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SCIENTIFIC INVESTIGATION AND DEFENDANTS' RIGHTS*

B. J. George, Jr.†

ADVANCES in science, medicine and industry have made much of the world a more pleasant place in which to live. In general more men are living a physically more satisfying life in more comfortable surroundings than preceding generations. But with this has come a parallel increase in criminality to the point that the term "crime wave" is heard with increasing frequency. Many crimes are facilitated in their commission by adaption or application of new scientific discoveries by criminal elements. A natural consequence is that already overburdened police departments turn as quickly as is financially possible to new scientific techniques in an effort to stem the flood. That more suspects are apprehended as a result cannot be gainsaid.

Experience indicates, however, that almost anyone in a community may be suspected by the police. A great many innocent persons have their privacy invaded or their liberty curtailed in the course of police investigation. Constitutional and legal rights of persons who have committed crimes are often ignored by the police. These practices have always existed, but the problems have become more acute through the increased number of techniques available to the police.

There are of course extra-legal community controls on certain kinds of police practices.¹ Survey techniques may determine the extent to which communal pressures are effective controls, but from a lawyer's point of view it is difficult to reduce them to a system. The balance between scientific investigating techniques and

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¹ For example, community disapproval of all or some forms of violent or abusive treatment of arrested or detained persons may today deter their use in a great many communities. Bad publicity may affect adversely the level of appropriations for police use. A legislative investigation into police activities, even though no curative legislation results, often has at least a temporary deterrent effect.

defendants' rights must be struck in the law courts by rules of law, and it is with these legal controls that this paper deals.

Direct legal controls on police activities are relatively few in number. The law of arrest determines when the citizen may be taken into custody and the maximum permissible time of his detention.² No physical abuse is permitted. Officers who transgress these requirements are subject to civil suit for damages and often to criminal prosecution. But so long as they stay within these bounds there is little in the way of direct control over police surveillance and scientific investigation. The main controls have come into being through indirection. The motivation for much of police investigation is procurement of evidence which will be adduced in court to secure a judgment of guilt against the criminal. Although the statement is often made that anything is available as evidence unless there is some specific reason why it should not be admitted,³ the reasons for non-admission are numerous enough that one may say that each new kind of evidence must make its own way toward an established position. The obstacles to admissibility are found in the law of evidence, in substantive statute law and in the constitutions.

Controls Arising From the Law of Evidence

Information derived through scientific police investigation must for the most part be offered as expert testimony which tends to establish circumstantially one of the elements necessary to be proved to sustain the allegations of the indictment or information.⁴ Before expert testimony may be admitted, it is necessary that the method used and testified to must be considered scientifically sound by the court, that the person called to testify be qualified to use the device or method, that the particular test or investigation be properly carried out, that possibility of error or substitution be substantially ruled out and that there be no policy of the law of evidence which prevents the qualified expert from testifying.

² A survey of state arrest law is to be found in the Commentary to the American Law Institute Code of Criminal Procedure, Official Draft, §§1-38 (1930). See also Waite, "Public Policy and the Arrest of Felons," 31 MICH. L. REV. 749 (1933); and Symposium, "Are the Courts Handcuffing the Police?" 52 N.W. UNIV. L. REV. 1 (1957).

³ 1 WIGMORE, EVIDENCE, 3d ed., §10 (1940).

⁴ The defense may of course wish to offer such evidence if favorable to its position. Most of the cases, however, have arisen from prosecution efforts to submit opinion evidence based on scientific investigation over defense objection.

Before test results from a new device can be discussed by an expert witness, it is necessary that the device or test be accepted by the courts as scientifically sound enough to merit general approval of its reliability. Underlying this is the fear that a jury will accept a scientific device as absolutely reliable, without consideration of any possible percentage of error in its operation which may have impact on the fact issues which they are to decide. The most striking example of a device which fails to meet the standard of scientific reliability is the lie detector. Almost without exception American courts have denied admissibility for any purpose to testimony about the results of polygraph examination.⁵ The operator is not permitted to testify to the conclusions he reached during his examination of the subject, nor is counsel permitted to make use of the results indirectly by referring to it in direct or impeaching examination of a witness.⁶ But the protection accorded the defendant here is limited to use of evidence in court.⁷ The police are not prohibited from using the lie detector as an investigating tool, and if the threat of a lie detector examination or confrontation of a suspect with the unfavorable results of such an examination induces him to confess,⁸ and no elements of force, threat or promise make the confession otherwise coerced and inadmissible,⁹ it is fully admissible in evidence.

It is also necessary that a witness called to testify about a scientific test or device be qualified as an expert witness with reference to the things he testifies about. This is particularly im-

⁵ The leading case is *State v. Bohner*, 210 Wis. 651, 246 N.W. 314 (1933). Other recent cases include *State v. Pusch*, 77 N.D. 860 at 884, 46 N.W. (2d) 508 (1950); *State v. Lowrey*, 163 Kan. 622, 185 P. (2d) 147 (1947); *Henderson v. State*, 94 Okla. Cr. 45, 230 P. (2d) 495 (1951). The only reported opinion in favor of unrestricted admissibility is *People v. Kenny*, 167 Misc. 51, 3 N.Y.S. (2d) 348 (1938), but this is probably overruled by *People v. Forte*, 279 N.Y. 204, 18 N.E. (2d) 31 (1938). One court refused to reverse a criminal conviction when the defendant stipulated admission of lie detector results in evidence. *People v. Houser*, 85 Cal. App. (2d) 686, 193 P. (2d) 937 (1948). To the contrary in a civil case, see *Stone v. Earp*, 331 Mich. 606, 50 N.W. (2d) 172 (1951), and in a criminal case, *Le Fevre v. State*, 242 Wis. 416, 8 N.W. (2d) 288 (1943).

