Constitutional Limitations on Obtaining Evidence for Scientific Analysis

Paul C. Giannelli
CONSTITUTIONAL LIMITATIONS ON OBTAINING EVIDENCE FOR SCIENTIFIC ANALYSIS

Paul C. Giannelli
Professor of Law
Case Western Reserve University

Through the examination of trace evidence, many scientific techniques can establish a link between a suspect and the scene of a crime. Blood, semen, hairs, fibers, soils, and fingerprints have all been used in this manner. In addition, bitemarks, gunshot residues, handwriting and voice exemplars have also been used to provide a nexus between a suspect and a crime. The use of these techniques often depends on some form of cooperation on the part of the suspect, ranging from his passive presence for fingerprinting and extraction of blood to his active participation in providing voice and handwriting exemplars. This contact between the police and a suspect has spawned constitutional litigation. Criminal defendants have argued that submission to police control for the purpose of obtaining evidence for scientific analysis: (1) violates the privilege against self-incrimination, (2) violates the right to counsel, (3) infringes upon the right to be free from unreasonable searches and seizures, and (4) deprives the suspect of due process of law. This article examines these arguments.

SELF-INCrimination

The Fifth Amendment to the U.S. Constitution prohibits compulsory self-incrimination. This prohibition applies when the state seeks to compel a person to produce evidence that may subject that person to criminal liability. See generally C. McCormick, Evidence §§ 114-43 (2d ed. 1972); 8 J. Wigmore, Evidence §§ 2250-84 (McNaughton rev. 1961).

The leading case on the applicability of the Fifth Amendment privilege to the collection of physical evidence is Schmerber v. California, 384 U.S. 757 (1966). While being treated at a hospital for injuries sustained in an automobile collision, Schmerber was arrested for driving under the influence of alcohol. Blood samples were subsequently obtained from Schmerber by a physician at the direction of the investigating police officer. Although the defendant—on his attorney's advice—objected to this procedure, blood was extracted and analyzed for alcoholic content. On appeal to the Supreme Court, the defendant argued that the privilege against self-incrimination had been violated by the extraction of blood. The Court rejected this argument, holding that the privilege covers only "communicative or testimonial evidence," not "physical or real evidence." According to the Court, it is clear that the protection of the privilege reaches an accused's communications, whatever form they might take.... On the other hand, both federal and state courts have usually held that it offers no protection against compulsion to submit to fingerprinting, photographing, or measurements, to write or speak for identification, to appear in court, to stand, to assume a stance, to walk, or to make a particular gesture. The distinction which has emerged, often expressed in different ways, is that the privilege is a bar against compelling "communications" or "testimony," but that compulsion which makes a suspect or accused the source of "real or physical evidence" does not violate it. Id. at 763-64.


Subsequent Supreme Court cases have reaffirmed the testimonial vs. physical evidence distinction recognized in Schmerber. In United States v. Wade, 388 U.S. 218 (1967), the Court held that compelling an accused to exhibit his person for observation was compulsion "to exhibit his physical characteristics, not compulsion to disclose any knowledge he might have," id. at 222, and thus is not proscribed by the self-incrimination clause. In Gilbert v. California, 388 U.S. 263 (1967), the Court concluded that the compelled production of a "mere handwriting exemplar, in contrast to the content of what is written, like the voice or body
itself, is an identifying physical characteristic outside [the Amendment's] protection." Id. at 266-67. Finally, in United States v. Dionisio, 410 U.S. 1 (1973), the Court again applied the Schmerber rationale in ruling that compelling a defendant to speak for the purpose of voiceprint analysis did not violate the Fifth Amendment because the "voice recordings were to be used solely to measure the physical properties of the witnesses' voices, not for the testimonial or communicative content of what was to be said." Id. at 7.


Polygraph Evidence

The one exception is polygraph evidence. The Court in Schmerber commented on this exception:

"Some tests seemingly directed to obtain "physical evidence," for example, lie detector tests measuring changes in body function during interrogation, may actually be directed to eliciting responses which are essentially testimonial. To compel a person to submit to testing in which an effort will be made to determine his guilt or innocence on the basis of physiological responses, whether willed or not, is to evoke the spirit and history of the Fifth Amendment. 384 U.S. at 764.

