory of a criminal event is of prime importance for accurate criminal identification. In the police milieu, however, these factors may again come into play, further compounding the errorprone process of person perception. Therefore, the legal system has a particular responsibility in regard to the effect of psychological and social structural variables at and on actual identification proceedings, such as lineups.

For example, since lineup identification, like all identification, involves the three steps of perceiving, remembering and reporting, 155 the witness' motivational state at the time of the lineup is a crucial component. The Supreme Court stated in Wade that "a victim's understandable outrage may excite vengeful or spiteful motives."156 Students of criminal procedure have similarly explored the possibility that revenge, even below the level of conscious awareness, might result in misidentifications. 157 It is also possible that the victim, as a function of psychological or physical needs, may simply want to bring the whole episode to a close as quickly as possible. Another powerful motive could be the desire to avoid looking foolishly unable to identify the "right" man. This motive is probably intensified by the fact that for most people police officers are still authority figures, and even the more cynical may attribute a degree of legitimacy to these professionals because of their particular expertise in this area. Alternatively, far from making a dubious identification in order to perform adequately at the lineup, witnesses may anticipate (perhaps unrealistically) having to testify at the suspect's trial, and, fearing the experience, they may refuse to make a correct identification. In addition, beyond witnesses' fear of revenge from suspects, 158 they may

¹⁵⁵ See text accompanying note 135 supra.

^{156 388} U.S. at 230.

¹⁵⁷ See, e.g., E. Borchard, supra note 12, at xiii; E. Gardner, supra note 13; Hammelmann & Williams, Identification Parades—II, 1963 Crim. L. Rev. 545, 546.

¹⁵⁸ See Read, supra note 29, at 373-74 in regard to witnesses' being intimidated by fear of revenge. In March 1971, the authors witnessed lineups held by a metropolitan police department and interviewed police officers experienced in their conduct. See note 119 supra. The officers maintained that the more traumatic the crime, the less willing witnesses were to identify. Illustratively, police officers indicated that robbery victims were more likely than rape victims to identify suspects. Certainly there is no assurance that these perceptions are not biased either by the class of cases these police officers witnessed or by their own prejudices. Whether or not their conclusions are accurate, however, their opinions stimulate a number of testable hypotheses. Several factors could explain why robbery victims may be more inclined to make positive identifications: differing conditions under which the criminal was seen, the seriousness of the offense charged, fear of retaliation, feelings of shame. Furthermore, rape victims may be equally willing to identify, but have less solid information to go on. Or, since rape victims are only female, while robbery victims include both sexes, the differing pattern may be due to sex differences in motives to avoid inaccurate identification. These are only some of the researchable issues that emerge for systematic, in-depth inquiry. Further preliminary investigation would undoubtedly define and refine others.

hesitate to contribute to sending anyone to prison, or they may be reluctant to publicize all the facts surrounding their presence at the crime (for example, if testimony would expose an extramarital affair). All of these reasons illustrate the wide range of factors potentially influencing witness decisionmaking at the time of the lineup. Quite clearly motivational states whether conscious or unconscious could increase the danger of error, either the error of misidentification or the error of nonidentification. Therefore, careful consideration must be given to the dynamics of their emergence and mechanisms for their potential control.

What the above analysis suggests—and what is important to recognize—is that the victim or witness at a lineup is one "actor" in a complex social situation. Thus, viewing the pretrial lineup, and all pretrial confrontations, as paradigmatic of social interactions may offer a new dimension for analysis. Such a perspective has the important advantage of acknowledging that normative behavioral patterns may emerge as a function of the social structure of the lineup itself. This, in essence, was the model the Wade Court adopted in saying: "We do not assume that these risks are the result of police procedures intentionally designed to prejudice an accused. Rather we assume they derive from the dangers inherent in evewitness identification and the suggestibility inherent in the context of the pretrial identification."159 In addition to the role at lineups of such factors as emotional significance, motivational state, and stereotypes and prejudices, 160 other social psychological variables may potentially inhibit an accurate identification process. Some of these include the power of group influence and interactive pressures, the uncertainty and ambiguity surrounding both the task and the procedure, the social power of legitimate authority, and evaluation apprehension. The potential effects of these variables—garnered from research in other social contexts—is overviewed below.

Changes in perception occur readily in response to information from social sources. The enormous suggestive power of groups in modifying perceptions, attitudes and norms was first illustrated experimentally by Sherif¹⁶¹ and then by Asch.¹⁶² Sherif created the auto-

^{159 388} U.S. at 235.

¹⁶⁰ See text accompanying notes 130-54 supra.

¹⁶¹ M. SHERIF, THE PSYCHOLOGY OF SOCIAL NORMS (1936); Sherif, A Study of Some Social Factors in Perception, 1935 Archives Psych. No. 187. See also Sherif, Group Influences Upon the Formation of Norms and Attitudes, in Readings in Social Psychology 219 (3d ed. E. Maccoby, T. Newcomb & E. Hartley 1958).

¹⁶² S. ASCH, SOCIAL PSYCHOLOGY Ch. 16 (1952); ASCH, Effects of Group Pressure upon the Modification and Distortion of Judgments, in Readings in Social Psychology 174 (3d ed. E. Maccoby, T. Newcomb & E. Hartley 1958); Asch, Issues in the Study of Social Influences on Judgment, in Conformity and Deviation 143 (I. Berg & B. Bass eds. 1961).

kinetic phenomenon with subjects. When an individual is exposed to a fixed, pinpointed light under conditions of total darkness, an illusory movement occurs. Sherif found that the emergence of group norms resulted in concurring reports of this light movement. In groups of both two and three, subjects' judgments converged in a group situation after they first observed the light independently. Also, when the group sessions preceded the individual ones, group influence was apparent from the first group session through the final individual session.¹⁶³

In the Asch experiment, subjects were simultaneously presented with lines of different lengths and with blatantly incorrect judgments about equality in length, delivered by the experimenter's confederates. Again there was a convergence of judgments. Only about twenty-five percent of Asch's subjects totally resisted group pressure and made no errors in judging length. In the experimental condition, the mean number of errors was 3.84 in comparison to .08 for the control group. According to Asch, some subjects were unaware that they had yielded, others presumed the group was correct, and yet others did not want to appear different or inferior. Whatever the underlying motivation, a similar manifestation of conforming to group pressure emerged.

Asch's research, while also exploring the effects of group pressure on individual judgments, differed from Sherif's work in several important respects. The difference in the length of lines was a real difference, not an illusory one; the size of the group was larger; and there was a decided discrepancy between the subjects' sensory experience and the reports of others. Both experiments, however, demarcate the potency of group pressure in modifying judgments, despite awareness of a conflict between sensory and social information. While the usual conditions of social suggestion are not always as extreme as those represented by the Sherif and Asch arrangements, clearly some witnesses to identical phenomena may markedly tailor their reports to the majority position. And, in the case of criminal identification, this "tailoring" could occur among witnesses at the scene of the crime, in subsequent communication with or without police knowledge, and at the lineup itself.

For us, the basic question is: what are the social arrangements or group pressures in the lineup, and how might they affect individual judgments of reality? The characteristics of a yielding, or changing,

¹⁶³ M. Sherif, supra note 160, at 95-105. In particular see id. 102-03.

