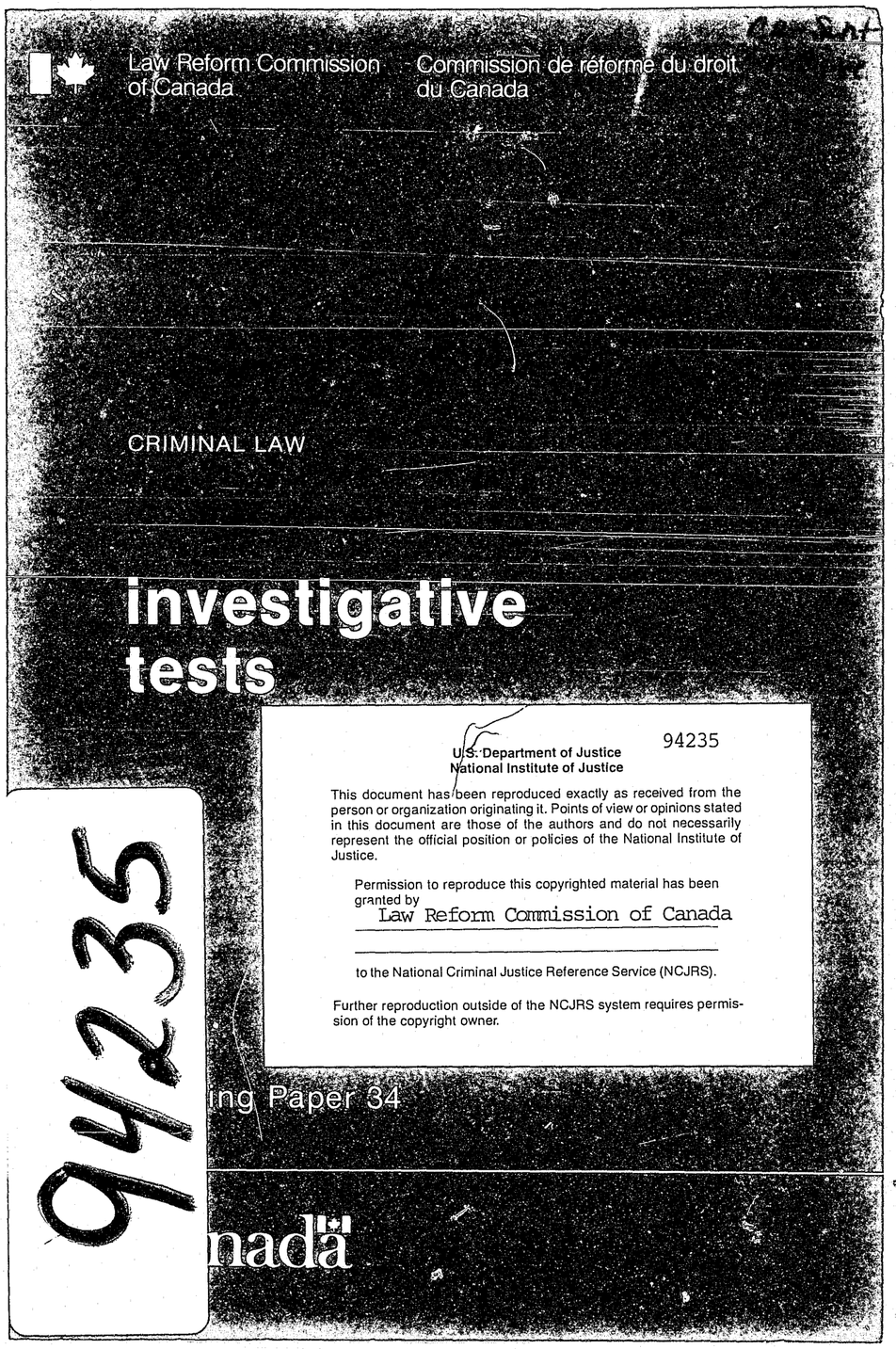

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Working Paper 34

INVESTIGATIVE TESTS

1984

Notice

This Working Paper presents the views of the Commission at this time. The Commission's final views will be presented later in its Report to the Minister of Justice and Parliament, when the Commission has taken into account comments received in the meantime from the public.

The Commission would be grateful, therefore, if all comments could be sent in writing to:

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Commission

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I.

Introduction

In its recent policy document on *The Criminal Law in Canadian Society*,[1] the Government of Canada has articulated several principles which are intended to serve as guidelines for the future development of criminal law and procedure in this country. One of those principles is that "the criminal law should provide and clearly define powers necessary to facilitate the conduct of criminal investigations ... without unreasonably or arbitrarily interfering with individual rights and freedoms...."[2] Another principle is that "in order to ensure equality of treatment and accountability, discretion at critical points of the criminal justice process should be governed by appropriate controls...."[3] A third principle is that "the criminal law should ... clearly and accessibly set forth the rights of persons whose liberty is put directly at risk through the criminal law process...."[4] The ideas embodied by these principles are ones that have long been held by the Law Reform Commission of Canada. Accordingly, this Working Paper is directed toward the rational and comprehensive statutory regulation of one aspect of criminal investigations, namely "investigative test" procedures. It will examine the current provisions of the *Criminal Code*[5] and other relevant federal legislation, as well as the relevant case law, in an effort to determine: (a) the current state of the law pertaining to the use of investigative tests; (b) whether the present law shows a fair, logical and uniform policy in operation; and (c) the extent to which the law ought to be modified by statute. In dealing with this last issue, the object will be to strike what the Government has called a "balance between individual liberties and the provision of adequate powers for the state to allow for effective crime prevention and control...."[6]

Before embarking on this difficult task, it is best perhaps to define clearly at the outset what exactly we mean when we refer to

"investigative tests." In their broadest sense, investigative tests may be thought of as procedures of a more or less scientific nature aimed at gathering "evidence" (or, perhaps more accurately, information that may ultimately be used at trial to establish guilt) in a criminal case. Essentially, they may be of three types. One type involves the gathering of evidence from the scene of the crime, and would include procedures such as dusting for fingerprints, making casts of footprints, and so forth. Another type involves the gathering of evidence from the victim or from witnesses, and would include such procedures as: medical examination in cases of assault; autopsy; hypnosis or narcoanalysis for the purpose of refreshing the memory, and so forth. A third type involves the gathering of evidence directly from the suspect or accused. It is with this type that we are primarily concerned. Such procedures, although they may be identical or complementary to those referred to above, have traditionally received special consideration in Anglo-North American jurisprudence insofar as they are inextricably bound to general concepts of fairness to the accused and the rights of the individual.[7]

Some scientific investigative procedures, although in a sense they involve the obtaining of evidence "from" the accused, may be used to ascertain whether the accused can be linked to the offence without necessarily interfering in any way with his or her privacy or physical or mental integrity. In one Canadian case,[8] for example, where the accused had been charged with murder and the prosecution's theory was that he had kicked the victim to death, blood and hair samples found on the accused's boots were analyzed and found to be similar to those of the deceased.[9] In a situation such as this, despite the potentially damaging nature of the evidence obtained through investigative test procedures (and despite possible objections as to its scientific reliability), it is submitted that the non-intrusive character of the procedure employed *vis-à-vis* the accused (namely, the borrowing of the accused's boots for laboratory analysis) would save it from most criticism based on concepts of "conscience and human dignity ..."[10] and the "inherent cruelty of compelling a man to expose his own guilt ...."[11]

For the purposes of this Working Paper, we are concerned with those investigative tests that either require some form of participation on the accused's or suspect's part, or constitute an intrusive interference with his or her physical or mental integrity.

Although some overlap is inevitable, we are not concerned with the type of procedure dealt with in our recent Working Paper on Search and Seizure.[12] For the time being, therefore, we may begin by defining the term "investigative test" very broadly as:

> any procedure (excluding simple interrogation, surveillance, the search of a place and the search of the person for concealed or foreign objects or substances) whereby a person in authority or any agent of such person endeavours to obtain or record from a person suspected or accused of having committed a criminal offence, information concerning or an exhibition of:
>
> (a) the physical or mental characteristics of that suspected or accused person;
>
> (b) the offence in question; or
>
> (c) the location of possible evidence relating to the offence in question.