The courts that have admitted polygraph evidence have recognized the applicability of the privilege in this context. See generally Note, Problems Remaining for the "Generally Accepted" Polygraph, 53 B. U. L. Rev. 375, 390-400 (1973). "The polygraph results are essentially testimonial in nature and therefore a defendant could not be compelled initially to take such an examination on the Commonwealth's motion." Commonwealth v. A. Juvenile (No. 1), 365 Mass. 421, 431, 313 N.E.2d 120, 127 (1974). The protection of the privilege would also prohibit any prosecutorial comment on a defendant's refusal to submit to a polygraph examination. See Griffin v. California, 380 U.S. 609 (1965); Bowen v. Eyman, 324 F. Supp. 339 (D. Ariz. 1970); McDonald v. State, 164 Ind. App. 285, 328 N.E.2d 436 (1975). The privilege, however, may be waived. Thus, so long as the defendant voluntarily, knowingly and intelligently waives the privilege, the Fifth Amendment does not bar admission of the results of a polygraph examination. See United States v. Oliver, 525 F.2d 731, 734-36 (8th Cir. 1975), cert. denied, 424 U.S. 973 (1976); United States v. Ridling, 350 F. Supp. 90, 97-98 (E.D. Mich. 1972); State v. Souel, 53 Ohio St.2d 123, 129 n.3, 372 N.E.2d 1318, 1321 n.3 (1978).

State Constitutions

It should be noted that state law may afford a defendant greater self-incrimination protection than is afforded by federal law. For example, in Hansen v. Owens, 619 P.2d 315 (Utah 1980), the Utah Supreme Court held that compelled production of handwriting exemplars violated the self-incrimination clause of the Utah Constitution because it involved the "affirmative act of writing." Id. at 317. See also Creamer v. State, 229 Ga. 511, 192 S.E.2d 350 (1972) (surgical removal of bullet; Georgia Constitution provides greater self-incrimination protection than U.S. Constitution).

**RIGHT TO COUNSEL**

The Sixth Amendment guarantees an accused the right to counsel. This right has not been limited to trial but has been extended to certain pretrial proceedings such as the preliminary hearing, Coleman v. Alabama, 399 U.S. 1 (1970), and, under some circumstances, to identification procedures, Moore v. Illinois, 434 U.S. 220 (1977), and interrogations. United States v. Henry, 447 U.S. 264 (1980); Brewer v. Williams, 430 U.S. 387 (1977). Although defendants have argued that the right to counsel applies when evidence is obtained for the purpose of scientific analysis, this argument has not been successful for two reasons.

First, the Supreme Court has held that the right to counsel attaches only after the "initiation of adversary judicial criminal proceedings—whether by way of formal charge, preliminary hearing, indictment, information, or arraignment." Kirby v. Illinois, 406 U.S. 682, 689 (1972). Frequently, evidence that is submitted for scientific analysis has been obtained from defendants during the investigatory stage, prior to the commencement of formal criminal proceedings. See State v. Ulrich, 609 P.2d 1219 (Mont. 1980) (swabblings for gunshot residue taken before right to counsel attached).

Second, neither the obtaining of evidence for the purpose of scientific analysis nor the analysis itself is a "critical" stage within the meaning of the Sixth Amendment. The leading cases are United States v. Wade, 388 U.S. 218 (1967) and Gilbert v. California, 388 U.S. 263 (1967). In Wade the Supreme Court held that the right to counsel applied to lineup identifications. According to the Court, a lineup presents "grave potential for prejudice...which may not be capable of reconstruction at trial, and since presence of counsel itself can often avert prejudice and assure a meaningful confrontation at trial..." a lineup constitutes a "critical stage," entitling the accused to counsel. 388 U.S. at 236. The Court distinguished the conducting of a lineup from the analysis of evidence by scientific techniques:

The Government characterizes the lineup as a mere preparatory step in the gathering of the prosecution's evidence, not different—for Sixth Amendment purposes—from various other preparatory steps, such as systemized or scientific analyzing of the accused's fingerprints, blood sample, clothing, hair, and the like.
We think there are differences which preclude such stages being characterized as critical stages at which the accused has the right to the presence of his counsel. Knowledge of the techniques of science and technology is sufficiently available, and the variables in techniques few enough, that the accused has the opportunity for a meaningful confrontation of the Government's case at trial through the ordinary processes of cross-examination of Government's expert witnesses and the presentation of the evidence of his own experts. The denial of a right to have his counsel present at such analyses does not therefore violate the Sixth Amendment; they are not critical stages since there is minimal risk that his counsel's absence at such stages might derogate from his right to a fair trial. Id. at 227-28.