⁶ A recent example of such indirect use is *People v. Aragon*, (Cal. App. 1957) 316 P. (2d) 370.

⁷ Obviously this doctrine is not for the defendant's benefit, for it rules out lie detector results favorable to and offered by the defendant. Since the test itself is defective from a legal point of view, it does not exist as something recognized by the law of evidence.

⁸ *Commonwealth v. Jones*, 341 Pa. 541, 19 A. (2d) 339 (1941); *State v. De Hart*, 242 Wis. 562, 8 N.W. (2d) 360 (1943).

⁹ *People v. Sims*, 395 Ill. 69, 69 N.E. (2d) 336 (1946), and *Bruner v. People*, 113 Colo. 194, 156 P. (2d) 111 (1945), are explainable on this ground.

portant in the first test case of a new scientific device. Failure to prove adequately the nature of the Harger drunkometer and to rebut defense testimony about possibilities of error inherent in the device produced a ruling in Michigan,¹⁰ contrary to the rule accepted elsewhere,¹¹ that it was as scientifically unsound as the lie detector. It is interesting to note that the greatest care is being exercised in producing expert scientific testimony about the radar speedmeter in the important test cases now being decided.¹² Careful preparation is causing the device to be upheld by the courts. After a device is accepted as sound, the prosecution case may still be jeopardized if a poorly qualified person conducts the tests. In such a case a verdict based on the evidence may be reversed,¹³ and there is little question but that the weight of the testimony is affected adversely by inexperience on the part of the witness.¹⁴

If the test or device is sufficiently sound and the expert witness properly qualified, the next consideration is whether or not the test was properly administered in the particular case and the possibility of substitution or influence by extraneous elements kept to a minimum. If, for example, the skin area from which a blood sample was obtained was first swabbed with alcohol,¹⁵ or the speed-measuring device used to test the speed of a vehicle driven by a defendant was not carefully calibrated prior to the time the reading was taken,¹⁶ vigorous cross-examination may weaken or make inadmissible such evidence. Where comparisons are made of fingerprints, bullets, weapons, tools, tire marks and other forensic evidence, the state must account for the custody of both the specimens taken at the scene of the crime and the comparison specimen

¹⁰ *People v. Morse*, 325 Mich. 270, 38 N.W. (2d) 322 (1949).

¹¹ *Lombness v. State*, 95 Okla. Cr. 214, 243 P. (2d) 389 (1952); *State v. Olivas*, 77 Ariz. 118, 267 P. (2d) 893 (1954); *McKay v. State*, 155 Tex. Cr. 416, 235 S.W. (2d) 173 (1951); *People v. Bobczyk*, 343 Ill. App. 504, 99 N.E. (2d) 567 (1951); *Commonwealth v. Hartman*, 383 Pa. 461, 119 A. (2d) 211 (1956).

¹² *State v. Dantonio*, 18 N.J. 570, 115 A. (2d) 35 (1955); *State v. Moffitt*, 48 Del. 210, 100 A. (2d) 778 (1953). Lack of such expert testimony was fatal in *People v. Torpey*, 204 Misc. 1023, 128 N.Y.S. (2d) 864 (1953).

¹³ *Hill v. State*, 158 Tex. Cr. 313, 256 S.W. (2d) 93 (1953); *Riddle v. State*, (Okla. Cr. 1955) 288 P. (2d) 761.

¹⁴ *Omohundro v. Arlington County*, 194 Va. 773, 75 S.E. (2d) 496 (1953).

¹⁵ Cf. *People v. Modell*, 143 Cal. App. (2d) 724, 300 P. (2d) 204 (1956), and *Pribyl v. State*, (Neb. 1957) 87 N.W. (2d) 201. For similar procedural errors in using the drunkometer, see *State v. Hunter*, 4 N.J. Super. 531, 68 A. (2d) 274 (1949), and *Hill v. State*, 158 Tex. Cr. 313, 256 S.W. (2d) 93 (1953).

¹⁶ Cf. *State v. Dantonio*, 18 N.J. 570, 115 A. (2d) 35 (1955), and *People v. Sarver*, 205 Misc. 523, 129 N.Y.S. (2d) 9 (1954).

from the time of procurement to the time of trial, in order to ensure against mistake or substitution.¹⁷ If the chain of custody is broken the evidence will be ruled inadmissible. Although comparatively few cases apply these rules, knowledge that a careful defense attorney may secure rejection of scientific evidence in this way keeps police alert and careful in their procurement and retention of material for scientific comparison and testing.

Sometimes otherwise competent evidence must be rejected because of some overriding policy of evidence law. Most often this policy is embodied in the form of a privilege which protects a right of privacy. The only privilege likely to be encountered in the area of scientific investigation is the statutory physician-patient privilege, which permits a patient to stop the mouth of a physician retained to treat or prescribe for him concerning what was determined or said in the course of examination.¹⁸ Tests for intoxication are sometimes required to be administered by a licensed physician,¹⁹ and even in the absence of such a requirement they very commonly are so administered. On occasion, defendants have objected to testimony by the testing physician on the ground of privilege. In order to establish a claim of privilege it is necessary to show that the physician was retained for the purpose of diagnosing and treating the claimant. If examination is at the instance of the prosecution, such a relationship does not exist.²⁰ Furthermore, the relationship must be confidential. If persons are pres-

¹⁷ *State v. Willis*, 37 Wash. (2d) 274, 223 P. (2d) 453 (1950); *People v. Sansalone*, 208 Misc. 491, 146 N.Y.S. (2d) 359 (1955); *People v. Reenstierna*, (N.H. 1958) 140 A. (2d) 572.