We hasten to point out that this is a preliminary and comprehensive working definition distinct from the greatly modified statutory definition that will be proposed in Part V of this Working Paper as the result of the analysis that follows.

II.

Types of Investigative Tests

Before we consider the various legal issues related to the regulation of investigative tests, it is important to have at least a superficial understanding of the actual techniques involved. This part will therefore deal with the various types of investigative tests that may be conducted by police officers, medical personnel or other trained individuals in the employ of the State. While the techniques used in some procedures will be self-evident, many will be explored in some detail in order that (a) the possible evidentiary implications of such procedures will become apparent; (b) the possible application of tort law and the *Canadian Charter of Rights and Freedoms*[13] may later be considered; and (c) an appropriate scheme for regulation may ultimately be devised.

While there are numerous ways in which investigative tests of the type covered by Part I's definition might be classified, it is most useful for our purposes to begin by dividing such tests into two broad categories: (1) tests that merely require the subject's passive acquiescence; and (2) tests that require the active participation of the accused. Since some tests (for example, identification lineups) might initially seem difficult to classify, we should define active participation tests as those that require participation beyond that which can be achieved through the use of reasonable physical force.

A. Passive Acquiescence Tests

Many investigative test procedures require very little of the subject beyond his or her lack of resistance. The subject is not asked to "do" anything, but is required to submit to having

something "done" to him or her. Such tests may be separated into four subcategories: (1) tests that involve inspection of the subject's body or its characteristics; (2) tests that involve the removal of substances from the exterior of the subject's body; (3) tests aimed at removal of substances from the interior of the subject's body; and (4) tests that involve the administration of substances to the subject. Although at first glance these classifications might appear to represent an ascending hierarchy of "intrusiveness," this may not necessarily be the case. Some tests that would clearly fall into group 1, for example, may be viewed by some subjects as more intrusive than others that would clearly fall into group 3. Simple examination of the naked body, for instance, might be considered an embarrassing or humiliating invasion of physical privacy and might therefore be more objectionable to some individuals than the taking of a blood sample. The same might hold true for fingerprinting and other "routine" identification procedures. As the Victorian Chief Justice's Committee remarked with regard to fingerprinting, photographing and the like: "There is a certain embarrassment and indignity involved in these procedures, to which a person ... should not be exposed unless there is some overriding necessity."[14] The Australian Law Reform Commission has similarly stated: "There is, for better or worse, an aura of real criminality about having one's fingerprints or photograph compulsorily taken."[15]

(1) Simple Body Inspection Tests

As the Indian Law Institute has succinctly noted:

> At times it may be necessary to require the accused to exhibit his body. For this purpose he may be asked to disrobe so that certain marks, scars, or wounds can be seen. It may also be necessary to require him to appear at an identification parade, to wear a particular apparel, to grow a beard, [or] to remove various disguising effects from his body....[16]

This inventory is not exhaustive. Below are described the more common simple body inspection tests in current use.

(a) Lineups and Showups

Although there are numerous cases dealing with the circumstances in which a particular lineup or showup procedure may be unfair, the basic procedures of such identification methods are

quite straightforward in terms of what is required of the accused. As Yarmey has summarized it:

> A lineup usually consists of a suspect standing among a group of five to nine persons out of whom witnesses attempt to pick the guilty individual. This procedure differs from the showup, ... in which the witness confronts the suspect in a one-to-one situation.[17]

In the course of an identification lineup, subjects may be required to wear[18] (or not wear[19]) certain clothing, eyeglasses,[20] and so forth.

(b) Examination for Peculiar Marks

Inspection of an accused's or suspect's body may reveal any number of physicial characteristics that potentially connect him or her to the offence involved. Identifying features such as scars, birth marks, tattoos,[21] wounds,[22] needle marks,[23] and so forth, may be revealed by simple examination of the subject's body by police officers or medical personnel.

(c) Medical Examination

Examination of the accused by a trained physician may be useful in detecting (or ruling out) symptoms of illness, injury, intoxication, drug or alcohol addiction, and so forth. In the course of such examination, procedures such as the taking of the subject's pulse, heart rate and blood pressure, pupil examination, X-rays, flouroscopy, and so forth, would clearly fall within the category of body inspection tests. (Medical examination procedures that involve the taking of substances from the body will be discussed *infra*). Note that some procedures in this category may involve inspection of the unclad body of the subject, including his or her private parts.[24] In cases where a suspect has been apprehended soon after a sexual assault has been committed, for example, examination of the suspect's genitals may reveal physical evidence consistent with the suspect's having committed such offence. Injury to the genitals, for example, may be consistent with forced intercourse.[25] Note also that other medical procedures in this category, such as the taking of X-rays and flouroscopic pictures, may involve an element of risk or entail the possibility of adverse side-effects in some instances.

(d) Photography

Photography of accused persons is specifically provided for in P.C. 1954-1109 under the *Identification of Criminals Act*.[26] The procedure is self-explanatory and need not be described here.

(e) Fingerprinting

The standard procedure for taking fingerprints from an accused person or criminal suspect is fairly simple. It consists in applying the top bulbs of each of the subject's fingers individually to an ink pad, and then pressing them with a "smooth, firm rolling motion" onto a file card.[27] Once the "actual" prints have been taken in this fashion, they may be compared with "latent" prints found at the scene of the crime, or on weapons, vehicles or other objects relating to the offence in question.[28] Palmprints, soleprints and toeprints may be taken from subjects and compared with latent prints in much the same manner as fingerprints.[29]

(f) Dental Impressions

As in the case of fingerprints, the analysis and comparison of a suspect's dental impressions with bite marks can be quite a complex and sophisticated procedure.[30] Again, however, the actual taking of dental impressions, like the taking of fingerprints, is fairly straightforward. It involves the (painless) placing of certain materials in the subject's mouth for a short period of time.[31] In bite mark identification cases, the taking of dental impressions may be supplemented by photography of the suspect's teeth and the taking of saliva and/or blood samples.[32] Bite impressions themselves may be taken by simply asking the subject to bite into any one of a variety of substances.[33]

(g) Physical Measurements

As New Zealand's Criminal Law Reform Committee has noted, physical measurements may be relevant for identification purposes insofar as they can be related to such things as footprints or clothing found at the scene of the crime.[34] The Bertillon Signaletic System, specifically approved of in section 2 of the *Identification of Criminals Act*,[35] was developed in France in the late 1800s and consisted in the taking of five measurements from a subject: skull; feet; forearms; middle fingers and ears.[36] England

and other western countries adopted this procedure for a time but, as noted by Bouck J. in the case of *R.* v. *A.N.*,[37] "flaws soon became apparent and most countries then switched to finger-printing...."

(2) External Substance Removal Tests

It is obvious that simple body inspection tests will not in all cases be appropriate or sufficient methods for obtaining necessary evidence. As the Indian Law Institute has observed, "[s]ometimes to identify the accused, it may be necessary to take into custody incriminating evidence from his person...."[38] Below are described some of the more common procedures that involve the removal of substances from the external person of the subject.