In Gilbert the defendant contended that his right to counsel had been violated when he was compelled to provide handwriting exemplars in the absence of counsel. The Court, however, found significant differences between conducting a lineup and obtaining handwriting exemplars:

The taking of the exemplars was not a "critical" stage of the criminal proceedings entitling petitioner to the assistance of counsel. Putting aside the fact that the exemplars were taken before the indictment and appointment of counsel, there was minimal risk that the absence of counsel might derogate from his right to a fair trial. Cf. United States v. Wade . . . . If, for some reason, an unrepresentative exemplar is taken, this can be brought out and corrected through the adversary process at trial since the accused can make an unlimited number of additional exemplars for analysis and comparison by government and defense handwriting experts. Thus, "the accused has the opportunity for a meaningful confrontation of the [State's] case at trial through the ordinary processes of cross-examination of the [State's] expert [handwriting] witnesses and the presentation of the evidence of his own experts." United States v. Wade . . . .388 U.S. at 267.


Hence, unlike eyewitness identification procedures, the adversary process is thought to afford a criminal defendant an adequate opportunity to confront and challenge the state's scientific evidence. The ability to discover and reexamine the prosecution's evidence, to cross-examine the state's witness at trial, and to present defense expert witnesses minimizes the need for counsel.

Moreover, as one court has remarked, "not only is the taking of the exemplars not a critical stage of the proceedings entitling an accused to the assistance of counsel, but Appellant has pointed to no function counsel could perform, were he present, save the futile advice not to give the sample . . . ." Lewis v. United States, 382 F.2d 817, 819 (D.C. Cir.), cert. denied, 389 U.S. 962 (1967) (handwriting exemplars). Accordingly, courts have held the right to counsel does not apply when evidence is obtained for scientific analysis. See Schmerber v. California, 364 U.S. 757 (1966) (blood); United States v. Love, 482 F.2d 213 (5th Cir. 1973) (acetone swablings for bomb nitrates); United States v. Sanders, 477 F.2d 112 (5th Cir.), cert. denied, 414 U.S. 870 (1973) (palmsprints); United States v. Sheard, 473 F.2d 139 (D.C. Cir. 1972), cert. denied, 412 U.S. 943 (1973) (blood); United States v. McNeal, 463 F.2d 1180 (5th Cir. 1972) (fingerprints); United States v. Jackson, 448 F.2d 963 (9th Cir. 1971), cert. denied, 405 U.S. 924 (1972) (hair); State v. Odom, 303 N.C. 163, 277 S.E.2d 352 (1981) (gunshot residues).

The taking of a polygraph examination, however, raises a different issue. Because such examinations implicate the Fifth Amendment, Miranda along with its right to counsel requirement applies. In addition, after the commencement of judicial adversary proceedings, the Sixth Amendment right to counsel would be applicable. See State v. Jones, 19 Wash. App. 850, 578 P.2d 71 (1978) (confession obtained after polygraph examination violated right to counsel).

SEARCH AND SEIZURE

The Fourth Amendment guarantees the right to be free from unreasonable governmental searches and seizures. In some cases, evidence which is subjected to scientific analysis is seized from a specific location. Under these circumstances, the general Fourth Amendment law is applicable. In other situations, the evidence is seized from a suspect. The cases involving the latter situation are discussed in this section.

Typically, there are two distinct Fourth Amendment issues raised when physical evidence is obtained from a suspect for the purpose of scientific analysis. First, there is a "seizure" of the person, which brings the suspect into contact with or under the control of government agents. Second, there is a subsequent search for and seizure of physical characteristics or trace evidence. United States v. Dionisio, 410 U.S. 1, 8 (1973) (voice exemplar).

Seizure of the Person

Before trace evidence or physical characteristics can be obtained from a suspect, the suspect must be detained under some form of government control. Such control raises the question of whether the person has been "seized" within the meaning of the Fourth Amendment. Evidence submitted for scientific analysis has been collected from suspects at the time of arrest, during pretrial incarceration, during detention on less-than-probable cause, and pursuant to grand jury subpoenas and administrative summonses. If the initial seizure of the person violates Fourth Amendment requirements, the fruits of the subsequent search of that person generally will be excluded at trial. See generally 3 W. LaFave, Search and Seizure § 11.4 (1978) (fruit of the poisonous tree doctrine).

Arrest

An arrest is a "seizure" of the person within the meaning of the Fourth Amendment. See 2 W. LaFave, Search and Seizure § 5.1 (1978). Generally, if the arrest is valid the seizure of physical evi-
dence incident to the arrest is also valid. While the arrest of a person in a public place does not require the issuance of a search warrant, it does require probable cause that a crime has been committed by the arrestee. United States v. Watson, 423 U.S. 411 (1976). For example, in Schmerber v. California, 384 U.S. 757 (1966), the defendant was arrested for driving under the influence of alcohol before blood was extracted. The Court held that probable cause for the arrest existed based on the arresting officer's observation of the defendant at both the scene of the accident and the hospital; the officer testified that the defendant's eyes were glassy and bloodshot and that he smelled liquor on the defendant's breath. Id. at 768-69. The Court considered the constitutionality of this initial seizure (the arrest) before turning to the Fourth Amendment implications of withdrawing blood from a suspect.