¹⁶⁴ Asch, Effects of Group Pressure Upon the Modification and Distortion of Judgments, supra note 162, at 177. Substantial individual differences in the number of errors emerged. The maximum possible number of errors was 12, with a range of 0-11. However, approximately 30% of the subjects erred in the direction of the majority's estimates at least 6 or more times.

response also have been studied in various contexts, including conditions of minimal pressure. In a variation of the Asch experiment, Deutsch and Gerard¹⁶⁵ found that both public and private prior commitment (written judgments prior to group judgments) "markedly reduce the socially influenced errors in both . . . face-to-face and anonymous situations." Also their experiment showed significantly less conformity when subjects expressed their judgments anonymously. Both field and experimental studies similarly confirm that anonymity leads to a decrease in judgmental shift. 167 DiVesta 168 noted that when initial social information was consistently unreliable. changes in perceptual judgment decreased. Presently a lineup situation is not one typically characterized by minimal pressure; thus, interventions to reduce pressure should be tested. For example, signed descriptions of suspects by witnesses as soon as possible after the crime might be required, and certainly anonymity, at least among witnesses. should be preserved.

Particularly in ambiguous, unusual or threatening situations, people are prone to judge the appropriateness of their behavior by looking to what others do. This phenomenon, termed by French and Raven "referent power," 169 has been demonstrated repeatedly in a variety of research contexts. Illustratively, pedestrians were more likely to jaywalk, 170 subjects were more likely to volunteer for an experiment,171 and people were more likely to violate a "no trespassing" sign¹⁷² when they observed others doing so.¹⁷³ Under circumstances of difficulty, ambiguity or complexity, many studies confirm the considerable social influence of someone considered to be an ex-

¹⁶⁵ Deutsch & Gerard, A Study of Normative and Informational Social Influences upon Individual Judgment, 51 J. Abnorm. & Soc. Psych. 629 (1955). See also Hood & Sherif, Verbal Report and Judgment of an Unstructured Stimulus, 54 J. Psych. 121

¹⁶⁶ Deutsch & Gerard, supra note 165, at 633.

¹⁶⁷ See, e.g., P. ZIMBARDO, THE COGNITIVE CONTROL OF MOTIVATION (1969); Raven & French, Legitimate Power, Coercive Power, and Observability in Social Influence, 21 SOCIOMETRY 83 (1958).

¹⁶⁸ Di Vesta, Effects of Confidence and Motivation on Susceptibility to Informational Social Influence, 59 J. Abnorm. & Soc. Psych. 204 (1959).

¹⁶⁹ French & Raven, The Bases of Social Power, in Studies in Social Power 150 (D. Cartwright ed. 1959).

¹⁷⁰ Lefkowtiz, Blake & Mouton, Status Factors in Pedestrian Violation of Traffic Signals, 51 J. ABNORM. & Soc. PSYCH. 704 (1955).

¹⁷¹ Rosenbaum & Blake, Volunteering as a Function of Field Structure, 50 J. Abnorm. & Soc. Psych. 193 (1955).

¹⁷² Freed, Chandler, Mouton & Blake, Stimulus and Background Factors in Sign Violation, 23 J. Personality 499 (1955). This citation is to an abstract of an unpublished paper. In 1955, copies were available from A.M. Freed, University of Texas.

¹⁷³ Studies cited notes 170-72 supra are reviewed in Collins' and Raven's excellent chapter, Group Structure: Attraction, Coalitions, Communication, and Power, in 4 HANDBOOK OF SOCIAL PSYCHOLOGY (2d ed. G. Lindzey & E. Aronson 1969).

pert.¹⁷⁴ Evidently, in novel contexts, as in the Sherif and Asch experiments, ¹⁷⁵ the actions or judgments of others provide informational inputs and guidelines about the accuracy of judgments, the appropriateness of behavior, or the limits of permissible activity. These cues are useful to the individual who is attempting to construe the meaning of an event. Thus, to the extent that the lineup is characterized by extreme ambiguity for the witness, a similar reliance on others—especially expert police officers—might be expected. Perhaps if witnesses had greater clarity regarding what to expect and more accurate information regarding the identification process, procedure and purpose, the influence of other actors in the lineup context would be substantially reduced.

While Asch's results on unanimity¹⁷⁶ underscore that introducing another person into a group can markedly influence perception, suggestibility does not reside in numbers alone. Recognized or official power provides another substantial source of influence over individuals. According to Collins and Raven, "[e]xpertise may be a basis for establishing and limiting legitimacy." However, although "there may be some correlation between expert and legitimate power . . . legitimate power should obtain even when there is no superiority in knowledge on the part of" the person in power. 177 Thus, Luchins and Luchins observed that in conflicts between the official authority and the majority, the verdict of the authority was given greater weight. 178 Milgram's now classic experiment¹⁷⁹ is a testament to the powerful effect of a legitimate authority conducting a legitimate "scientific" enterprise. In this research, subjects under request by an experimenter induced what they believed to be painful, dangerously high levels of shock to another subject who was actually a confederate of the investigator, Likewise Orne and Evans¹⁸⁰ reported that subjects persisted at boring, meaningless or noxious tasks in compliance with experimental instructions. These studies are illustrative of a substantial body of research evidencing systematic effects attributable to the

¹⁷⁴ Id. 176-77.

¹⁷⁵ See text accompanying notes 161-62 supra.

¹⁷⁶ Asch, Studies of Independence and Conformity: I. A Minority of One Against a Unanimous Majority, 70 PSYCH. MONOGRAPHS No. 416 (1956).

¹⁷⁷ Collins & Raven, supra note 173, at 178.

¹⁷⁸ Luchins & Luchins, On Conformity with Judgments of a Majority or an Authority, 53 J. Soc. Psych. 303, 315 (1961).

¹⁷⁰ Milgram, Behavioral Study of Obedience, 67 J. Abnorm. & Soc. Psych. 371 (1963); Milgram, Some Conditions of Obedience and Disobedience to Authority, 18 Hum. Rel. 57 (1965).

¹⁸⁰ Orne & Evans, Social Control in the Psychological Experiment: Antisocial Behavior and Hypnosis, 1 J. Personality & Soc. Psych. 189 (1965).

legitimacy of certain social roles and contexts. Therefore, the police as a legitimate authority of the legal system may have a potentially critical impact both on witnesses' judgments and on suspects' behavior. Since the specific mechanisms mediating such effects are as likely to be unintentional as intentional, systematic observation and manipulation are necessary to obtain both their detection and control.