(a) Gunshot Residue Tests

Several tests have been developed for the purpose of ascertaining whether the suspect in an offence involving the discharge of a firearm has recently fired a gun. One of the older methods is the dermal nitrate or paraffin test. This procedure involves the application of two layers of hot paraffin, separated by a layer of cotton, to the skin of the subject's hands. In this manner, molds are taken which will contain any residues present on the subject's skin.[39] Diphenylamine in a concentrated solution of sulphuric acid is then applied, which will react with any nitrate deposits by turning blue.[40] As Moenssens and Inbau have noted, "[t]he theory behind the test was that the results established the presence of particles of nitrates or nitrites, deposited on the hand by the gases of a discharged cartridge."[41] As they have also pointed out, however:

> The flaw in this theory was ... that similar reactions could result from the presence of other, innocently acquired substances containing nitrates or nitrites, as was disclosed by controls conducted in various criminalistics laboratories.[42]

While more reliable and specific variations of the dermal nitrate test have been developed,[43] along with several other methods for detecting gunpowder residues,[44] none of the standard techniques has received more attention than the combination of neutron activation analysis for quantitative analysis of barium and antimony traces and atomic absorption spectrophotometry for

quantitative analysis of lead traces.[45] Though it is not important for our present purposes to detail the complexities of these procedures, a word or two about sample collection is in order. In this regard it should be noted that there are four basic methods for obtaining skin residue samples from the hands of suspects. One rather unsatisfactory method involves the "lifting" of the samples through the use of films or casts. In addition to paraffin (mentioned previously), substances such as collodion or cellulose acetate may be used.[46] A second technique involves the use of swabs moistenened with hydrochloric or nitric acid. A third and highly satisfactory method involves actual washing of the subject's hand in either water or dilute nitric acid. As Canadian forensic scientist S. S. Krishnan has explained:

> The washing can be done with a plastic squeeze bottle or by dipping the hand into a bag containing the liquid. The residue appears to be mechanically removed by the water or dilute nitric acid, which are comparable in effect (removal of more than 80 percent and 95 percent, respectively). Nitric acid aids in getting the trace elements into solution for further chemical analysis. The advantage of this method is its simplicity. It takes less than a minute to complete and therefore provides little opportunity for contamination.[47]

Fourth and finally is the technique of lifting residue samples with adhesive tape. This is not, apparently, a widely-accepted procedure, and its effectiveness has not been thoroughly studied.[48]

(b) Hair Examination

There are two methods by which hair samples are currently compared by forensic scientists: microscopic examination and neutron activation analysis. Microscopic examination is a subjective technique in which the observer notes the similarities and differences in the hair samples with reference to such characteristics as: colour, texture, curliness, damage, scale appearance and variation, pigment density and distribution, medullation, the presence of air bubbles, banding, scale count, the presence of residues, and so on.[49] Neutron activation analysis is an objective technique in which the sample hair is bombarded with neutrons in order that the micro-quantities of trace elements present (for example, copper, gold, manganese, sodium, and so on) may be calibrated to several decimal points.[50] Regardless of which method is used, the methods by which hair samples may be taken from the

subject are quite simple and straightforward. Vigorous combing is generally all that is required.[51]

(c) Fingernail Scrapings

This procedure is self-explanatory. It involves the removal of matter from beneath the subject's fingernails with a suitable instrument for the purpose of laboratory analysis.

(d) Skin Washings

Various substances may be washed from the surface of the skin for laboratory analysis. Penile washing, for example, may be performed in cases where a suspect has been apprehended very soon after a sexual assault has been committed. As Zumwalt and Petty have explained:

> Penile washings to determine recent sexual activity may help in identifying possible suspects. In this test the suspect's penis is washed with saline, and the material is treated with Papanicolaou's stain. Cells consistent with vaginal and cervical cell populations and Barr body identification suggest recent intercourse.[52]

(3) Internal Substance Removal Tests

This type of test is generally thought of as "medical" in nature insofar as most tests that fall into this category constitute procedures that, although sometimes adopted for investigative forensic purposes, are commonly performed by trained medical personnel for diagnostic or therapeutic purposes. As the Indian Law Institute has summarized:

> Medical tests to secure evidence from within the body of the accused may take various forms, for example, examination to determine pregnancy, recent child birth, or presence of venereal disease, blood or urine test to determine intoxication.... It may also be necessary to puncture the skin or perform such other acts which may be painful or harmful (if not done under competent medical supervision) to the body.[53]

This list, once again, is not exhaustive. Below are set out some of the more common procedures that involve the removal of substances from inside the body of the subject.

(a) Blood Tests

Blood samples are taken from a subject either by puncture of a vein[54] (usually the cubital vein in the arm)[55] or from capillaries (usually in the fingertip, sometimes in the earlobe).[56] The amount of blood required may vary depending on the type of test contemplated. Where, for example, drug and alcohol analysis is to be done, Bear has suggested that 10 c.c. should be obtained.[57] However, a fraction of this amount should be adequate for the purpose of blood typing only.[58]

The presence and proportion (if any) of alcohol in a given sample of blood may be quite reliably and accurately determined through the use of a number of sophisticated scientific techniques.[59] The presence, identity and proportion (if any) of a drug in a given sample of blood may also be reliably and accurately determined in many cases, though such determination has its limitations and may be problematic due to a number of factors.[60]

Blood group determinations are generally made by various antigen, protein and enzyme system tests.[61]

(b) Saliva Samples

Although it may have other forensic uses, saliva is the bodily fluid most commonly obtained for the purpose of establishing whether a given individual is or is not a "secretor," that is, someone whose blood group (ABO) factors are present in other bodily fluids.[62] As New Zealand's Criminal Law Reform Committee has noted, "[s]aliva samples may be obtained without particular inconvenience to the examinee, as a mouth swab, or a piece of gum or gauze chewed by the examinee, will suffice."[63]

(c) Urine Samples

The taking of urine samples for laboratory analysis may be classified as an "active participation" type procedure where the subject provides such samples by means of the normal excretory process. Note, however, that urine samples may also be obtained by catheterization, that is, the passing of a tube through the urethra into the bladder.[64] Urine samples may be analyzed *inter alia* for the presence of alcohol or drugs (or metabolites thereof) in much the same manner as blood samples are analyzed.

(d) Semen Samples

Semen samples may be obtained from a subject for laboratory analysis by means of a rectally administered massage of the prostate gland for the purpose of inducing involuntary ejaculation. This procedure has been used on criminal suspects and accused persons to obtain evidence of venereal infection for the purpose of corroboration of identification in cases of alleged sexual offences.[65] Note, however, that in those cases where this procedure has been used it has not been shown to be a particularly reliable diagnostic technique for the specific conditions involved.[66]

(4) Tests in Which Substances Are Administered

Certain substances (for example, enemas, emetics) may be administered to persons for the purpose of obtaining "physical evidence" which has in one way or another been internally concealed. As mentioned earlier, we are not concerned with "search and seizure" techniques in this Working Paper. In addition, however, there are substances that may be administered to criminal suspects or accused persons for the purpose of obtaining other kinds of evidence.

(a) Narcoanalysis

Narcoanalysis has been defined as "the method in which the intravenous injection of a sedative drug is employed to produce a disinhibited state of mind, so that the patient becomes more communicative and has less emotional control...."[67] A variety of drugs may be used in this procedure,[68] although the barbiturates amobarbital sodium and thiopental sodium are currently the most popular.[69] Although sometimes colloquially referred to as the "truth serum technique," it should be noted that narcoanalysis has not been shown to be a reliable method of obtaining accurate information from criminal suspects and accused persons.[70]

(b) Administration of Other Drugs

In *R.* v. *Conkie*,[71] where the accused was charged with murder, and drunkenness was one of the defences that was ultimately raised at trial, the evidence indicated that the accused, while under remand at the Alberta hospital for psychiatric assessment, had apparently been subjected to an experiment designed to test his

tolerance for large quantities of alcohol. As Moir J.A. described it, the accused was given "22 ounces of liquor in controlled circumstances which produced a frenzied state that required five people to control [him] and then he had to be given sodium pentothal intravenously to subdue him."[72]

B. Tests That Require the Active Participation of the Subject

In addition to the various tests discussed above, there exist a number of investigative procedures in which the subject is required not merely to acquiesce but to "do things." Depending on the test involved, the level of participation required of the accused will vary. In some instances it may be difficult to distinguish, in either a practical or theoretical sense, active participation tests from passive acquiescence tests. Below are described some of the more obvious procedures that would fall into the active participation category.