¹⁸ The most complete discussion of this privilege is found in 8 WIGMORE, EVIDENCE, 3d ed., §§2380-2391 (1940). On rare occasions the common law attorney-client privilege may apply. See 8 WIGMORE §§2290-2329. Results and reports of scientific experiments carried out at an attorney's request during preparation of the case are privileged, though the privilege does not extend to testimony by the experts who made the experiments; some other privilege must be found if they are to be kept from testifying. If officers impersonate an attorney in order to gain some advantage over a defendant, the lawyer-client privilege may be invoked to silence them. Cf. *People v. Barker*, 60 Mich. 277, 27 N.W. 539 (1886). Eavesdropping, however, is usually held to destroy the confidentiality required by the privilege, so that, for example, wiretapping or the use of a detectaphone does not violate the privilege, though they possibly violate other rules discussed later. Cf. Cal. Penal Code (Deering, Supp. 1957) §653i, which makes it a felony to eavesdrop on confidential communications.

¹⁹ Idaho Code (1957) §49-354; Kan. Gen. Stat. (Supp. 1957) §8-1003; N.Y. Vehicle and Traffic Law (McKinney, Supp. 1958) §71-a; Ore. Rev. Stat. (1957) §483.630; Utah Code Ann. (Supp. 1957) §41-6-44.10; Va. Code (Supp. 1958) §18.75.1.

²⁰ *Richter v. Hoglund*, (7th Cir. 1943) 132 F. (2d) 748; *Hanlon v. Woodhouse*, 113 Colo. 504, 160 P. (2d) 998 (1945); *Block v. People*, 125 Colo. 36, 240 P. (2d) 512 (1952).

ent other than to assist the doctor, the testimony is not privileged.²¹ Further, the particular statement made or test carried through must be necessary to enable the doctor to diagnose and treat. Tests for intoxication are often, though logically not inevitably, considered unnecessary for treatment, and are therefore held to be unprivileged.²² Relatively few cases result in actual application of the privilege. Desire for certainty, however, probably causes metropolitan police departments to use a small core of trained doctors to administer such tests, which in turn tends to guarantee to a defendant that the tests at least will be safely administered by experts even though he cannot claim privilege to prevent them from testifying.

Controls Created by Legislation

On occasion statutes may create additional obstacles to the use of scientific evidence, either in court or absolutely. Sometimes legislation extends the general coverage of a principle of evidence law, with the incidental result of restricting the use of certain kinds of scientific evidence. Thus, for example, the creation by statute of the physician-patient privilege, by analogy to the common law attorney-client privilege, was not done with any thought of affecting the use of scientific evidence procured by a doctor.²³ But since the statutory language covers such a situation, it has been necessary for the courts to resolve the question of how far it in fact applies to such tests.

Other statutes deal specifically with the conditions under which certain scientific tests must be carried out. For example, several states require that blood tests for intoxication be carried out only by a physician.²⁴ Presumably results of a blood test carried out by a non-physician are inadmissible. Or inquiries into the sanity or mental condition of an individual may have to be carried out by

²¹ 8 WIGMORE, EVIDENCE, 3d ed., §2381 (1940). Thus if police officers are present, the privilege probably does not attach. *Iwerks v. People*, 108 Colo. 556, 120 P. (2d) 961 (1942).

²² *Perry v. Hannagan*, 257 Mich. 120, 241 N.W. 232 (1932); *State v. Townsend*, 146 Kan. 982, 73 P. (2d) 1124 (1937). Statutory language may dictate a contrary conclusion however. *Okla. Stat. Ann.* (1937) tit. 12, §385; *Clapp v. State*, 73 Okla. Cr. 261, 120 P. (2d) 381 (1941).

²³ Rather, the purpose was to encourage full disclosure by the patient of everything necessary to enable the doctor to treat the case. 8 WIGMORE, EVIDENCE, 3d ed., §§2380, 2380-a (1940).

²⁴ See the statutes in note 19 supra.

certain specified officials or by persons possessing certain professional qualifications.²⁵

The maximum control is of course by legislation which prohibits the use of a particular scientific device otherwise acceptable under the law of evidence.²⁶ The most striking example is the legislative treatment of wiretapping. Prior to 1934 there was nothing inherently wrong in the use of wiretaps so long as they were not placed physically on premises owned or in the possession of the defendant.²⁷ But in 1934 Congress enacted section 605 of the Federal Communications Act²⁸ which provides in part:

“ . . . [A]nd no person not being authorized by the sender shall intercept any communication and divulge or publish the existence, contents, substance, purport, effect, or meaning of such intercepted communication to any person. . . .”

Although there was no clear indication that wiretapping by police was considered by Congress at the time the statute was enacted²⁹ and although exceptions have been created by judicial interpretation of other regulatory statutes, absolute on their face, in favor of police and other governmental officials in the performance of their official duties,³⁰ the United States Supreme Court held that taps placed by government agents were without authorization by the sender and that testimony by the officers about what they overheard would constitute divulgence within the meaning of the statute. Consequently, in order not to connive at the com-

²⁵ E.g., 18 U.S.C. (1952) §4241: “A board of examiners for each Federal penal and correctional institution shall consist of (1) a medical officer appointed by the warden or superintendent of the institution; (2) a medical officer appointed by the Attorney General; and (3) a competent expert in mental diseases appointed by the Surgeon General of the United States Public Health Service.” 18 U.S.C. (1952) §4244: “. . . [T]he court shall cause the accused, whether or not previously admitted to bail, to be examined as to his mental condition by at least one qualified psychiatrist, who shall report to the court. . . .”