Without knowing it, witnesses may alter their beliefs to conform with those of others because of either a lack of confidence in their perceptions or a desire to make contradictory perceptions fit together. As one might expect, the problems of influence and suggestibility are compounded by the fact that subjects are typically unaware of their yielding behavior. Illustratively, Wrightsman's experiment¹⁸¹ measured reported levels of anxiety of subjects waiting for injections. Those in a "no talk" group condition changed their felt anxiety in a direction closer to that of other group members. Without any knowledge, this convergence phenomenon occurred, suggesting that subjects changed in response to subtle, indirect cues, Likewise, those who communicate suggestive cues or pressures are often equally unaware of their action. An important area of social science research currently dealing with such phenomena is called the social psychology of the experiment.182

Rosenthal has extensively investigated the various conditions that enhance "experimenter bias"—that is, the subtle unintentional communication of expectations from experimenter to subject.¹⁸³ Dovetailing with Rosenthal's studies is considerable work that puts more emphasis on the subject side of the social interaction.¹⁸⁴ Rosenberg views the subject of an experiment as an "active" actor who is not merely the recipient of experimenter "cues" but who is independently engaging in information seeking, ambiguity reduction and the development of interpretive hypotheses. 185 His research on the conditions and consequences of evaluation apprehension (EA) is exemplary of the utility of this research movement for illuminating the lineup context.

¹⁸¹ Wrightsman, Effects of Waiting with Others on Changes in Level of Felt Anxiety, 61 J. Abnorm. & Soc. Psych. 216 (1960).

¹⁸² See, e.g., Orne, On the Social Psychology of the Psychological Experiment: With Particular Reference to Demand Characteristics and Their Implications, 17 Am. Psychology, 776 (1962); Riecken, A Program for Research on Experiments in Social Psychology, in 2 Decisions, Values, and Groups (N. Washburne ed. 1962).

¹⁸³ R. ROSENTHAL, EXPERIMENTER EFFECTS IN BEHAVIORAL RESEARCH (1966); Rosenthal, Experimenter Outcome-orientation and the Results of the Psychological Experiment, 61 PSYCH. BUIL. 405 (1964); Rosenthal, On the Social Psychology of the Psychological Experiment: The Experimenter's Hypothesis as Unintended Determinant of Experimental Results, 51 Am. Scientist 268 (1963).

¹⁸⁴ See, e.g., Rosenberg, The Conditions and Consequences of Evaluation Apprehension, in ARTIFACT IN BEHAVIORAL RESEARCH 280 (R. Rosenthal & R. Rosnow eds. 1969). 185 Id. 344-46.

For Rosenberg, evaluation apprehension is an anxiety-toned concern on the part of subjects that they win a positive evaluation from the experimenter. 186 Thus, when subjects, based on cues regarding what they are to do, believe that one mode of responding is more "normal" or "competent" than another, data-biasing processes are likely to be triggered. Analogously, witnesses at a lineup know that they have been called in to make an identification and quite probably are concerned about performing well, being helpful and not looking foolish, particularly since the presence of a relevant authority figure has been found to have an enhancing effect on EA.¹⁸⁷ In short, victims or witnesses of crime do not want to be evaluated as atypical or abnormal in their ability to identify a suspect or in their performance as good citizens. Therefore, they may be heavily oriented to gear their behavior to be congruent with their image of what a "competent witness" is able to do. To counterbalance such an effect, specific instructions alleviating apprehension may need to be administered.

This excursion into work on the social psychology of the experiment is intended to underscore its particular relevance and applicability for refining lineup procedures and testing hypotheses regarding lineup behavior. The lineup, after all, is a data-gathering, research paradigm that desperately needs improvement in both design and execution. And, almost by definition, this new field has particular salience for any discipline "whose data are gathered through interaction between the investigator and other, investigated persons." 188

Another fruitful area for consideration in the lineup context has been the work on false report, suggestion and self-persuasion. There is substantial evidence that an initially false statement may be distorted in a person's recall, engendering thereafter a belief that the erroneous statement is correct. Bem conducted an experiment in which subjects, after giving false information in response to certain cues, were asked to recall the correct answers. He found that subjects, under conditions normally associated in the subjects' experience with truth-telling, tended to recall the truth less accurately and to believe their erroneous confessions. These findings suggest that once a witness' report has been changed according to some minimum inducement and subtle pressure, self-persuasion regarding the truth of statements

¹⁸⁶ Id. 281.

¹⁸⁷ Id. 337.

¹⁸⁸ Id. 323.

¹⁸⁹ Bem, Inducing Belief in False Confessions, 3 J. Personality & Soc. Psych. 707 (1966); Bem, When Saying is Believing, Psych. Today, June, 1967, at 21.

is likely to occur, and the error may be difficult, if not impossible, to rectify.190

As we already know, the possibilities of error-producing suggestion in questioning are substantial. 191 Bem's research clearly underscores the potential effect of both police reassurances to victims and other police procedures associated with truth-telling. Bem himself noted that self-persuasion can distort recall of small, vital details surrounding a crime, including distorting eyewitness accounts. 192 This phenomenon is a variant of Festinger's cognitive dissonance effect: 193 with strong pressure to elicit change in belief there is little tendency to change, but with subtle or moderate pressure a person has "no good reason" for his or her behavior and therefore may experience selfpersuasion. Since the lineup is one stage of a three- or four-stage process and occurs after witnesses have been questioned at least once by police, the situation is fraught with self-persuasion possibilities. 194 And the problem is compounded by the fact that repeated questioning is likely to strengthen commitment to a position. 195

This work on self-persuasion is, of course, particularly valuable to those investigating suspect confessions. A large proportion of the cases handled by police every year involve confessions by suspects. And a number of innocent people have confessed to crimes they did not commit. As Philip Zimbardo phrased the issue for the law:

How can a court assess the amount of psychological coercion. tell whether a confession was truly voluntary, or measure a man's ability to resist pressure? Central in defining and analyzing these questions is a knowledge of personality, behavior deviations, performance under stress and deprivation, the 'social demand' implicit in a situation, persuadability, and the conditions for attitude change. 196

¹⁹⁰ See, e.g., Insko, Verbal Reinforcement of Attitude, 2 J. Personality & Soc. Psych. 621 (1965).

¹⁹¹ See, e.g., Hildum & Brown, Verbal Reinforcement and Interviewer Bias, 53 J. Abnorm. & Soc. Psych. 108 (1956).

¹⁹² Bem, When Saying is Believing, supra note 189, at 25.

¹⁹³ L. FESTINGER, supra note 144.

¹⁹⁴ This is an excellent illustration of one area where defense counsel could facilitate efforts to reduce erroneous identification. Through close observation, a lawyer may very well be able to detect some self-persuasion processes.

¹⁹⁵ D. McCarty, supra note 75, at 181-82, reports a study on suggestive effects by A. Biner, supra note 48. Even when questioning was honest, subjects were susceptible to subtle suggestion, especially when matters inquired into were vague. Forced memory was responsible for 26% of the errors; when suggestion was added, error increased to 38%. Once having committed themselves, witnesses had a tendency to stand by their statements and finally believe them. See also J. Marshall, supra note 12, at 34.

¹⁹⁶ Zimbardo, The Psychology of Police Confessions, PSYCH. TODAY, June, 1967, at 18. See also Zimbardo, Toward a More Perfect Justice, PSYCH. TODAY, July, 1967, at 45.

This article has urged an assessment of these same kinds of dimensions for unraveling the dynamics of the lineup social exchange.