(1) Physical Performance Tests

Various physical performance tests have from time to time been used by police officers as a preliminary means for assessing alcoholic or drug-induced impairment.[73] As to the reliability of these tests as a means for assessing impairment, Watts has noted that "[t]here is a great deal of controversy...."[74] As Erwin has asserted in his textbook on *Defense of Drunk Driving Cases*, it is quite possible for persons with high blood alcohol levels to pass such tests and for sober persons to fail them in certain circumstances.[75]

(2) Handwriting Comparison

The comparison of handwriting for identification purposes is a subjective technique[76] whereby the characteristics of known and questioned writings (for instance, letter formation, size, proportion, shading, pressure, slant, spacing, pen lifts, movement, quality, beginning and ending strokes, and so on) are analyzed for the purpose of determining whether there is both a significant combination of individual and class features common to both

specimens, and an absence of fundamental differences.[77] It is not necessary to describe the various complexities of handwriting analysis, it being sufficient for our purposes to outline the procedure commonly used for obtaining standards of comparison from the suspect or accused. In this regard it should first be noted that the amount of writing required for proper analysis and comparison will vary from case to case. Generally, it will depend upon the variation in both the questioned and the subject's handwriting[78], the amount of questioned writing involved[79] and the suitability of the standard sample.[80] Standards may be obtained by asking the subject to fill out a specially designed form which requires him or her to write or print the words and numerals indicated thereon, to sign his or her name, and so forth.[81] Even where this practice is followed, however, it is generally thought advisable to request from the subject as well dictated specimens of the actual writings in question.[82] This may be done several times.

(3) Breathalyzer Test

Blood alcohol content may, in appropriate circumstances, be indirectly established by determining the proportion of alcohol vapour in alveolar air from the respiratory tract, and applying a conversion factor. This procedure has been made convenient through the development of a variety of instruments, most notably the Borkenstein Breathalyzer. Breathalyzer testing requires the subject to blow into the mouthpiece of the instrument.[83]

When correctly conducted using a properly functioning machine, breathalyzer testing is a highly accurate method for determining blood alcohol content.[84] Although substances other than ethyl alcohol (for example, methyl alcohol, ether, paraldyhyde, cigar or cigarette smoke and possibly acetone) may produce readings on the instrument, their presence in sufficient quantities to affect a given subject's test reading significantly would be unlikely to go unidentified by a trained breathalyzer technician.[85] While falsely high results might be produced by the presence of residual liquid alcohol in the mouth, this contingency is guarded against by the observance of at least a fifteen minute waiting period following the subject's last ingestion or regurgitation of alcohol prior to testing.[86] Though it is possible for the subject to produce a falsely low reading by limiting his expiration of deep lung air,[87] Lucas has asserted that "[a] subject cannot blow in a way which could produce falsely high results."[88]

(4) Polygraph Examination

Polygraph (lie detection) examination, as succinctly described by one Canadian writer, consists of a pre-test interview followed by an interview conducted while various psychophysiological responses are monitored by means of instrumentation.[89] As that writer has further explained, the process involves comparison of the responses which occur while "control" questions are being answered with those which occur during the answering of relevant questions.[90] To eliminate the risk of shock or surprise reactions, all questions are made known to the subject before the test.[91]

The polygraph apparatus is comprised of basically three separate recording instruments. One instrument monitors changes in respiration by means of pneumograph tubes which are fastened around the subject's chest and abdomen.[92] Another monitors changes in pulse and blood pressure by means of a cuff fastened around the subject's upper arm.[93] A third instrument records electrodermal activity (also called galvanic skin reflex or response) through electrodes attached to the subject's hand or fingers.[94] Additional instrumentation may be attached to the chair occupied by the subject for the purpose of recording muscular movements and pressures.[95] The information received by the polygraph machine from each of these sources is recorded simultaneously on a moving chart which is marked by the polygraph examiner during the course of the interview to indicate at what point the various questions were asked and whether the response was "yes" or "no."[96]

It is important to note that the polygraph apparatus does not in itself "detect" untruth. As Moenssens and Inbau have pointed out, the physiological changes recorded by the machine merely serve as the basis for possible (subjective) *diagnosis* of truth or deception.[97] Accurate determination of truthfulness is therefore dependent in part on the competence and training of the polygraph examiner. Other factors that may lead to erroneous diagnoses of deception (that is, "false positives"), apart from mechanical malfunctioning, include: extreme nervousness;[98] fear;[99] high or low blood pressure;[100] heart disease;[101] respiratory disorders;[102] mental disorder;[103] ingestion of drugs;[104] pregnancy;[105] ethnic or cultural background;[106] and so on.[107]

(5) Spectrographic Analysis

Spectrographic analysis is the technique of voice identification (or elimination) by means of "voiceprints." A voiceprint may be defined as "a pictorial representation of the acoustical energy output of a speaker, as a function of time, frequency and amplitude."[108] Essentially, there are two types of voiceprint that may be produced for analysis in this technique: (1) bar spectrograms, "showing the resonance bars of the voice with dimensions of time, frequency and loudness" (most useful in matching known and unknown voice samples);[109] and (2) contour spectrograms, "measuring levels of loudness, time and frequency in a shape much like a topographical map" (most useful in computerized spectrographic classification).[110] Voice identification is accomplished by subjective visual comparison of voiceprints from known and unknown sources in much the same way as fingerprints are compared. As Tosi has noted, "[a]ny method of identification or elimination has to be based on parameters that vary differently or less within the individual than among different persons."[111] Spectrographic analysis is accordingly premised on the theory (1) that the anatomical characteristics of people's speech organs differ significantly, and (2) that the habit patterns with regard to the way a given individual uses his or her speech organs are different but consistent.[112] The validity of this theory is, however, a hotly-debated issue.[113]

Spectrographic voice identification requires nothing of the suspect beyond the furnishing of a voice sample, either in the presence of a tape recorder or, depending on the circumstances, over a telephone line to which a recording device has been connected. The suspect is required to repeat sentence by sentence (perhaps several times) the words that have been transcribed from the recording of the known voice with which his or her voice is to be compared.[114]

Note that subjects may be required to speak out loud[115] or repeat certain words[116] in the course of identification lineups.

(6) Psychiatric Examination

A thorough psychiatric examination is generally comprised of three elements: physical examination; psychological testing; and personal psychiatric interview[117]. The first element has already

been dealt with in part under the heading "Medical Examination." Note, however, that where organic disorder is suspected as a possible factor affecting the subject's mental state or behaviour, physical examination may entail various specialized tests. As Schiffer has explained:

> Physical testing is aimed generally at detecting organic abnormality which may be relevant to the accused's alleged criminal behaviour. It involves such procedures as: blood tests (*i.e.*, for detecting possible lead or alcohol poisoning, anemia, syphilis, etc.); urinalysis (useful in detecting diabetes or hypoglycemia); routine chest and skull X-rays; and perhaps such special organic and neurological tests as pneumoencephalography, electroencephalography and spinal fluid examination (useful in the diagnosis of neurological and organic brain disorders such as meningitis, tumours, epilepsy, brain injury and neurosyphilis).[118]

Psychological tests (administered by clinical psychologists) fall generally into three categories:[119] intelligence tests (in which the subject is required to solve problems or answer quiz-like questions[120]); personality and behavioural questionnaires (in which the subject is required to answer questions about him- or herself[121]); and projective tests (in which the subject may be required to do various things, such as interpret the meaning of a picture,[122] tell what a series of ink blots look like to him or her,[123] or draw a picture of a person).[124] Additional tests may be given to measure intellectual impairment.[125]

The personal psychiatric interview, as one would expect, takes the form of a conversation between the psychiatrist and the subject. Though it is not easily defined, Sullivan has enumerated its general characteristics, describing it in part as:

> ...a situation of primarily *vocal* communication in a *two-group*, more or less *voluntarily integrated*, on a progressively unfolding *expert-client* basis for the purpose of elucidating *characteristic patterns of living* of the subject person, the patient or client, which patterns he experiences as particularly troublesome or especially valuable....[126]

As Stevenson has further noted, the interview need not conform to any specific format. As he has written:

> Formerly a question-and-answer type of interview satisfied the requirements of psychiatric interviewing, as it did and still does satisfy those of medical history-taking with regard to exclusively physical illnesses. But the modern psychiatric interview, though it includes questions, puts much more emphasis on a free-flowing exchange between the psychiatrist and the patient.[127]