²⁶ Legislation is also possible which permits the use of otherwise inadmissible evidence, but it is difficult to find legislation which goes this far, as opposed to that which liberalizes the conditions under which basically acceptable evidence is to be received. Compare the amendment of the Michigan Constitution (1908), Art. II, §10, to permit introduction into evidence of narcotics, firearms and explosives earlier proscribed under the Michigan interpretation of the search and seizure provision.

²⁷ *Olmstead v. United States*, 277 U.S. 438 (1928). If a trespass was involved the Fourth Amendment search and seizure exclusionary rule, discussed below, was invoked.

²⁸ 48 Stat. 1103-1104 (1934), 47 U.S.C. (1952) §605.

²⁹ The Government so argued in *Nardone v. United States* (First *Nardone Case*), 302 U.S. 379 (1937). See also Rosenzweig, “The Law of Wiretapping,” 32 *CORN. L. Q.* 514 at 532-535 (1947).

³⁰ E.g., speed laws. *State v. Gorham*, 110 Wash. 330, 188 P. 457 (1920).

mission of a crime in the courtroom, evidence based on wiretapping was declared illegal and inadmissible.³¹ On the face of it this would not have prevented use of wiretapping as a surveillance device so long as a transcript of the overheard conversations was not offered in evidence. But soon afterward the Supreme Court held that all evidence derived from illegal wiretaps was equally inadmissible as "fruit of the poison tree,"³² which in effect makes wiretapping useless if a federal court case is to be built up around the information secured.³³

Prior to 1934 wiretap evidence was generally admissible in state courts. At least there was no indication on the part of state appellate courts that such testimony would be improper.³⁴ Since the enactment and interpretation of the federal statute, state reaction has varied. A number of states have done nothing.³⁵ A few states prohibit wiretapping and wiretap evidence in their courts.³⁶ At least two states specifically provide for the placing of wiretaps pursuant to ex parte court order.³⁷ The question naturally arose as to the admissibility of such evidence in state courts and the validity of state legislation which regulated or permitted wiretapping. The first question was answered by *Schwartz v. Texas*,³⁸ in which state officers had placed taps and had been permitted to testify in a state criminal prosecution about what they

³¹ *Nardone v. United States*, (First *Nardone Case*), 302 U.S. 379 (1937). Intrastate calls are also covered. *Weiss v. United States*, 308 U.S. 321 (1939). Monitoring of radio messages is also covered. *United States v. Sugden*, (9th Cir. 1955) 226 F. (2d) 281, affd. per curiam 351 U.S. 916 (1956).

³² *Nardone v. United States* (Second *Nardone Case*), 308 U.S. 338 (1939).

³³ A good example is *United States v. Coplon*, (S.D. N.Y. 1950) 88 F. Supp. 921; (2d Cir. 1950) 185 F. (2d) 629. Use of transcripts to induce a person to become a government witness is, however, unobjectionable. *Goldstein v. United States*, 316 U.S. 114 (1942).

³⁴ Rosenzweig, "The Law of Wiretapping," 33 CORN. L. Q. 73-80 (1947).

³⁵ E.g., Mich. Comp. Laws (1948) §§750.539, 750.540. For typical state cases, see *Leon v. State*, 180 Md. 279, 23 A. (2d) 706 (1942); *People v. Sica*, 112 Cal. App. (2d) 574, 247 P. (2d) 72 (1952); but cf. *People v. Kelley*, 22 Cal. (2d) 169, 137 P. (2d) 1 (1943); *State v. Steadman*, 216 S.C. 579, 59 S.E. (2d) 168 (1950).

³⁶ R. I. Gen. Laws (1956) §§11-35-12, 13; Ill. Stat. Ann. (Smith-Hurd, Supp. 1957) tit. 38, §§206.1 to 206.5. Tex. Code Crim. Proc. Ann. (Vernon, 1941) art. 727a, bars all illegally-obtained evidence.

³⁷ N.Y. Code Crim. Proc. (McKinney, 1958) §813-a; N.Y. CONST., Art I, §12. Ore. Rev. Stat. (1957) §§141.720 to 141.740. Evidence from any tap is admissible in criminal cases, *Harlem Check Cashing Corp. v. Bell*, 296 N.Y. 15, 68 N.E. (2d) 854 (1946); though not in civil cases, N.Y. Civ. Prac. Act §345-a. Oregon bars all such evidence. Ore. Rev. Stat. (1957) §41.910. Officers in both states who place taps without a court order commit a felony. N.Y. Code Crim. Proc. (McKinney, 1958) §813-b; Ore. Rev. Stat. (1957) §165.540.

³⁸ 344 U.S. 199 (1952).

overheard. Although the Supreme Court recognized that the officers had violated the federal statute, it held that the rule of exclusion in federal courts is based on the Court's control over the federal judicial process. Lacking such power constitutionally to control state court practice, the exclusionary rule could not be applied to prohibit the use of wiretap evidence in a state court.