Many current police techniques regarding the handling of both suspect interrogation and lineup identification reflect, perhaps unknowingly, a highly sophisticated application of the various psychological principles outlined above. Citing police practice manuals. Zimbardo pointed out in discussing the demand characteristics¹⁹⁷ of suspect interrogation: "Police manuals generally agree that the suspect should never be interrogated in an environment familiar to him The suspect must always feel that he is the 'guest' of the police. Indeed, 'By going to the police station the suspect has made the first act of yielding.' "198 Similarly, an examination of the ways in which lineups are actually conducted makes clear how police practices may enhance suggestive influences on witnesses. One such practice is the "Oklahoma showup," in which the witness "accidentally" encounters the suspect in custody prior to the lineup. 199 Another is the pre-lineup identification of the suspect from photographs shown to the witness, after which his identification of the suspect at the lineup tests nothing but the accuracy of the photograph.²⁰⁰ As of 1970, such obviously suggestive procedures had a better than even chance of being upheld by the courts.²⁰¹ Not only have multiple confrontations and the showing of photographs been commonplace, but also police may order only suspects in lineups to don clothes described as being worn by the criminal, place suspects in lineups where they differ markedly in appearance from all other participants, and even point out suspects with varying degrees of subtlety.202

These widespread practices on the part of police suggest a shrewd, pragmatic grasp of the dynamics of suggestion. This situation raises two issues for the criminal justice system: whether police practices which utilize principles of suggestibility result in correct identifications, and whether these methods are consistent with societal norms of justice even if the resulting identifications are correct. The issue

¹⁹⁷ The term "demand characteristics" was first used by Orne in writing about the social psychology of the experiment. Demand characteristics are cues in the experimental setting that allow subjects to infer how they are expected to behave. Orne, *supra* note 182

¹⁹⁸ Zimbardo, The Psychology of Police Confessions, supra note 196, at 19.

¹⁹⁹ See, e.g., No Panacea, supra note 5, at 368 n.43; Comment, supra note 21, at 398 n.31.

²⁰⁰ See, e.g., Pretrial Identification, supra note 5, at 798-803.

²⁰¹ Id.

²⁰² See, e.g., E. Borchard, supra note 12; J. Marshall, supra note 12; P. Wall, supra note 12; Murray, supra note 42; Quinn, supra note 7; Read, supra note 29; Sobel, supra note 7; No Panacea, supra note 5; Pretrial Identification, supra note 5; Protection of the Accused, supra note 29.

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for criminal jurisprudence is straightforward. If unfair methods, intentionally and unintentionally suggestive practices, or abusive procedures result even in accurate identifications, the legal system must ask itself whether the loss in justice is worth the gain in ostensible efficiency.²⁰³

VII. A PSYCHOLOGICAL RESEARCH REFORM PERSPECTIVE

While the preceding sections present research findings and theory important for understanding the criminal identification process, it is impossible without systematic, scientific analysis to assess variables in terms of the strength of their effect. In this article, we attempt to raise some questions, discuss issues and provide guidelines. Our effort is to reduce error and particularly to reduce identification judgments that are artifacts of the lineup or pretrial confrontation procedure. To remedy these problems, specific and well-aimed research is required. Thus, what is most important is that a substantial number of reforms—stemming from the theories and findings reported above—emerge for testing and evaluation.

For example, the vagaries of perception and memory, documented at least since Thucydides' time, 204 can be confronted at a variety of levels. Preliminary sight and hearing tests could be employed to disclose gross sensory disabilities in witnesses. Alternative procedures for witnesses' reports to the police also might increase accuracy and completeness. Forced memory has substantial limitations. 205 Marshall, Marguis and Oskamp found that multiple-choice questioning considerably improved the completeness of recall but somewhat diminished accuracy.²⁰⁶ While such questioning is obviously impractical for initial interrogation (although, as the authors suggest, it might be a useful pretrial procedure), nonleading, structured questioning by police could have much the same effect. This procedure might even reduce the slight drop in accuracy which these investigators found with multiplechoice questions, although a recent report in the Police Research Bulletin reaffirmed that free descriptions elicited more accurate identifications than did cued descriptions.207

Similarly, a host of research and reform implications surround the issue of improper suggestibility.²⁰⁸ On the one hand, group pres-

²⁰³ See Zimbardo, Toward a More Perfect Justice, supra note 196, at 17.

²⁰⁴ THUCYDIDES, supra note 44.

²⁰⁵ See sources cited note 195 supra.

²⁰⁶ Marshall, Marquis & Oskamp, supra note 82, at 1629.

²⁰⁷ Goulding, Facial Description Ability, 19 Police Research Bull. 43 (1972).

²⁰⁸ For a sensitive presentation of these problems and approaches for their amelioration, see *Erroneous Eyewitness*, supra note 15.

sure may not always be a potent factor. If there is only one witness at a lineup or if witnesses are separated,²⁰⁹ the potential for group influence resides almost exclusively with the police. Yet police suggestion is extraordinarily difficult to control, even when police act in good faith. It is not enough to do what some courts and police departments have already done—prohibit police officers only in very general terms from verbally nudging the witness toward the suspect. As the studies already examined on suggestive influence imply,²¹⁰ and some additional recent materials confirm,²¹¹ much interpersonal communication is nonverbal. In all probability this is as true for lineups as for other social contexts, and merely instructing the police to refrain from making such nonverbal cues probably would be ineffective.

Wall²¹² strongly recommends that, by having the lineup conducted by police officers not connected with the investigation of the crime, chances for police pressure and suggestion would be reduced significantly. This procedure is in fact followed in England, Paris²¹³ and the District of Columbia,²¹⁴ where certain officers are assigned to conduct all lineups. Depending on the size and degree of specialization within the particular department or division, it may be unrealistic to assume such officers will have no knowledge about which suspects have been arrested for what crimes. But officers not involved in investigating a crime might be expected to have a reduced stake, both conscious and unconscious, in obtaining a positive identification. As a corollary to the above, every attempt also should be made to minimize contact between any police officer present in the lineup room and the waiting witnesses.

One can imagine the salutary effect of the police scrupulously avoiding any suggestion to the witness that a person strongly suspected is actually present in the lineup.²¹⁵ In addition to assigning different

²⁰⁹ See, e.g., H. Burtt, supra note 67; P. Wall, supra note 12. Since Wade, this practice has seen some support. Examples include the materials and model code outlined by Murray, supra note 42; the guidelines set forth by the Oklahoma court in Thompson v. State, 438 P.2d 287, 289 (Okla. Crim. App. 1968); the suggested procedures for Clark County, Nevada, note 33 supra; the standards employed by the New York City Police Department, note 32 supra.

²¹⁰ See, e.g., notes 161-62, 165, 168, 181, 183 supra.

²¹¹ See, e.g., Increase 101-02, 103, 105, 101, 103 Supra.

211 See, e.g., J. Fast, Body Language (1970); Duncan, Rosenberg & Finkelstein, The Para-language of Experimental Bias, 23 Sociometry 207 (1969); Ekman & Friesen, Non-verbal Behavior in Psychotherapy Research, in 3 Research in Psychotherapy 179 (J. Shlien ed. 1968); Exline & Winters, Affective Relations and Mutual Glances in Dyads, in Affect, Cognition, and Personality 319 (S. Tompkins & C. Izard eds. 1965). Also see references to Birdwhistell's work in N. Friedman, The Social Nature of Psychological Research: The Psychological Experiment as a Social Interaction (1967).