This is not to say, however, that the goals of any psychiatric interview and the factors being assessed are not clearly defined. In their outline of a typical psychiatric examination, Stevenson and Sheppe have enumerated several key areas on which the psychiatrist is trained to focus. These include: the subject's emotions; his or her behaviour (including the potential for destructive behaviour); intelligence (including vocabulary, range of information, memory and judgment); thought processes (including speed, accuracy and clarity of thought, capacity for higher forms of thinking and rigidity of thought processes); thought content (including central themes, abnormalities of thought content, self-concept and insight) and perceptions (including misperceptions, illusions, hallucinations, attention and orientation).[128] In conducting his or her evaluation, moreover, the psychiatrist may pay as much attention to non-verbal indicia (for example, facial expressions, gestures, postures, and so forth) as to the information verbally communicated by the subject.[129] In forensic examinations, the psychiatrist may or may not directly question the subject concerning the offence he or she is suspected or alleged to have committed. As Davidson has written:

> In Britain it is considered unsporting for the doctor to ask the accused whether he has committed the crime, but American psychiatrists often find it impossible to conduct a thorough mental examination without somehow touching on that point.[130]

(7) Hypnosis

Psychiatric authors Kolb and Brodie have defined hypnosis as "an induced state of dissociation produced through suggestion."[131] Though discussion of the complex dynamics of this procedure is beyond the scope of this Working Paper,[132] it should be noted for our purposes that hypnosis is an effective means of reducing a subject's inhibitions and of recovering repressed (that is, "forgotten") material.[133] Its reliability as a truth-seeking device has not, however, been established. A subject under hypnosis may be capable of lying or confessing to crimes that he or she has not in fact committed.[134]

Arons has asserted that while it is "common knowledge among the well-informed today that it is possible to induce the hypnotic state in susceptible subjects without their awareness of the fact,"[135] it is an exaggeration to claim that hypnosis can ever be induced, however indirectly, without the subject's tacit consent.[136]

III.

Evidentiary Uses of Investigative Test Results

Having enumerated and described the various types of investigative tests to which accused persons and criminal suspects may be subjected, we should now examine the uses to which the direct or indirect results of such procedures may be put in court. From an examination of the relevant case law and statutory provisions, it would appear that under the present law there exist no less than eleven ways in which the use of investigative tests may result in the obtaining of incriminatory evidence. They are, essentially, as follows.

A. Physical Evidence of Identity

The use of some investigative tests may result in the obtaining of physical evidence from a suspect or accused person that can be compared with other physical evidence relating to the scene of the crime or to the victim, such comparison then being admissible on the issue of identity.

This is possibly the "classic," or at least most obvious, use of investigative test procedures. In cases where the identity of the perpetrator is in issue, the results of investigative techniques (such as the taking and analysis of fingerprints, palm prints, footprints, hair samples, fingernail scrapings, dental impressions, blood, saliva, urine, semen, and so forth) may be used by various scientific experts to compare with analysis of various potential "clues" found at the scene of the crime or relating to the victim. The results of such comparison might then be adduced in evidence in

the course of expert opinion testimony as circumstantial evidence of the accused's guilt.[137]

The relevance of various forms of circumstantial "physical trace" evidence may be easily understood by reference to some of the many reported criminal cases in which it has been admitted. The use of fingernail scrapings is exemplified in the American case of *Cupp* v. *Murphy*.[138] There, police investigating a homicide by apparent strangulation took such scrapings from the victim's husband upon noticing a dark spot on his finger which they suspected might be dried blood. Forensic analysis of the scraped material revealed traces of skin and blood cells, and fabric from the victim's night-gown. Hair comparison has been put to evidentiary use in many cases. A classic example occurred in *State* v. *Andrews*[139] where pubic hairs found at the scene of a rape were matched with pubic hairs removed from the accused. Bite mark evidence has also been admitted in a number of reported American cases, most of which deal with bite marks on the bodies of victims;[140] although in *Doyle* v. *State*[141] bite marks on food remnants helped place the accused at the scene of the crime.

It is important to note that the admissibility and probative value of any "matching up" of "clues" will generally depend on three distinct considerations: (1) the nature of the clue involved; (2) the procedure employed in the analysis; and (3) the circumstances of the case.

(1) The Nature of the Clue

Some clues, if properly analyzed, are capable of being matched with an extremely high degree of specificity. Put another way, the inherent uniqueness of some physical traces makes it theoretically possible to say with near absolute certainty whether they belong to the particular person who donated the comparison sample. As McWilliams has pointed out with regard to fingerprint evidence, for example: "It is universally asserted that no two persons can have identical fingerprints."[142] Therefore, in the words of England's Royal Commission on Criminal Procedure, "[w]here fingerprint evidence is available, it will frequently be conclusive and therefore provide hard evidence leading to conviction...."[143] Thus in *Goguen* v. *The Queen*,[144] where fingerprints were the only evidence linking the accused with the offence of breaking and entering with which he was charged, the Appeal Division of the New Brunswick

Supreme Court held such evidence to be "a sufficient circumstance from which the Magistrate could properly draw an inference of guilt"[145] and to have satisfied the rule in *Hodge's Case*.[146] Likewise in *Dufresne* v. *The Queen*[147] the Québec Queen's Bench (Appeal Side) held that in the absence of any explanation, the jury were entitled to infer from fingerprint evidence alone that the accused had been the driver of the get-away car in an armed robbery. In *R.* v. *Keller*[148] the unexplained presence of the accused's fingerprint on a match-cover found near a safe which had been opened with a cutting torch was held in itself to be sufficient circumstantial evidence of identity to support a finding of guilt.

Other forms of "physical trace" evidence are not as inherently cogent as fingerprints. In the case of blood samples, for example, the numbers of persons who may have a given blood type make it impossible, given the present state of the science of forensic serology, to say with certainty whether a questioned blood sample came from a particular accused.[149] This difficulty is present in the case of all other physical trace evidence that involves the analysis of blood group characteristics, for example, saliva, mucus, semen, perspiration, tears, vaginal fluids, gastric contents, and so forth.[150] Nevertheless, such evidence may be useful in the process of elimination which frequently takes place in cases where there are several possible perpetrators of an offence.[151] It should be noted that the science of forensic serology is making considerable advances. Current methods make it possible in some cases to narrow down statistically the group of possible donors of a questioned blood specimen to a very small proportion of the public indeed.[152]

Bite mark evidence has a number of difficulties. Although, as Moenssens and Inbau have noted, reliable identification is possible "in exceptional circumstances, when the bite mark is deep, pronounced, clearly visible, and well preserved and contains unusual characteristics of the teeth that made the impressions...,"[153] they have noted that positive identification is usually not possible.[154]

In the case of hair analysis, there is likewise no known method at the present time by which hair can be positively identified as having come from a particular person, except in very rare cases.[155] Generally, the most that can be determined from microscopic comparison of hair samples is: (1) whether the samples came from

persons of the same race; (2) whether the samples came from persons of the same sex; and (3) to what extent the samples are similar with respect to colour, structure, pigmentation, and so on.[156] Though serological examination may be possible if hair roots are present,[157] the probative limitations of such results have already been noted. Even where the objective and quantitative technique of neutron activation analysis is used, practical difficulties concerning the sample amount, contamination, and the fact that the trace element composition of one's hair changes continuously, may make identification problematic.[158] In addition, it would appear that while statistics have been compiled concerning the trace element concentration pattern of scalp hair in the Canadian population,[159] there may be less data of this kind with regard to pubic and other body hair.[160]

Limitations of the type discussed above, while they may diminish the usefulness of certain forensic techniques, do not necessarily render them valueless.