In Davis v. Mississippi, 394 U.S. 721 (1969), the Court considered the constitutionality of a detention during which fingerprints were obtained from the defendant. Although fingerprints and palm prints were found on the window used by the assailant to gain entry into a rape victim's house, the victim could not provide any further description of her attacker than his race and approximate age. The police conducted a dragnet procedure in which numerous young blacks, including the defendant, were detained and fingerprinted. The defendant was subsequently seized a second time and another set of fingerprints was obtained; these prints were used for comparison with the crime scene prints and introduced at trial. The Court ruled that the detention, based neither on probable cause nor a warrant, was illegal and thus the fingerprint evidence should have been suppressed at trial.

**Detention on Less than Probable Cause**

In Terry v. Ohio, 392 U.S. 1 (1968), the Supreme Court first recognized that a detention of a suspect on less than probable cause may satisfy Fourth Amendment requirements. The importance of Terry v. Ohio and its progeny, defining the scope of the "stop and frisk" doctrine, to the collection of physical evidence for the purpose of scientific analysis turns on dictum in Davis v. Mississippi, 394 U.S. 721 (1969). As noted previously, the Court in Davis held that the detention of a suspect on less than probable cause during which time fingerprints were obtained was unconstitutional. The Court, however, made the following comments:

Detentions for the sole purpose of obtaining fingerprints are no less subject to the constraints of the Fourth Amendment. It is arguable, however, that, because of the unique nature of the fingerprinting process, such detentions might, under narrowly defined circumstances, be found to comply with the Fourth Amendment even though there is no probable cause in the traditional sense.... Detention for fingerprinting may constitute a much less serious intrusion upon personal security than other types of police searches and detentions. Fingerprinting involves none of the probing into an individual's private life and thoughts that marks an interrogation or search. Nor can fingerprint detention be employed repeatedly to harass any individual, since the police need only one set of each person's prints. Furthermore, fingerprinting is an inherently more reliable and effective crime-solving tool than eyewitness identifications or confessions and is not subject to such abuses as the improper line-up and the "third degree." Finally, because there is no danger of destruction of fingerprints, the limited detention need not come unexpectedly or at an inconvenient time. For this same reason, the general requirement that the authorization of a judicial officer be obtained in advance of detention would seem not to admit of any exception in the fingerprinting context.

We have no occasion in this case, however, to determine whether the requirements of the Fourth Amendment could be met by narrowly circumscribed procedures for obtaining, during the course of a criminal investigation, the fingerprints of individuals for whom there is no probable cause to arrest. For it is clear that no attempt was made here to employ procedures which might comply with the requirements of the Fourth Amendment: The detention at police headquarters of petitioner and the other young Negroes was not authorized by a judicial officer; petitioner was unnecessarily required to undergo two fingerprinting sessions; and petitioner was not merely fingerprinted during the December 3 detention but also subjected to interrogation. Id. at 727-28.


For example, an Arizona statute provides for the issuance of judicial orders covering "fingerprints, palmprints, footprints, measurements, handwriting, handprinting, sound of voice, blood samples, urine samples, saliva samples, hair samples, comparative personal appearance, or photographs of an individual." Ariz. Rev. Stat. Ann. § 1305(D). Such an order may be issued if the following conditions are satisfied:

1. Reasonable cause for belief that a specifically described offense punishable by at least one year in the state prison has been committed.
2. Procurement of evidence of identifying physical characteristics from an identified or particularly described individual may contribute to the identification of the individual who committed such offense.
3. Such evidence cannot otherwise be obtained by the investigating officer from either the law enforcement agency employing the affiant or the criminal identification division of the Arizona department of public safety. Id. § 13-3905(A).
The constitutionality of this provision has been upheld by the Arizona courts. State v. Grijalva, 111 Ariz. 476, 533 P.2d 533, cert. denied, 423 U.S. 873 (1975) (fingerprinting and hair samples); Long v. Garrett, 22 Ariz. App. 397, 527 P.2d 1240 (1974) (handwriting exemplar). Unlike other provisions, the Arizona statute does not specify the quantum of evidence required to subject a person to such an order. In contrast, an Idaho statute provides that a nontestimonial identification order may be issued if "reasonable grounds exist, which may or may not amount to probable cause, to believe that the individual committed the criminal offense." Idaho Code § 19-625(B). One commentator states that the "reasonable suspicion" standard of Terry v. Ohio should suffice. 3 W. LaFave, Search and Seizure 159 (1978).