²¹² P. WALL, supra note 12.

²¹³ Id. 46.

²¹⁴ See Read, supra note 29, at 370.

²¹⁵ See, e.g., P. WALL, supra note 12, at 47-48; Sobel, supra note 7, at 265;

police officers to investigations and lineups, separating witnesses from one another would help immeasurably in controlling suggestive influences. As indicated above, 216 segregating witnesses should be of particular value in preserving anonymity and in reducing informational suggestion as well as group pressure to identify. Such a reform should be one of the easiest to institute, both administratively and in terms of police willingness to comply. For obvious reasons, this segregation is best if imposed not only at the lineup itself but also before and after the lineup. If witnesses who have observed the lineup are brought into contact with other witnesses who have not, unintentional cues may be communicated. Furthermore, even after viewing a lineup, witnesses should remain separated and should be encouraged not to talk. Information regarding who, if anyone, was identified must remain confidential if subsequent viewing of other suspects is to have any validity. For example, witness confidentiality is of paramount importance if blank lineups (with no suspects) are to be administered. And certainly the effect on accuracy of viewing multiple lineups should be tested²¹⁷ as well as the effect of viewing the same person more than once.

Further concern must be directed at the suspect—who is also an "actor" in this complex process. Although the Supreme Court ruled that Wade's fifth amendment privilege was not violated by speaking certain words or wearing "strips of tape," 218 four of the nine Justices dissented from this holding. Whatever the legal rule in this area, there still remains the empirical question of the effects of intentional and unintentional special treatment. Any action that calls particular attention to a suspect must be scrupulously avoided. For example, given the impact of prejudice on perception, 219 police officers should refrain from using suspects' names—which might reveal to the witness their ethnic background. Also, any unusual physical characteristics of the suspect should be kept uniform among lineup participants (e.g., wearing glasses). The impact of such uniformity on increasing accurate identifications could certainly be tested. In addition, however, the criminal

Erroneous Eyewitness, supra note 15, at 99-100; Pretrial Identification, supra note 5, at 798.

²¹⁶ See text accompanying notes 164-68 supra.

²¹⁷ For a discussion of the utility of the "blank" lineup and other procedures, see Williams & Hammelman, *Identification Parades—I*, 1963 CRIM. L. Rev. 479, 487. See also Sobel, supra note 7, at 302-03. In the District of Columbia, through use of the "Adams order" (Adams v. United States, 399 F.2d 574 (D.C. Cir. 1968)), suspects stand in several lineups in addition to the lineup for the crime charged. This procedure provides witnesses opportunity to observe more than one lineup. For a fuller explication of the pros and cons of suspects' participating in multiple lineups, see Read, supra note 29, at 368; Sobel, supra note 7, at 280.

^{218 388} U.S. at 220-21.

²¹⁹ See text accompanying notes 147-54 supra.

justice system needs to ferret out the ways that lineup participants, perhaps unconsciously, might call attention to themselves or to someone else. A stare or glance to the suspect from another lineup participant could be sufficient to cue the witness. As Exline maintained,²²⁰ head and body cues as well as mutual glances are a meaningful source of information.

Thus, one initial way to reduce lineup suggestion would be to establish uniformly the kinds of regulations which several departments have already adopted.²²¹ These include such measures as prohibiting police from making suspects dress in clothes, make gestures, or utter words described by witnesses unless all other lineup participants are required to do the same; stipulating that lineup participants must be of the same race and sex, and approximate age, height, weight, build and coloring; and camouflaging any of the suspects' physical peculiarities. Alternatively the legal system might even consider the potential utility of entirely different lineup-type formats. Wigmore's proposed identification procedure could provide a useful model:²²²

[A]t least 100 talking films would be prepared of [various people]. Each would be photographed in a number of stock movements . . . The suspect would be filmed in the same manner. Some 25 of the films would be shown in succession in a special projection room in which each witness would be provided an electric button which . . . when pressed . . . [would] indicate that the witness had identified a given person . . . the degree of hesitancy in the identification to be indicated by the number of presses.²²³

But, even though this proposal has stringent, built-in controls, systematic research would be required for determining film format, preand postfilm handling of witnesses, and procedures for prior police contact. In addition, evaluation studies are vital for adequately assessing the impact of this reform.²²⁴

²²⁰ Exline, supra note 117. The problem of lineup participants cuing a suspect or suspects cuing themselves is discussed in Williams & Hammelman, supra note 217, at 489.

²²¹ The procedures are outlined in a number of review articles. See, e.g., Read, supra note 29, at 380-93, apps. D, E, F; Sobel, supra note 7, at 301. See also notes 32-33 supra.

²²² Two commentators ably demonstrate the potential of Wigmore's proposal for reforming criminal identification procedures. See No Panacea, supra note 5, at 372-74; Right to Counsel, supra note 5, at 849-53. As reported in No Panacea, 374 nn. 104-05, 107, a videotaping procedure for identification purposes has already been introduced in the Miami Police Department.

^{223 388} U.S. at 239 n.30. This language is an accurate paraphrase of J. Wigmore, The Science of Judicial Proof 541 (3d ed. 1937).

²²⁴ See Campbell, supra note 52. Scientific evaluation of attempts to remedy lineup ills is strongly urged in *Erroneous Eyewitness*, supra note 15. This is as well a recurrent theme in Zimbardo's analyses of police confession problems, supra note 196.

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We are now in a position to offer some illustrative research questions for the lineup context. Others could likewise be generated for films, photographs and other identification procedures. Indeed, many issues as to both human fallibility and suggestibility at various stages of the criminal identification process have emerged for consideration and planning. Therefore, the following ten sets of questions, while perhaps reflecting our priority and focus on lineups, are only intended to demonstrate that theory and research provide practical approaches for realizing the charge of Wade, as stated by Sobel, "to avoid the danger of 'wrong man' convictions as a result of the uncertainty and unreliability of eye-witness identification."

- (1) Does the legitimacy of a police officer conducting the lineup affect the accuracy of witness identification? Does the authority's approach (e.g., personal and solicitous or cool and official) have differential impact on a witness' behavior?
- (2) Does prior contact (i.e., familiarity) with the police officer conducting the lineup affect a witness' response?
- (3) What is the cuing effect on identification accuracy of the "lineup" police officer knowing or not knowing which participant is the suspect? More generally, what kinds of unintentional cues pass between "lineup" police officers and the witness, participants in the lineup and the witness, and observers or counsel and the witness?
- (4) Does either the witness' desire to cooperate, to be evaluated positively by the police, or to appear in the "best possible" light induce him or her to confirm the police "hypothesis" in identifying a suspect?
- (5) What is the effect of certain attitudinal or personality variables of the witness on making an erroneous identification?
- (6) What is the impact of prior communication among witnesses on lineup identification (e.g., improve accuracy, increase witnesses' need to pick a suspect, or provide a base of social support for no identification)?
- (7) What does the witness believe his or her role is? How does the witness' perception of role affect identification accuracy? Would, for example, explicit instructions that "no suspect may be in the lineup" reduce erroneous identifications by legitimizing negative responses?
- (8) Does private or public commitment reflected in identifying the suspect by prior verbal or written statement affect accuracy? Do written or verbal statements differentially affect later susceptibility to suggestive influences?