This left untouched the question of the validity of state legislation regulating or prohibiting wiretapping. Disturbing questions about this point have been raised by the recent case of *Benanti v. United States*.³⁹ New York police officers had procured a court order⁴⁰ authorizing them to tap Benanti's telephone and had overheard incriminating conversations. No federal officers participated in the tapping in any way. The state officers were called to testify in a federal prosecution against Benanti based in part on the statements overheard. The Supreme Court reversed the conviction, citing the basic proposition of the *First Nardone Case* that divulgence in court constitutes a violation of section 605. The Government, however, argued that the taps were placed properly under New York law, and that there was room for state regulation of wiretapping which should be recognized by the Court. But the Court held that state authorization must be held ineffectual, in that Congress had occupied the field to the exclusion of state power. The implication is that any state regulation, whether legalizing or prohibiting wiretapping, is unconstitutional as invading an area preempted by Congress under one of the delegated powers.⁴¹ But *Schwartz v. Texas* remains undisturbed,⁴² which suggests the incongruous result that evidence obtained illegally in a state which does not exclude it on that ground alone is in a more favored position than evidence admitted or rejected pursuant to state statute. How, if at all, this will be resolved is uncertain, but in the meantime wiretapping must be considered a surveillance technique fraught with danger to the prosecution if criminal charges arising from or to be proved even in part or in-

³⁹ 355 U.S. 96 (1957).

⁴⁰ Under the statute cited in note 37 supra.

⁴¹ The Court cited *Pennsylvania v. Nelson*, 350 U.S. 497 (1956), which voided state subversive control legislation consistent with federal legislation, *Hill v. Florida ex rel. Watson*, 325 U.S. 538 (1945), which held a state law for licensing of business agents and registration of unions incompatible with the National Labor Relations Act, and *Hines v. Davidowitz*, 312 U.S. 52 (1941), which struck down a state alien registration law.

⁴² Footnote 19 of the opinion so indicates. *Benanti v. United States*, 355 U.S. 96 at 106 (1957).

directly by the overheard conversations are in any way contemplated.

Wiretapping does not include within it all types of electronic or mechanical eavesdropping by police. Only the electronic circuit is protected by the federal statute. It is therefore unobjectionable to use a detectaphone or other device which picks up sound waves mechanically,⁴³ so long as the device is not placed on premises of the defendant. Listening or recording from one end of the line, at least with authorization of one of the parties to the conversation, does not violate section 605.⁴⁴ And there is no objection to using a small portable transmitter for the purpose of transmitting conversation with a suspect to officers holding a receiver, so long as the defendant's property is not trespassed upon.⁴⁵ The same thing holds true for long-range observation by searchlight, binoculars or camera.⁴⁶

Control by Constitutional Provisions

The Constitution of the United States and the constitutions of most of the states contain a number of procedural guarantees to criminal defendants. The three which have the greatest potential effect on the use of scientific evidence are the search and seizure provision, the privilege against self-incrimination and the due process clause.

Unreasonable Search and Seizure. The constitutions generally protect persons against unreasonable searches and seizures.⁴⁷ Search warrants may issue only upon probable cause supported by oath describing particularly the person or thing to be seized and the premises to be searched. Any search and seizure carried through under an invalid search warrant or improperly under a valid search warrant are unconstitutional. The more actively litigated question, however, is what constitutes an unreasonable search. Arrests without warrant have been legally possible since before the adoption of the several constitutional provisions, and at least some search incident to a valid arrest is also legally

⁴³ *Goldman v. United States*, 316 U.S. 129 (1942).

⁴⁴ *Rathbun v. United States*, 355 U.S. 107 (1957).

⁴⁵ *On Lee v. United States*, 343 U.S. 747 (1952).

⁴⁶ *United States v. Lee*, 274 U.S. 559 (1927).

⁴⁷ U.S. CONST., Amend. IV, sets the pattern.

permissible.⁴⁸ If, however, a person is detained improperly, the seizure of his person, the ensuing search, and the seizure of articles to be used in evidence are all unreasonable and therefore unconstitutional.⁴⁹ If the arrest is valid, but the search extends beyond the person or immediate presence of the arrested person, the search and the seizure are unreasonable and unconstitutional.⁵⁰ One may say, therefore, that constitutional searches are limited to cases of legal arrest with or without warrant in which only the person of, things carried by, and room occupied at the time of arrest by the arrested person are searched.⁵¹

The constitutional provisions contain no remedy for violations. Prior to 1914 redress for unconstitutional conduct had to be sought in the form of civil actions against or prosecution of the offending officers. But in 1914 the United States Supreme Court decided that the traditional forms of relief were inadequate. Since unconstitutional police conduct is most often motivated by the desire to procure evidence upon which to secure a conviction of crime, the Court reasoned that if the motivation was removed the practices would diminish or cease entirely. Therefore, the Court ruled that evidence obtained through an unconstitutional search and seizure is thereby inadmissible as evidence in any federal court.⁵² Several of the states immediately followed the lead of the United States Supreme Court in the interpretation of their own state constitutional provisions,⁵³ and in recent years an additional number of states have made a similar change.⁵⁴ The exclusionary rule, however, is a rule of evidence adopted in the exercise of the power to control procedure and practice, so that it cannot be called a requirement of due process of law binding on the states under the Fourteenth Amendment.⁵⁵

⁴⁸ *United States v. Rabinowitz*, 339 U.S. 56 (1950).

⁴⁹ *Weeks v. United States*, 232 U.S. 383 (1914).

⁵⁰ *Agnello v. United States*, 269 U.S. 20 (1925).

⁵¹ *United States v. Rabinowitz*, 339 U.S. 56 (1950).

⁵² *Weeks v. United States*, 232 U.S. 383 (1914).

⁵³ The state of law in each state prior to 1949 is summarized in the Appendix to Justice Frankfurter's opinion in *Wolf v. Colorado*, 338 U.S. 25 (1949).