Several courts have refused to uphold the issuance of such orders in the absence of explicit statutory or rule authority. See United States v. Holland, 552 F.2d 867 (5th Cir. 1977), withdrawn, 565 F.2d 383 (5th Cir. 1978) (handwriting exemplars); United States v. Jennings, 468 F.2d 111 (9th Cir. 1972) (fingerprints); People v. Marshall, 69 Mich. App. 268, 244 N.W.2d 451 (1976) (detention order for hair and blood samples must be based on probable cause). Other courts, however, have sanctioned their use. See Wise v. Murphy, 275 A.2d 205 (D.C. App. 1971) (lineups); In re Fingerprinting of M.B., 125 N.J. Super. 115, 309 A.2d 3 (1973) (fingerprints); Merola v. Fico, 81 Misc. 2d 206, 365 N.Y.S.2d 743 (1975) (lineup). The Supreme Court has yet to consider the constitutionality of detentions, whether authorized by statute or not, on less than probable cause for the purpose of obtaining nontestimonial identification evidence. Nevertheless, the use of such a procedure, at least for the extraction of blood, would appear to conflict with Schmerber v. California, 384 U.S. 757 (1966), in which the Court required a more demanding standard. See People v. Marshall, 69 Mich. App. 268, 297-98, 244 N.W.2d 451, 456 (1976) ("No judicial precedent was found, however, which sanctioned the use of a court order on less than probable cause in order to take blood samples from a suspect's person. Indeed, the constitutionality of such a procedure appears doubtful in light of Schmerber v. California. . .").

Grand Jury Subpoenas; Administrative Summonses

Another method by which evidence may be obtained from a suspect is the grand jury subpoena. In United States v. Dionisio, 410 U.S. 1 (1973), the defendant challenged the use of a grand jury subpoena to obtain voice exemplars, arguing that appearance before a grand jury pursuant to a subpoena was a "seizure" of the person within the meaning of the Fourth Amendment. The Court rejected this argument, holding that the "compulsion exerted by a grand jury subpoena differs from the seizure effected by an arrest or even an investigative "stop". . . ." id. at 10.

The latter is abrupt, is effected with force or the threat of it and often in demeaning circumstances, and, in the case of arrest, results in a record involving social stigma. A subpoena is served in the same manner as other legal process; it involves no stigma whatever; if the time for appearance is inconvenient, this can generally be altered; and it remains at all times under the control and supervision of a court. Id.

In short, since the Fourth Amendment is not implicated, requirements such as probable cause, do not apply. The use of a grand jury subpoena for the purpose of obtaining handwriting exemplars as well as other evidence of identification has been upheld. See United States v. Mara, 410 U.S. 19 (1973) (handwriting); In re Melvin, 550 F.2d 674 (1st Cir. 1977) (lineup; fingerprinting and photographing also involved); In re Grand Jury Proceedings (Schofield), 507 F.2d 963 (3d Cir. 1975) (fingerprints); In re Rogers, 359 F. Supp. 576 (E.D.N.Y. 1973) (photographs); In re Toon, 364 A.2d 1177 (D.C. App. 1976) (lineup).

The Supreme Court has also considered whether an administrative summons may be used to obtain evidence of physical characteristics. In United States v. Euge, 444 U.S. 707 (1980), the Court held that the Internal Revenue Service was statutorily authorized to issue summons compelling a taxpayer to provide handwriting exemplars. The court also found no constitutional impediment to this procedure.

Search for and Seizure of Physical Evidence from a Suspect

Even if a suspect's detention is constitutionally permissible, the question remains whether the search of that person is also constitutional. The initial inquiry is whether there is, in fact, a search within the meaning of the Fourth Amendment. If there is a "search," the next question is whether the search complies with Fourth Amendment requirements, such as the warrant and probable cause requirements.

Physical Characteristics; Reasonable Expectations of Privacy

The leading case on defining what governmental activities are "searches" within the meaning of the Fourth Amendment is Katz v. United States, 389 U.S. 347 (1967). Katz substituted a privacy approach for the traditional property approach to this issue. According to the Court:

The Fourth Amendment protects people, not places. What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection . . . . But what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected. Id. at 351.