- (9) Does the presence of counsel at lineups reduce suggestibility? How does the presence of an impartial observer influence a witness' identifying behavior? How does it affect police officers' style or behavior?
- (10) Does differential stress (e.g., face-to-face in contrast to one-way mirror identification) affect accuracy of recall or susceptibility to suggestion? Does having the lineup participants "repeat the words of the crime" rather than "say innocuous words" differentially enhance accuracy or increase the magnitude of a witness' stress?

Given this type of research perspective and the questions enumerated here and before, the issue becomes how reform of the criminal justice system should proceed. Since the institution of law, like all social institutions, must place a high priority on meaningful reform. the determination of methodology is of crucial importance. The best way to evolve more effective standards and procedures is to introduce alterations in the legal system while retaining flexibility. To paraphrase the innovative and sagacious advice of Donald Campbell:²²⁶ in order to maximize options for change and rigorously assess changes, reform must proceed through experimentation. At a purely methodological level, experimentation enables the most direct test of causality. According to Richard Schwartz, the other methods, such as case studies and survey research, "are useful in preparing for and supplementing field experiments and in substituting for them where field experiments are impossible."227 Thus, while various results already proffered might contribute immeasurably to improving the reliability and fairness of criminal identification, a testing design built upon a field experimental model would in the long run offer the criminal justice system maximum output and utility.228

VIII. A LEGAL PERSPECTIVE

At this point the focus shifts from psychology to law. The psychodynamics of eyewitness identification raise difficult and complex legal questions. First, is an effort to improve identification procedures on balance worthwhile, or would the gains be outweighed by the loss of valuable evidence? Second, what remedies are likely to be most effective: changes in lineup procedure, participation of defense counsel,

²²⁶ Campbell, supra note 52; Campbell, Reforms as Experiments, 24 Am. Psychologist 409 (1969).

²²⁷ Schwartz, Field Experimentation in Sociolegal Research, 13 J. Legal Ed. 401, 402 (1961).

²²⁸ Lloyd E. Ohlin addressed himself to experimental reform regarding the *Miranda* decision. ALI Model Code of Pre-Arraignment Procedure: Part II 149, 163-66 (Study Draft No. 1, 1968).

or both? Third, what agencies may, or should, establish new regulations and safeguards: prosecuting authorities, legislatures, courts, or a combination of these? Finally-a question of particular interest for legal scholars—what are the particular limitations, if any, upon the courts? Our survey gives ample justification for regarding all eyewitness identifications with scepticism.²²⁹ Although many legal experts and scholars may find circumstantial evidence far more reliable than visual identification, the latter could become more useful if abusive practices were eliminated and vagaries controlled. And there is every justification in arguing for the elimination of suggestion when visual identification evidence is used.

Police offer counterarguments that suggestion might provide the last bit of evidence needed to convict a suspect they believe is guilty, and that convictions or guilty pleas would be more difficult to obtain without identifications because of popular faith in the reliability of identification. Such a standard cannot justify suggestion, and there is no reason to presume that convictions are impossible or prohibitively difficult to obtain without evewitness identification. If the circumstantial evidence is sufficiently strong, an identification will probably not be necessary. If the circumstantial evidence is weak, and police and prosecutors are relying basically on their belief of guilt, the conclusion of guilt is unjustified, even if the suspect is guilty. In short, research indicates that suggestive influence can produce erroneous responses, and that even without suggestion the processes of perception and memory are often fallible. Also there are factors which probably operate in favor of the police and which are not easily controlled. Therefore, it is difficult to justify refusal to make reforms.

In addition to the several types of possible improvements already mentioned, in the Wade trilogy the Supreme Court proposed another remedy: the presence of defense counsel at lineups. Although it did not specify what the lawyer's role was to be at the lineup, the Court reasoned that the presence of counsel would avert prejudice and assure meaningful cross-examination at trial.²³⁰ Several commentators²³¹ have argued that the merits of extending the right to counsel to lineups are dubious. If lawyers are permitted only to observe the lineup, as apparently is the case in most jurisdictions, 232 their possible contribution

²²⁹ See text accompanying notes 86-126 (Human Limitations on Identification) supra.

^{230 388} U.S. at 232.

²³¹ See, e.g., Read, supra note 29, at 362; Comment, Defendants' Rights During Extra-Judicial Identification Defined, 17 DePaul L. Rev. 583, 589 (1968); Comment, supra note 21, at 396; Comment, The Right to Counsel during Pretrial Identification Proceedings, 47 Neb. L. Rev. 740, 752-54 (1968).

²³² See, e.g., Read, supra note 29; Protection of the Accused, supra note 29.

is limited, and they may do harm by lending an appearance of legitimacy. Even if lawyers are permitted a more active role, they may not be sufficiently sensitive to important psychological variables. In other words, as Read pointed out, lawyers' presence, whether active or passive, may have little or no effect on the dangers which the Court found inherent in pretrial confrontations and upon which its holding was in large part based.²³³ The Court's recommendation of executive or legislative action suggests some awareness of these problems. The Justices' preference for relying solely on the established and explicit constitutional right to counsel and not also imposing lineup regulations, for which constitutional authority is very vaguely defined, is understandable, but perhaps overly diffident.²³⁴

It is not that the right to counsel should be abandoned. Indeed, the lineup as presently conducted is a "critical stage." A lawyer through observation, investigation and questioning could ferret out many of the circumstances surrounding the identification (e.g., prior witness communication), protect suspect rights (e.g., alleviate anxiety that might result in suspect's cuing), or even balance the demand characteristics placed on the witness (e.g., explain human limitations on perception).235 And Rosenthal's work on expectancy does show that the mere presence of an observer reduced even unintentional biasing effects.²³⁶ Further, as one commentator suggested, "The presence of lawyers at lineups will focus professional attention on the prickly issues raised by attempts to evaluate the reliability of investigatory technique."237 Pressure from the bar might even lead to reforms that could make counsel at lineups unnecessary. It would, however, be most unfortunate if the presence of counsel produced a false sense of security which inhibited additional procedural reform.

The power of all relevant agencies except the courts to set up regulations is well established. The more difficult question is, which agencies are likely to develop the best regulations? Improvements to date underscore the problem of leaving the task exclusively in the hands of law enforcement officials. Not only may police departments do the job poorly, they may prefer, as apparently has often been the case,²³⁸ not to do it at all. Unfortunately, the guidelines drawn up by

²³³ Read, supra note 29, at 365.

²³⁴ Comment, supra note 21.

²³⁵ See, e.g., text accompanying note 194 supra. Defense counsel could be useful in a variety of areas, particularly detailed at text accompanying notes 127-54 (Social Psychology of Identification), 155-203 (Lineups As a Social Psychological Context), 204-28 (A Psychological Research Reform Perspective) supra.

²³⁶ Rosenthal, supra note 183.

²³⁷ Comment, supra note 21, at 400.