⁵⁴ The most striking change was in California, where *People v. Cahan*, 44 Cal. (2d) 434, 282 P. (2d) 905 (1955), reversed a long line of cases rejecting the exclusionary rule. The same thing occurred earlier in Delaware. *Rickards v. State*, 45 Del. 573, 77 A. (2d) 199 (1950). Three states have adopted the rule by statute. N.C. Gen. Stat. (1953) §15-27; Tex. Code Crim. Proc. (Vernon, 1941) Art. 727a; R.I. Gen. Laws (1956) §9-19-25. Maryland has adopted the rule for misdemeanor cases, with several qualifications discussed in *Salsburg v. Maryland*, 346 U.S. 545 (1954).

⁵⁵ *Wolf v. Colorado*, 338 U.S. 25 (1949).

In jurisdictions, therefore, having the exclusionary rule, any evidence, including scientific, obtained in violation of a defendant's right to be free from unreasonable searches and seizures is inadmissible. Thus, comparison of handwriting specimens and ballistics tests are clearly proper under the law of evidence. But if one of the comparison specimens is obtained while the defendant is improperly under arrest or by an illegal search of his house, it becomes inadmissible⁵⁶ and the expert's testimony becomes impossible for want of things in evidence to compare. Blood tests for intoxication are scientifically valid, but if a sample is taken without consent from a person under illegal detention, evidence about the illegally-obtained sample will be unavailable in court.⁵⁷ Use of a detectaphone does not violate the Federal Communications Act, but if it is placed on the defendant's premises by an act of trespass, the results obtained by its use are unavailable to the prosecution.⁵⁸ Thus all kinds of evidence, scientific and otherwise, are controlled by the exclusionary rule. Conversely, if a state does not have the exclusionary rule, police are not hampered by any restriction on admissibility of evidence not found in the law of evidence or by virtue of a special statute.⁵⁹

Privilege Against Self-Incrimination. The law of every state contains the equivalent to the language of the Fifth Amendment to the United States Constitution: "No person . . . shall be compelled in any criminal case to be a witness against himself. . . ." In most states the privilege, in line with its historical development, applies only to "testimonial utterances" compelled in some kind of formal proceeding.⁶⁰ Nevertheless, some jurisdictions have read into the privilege the concept that no person shall be the unwilling source of evidence against himself. Though the position is seldom consistently maintained, some courts have excluded evidence of physical examinations,⁶¹ blood specimens⁶² and the like. Others have interpreted the privilege to prohibit affirmative acts from

⁵⁶ *United States v. Jeffers*, 342 U.S. 48 (1951).

⁵⁷ *United States v. Willis*, (S.D. Cal. 1949) 85 F. Supp. 745; *State v. Weltha*, 228 Iowa 519, 292 N.W. 148 (1940) (semble).

⁵⁸ Cf. the discussion in *Olmstead v. United States*, 227 U.S. 438 (1928).

⁵⁹ *State v. Alexander*, 7 N.J. 585, 83 A. (2d) 441 (1951).

⁶⁰ The cases are gathered in 8 WIGMORE, EVIDENCE, 3d ed., §2265 (1940).

⁶¹ *State v. Height*, 117 Iowa 650, 91 N.W. 935 (1902); *State v. Newcomb*, 220 Mo. 54, 119 S.W. 405 (1909).

⁶² *Apodaca v. State*, 140 Tex. Cr. 593, 146 S.W. (2d) 381 (1940); *People v. Dennis*, 131 Misc. 62, 226 N.Y.S. 689 (1923).

being required of a suspect, but not to protect his person from being the passive source of evidence. Thus to be required to make tracks for comparison is in violation of the privilege, but to have one's shoes removed forcibly is not.⁶³ In most states, however, privilege poses no problem in the acquisition of material on which scientific tests are to be made.

Conceptually, however, a more serious problem is presented when a defendant is required to write handwriting specimens for comparison, or required to answer questions during an examination to determine mental condition at the time of a criminal act. In both instances a defendant is required to make utterances which may result in evidence against him. However, against application of the privilege it may be argued either that the defendant has in fact an option to refuse to write or speak, so that if he does so his privilege is waived, or that the statements he makes are not in fact to be used as evidence against him, but rather serve as raw data for determination of a fact not actually referred to in the substance of the statements stemming from defendant. Whatever the reason, courts have generally upheld the procurement of such evidence as not violative of the privilege.⁶⁴

Any constitutional guarantee for the protection of a defendant can be waived. One of the more interesting recent legislative developments is that of compulsory waiver of privilege in cases arising out of use of the highways. Use of the highways is a privilege afforded to and not a right of the citizen.⁶⁵ Several states have enacted that any person who holds an operator's permit is deemed to have consented to the taking of any blood, urine or breath specimen whenever there is reason to believe he is intoxicated.⁶⁶ Refusal in fact to consent is ground for revocation of the permit after hearing. The device has been held constitutional,⁶⁷

⁶³ *State v. Griffin*, 129 S.C. 200, 124 S.E. 81 (1924); *Aiken v. State*, 16 Ga. App. 848, 86 S.E. 1076 (1913).

⁶⁴ *Beltran v. Samson and Jose*, 53 Phil. Is. 570 (1929); *Clark v. United States*, (5th Cir. 1923) 293 F. 301; *State v. Barnard*, 176 Minn. 349, 223 N.W. 452 (1929).

⁶⁵ *People v. Rosenheimer*, 209 N.Y. 115, 102 N.E. 530 (1913); *Larr v. Dignan*, 317 Mich. 121, 26 N.W. (2d) 872 (1947); *Otis v. Parker*, 187 U.S. 606 (1903).