(2) The Procedure Employed in the Analysis

Even in the case of clues that possess an inherent uniqueness, the very admissibility of various investigative test results as the basis for expert scientific opinion may depend *inter alia* upon the threshold consideration of scientific reliability. In the United States, the generally accepted test for admissibility of scientific evidence is that articulated by the United States Court of Appeals for the District of Columbia Circuit in *Frye* v. *United States*.[161] There Van Orsdel J. remarked:

> Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be *sufficiently established to have gained general acceptance in the particular field in which it belongs*. [Emphasis added]

In *R.* v. *Medvedew*,[162] O'Sullivan J.A. of the Manitoba Court of Appeal expressed approval of this test, saying: "I do not know whether that test has been adopted in Canadian courts or not, but to me it makes sound sense and expresses a view in accord with the principles of the common law."[163]

It is our view that techniques that do not meet the test propounded in the *Frye* case should be regarded with a considerable degree of scepticism. For this reason we do not believe that the forcible administration of such procedures ought to be statutorily permitted or that any penal or evidentiary consequence should ordinarily result from a person's failure or refusal to allow them to be conducted. Saying this, however, does not make the difficult problem of separating those tests which fall within the rule in *Frye* from those which do not much easier. This point is perhaps best demonstrated by reference to Canadian case law on "voiceprint" evidence. For our purposes, spectrographic analysis may be likened to the analysis of "physical trace" evidence.

The first reported case in which the admissibility of voiceprint analysis was considered in Canada is that of *R.* v. *Montani*.[164] There the Crown was seeking to have expert evidence based on spectographic analysis admitted for the purpose of identifying a voice recorded from a wire-tapped telephone as that of the accused. On the matter of reliability, the Crown adduced evidence: (1) that on the basis of empirical research spectrographic analysis had been determined to be "substantially accurate;"[165] and (2) that the spectrograph of an imitator's voice would not be the same as that of the subject's.[166] In the result, Marck Prov. J., after referring to cases in which voice identification by non-expert witnesses had been allowed, ruled that the evidence of the proffered expert was admissible.[167]

In *R.* v. *Medvedew*[168] the admissibility of voiceprint evidence was considered by the Manitoba Court of Appeal. There the Trial Judge, after admitting the testimony of a spectrograph expert called by the Crown and the evidence of two other expert witnesses with sharply differing views as to the reliability of voiceprint techniques, had left the question of weight to be decided by the jury. Speaking for the majority of the Court of Appeal, Matas J.A. held that there had been nothing improper in the admission of the evidence or the manner in which the learned Trial Judge had dealt with it, and therefore dismissed the accused's appeal from his conviction for uttering a threat by telephone. O'Sullivan J.A. dissented, however, on the basis *inter alia* that voiceprint analysis had not been established as being a sufficiently reliable scientific technique to permit the admission of expert evidence based thereon. The jury, in his view, had been invited not merely to assess the weight to be given to such evidence, but to decide the question of the

technique's scientific reliability on their assessment of the demeanour of the witnesses.

Even where a given investigative test procedure has gotten over the "scientific reliability" hurdle as regards the admissibility of expert evidence based thereon, the weight that is given to such evidence in practice may well be affected by the existence of an alternative technique that is at least *potentially* more reliable. This point is well illustrated in the case of hair analysis. As noted in Part II, though the standard technique for analysis of hair samples is a subjective microscopic comparison in which points of similarity and difference are judged by a standard set of criteria, the comparatively new (and essentially objective) technique of neutron activation analysis, in the words of Moenssens and Inbau, "has to a certain extent revolutionized all trace investigation techniques, because it is more sensitive than almost any other known method."[169] The authors have described a Canadian case[170] in which a single strand of hair found under a murder victim's fingernail was compared with hair obtained from the accused using neutron activation analysis and was shown to have the same trace amounts of soduim, copper and manganese. According to the expert evidence, the chances of such a coincidence occurring with respect to hairs of different people was approximately one in one million.

Though the forensic literature on the usefulness of neutron activation analysis is widely contradictory,[171] it would seem that the failure to employ this technique may seriously undermine the impact of expert hair analysis evidence based exclusively on microscopic comparison. In *R.* v. *Roberts*,[172] for example, a murder case involving comparison of hairs taken from the accused with hairs found in the apartment of a homicide victim whom the accused claimed never to have visited, an expert witness for the Crown testified on the basis of microscopic analysis alone that the hairs were "similar to Mr. Roberts' and could have come from him."[173] At one point he defined "similar" as meaning "one step short of certainty."[174] The accused was convicted but a new trial was ordered by the Ontario Court of Appeal essentially on the strength of new expert evidence based on neutron activation analysis that "it is very unlikely that the hair said to be microscopically similar to the appellant's hair is in fact hair from the appellant."[175] At the accused's second trial he was acquitted.

(3) The Circumstances of the Case

The probative value of a given form of physical trace evidence will not be the same in all cases. Fingerprint evidence, for example, though it may in some circumstances be conclusive on the issue of identity, is capable (like all other circumstantial evidence) of being explained away in other cases.[176] In still other instances, fingerprint evidence, though not in itself capable of establishing the identity of the perpetrator, may be corroborative on this issue. In *R.* v. *LaRochelle*,[177] for example, where the complainant in an indecent assault case had testified that the accused had thrown away a beer bottle at the secluded spot where the assault took place, and where the accused denied ever having met the complainant, the presence of a beer bottle at that spot bearing the accused's fingerprints was held to be corroborative.

Other forms of "physical trace" evidence that are not as inherently cogent as fingerprints may have other uses. In *R.* v. *Ethier*,[178] for example, a rape case in which the accused denied ever having met the complainant, the Ontario Court of Appeal held that scientific evidence regarding the similarity of blood and hair traces was not capable of being *corroborative* evidence on the issue of identity, although it could be considered by the jury as adding to the *credibility* of the complainant's story.

B. Eyewitness Evidence of Identity

The use of some investigative tests may result in eyewitness evidence tending to identify the accused as the perpetrator of an offence.

Investigative tests in the nature of lineups, show-ups, the trying on of certain clothing or the speaking of certain words in the presence of witnesses to an offence may ultimately result in the leading of evidence at trial as to the accused's identification, by a witness or witnesses, as the perpetrator of the offence involved.

The evidentiary character and value of eyewitness identification by means of the above-mentioned procedures has been discussed in numerous reported cases and by a great many legal commentators and text writers.[179] A preliminary point worth noting

is that eyewitness identification evidence is, like the forensic evidence discussed in section A above, a form of *opinion evidence*. As O'Halloran J.A. remarked in the case of *R.* v. *Browne and Angus*:[180]

> A positive statement "that is the man" when rationalized, is found to be an opinion and not a statement of single fact. All a witness can say is, that because of this or that he remembers about a person, he is of opinion that person is "the man."

As to the value of eyewitness identification evidence, several points need to be made. First, it has been stated that eyewitness testimony, standing by itself, and without reference to any particular noteworthy characteristic:

> ...amounts to little more than speculative opinion or unsubstantial conjecture, and at its strongest is a most insecure basis upon which to found that abiding and moral assurance of guilt necessary to eliminate reasonable doubt.[181]

This being the case, it has been held that in cases where identification is a major issue:

> ...the jury's attention... "should be called in general terms to the fact that in a number of instances such identification has proved erroneous, to the possibilities of mistake in the case before them and to the necessity of caution."[182]

A second point worth noting is that the reliability of such evidence may depend upon a number of factors, namely: the circumstances of the witness's observation of the perpetrator; the amount of time which has elapsed since the observation; prior acquaintance of the eyewitness with the perpetrator; and the presence or absence of features which are distinctive to the appearance of the perpetrator.[183] Finally, it should be noted that the failure to use identification procedures prior to trial (that is, a lineup) may greatly reduce the cogency of eyewitness testimony that the accused present in the courtroom is the perpetrator of the offence witnessed.[184] Cross has described the holding of an identification parade (lineup) before the trial or preliminary inquiry as the "correct procedure,"[185] and has observed that the out-of-court words and actions of a witness (that is, at a lineup) may be admitted in evidence for the purpose of confirming his or her testimony that the accused is the culprit, notwithstanding the

general inadmissibility of previous statements to prove consistency.[186] As Lord Haldane L.C. remarked in the case of *R.* v. *Christie*,[187] what was said or done out of court is relevant "to shew that the [witness] was able to identify at the time and to exclude the idea that the identification of the prisoner in the dock was an afterthought or a mistake."