The Katz rationale played a major role in two cases which involved the compelled production of voice and handwriting exemplars by means of a grand jury subpoena. In United States v. Dionisio, 410 U.S. 1 (1973), after ruling that the compelled appearance of a person before a grand jury was not a "seizure" within the meaning of the Fourth Amendment, the Court addressed the issue of whether the taking of a voice exemplar constituted a "search."
The physical characteristics of a person's voice, its tone and manner, as opposed to the content of a specific conversation, are constantly exposed to the public. Like a man's facial characteristics, or handwriting, his voice is repeatedly produced for others to hear. No person can have a reasonable expectation that others will not know the sound of his voice, any more than he can reasonably expect that his face will be a mystery to the world. Id. at 14.

In United States v. Mara, 410 U.S. 19 (1973), the Court reached the same conclusion with respect to handwriting. "Handwriting, like speech, is repeatedly shown to the public, and there is no more expectation of privacy in the physical characteristics of a person's script than there is in the tone of his voice." Id. at 21. See also United States v. Euge, 444 U.S. 707, 713 (1980) ("compulsion of handwriting exemplars is neither a search or seizure subject to Fourth Amendment protections ... ").

All evidence of physical characteristics, however, is not beyond Fourth Amendment protection. In Schmerber v. California, 384 U.S. 757 (1966), decided before Dionisio, the Court held that the extraction of blood for the purpose of scientific analysis "plainly constitute searches of the 'persons'...", id. at 767, within the meaning of the Fourth Amendment. Moreover, the Court in Dionisio distinguished, rather than overruled, Schmerber. "The required disclosure of a person's voice is thus immeasurably further removed from the Fourth Amendment protection than was the intrusion into the body effected by the blood extraction in Schmerber." 410 U.S. at 14. Thus, there are two categories in which the seizing of physical evidence may fall—one within the scope of the Fourth Amendment protection (Schmerber), and one without it (Dionisio-Mara). Determining in which category government activity falls is not always an easy task.

One other case sheds light on this issue. In Cupp v. Murphy, 412 U.S. 291 (1973), the Court considered the legality of seizing fingernail scrapings from a suspect. After finding that the defendant had been detained on probable cause, the Court stated:

The inquiry does not end here, however, because Murphy was subjected to a search as well as a seizure of his person. Unlike the fingerprinting in Davis, the voice exemplar obtained in United States v. Dionisio..., or the handwriting exemplar obtained in United States v. Mara..., the search of the respondent's fingernails went beyond mere "physical characteristics...constantly exposed to the public," United States v. Dionisio..., and constituted the type of "severe, though brief, intrusion upon cherished personal security" that is subject to constitutional scrutiny. Id. at 295.

Thus, the taking of fingernail scrapings, like the blood extraction in Schmerber, falls within Fourth Amendment protection, whereas the taking of fingerprints, like the taking of voice and handwriting exemplars, does not. Why a person has a reasonable expectation of privacy with respect to substances under his fingernails but not to his fingerprints, a fraction of an inch away, is difficult to discern. Apparently, any procedure that is more intrusive than obtaining fingerprints, voice or handwriting exemplars is covered by the Fourth Amendment. See also United States v. Holland, 378 F. Supp. 144 (E.D. Pa. 1974) (dental examination not a search because no reasonable expectation of privacy). This view is supported by cases involving the obtaining of breath samples, see Commonwealth v. Quarles, 229 Pa. Super. 363, 324 A.2d 452 (1974), and hair samples, see United States v. D'Amico, 408 F.2d 331, 333 (2d Cir. 1969); State v. Sharpe, 284 N.C. 157, 200 S.E.2d 44 (1973), which have been considered subject to constitutional constraints. See generally 1 W. LaFave, Search and Seizure § 2.6(a) (1978).

Searches Incident to Arrest

If the obtaining of physical evidence from a properly detained suspect is considered a search, that search must satisfy constitutional requirements. In other words, once the applicability of the Fourth Amendment is recognized, such questions as the existence of probable cause and the necessity of obtaining a warrant are raised. One of the major exceptions to the warrant requirement is the search incident to arrest doctrine. Under this exception, once a suspect has been arrested, based upon probable cause, a search of the arrestee's person and the area within his immediate control is permitted. The justification for this exception is set forth in Chimel v. California, 395 U.S. 752 (1969):

When an arrest is made, it is reasonable for the arresting officer to search the person arrested in order to remove any weapons that the latter might seek to use in order to resist arrest or effect his escape. Otherwise, the officer's safety might well be endangered, and the arrest itself frustrated. In addition, it is entirely reasonable for the arresting officer to search for and seize any evidence of the arrestee's person in order to prevent its concealment or destruction. And the areas into which an arrestee might reach in order to grab a weapon or evidentiary items must, of course, be governed by a like rule. Id. at 762-83.