⁶⁶ Kan. Gen. Stat. (Supp. 1957) §8-1001; N.Y. Vehicle and Traffic Law (McKinney, Supp. 1958) §71-a; Utah Code Ann. (Supp. 1957) §41-6-44.10. Other states require actual consent. Ore. Rev. Stat. (1957) §483.630; Va. Code (Supp. 1958) §18.75.1.

⁶⁷ At least if the arrest is legally proper, and proper hearing is given before license revocation. *Anderson v. MacDuff*, 208 Misc. 271, 143 N.Y.S. (2d) 257 (1955); *People v. Kovacic*, 205 Misc. 275, 128 N.Y.S. (2d) 492 (1954).

and thus ensures that police authorities will have free access to the best kind of evidence of intoxication, provided they comply with the statutory requirements as to the method of procuring test samples.

Due Process of Law. Under federal and state constitutions "no person . . . shall be deprived of life, liberty, or property, without due process of law."⁶⁸ The impact of the clause on criminal procedure in general is great, and it serves as the chief medium of control of state procedure by the federal courts. It applies, however, to use of scientific investigatory devices in two primary areas.

One arises out of the doctrine which holds use of a coerced confession in a criminal case to be a denial of due process.⁶⁹ Police brutality and the use of psychic pressures to procure confessions can of course scarcely be called "scientific" techniques of investigation. But the use of hypnosis and narcosis is on occasion relied on to obtain a statement from one suspected of having committed a crime. Where confessions have been so obtained they have been to date struck down as coerced and held inadmissible under the due process clause.⁷⁰ If, however, a psychiatrist or psychologist examining a person to determine his mental condition uses either technique, he may testify to the conclusions he reached about the subject's condition.⁷¹ Thus the technique is scientifically sound enough to support a professional conclusion, at least for ancillary use, but is deemed untrustworthy when used to elicit a confession for police use, and serves to violate due process of law requirements as well.

The second covers extraction of evidence from the person by violent methods. In *Rochin v. California*⁷² the Supreme Court was confronted by a case in which state officers had pumped the stom-

⁶⁸ U.S. CONST., Amend. V (binding on federal authorities) and Amend. XIV (binding on states). The former sets the pattern for state constitutional equivalents.

⁶⁹ *Wan v. United States*, 266 U.S. 1 (1924); *Brown v. Mississippi*, 297 U.S. 278 (1936); *Ashcraft v. Tennessee*, 322 U.S. 143 (1944); *Brown v. Allen*, 344 U.S. 443 (1953).

⁷⁰ *Leyra v. Denno*, 347 U.S. 556 (1954); *Lindsey v. United States*, (9th Cir. 1956) 237 F. (2d) 893; *State v. Lindemuth*, 56 N.M. 257, 243 P. (2d) 325 (1952); *People v. Leyra*, 302 N.Y. 353, 98 N.E. (2d) 553 (1951); *State v. Pusch*, 77 N.D. 860, 46 N.W. (2d) 508 (1950).

⁷¹ *People v. Esposito*, 287 N.Y. 389, 39 N.E. (2d) 925 (1942), but cf. *People v. Ford*, 304 N.Y. 679, 107 N.E. (2d) 595 (1952). The former involved testimony on the ancillary question of whether or not defendants were sane enough to stand trial. The latter case rejected such testimony submitted on the question of insanity at the time of the criminal act charged. Cf. *People v. Speaks*, (Cal. App. 1958) 319 P. (2d) 709.

⁷² 342 U.S. 165 (1952).

ach of a person, suspected of possessing narcotics, who was seen to swallow something immediately before he was illegally arrested. California did not then have the exclusionary rule, so that evidence of the narcotic content of the stomach was used to convict him of a violation of state law. The Supreme Court did not see fit to reverse its earlier position that Fourteenth Amendment due process does not require the states to adopt the exclusionary rule in cases where unreasonable search and seizure had been carried through.⁷³ Rather, it held that evidence obtained through physical violence which shocks the conscience, which results from "methods too close to the rack and the screw to permit of constitutional differentiation,"⁷⁴ violates due process of law if admitted in a criminal case. How far the doctrine goes to prohibit non-consensual acquisition of evidence from the person of a suspect remains to be seen.⁷⁵ It was specifically held not to apply to the taking of blood, breath and urine specimens to determine intoxication.⁷⁶ Two intermediate courts of appeal have held it inapplicable to rectal examination which revealed narcotics in suppositories.⁷⁷ To how many kinds of unpleasant physical examination the *Rochin* rule will be held applicable, particularly after the *Breithaupt* case, is uncertain, but that it serves as a potential check to calloused or dangerous examination at the hands of police ought not be minimized.⁷⁸

⁷³ *Wolf v. Colorado*, 338 U.S. 25 (1949).

⁷⁴ 342 U.S. 165 at 172 (1952).

⁷⁵ It does not cover invasion of a defendant's home as opposed to his person. *Irvine v. California*, 347 U.S. 128 (1954), in which officers placed concealed microphones and recording equipment throughout the defendant's home.

⁷⁶ *Breithaupt v. Abram*, 352 U.S. 432 (1957). The four dissenting justices felt that this left no real room for the *Rochin* rule to operate. It is difficult to see how *United States v. Townsend*, (D.C. D.C. 1957) 151 F. Supp. 378, which excluded results of blood tests based on swabbings from a rape suspect's genitals, can be reconciled with *Breithaupt v. Abram*.

⁷⁷ *Blackford v. United States*, (9th Cir. 1957) 247 F. (2d) 745; *Application of Woods*, (D.C. Cal. 1957) 154 F. Supp. 932; *People v. Woods*, 139 Cal. App. (2d) 515, 293 P. (2d) 901 (1956). In both instances the defendants were under lawful arrest and external physical examination indicated clearly that something had been inserted through the anus. See also *State v. Pierce*, (Vt. 1958) 141 A. (2d) 419.