Even where a proper lineup procedure is used, the reliability of eyewitness identification evidence emanating therefrom may not be regarded as particularly high.[188]

Photographs are of course another method used by police in the course of their investigations which may ultimately be the basis for eyewitness identification evidence. As Robertson C.J.O. remarked in the case of *R.* v. *Goldhar*,[189] "it is often necessary to assist the police in their search that photographs should be exhibited to someone who may be able to pick out a photograph of the person to be sought for..." In this context, Cohen has described the use of photographs as "an indispensible investigatory tool."[190] This is not to say, however, that evidence of identification of an accused person as the perpetrator of an offence by means of photographs will have any greater value than that of lineup identification.

C. Physical Evidence of Criminal Conduct

The use of some investigative tests may result in the obtaining of physical evidence from an accused person or criminal suspect that either corroborates other evidence or is prima facie *evidence in itself that the person's conduct in a given situation was criminal.*

One of the evidentiary uses of investigative tests involving the taking and analysis of samples of blood, urine, breath, saliva, and so forth, is apparent when one considers those statutory provisions that make certain conduct an offence when various substances have been consumed in sufficient quantity. By subsection 234(1) of the *Criminal Code*, for example:

> Every one who, while his ability to drive a motor vehicle is impaired by alcohol or a drug, drives a motor vehicle or has the care or control of a motor vehicle, whether it is in motion or not, is guilty of an indictable offence or an offence punishable on summary conviction...

Here it would appear that evidence of an accused's consumption of a proven quantity of alcohol or drug may not in itself be sufficient to establish impairment of the ability to drive a motor vehicle,[191] and that expert evidence relating his or her ability to drive to drug or alcohol consumption may be required.[192] This difficulty does not exist, however, with regard to a charge laid under subsection 236(1) of the *Code*, which provides:

> Every one who drives a motor vehicle or has the care or control of a motor vehicle, whether it is in motion or not, having consumed alcohol in such a quantity that the proportion thereof in his blood exceeds 80 milligrams of alcohol in 100 millilitres of blood, is guilty of an indictable offence or an offence punishable on summary conviction...

Similar provisions exist under the *Code* with respect to the navigation or operation of vessels. According to subsection 240(4):

> Every one who, while his ability to navigate or operate a vessel is impaired by alcohol or a drug, navigates or operates a vessel is guilty of an offence punishable on summary conviction.

Section 240.2 states:

> Every one who navigates or operates a vessel having consumed alcohol in such a quantity that the proportion thereof in his blood exceeds 80 milligrams of alcohol in 100 millilitres of blood, is guilty of an offence punishable on summary conviction.

D. Lay Opinion Evidence of Criminal Conduct

The use of some investigative tests may lead to (or lend weight to) lay opinion evidence tending to show, or corroborate an allegation that, the accused's conduct in a given situation was criminal.

Although, as Cross has pointed out, non-expert witnesses will not generally be allowed to draw inferences from observed facts (that is, express opinions),[193] a witness will be permitted to state an opinion or impression when, in the words of one American judge, "the facts from which a witness received an impression were too evanescent in their nature to be recollected, or too complicated to

be separately and distinctly narrated...."[194] The reasoning here is that the witness is, in such circumstances, in a better position than the jury to draw the inference as it would be virtually impossible to convey all of the necessary data upon which it is founded to the jury.[195] Such reasoning has been applied in Canada to allow the reception in evidence of lay opinion on a variety of issues — most notably, for our purposes, the reception of police evidence of impairment in cases where the accused has been charged with impaired driving under subsection 234(1) of the *Criminal Code*.[196] In *R.* v. *Graat*,[197] a decision of the Ontario Court of Appeal recently affirmed by the Supreme Court of Canada,[198] it was noted that "[t]he weight to be given to such inferential testimony will vary from witness to witness, depending on the observed facts on which it is based."

This being the case, it is easy to see how the performance of various physical tests by the accused at the behest of the police would assist in providing a basis for future opinion testimony as to impairment. For this reason, as the Court in *R.* v. *Dixon*[199] noted:

> The cases in the reports are replete with accounts of various physical co-ordination tests to which the accused is normally subjected upon his arrival at the Police Station such as the heel and toe test, closing the eyes and touching the nose with the index finger of either hand, standing on one foot and with one hand picking up a coin from the floor, walking along a chalked line....

The usefulness of such tests was recognized by implication when the Court continued:

> If no such aids to determining or demonstrating the degree of impairment are utilized by the investigating officers then particular care should be taken to put themselves in a position to be able to present to the trial tribunal a reasonably thorough and reliable account of the observation of objective symptoms exhibited by the accused at the time of or subsequent to his arrest which impels the mind of the Court to the conclusion that at the relevant time the ability of the accused to drive a motor vehicle was actually impaired by alcohol.[200]

Moreover:

> ...such requirements are particularly necessary where, as here, there is no evidence whatever as to any mode or manner of driving by the accused nor has he been in any accident.[201]

In cases where there is other evidence of intoxication which may amount to impairment, the accused's performance of physical coordination tests may strengthen the basis of an opinion as to impairment, making it more likely to be accepted by the trier of fact. Thus in *R.* v. *McKenzie*,[202] though the Court acknowledged that "[t]here appears to be no single test or observation of impairment of control of faculties, standing alone, which is sufficiently conclusive,"[203] it stated that:

> If a combination of several tests and observations shows a marked departure from what is usually considered as the normal, it seems a reasonable conclusion that the driver is intoxicated with consequent impairment of control of faculties and therefore that his ability to drive is impaired.[204]

In *Hurley* v. *Taylor*[205] it was similarly held that an accused's failure to pass certain tests, when considered along with the other evidence, provided "ample justification" for a conviction for impaired driving.

E. Confessions

The use of some investigative tests may result in the obtaining of an admissible confession, depending inter alia *on compliance with the voluntariness rule.*

The investigative test procedure that perhaps most frequently results in the obtaining of inculpatory statements from criminal suspects and accused persons is psychiatric examination. Where a confession is obtained by this method, its admissibility may, depending on the circumstances, depend *inter alia* on compliance with the "voluntariness rule." The classic formulation of this rule, of course, is that laid down by Lord Sumner in the case of *Ibrahim* v. *The King*,[206] namely that:

> [N]o statement made by an accused is admissible in evidence against him unless it is shewn by the prosecution to have been a voluntary statement, in the sense that it has not been obtained from him either by fear of prejudice or hope of advantage exercised or held out by a person in authority.

Because the applicability of this test is initially contingent on the question of whether the psychiatrist, at the relevant time, was a "person in authority," the issue has arisen in several reported cases.[207]

Even where a psychiatrist conducting a psychiatric examination may properly be called a "person in authority," it is seldom that such person will in fact play on the accused's "fear of prejudice or hope of advantage" in order to obtain information from him or her. Nevertheless, it appears that this sometimes happens. In *People* v. *Leyra*,[208] an American case, the Court criticized a psychiatrist *inter alia* for:

> ...calling himself defendant's doctor, playing upon the latter's natural fears and hopes, pressing his hands upon defendant's head with accompanying commands, and suggesting details to an unwilling mind by persistent and unceasing questioning; informing defendant that he was not morally responsible; making deceptive offers of friendship and numerous promises, express and implied; giving assurances in a pseudo-confidential atmosphere of physician and patient....