²³⁸ See Read, supra note 29, at 367-68 n.85.

legal experts generally have been only slightly better. These facts suggest that ignorance may be a powerful factor in limiting the scope and quality of such regulations. Further, there is evidence that lawyers may share police attitudes to a greater degree than commonly supposed.²³⁹ However, one of the best sets of regulations resulted from collaboration between the district attorney and the public defender in Clark County, Nevada, which signals another area wherein the adversary principle might fruitfully be applied. Although defense attorneys may be as unaware of psychological variables as prosecutors, and, indeed, the Clark County rules did not have as much psychological sophistication as needed, the Nevada effort does set a precedent, which hopefully can be improved upon as further reforms are tested.

Theoretically, there is much to be said in favor of the legislature promulgating lineup regulations by statute. Laws have a legitimacy and authority which rules established by executive agencies for their own governance lack. This is true in part because the fresh and vigorous judgment of a legislature represents "the best and most authentic judgment of the state as a political body." Much of this authenticity derives from the legislature's position as the governmental agency designed to be most responsive to and representative of the citizens of the body politic. However, no meaningful legislative response in the lineup arena has been forthcoming. 241

The agency whose proper role in this area remains to be discussed is, of course, the judiciary. The Supreme Court and lower federal courts could interpret the United States Constitution to establish minimum standards for the conduct of lineups as, of course, was done in *Wade* and *Gilbert*. The appellate courts of the states can use the same approach and rely on their state constitutions as well.

So far, however, the courts' performance has been very disappointing. Typically, courts have invalidated only the most flagrantly unfair procedures, leaving untouched convictions in many cases where improper suggestion was clearly present. For example, courts have generally held that an express police instruction to a witness which focuses attention unnecessarily on the suspect is a violation of due process.²⁴² The Supreme Court did reverse a conviction in *Foster v. California*,²⁴³ where there was one three-man lineup in which the suspect differed

²³⁹ See, e.g., Tigar, supra note 37.

 $^{^{240}\,\}mathrm{C}.$ Black, Structure and Relationship in Constitutional Law 87-88 (1969).

²⁴¹ See Read, supra note 29, at 379-80. See also text accompanying notes 17, 28 supra.

²⁴² See Pretrial Identification, supra note 5, at 812.

^{243 394} U.S. 440 (1969).

significantly in height from the other participants, a one-to-one confrontation between the witness and the suspect in a policeman's office at the witness' request, and a second lineup about ten days later, with the suspect the only participant from the original lineup. "In effect," the Court stated "the police repeatedly said to the witness, 'This is the man.' "244 A Pennsylvania Superior Court condemned a similar series of multiple confrontations. Both of these decisions displayed an appreciation on the part of the judiciary of the potential effects of suggestion.

But, as we indicated earlier, courts generally have displayed a marked unwillingness to condemn any procedure where the suggestion was any less blatant than the above. Even if we omit extreme examples, typical decisions have upheld convictions where witnesses identified suspects after being shown photographs of them; there suspects differed markedly from other participants in general physical appearance, complexion or hair coloring; and where suspects were clothed differently from other participants, sometimes at the direction of police.

Lower courts often justify their rulings in ways which quickly become familiar. As has been pointed out,²⁵³ judges have seized upon the *Stovall* "totality of the circumstances" rule to broaden the scope of their inquiry into the circumstances of the confrontation. For example, the fact that witnesses spent a considerable amount of time in the suspect's presence²⁵⁴ and, therefore, had ample opportunity to observe him is often used to counterbalance the effect of highly questionable procedures. As one commentator observed, "'Totality of the circumstances,' when applied to lineups, appears to encompass both a consideration of external factors . . . and a weighing process with respect to

²⁴⁴ Id. at 443.

²⁴⁵ Commonwealth v. Lee, 215 Pa. Super. 240, 257 A.2d 326 (1969).

²⁴⁶ See, e.g., Bradley v. Commonwealth, 439 S.W.2d 61 (Ky. 1969), cert. denied, 397 U.S. 974 (1970), where police said, "All you have to do is point him out. We know we got him"; State v. Parker, 282 Minn. 343, 164 N.W.2d 633 (1969), where the suspect alleged he had been assaulted by 3 Indians and the 3 suspects were the only 3 Indians in a 6-man lineup.

²⁴⁷ See, e.g., United States v. Culotta, 413 F.2d 1343 (2d Cir. 1969), cert. denied, 396 U.S. 1019 (1970); People v. Romero, 272 Cal. App. 2d 39, 77 Cal. Rptr. 175 (1969).

²⁴⁸ Parker v. United States, 400 F.2d 248 (9th Cir. 1968), cert. denied, 393 U.S. 1097 (1969).

²⁴⁹ State v. Burch, 284 Minn. 300, 170 N.W.2d 543 (1969).

²⁵⁰ Massen v. State, 41 Wis. 2d 245, 163 N.W.2d 616, cert. denied, 393 U.S. 1097 (1969).

²⁵¹ See, e.g., People v. Chambers, 112 Ill. App. 2d 347, 251 N.E.2d 362 (1969).

²⁵² People v. Stanton, 274 Cal. App. 2d 13, 78 Cal. Rptr. 771 (1969).

²⁵³ See text accompanying notes 24-26 supra.

²⁵⁴ Pretrial Identification, supra note 5, at 815.

the characteristics of the lineup itself, i.e., the unfair characteristics of the confrontation are measured against the fair characteristics."255 No matter how suggestive some features of a particular confrontation are, many courts will uphold a conviction if they find more good features than bad.256

Even when judges do manage to separate the issue of fairness from that of guilt in evaluating the "totality of the circumstances," this balancing process has dangerous pitfalls in its approach to disciplining police, being fair to suspects, and determining guilt. Affirming convictions in cases where unfair police practices were used simply assures the police that they are free to continue those practices. Even if the court criticizes the practices, it is not likely to affect police behavior unless cases are frequently remanded for new trials. The dangers inherent in creating precedents favorable to the continuation of suggestive procedures are intensified because the great majority of criminal cases is disposed of by plea bargaining, not trial. Therefore. few suspects who are the victims of unjust police practices ever get a chance for judicial review of their cases.

Furthermore, "totality of the circumstances" is profoundly wrong in even more serious ways. The issue of justice is separate from that of guilt, not only analytically, but in fact. A criminal procedure in which an innocent defendant is acquitted, or a guilty one convicted, is not necessarily just, simply because the empirically correct result has

of the event established a sumcient basis for an independent source for the identificate. The court accepted the trial judge's conclusion that:

An experience of that kind would be very apt to indelibly implant upon her mind and memory, the vision of the man with whom she had just been in conversation. And it is easy to understand why she would be able to identify that man in Justice Court within a few weeks, and even in this court in a few

n untermination that the witness can make an in-court identification on the basis of his original mental picture, unaffected by manipulative practices at the lineup, is probably ill-founded. The processes of perception and identification do not operate in such a manner. For legal analysis to comport with psychological theory, the inquiry must be into how much the in-court identification was affected by the lineup.

²⁵⁵ Id. 795.

²⁵⁶ One striking example of this occurred in State v. Redmond, 75 Wash. 2d 62, 448 P.2d 938 (1968). In this case the victim of a holdup robbery identified the suspect obbery lasted only a few minutes, but the Washington Supreme Court found that the victim's position—about 6 feet away from the suspect—and the emotional significance of the event established a sufficient basis for an independent source for the identification.

months.