⁷⁸ "This is not to say that the indiscriminate taking of blood under different conditions or by those not competent to do so may not amount to such 'brutality' as would come under the *Rochin* rule. The chief law-enforcement officer of New Mexico, while at the Bar of this Court, assured us that every proper medical precaution is afforded an accused from whom blood is taken." 352 U.S. at 437-438. The California court relied on *Rochin* in part in *People v. Speaks*, (Cal. App. 1958) 319 P. (2d) 709.

Conclusion

Methods of obtaining are of considerable importance in determining admissibility of evidence, the scientific reliability of which has been otherwise established. The status of the several kinds of investigative techniques may be summarized as follows:

Scientific Interrogation. Though most experts feel the polygraph to be reliable,⁷⁹ the courts have not felt that it is. With the possible exception of a case in which both sides stipulate for their use,⁸⁰ polygraph test results cannot be used or referred to in any way. Hypnosis and narcosis, however, are recognized at least indirectly as scientifically sound methods of determining mental condition, where an expert opinion is to be expressed. If, however, statements admitting guilt are so procured, they are likely to be deemed coerced in violation of the due process clauses. Should any or all of the three methods come to be recognized as proper in securing statements, a possible question of the privilege against self-incrimination arises.⁸¹ Results of such interrogation by federal officers during illegal custody of an arrested person may also fall afoul of the evidentiary exclusion rule arising from the prompt production provisions of the Federal Rules of Criminal Procedure.⁸²

Physiological Examination. The scientific accuracy of tests, chemical and mechanical, of body tissues, fluids, breath and the like is unimpeachable. If, however, samples are obtained in the course of an unlawful arrest, the subject's constitutional rights have been violated, and if the jurisdiction pursuant to whose authority the investigating officers purport to act has in force the exclusionary rule, results of the tests performed on the sample are

⁷⁹ For a dissent on this proposition, see Levitt, "Scientific Evaluation of the 'Lie Detector,'" 40 IOWA L. REV. 440 (1955).

⁸⁰ *People v. Houser*, 85 Cal. App. (2d) 686, 193 P. (2d) 937 (1948).

⁸¹ However, the answers are not being required by a regular constituted hearing body, answers must be voluntarily given so that the waiver doctrine applies, and the important thing in any event is not the answers which the subject gives, but rather the physiological or mental condition which accompanies the words. Statements showing guilt elicited under narcosis or hypnosis required by court order might well be held within the privilege unless the waiver doctrine were invoked.

⁸² Federal Rules of Criminal Procedure, 18 U.S.C. (1952) rule 5(a) requires an arrested person to be taken before a United States commissioner "without unnecessary delay." To discourage federal officers from violating this requirement, the Supreme Court has ruled out all statements taken from a person in unlawful detention in violation of the rule, without regard to their voluntary character. *Upshaw v. United States*, 335 U.S. 410 (1948). The method used in obtaining the statement should be immaterial if the test is unlawful detention at the time.

inadmissible as evidence. In the remaining jurisdictions such evidence is fully admissible regardless of the circumstances under which it was obtained. Occasionally the privilege against self-incrimination may be invoked to prevent use of specimens taken without consent from a subject under either lawful or illegal detention, although the number of jurisdictions in which this is possible is small. If, however, undue violence or crudity is used in procuring such evidence, the rule of the *Rochin* case may be invoked in either state or federal courts.

Forensic Evidence. The accuracy of ballistics tests and of comparison tests between handwriting and typewriting specimens, fingerprints, tire marks, footprints, tool marks, hairs, fingernail parings, fibers, fabrics, dust and dirt samples, vegetable matter and the like is well enough established that expert testimony about them is everywhere admissible, provided the particular tests have been accurately made and possibility of substitution of samples guarded against.⁸³ Comparison specimens obtained in the course of an unreasonable search and seizure may not be discussed in evidence in jurisdictions following the federal exclusionary rule. Arguments based on the privilege against self-incrimination are rarely accepted, and the rule of the *Rochin* case seems inapplicable.

Electronic Surveillance. Wiretapping, radio monitoring, use of portable transmitters, and the radar speedmeter are all scientifically exact enough to be recognized judicially. If, however, such devices are used during the course of a trespass on the defendant's property, the results will be inadmissible by the exclusionary rule of unreasonable search and seizure. And the Federal Communications Act, as interpreted by the United States Supreme Court, limits use of wiretap evidence only to those state courts willing or able under state law to receive evidence from any source whatever.

One may, of course, argue that whatever is potentially relevant to resolution of any fact issue in a criminal case should be received by a court. One certainly has excellent historical and policy reasons for questioning any application whatever of the privilege against self-incrimination to non-verbal evidence from a defendant. In particular one may quarrel with the exclusionary rule which usually results in emasculating the case against a man who has committed a crime because police officers have themselves committed

⁸³ The latter requirement applies also to specimens procured through physiological examination.

unlawful acts, thus in effect benefitting the guilty and not the innocent who are relegated to civil action or criminal prosecution of the officers involved.⁸⁴ Such arguments, however, are beside the point if one considers the question of the status of scientific investigation today. Defendants do have statutory and constitutional rights, and exclusion of evidence obtained in violation of such rights is recognized to such an extent that one must conclude that pursuit of scientific truth without regard for human rights and sensibilities is, and probably should be, a matter for the laboratory and not the courtroom.

⁸⁴ See Waite, "Judges and the Crime Burden," 54 MICH. L. REV. 169 (1955).