Several Supreme Court cases involving the seizure of evidence for the purpose of scientific analysis have turned on the search incident to arrest theory. In Cupp v. Murphy, 412 U.S. 291 (1973), the Supreme Court upheld a search and seizure of fingernail scrapings under the Chimel doctrine. During the voluntary stationhouse questioning of the defendant about his wife's strangulation murder, the police observed a dark spot on the defendant's finger, which they believed to be blood. Despite the defendant's protests, fingernail scrapings were taken. The scrapings contained traces of skin and blood as well as fabric from the victim's garments. The facts of Cupp v. Murphy are somewhat unusual because the defendant was not formally placed under arrest at the time the scrapings were removed. Nevertheless, the Court held that the "rationale of Chimel, in these circumstances, justified the police in subjecting him to the very limited search necessary to preserve the
highly evanescent evidence they found under his fingernails." *Id.* at 296.

In United States v. Edwards, 415 U.S. 800 (1974), the defendant was arrested at night and then incarcerated in a local jail for attempting to break into a Post Office. Investigation at the scene revealed paint chips at a window of the Post Office. The following morning the defendant's clothes were seized. Examination of the clothes disclosed paint chips which matched those found at the scene of the crime. The Supreme Court held that the delayed search of the clothing was constitutional, notwithstanding the absence of a warrant. According to the Court, the established rule is that once the defendant is lawfully arrested and is in custody, the effects in his possession at the place of detention that were subject to search at the time and place of his arrest may lawfully be searched and seized without a warrant even though a substantial period of time has elapsed between the arrest and subsequent administrative processing, on the one hand, and the taking of the property for use as evidence, on the other. This is true where the clothing or effects are immediately seized upon arrival at the jail, held under the defendant's name in the "property room" of the jail, and at a later time searched and taken for use at the subsequent criminal trial. The result is the same where the property is not physically taken from the defendant until sometime after his incarceration. *Id.* at 807-08.

The seizure of gunshot residue, State v. Ulrich, 609 P.2d 1218 (Mont. 1980); bomb residue, United States v. Love, 482 F.2d 213 (5th Cir. 1973); and fingerprints, Napolitano v. United States, 340 F.2d 313 (1st Cir. 1965), have all been upheld as incidental to arrest. More intrusive searches, such as those involving the extraction of blood, however, require greater justification.

**Bodily Intrusions**

The Supreme Court has shown a greater concern for searches involving bodily intrusions than for other types of searches. For example, in Schmerber v. California, 384 U.S. 757 (1966), the Court considered the constitutionality of extracting blood for the purpose of blood-alcohol analysis. The Court rejected the notion that the extraction of blood would automatically be encompassed by the search incident to arrest doctrine. According to the Court, the justifications underlying the search incident to arrest rule "have little applicability with respect to searches involving intrusions beyond the body's surface. The interests in human dignity and privacy which the Fourth Amendment protects forbids any such intrusions on the mere chance that desired evidence might be obtained. In the absence of a clear indication that in fact such evidence will be found, these fundamental human interests require law officers to suffer the risk that such evidence may disappear unless there is an immediate search." *Id.* at 769-70.

The Court went on to consider the necessity of securing a warrant based on probable cause as a prerequisite to the extraction of blood. The Court found that the purpose underlying the warrant requirement—the intervention of a neutral detached magistrate between the police and the citizen—was applicable to bodily intrusions. "The importance of the informed, detached and deliberate determinations of the issue whether or not to invade another's body in search of evidence of guilt is indisputable and great." *Id.* at 770. Nevertheless, because the alcohol content of blood diminishes with the passage of time, the court recognized an "emergency" exception to the warrant requirement which was necessary to preclude the destruction of evidence. The emergency exception recognized in *Schmerber*, however, would not apply in other contexts—for example, when blood is sought for the purpose of typing, a physical characteristic that remains constant. See *Graves v. Beto*, 301 F. Supp. 264 (E.D. Tex. 1969), *aff'd*, 424 F.2d 524 (5th Cir. 1970); *Mills v. State*, 26 Md. App. 300, 307, 345 A.2d 127, 132 (1975). See also *State v. Gammill*, 2 Kan. App.2d 627, 585 P.2d 1074 (1978) (hair follicle, no emergency as in *Schmerber*).