Id. at 66, 448 P.2d at 940. This case is valuable for the insight it provides into at least one judicial conception of the psychology of memory. Despite psychological testimony at the trial level that an independent and untainted identification by this witness would not be possible, the supreme court concluded the witness made an in-court identification entirely independent of and untainted by the illegal lineup. For an excellent presentation and analysis of the Redmond case, see Note, 45 Wash. L. Rev. 202 (1970). As this commentator rightly concludes on the basis of psychological research,

A determination that the witness can make an in-court identification on the basis of bis original mental picture, unaffected by manipulative practices at the

been reached. Our procedural safeguards derive not only from a commitment to acquitting innocent defendants, but from two additional equally important values: the belief that there are certain things which just should not be done to people, and the need to preserve the morality of the official actions of the government.²⁵⁷ Therefore, the "totality of the circumstances" rule, as applied to lineups at least, must be replaced with an approach which searches for any improper suggestion. whether intentional or unintentional, and rigorously roots out such convictions.

Since no specific provision of the Constitution regulates the conduct of pretrial confrontations, 258 judges are thrown back on the due process clauses of the fifth and fourteenth amendments. The use of the due process clause to protect rights not specifically listed is well enough established²⁵⁹ that the courts need not flinch from it. Because the lineup is a critical stage that contributes to many false convictions, based partly on human fallibility and partly on intentional or unintentional suggestive practices, judges have plentiful justification under the due process clause for regulating lineups as well as other pretrial confrontations. Indeed, this is exactly what courts, including the Supreme Court, have been doing since Wade. The only error was the Court's readiness to adopt a "totality of the circumstances" test, and the lower courts' eagerness to broaden a rule of construction found wanting so many times in the past.260

²⁵⁷ See, e.g., L. Fuller, The Morality of Law (1964); H. Hart, Punishment and Responsibility (1968); Andenaes, The Moral or Educative Influence of Criminal Law, 27 J. Soc. Issues No. 2, at 17 (1971).

²⁵⁸ Several specific constitutional rights may be violated by the manner of carrying out the pretrial identification procedure, although they do not regulate the procedure itself, e.g., right to counsel (see the Wade, Gilbert, Stovall and Kirby cases themselves), and right not to be arrested without probable cause, see Adams v. United States, 399 F.2d 574 (D.C. Cir. 1968), cert. denied, 393 U.S. 1067 (1969).

²⁵⁹ As Justice Frankfurter stated for the Court in Rochin v. California, 342 U.S. 165,

^{169 (1952) (}citations omitted):
Regard for the requirements of the Due Process Clause 'inescapably imposes upon this Court an exercise of judgment upon the whole course of the proceedings [resulting in a conviction] in order to ascertain whether they offend those canons of decency and fairness which express the notions of justice of English-speaking peoples even toward those charged with the most heinous offenses.' These standards of justice are not authoritatively formulated anywhere as though they were specifics. Due process of law is a summarized constitutional guarantee of respect for those personal immunities which, as Mr. Justice Cardozo twice wrote for the Court, are 'so rooted in the traditions and conscience of our people as to be ranked as fundamental,' or are 'implicit in the concept of ordered liberty.'

Rockin concerned the forcible pumping of the defendant's stomach. See also, e.g., Culombe v. Connecticut, 367 U.S. 568 (1961); Reck v. Pate, 367 U.S. 433 (1961); Spano v. New York, 360 U.S. 315 (1959) (coerced confession cases).

²⁶⁰ For an excellent critique and analysis of the "totality of the circumstances" test and its application in lower courts, see *Pretrial Identification*, supra note 5, at 814-24 For a recent example, see United States v. Bothwell, 465 F.2d 217 (9th Cir. 1972).

IX. Conclusion

This review of the psychological dimensions of eyewitness identification has shown that the dangers from fallible sense perception and memory and from suggestive influence are overwhelming. Perception and memory are constructive rather than reproductive processes. They depend to a great extent upon what is already in the mind of the individual. The mind is not a mirror which reflects the external world. but an organism with its own needs, values and capacities—its own vision of "reality" through which the outside world is interpreted. This view of the human mind provides at least a partial explanation for the wealth of evidence on the fallibility of perception and memory. We know, further, that in some cases very little can be done to improve this process. But we must undertake to assess when this prepotent cause of erroneous identification cannot be eliminated, so that the legal system may be adequately informed. We have also discovered some of the social psychological dynamics of the criminal identification process and the complexity of their effects. Finally, we have looked at the multitude of possible suggestive and biasing influences at lineups, searching for and pointing out ways of potential control.

Clearly the problematic nature of pretrial confrontations raises issues that necessitate reform, as was the case in 1967 at the time of Wade. Judicial rulings aimed at regulating lineups and extirpating improper suggestion from pretrial confrontations are one effective means of bringing improvement. Legislatures and prosecuting authorities, of course, are freer than courts to serve as "sociological laboratories," in Justice Brandeis' phrase. These groups might work effectively with social scientists to develop and refine intervention procedures. As Marshall, Marquis and Oskamp astutely concluded with regard to testimony: "We urge that there be an ongoing collaboration between lawyers and social scientists to carry out the empirical investigation necessary to test . . . legal assumptions and practices."261

Thus, two recurrent themes pervade this article: a call for systematic research, and an equally immediate call for openness from legal functionaries in the criminal justice system. The first theme may seem the more difficult to implement. We have included suggestions for beginning that process. The second, while superficially obvious, is potentially the more complex. This theme requires the legal perspective, even of those engaged in strict advocacy, to be sensitized to a scientific, problem-solving approach at each point in the criminal justice process.

²⁶¹ Marshall, Marquis & Oskamp, supra note 82, at 1639-40.

An expanded perspective would include instructing victim, witness, judge, jury and public of the possible natural and social limitations on accurate identification.²⁶² Imagine, for example, the effect on witnesses of a required instruction informing them that under certain circumstances accurate identification is almost impossible. How might it affect identifying behavior and its accuracy to know that no identification is a legitimate option? Similarly, perhaps the jury might be instructed that in-court identification demonstrates more the witnesses' ability to remember whom they identified at the lineup than whom they saw at the scene of the crime, or the witnesses' need to reinforce their belief in their prior statements, even inaccurate ones. Further, if the latter be true, one might consider modulating the theatrics of in-court identification. The specific procedural guidelines necessary to achieve awareness of the real or potential dynamics affecting valid identification must be developed by lawyers, perhaps in concert with social scientists knowledgeable in theory and research. But one thing is clear: even open communication regarding the known, the unknown and the ambiguous would foster in the meantime an accuracy and credibility that could only advance the basic aims of criminal justice.

²⁶² The commentator in Erroneous Eyewitness, supra note 15, at 100-04, emphasizes the importance of adapting jury instructions to be responsive to lineup problems. She cites J. Frank & B. Frank, supra note 12, at 200, who strongly support public awareness of the fallibility in eyewitness identification and the possibilities of error due to prejudice, bias and suggestibility. Hammelman & Williams, supra note 157, at 555, conclude that "in doubtful cases... a warning of the dangers of identification evidence from the bench should become established practice."