*Schmerber* is also important because the Court held that the scientific procedure chosen as well as the manner in which it is performed are both subject to the Fourth Amendment reasonableness requirement. With respect to the procedure, the Court commented, "we are satisfied that the test chosen to measure petitioner's blood-alcohol level was a reasonable one. Extraction of blood samples for testing is a highly effective means of determining the degree to which a person is under the influence of alcohol." 384 U.S. at 771. The Court also found that the "record shows that the test was performed in a reasonable manner. Petitioner's blood was taken by a physician in a hospital environment according to accepted medical practices." *Id.*

The most intrusive procedures that have been challenged on Fourth Amendment grounds have concerned the surgical removal of bullets from suspects for the purpose of firearms identification. The leading case is United States v. Crown, 543 F.2d 312 (D.C. Cir. 1976), *cert. denied*, 429 U.S. 1062 (1977), in which the defendant was ordered to undergo minor surgery for the removal of bullet fragments from his arm. The Court of Appeals for the D.C. Circuit upheld the removal of the bullet, citing the following factors:

(1) the evidence sought was relevant, could have been obtained in no other way, and there was probable cause to believe that the operation would produce it; (2) the operation was minor, was performed by a skilled surgeon, and every possible precaution was taken to guard against any surgical complications, so that the risk of permanent injury was minimal; (3) before the operation was performed the District Court held an adversary hearing at which the defendant appeared with counsel; (4) thereafter and before the operation was performed the defendant was afforded an opportunity for appellate review by this court. *Id.* at 316.

Other courts have also found no constitutional impediment to court-authorized minor surgery. See *Creamer v. State*, 229 Ga. 511, 192 S.E.2d 350
The seizure of evidence for the purpose of scientific analysis has been challenged on due process grounds in a number of cases. In Rochin v. California, 342 U.S. 165 (1952), the Supreme Court held that the forcible stomach pumping of a suspect to recover narcotic pills "shocks the conscience" and does not comport with traditional ideas of fair play and decency, thereby violating due process. The Court distinguished Rochin in a later case, Breithaupt v. Abram, 352 U.S. 432 (1957). In that case the Court upheld the compelled extraction of blood in the face of a due process challenge. In distinguishing the extraction of stomach contents from the extraction of blood, the Breithaupt Court emphasized that the latter procedure, "under the protective eye of a physician," was a routine and scientifically accurate method and therefore did not involve the "brutality" and "offensiveness" present in Rochin. Id. at 435. This ruling was reaffirmed in Schmerber v. California, 384 U.S. 757 (1966).

The Rochin and Breithaupt decisions predated the applicability of the Bill of Rights to the States through the due process clause of the Fourteenth Amendment, and thus the continued validity of an independent due process analysis is questionable. Such issues no longer need be addressed in terms of due process but rather as possible violations of specific constitutional guarantees enumerated in the Bill of Rights. For example, according to the Court in Schmerber v. California, the manner in which evidence is obtained from a suspect is subject to the reasonableness clause of the Fourth Amendment. This requirement would encompass virtually all cases that are vulnerable to attack on due process grounds.

**Recent Developments**

**Self Incrimination**

The Supreme Court reversed the Sixth Circuit's decision that the Fourteenth Amendment requires a hearing before the Parole Authority can rescind a decision to grant early parole. The Court held that the principle of "mutually explicit understandings" relied upon to find constitutionally protected property interests does not lend itself to determining the existence of a constitutionally protected liberty interest in the setting of prisoner parole. Although the Court acknowledged that respondent suffered a "grevious loss," because the statutes which provide for parole place the decision wholly within the discretion of the Parole Authority, the Court found no protected liberty interest and held that respondent was not entitled to a prior hearing. Jago v. Van Curen, 102 S. Ct. 31 (1981).

**Public Defenders—1983 Actions**

Relying on a public defender's employment by the County, a convicted defendant brought a 1983 action against a public defender, Polk County, the Polk County Offender Advocate, and the County Board of Supervisors alleging that his constitutional rights were violated when the public defender moved to withdraw as counsel on the ground that the defendant's appellate claims were frivolous. Reversing the 8th Circuit Court of Appeals, the Supreme Court held that a public defender when representing an indigent defendant does not act "under color of state law" within the meaning of section 1983. The Court also ruled that the defendant failed to state a claim against the remaining defendants because he failed to allege any official policy that arguably violated his constitutional rights. Polk County v. Dodson, 102 S. Ct. 445 (1981).

**Post-Arrest Silence**

In a case involving the use of a defendant's silence between his arrest and the giving of Miranda warnings, the Sixth Circuit held that it was fundamentally unfair to use this silence to impeach the defendant. The Court concluded that post-arrest silence was not probative because fear and anxiety will lead the defendant, whether guilty or innocent, to remain silent. The Court's second reason not to permit use of post-arrest silence for impeachment is the widespread knowledge that one who is arrested has the right to remain silent. Persons who are exercising their right to remain silent should not be penalized for it. Weir v. Fletcher, 30 Crim. L. Rptr. 2052 (6th Cir. 1981).