More frequently, however, inculpatory statements (where they are not made spontaneously) may result from the use of such investigative psychiatric tools as hypnosis and narcoanalysis. Where this happens (and where the psychiatrist is a "person in authority") it is clear from the Supreme Court of Canada's decision in *Horvath* v. *The Queen*[209] that the resulting statement would most likely be ruled inadmissible as having been improperly induced. In *Horvath* the so-called voluntariness rule was expanded (or, more properly, recognized as not having been exhaustively defined in *Ibrahim*) to prohibit the admission into evidence of inculpatory statements obtained as the result of involuntary hypnosis of the accused by a person in authority (in this case an R.C.M.P. officer). The Court went on to imply, *per* Beetz J. (*obiter*), that statements obtained by consensual hypnosis, or by consensual narcoanalysis for that matter, would likely also be inadmissible.[210]

Where the psychiatrist is not a "person in authority" for the purposes of the voluntariness rule, a confession will generally be admissible as proof of the truth of its contents without it being necessary to establish voluntariness in accordance with the *Ibrahim* rule. It is likely, however, that a confession made while under the influence of hypnosis or narcoanalysis will be treated as inherently unreliable and excluded by the Court.[211] In *R.* v. *Booher*[212] the

Alberta Supreme Court refused to admit a confession that may have been produced by hypnotic suggestion. Though there do not appear to be any reported Canadian decisions dealing directly with the reliability of narcoanalysis, scientific authorities have generally described this technique as an "unreliable test of truth,"[213] and empirical research would seem to indicate that some subjects remain quite capable of lying while under the influence of "truth drugs."[214] This lack of scientific acceptance has prompted most American courts to reject statements obtained by means of narcoanalysis.[215]

One possibly overriding consideration concerning the admissibility of confessions, which may transcend the voluntariness rule, is that expressed in the landmark decision of the Ontario High Court in *R.* v. *St. Lawrence*,[216] relating to the admissibility of statements subsequently confirmed by the finding of physical evidence.[217] This rule has received judicial approval in a great many subsequent Canadian decisions,[218] most notably by the Supreme Court of Canada in *R.* v. *Wray*,[219] although it is difficult to determine the extent to which it has been affected by the *Charter* (see below).

F. Inculpatory Statements Admissibile for Other Purposes

The use of some investigative tests may result in the obtaining of an inculpatory statement which, though inadmissible as proof of the truth of its contents, may be admissible as the basis of expert opinion.

This is the situation that may sometimes obtain in the case of psychiatric and psychological examinations of accused persons. Where, for example, an inculpatory statement has been obtained by an examining psychiatrist or psychologist under circumstances that do not comply with the voluntariness rule, it may be that the statement could nevertheless be repeated or alluded to by the doctor in the course of giving expert testimony, provided that the statement forms part of the basis of the expert opinion. The rationale for admissibility would be that the relating of the statement does not offend the hearsay rule because, in such

circumstances, it is not designed to prove the truth of its contents.[220] As Ritchie J. remarked in the case of *Phillion* v. *The Queen*:[221]

> Statements made to psychiatrists and psychologists are sometimes admitted in criminal cases and when this is so it is because they have qualified as experts in diagnosing the behavioural symptoms of individuals and have formed an opinion which the trial judge deems to be relevant to the case, but the statements on which such opinions are based are not admissible in proof of their truth but rather as indicating the basis upon which the medical opinion was formed in accordance with recognized professional procedures.

In *Perras* v. *The Queen*,[222] a majority of the Supreme Court of Canada ruled that no *voir dire* was required to determine the voluntariness of inculpatory statements made to a psychiatric expert witness who was a "person in authority" at the relevant time, despite the fact that cross-examination might have resulted in their being revealed to the jury. In a dissenting judgment, however, Spence J. (Laskin J. concurring) commented on the artificiality of admitting a confession into evidence for the narrow purpose of demonstrating the basis of expert opinion while at the same time instructing the jury that they should disregard it in deciding the truth of its content.[223]

G. Leads

The use of some investigative tests may lead to information concerning the location of physical evidence tending to identify the suspect or accused as the perpetrator of an offence.

Perhaps the best example that can be cited here is the use of such techniques as narcoanalysis and hypnosis. Hypnosis appears to have been used in the case of *R.* v. *Booher*[224] to discover the location of a rifle of the same calibre used in the murder with which the accused was charged.

As indicated by the case of *R.* v. *Wray*,[225] evidence of the accused's part in leading the police to the physical evidence, as well as the evidence thus obtained, would generally be admissible regardless of the method by which the accused's co-operation was obtained, and might only be excluded by operation of judicial

discretion if of "trifling" probative value as compared with prejudicial effect. Section 24 of the *Canadian Charter of Rights and Freedoms*[226] may now be taken to have modified the rule in *Wray*, however, reducing its importance considerably. According to subsection (1) of that section:

> Anyone whose rights or freedoms, as guaranteed by this Charter, have been infringed or denied may apply to a court of competent jurisdiction to obtain such remedy as the court considers appropriate and just in the circumstances.

One "remedy" is specifically mentioned in subsection (2) of section 24, which continues:

> Where, in proceedings under subsection (1), a court concludes that evidence was obtained in a manner that infringed or denied any rights or freedoms guaranteed by this Charter, the evidence shall be excluded if it is established that, having regard to all the circumstances, the admission of it in the proceedings would bring the administration of justice into disrepute.

More will be said about section 24 of the *Charter* in Part IV.

H. Expert Evidence of Disposition/Identity

The use of some investigative tests may result in expert opinion evidence tending to identify the suspect or accused as the perpetrator of an offence that must have been committed by a particular type of person.

Apart from situations involving the analysis and comparison of "physical trace" evidence of the type described in section A above, there remain cases in which certain expert witnesses may offer opinion evidence, based on other forms of investigative tests, that has bearing on the identity of the perpetrator of the offence and the issue of whether the accused is in fact such person. The best example here would be the use of psychiatric or psychological expert witnesses to establish, on the basis of their examinations of the accused, a peculiar propensity on his or her part to commit the type of offence involved. Such evidence of "disposition," as it is called, may only be led in rather special circumstances, however. Evidence of the accused's character is generally limited to evidence concerning his or her reputation.[227] The mere fact that the accused

has put his or her general character in issue will not entitle the prosecution to lead psychiatric or psychological evidence as to the accused's disposition. Where, however, the offence involved has distinctive characteristics constituting "the hall-mark of a specialized and extraordinary class...,"[228] evidence will be admissible on the question of whether the accused falls within this class of persons.[229] As the Ontario Court of Appeal remarked in *R.* v. *Glynn*:[230]

> [W]here it was proved death could have been caused only by a left-handed person, evidence that the accused had the characteristic of being left-handed would clearly be admissible on the question of identity, so in this case where the death may well have been caused by a homosexual with certain characteristics it was proper to show that the accused was a homosexual with those characteristics.

It follows that where the features of the particular abnormal class in question fall within the expertise of a psychiatrist or psychologist, the opinion evidence of such expert will be admissible on the issue of disposition.[231]

Unlike that of some of the scientific procedures discussed above, the scientific reliability and validity of psychiatric evaluation do not appear to be supported on a very strong foundation of empirical data. As Ziskin has asserted (in 1981) with regard to the reliability of diagnoses, "the most common research findings indicate that, on the average, one cannot expect to find agreement in more than about 60% of cases between two psychiatrists."[232] As to the question of validity, that is, the statistical probability of a given psychiatric diagnosis being subsequently verified as accurate, Ziskin has stated that "[t]here is a substantial body of literature to the effect that psychiatric and psychological diagnosis and evaluation have low validity."[233]

The reliability and validity of the psychological testing techniques upon which expert psychological opinion is based are similarly open to question. As one commentator has pointed out:

> A fundamental criticism of psychological tests and techniques is that their accuracy may be a function of the methodology used to evaluate the data they generate. The selection of assessment technique may significantly alter both the accuracy and objectivity of the results. Other criticisms of psychological tests and techniques typically focus on one or more of the following factors: (1) adequacy of standardiza-

tion, (2) low reliability or insufficient data on reliability, and (3) low validity or insufficient data on validity.[234]

I. Expert Evidence to Counter Defences

The use of some investigative tests may result in expert opinion, not necessarily based upon the analysis and/or comparison of physical evidence, that may be damaging to certain defences that might be raised by the accused.

Psychiatric and psychological examinations are excellent examples of the type of investigative test with which we are concerned here. In cases where the accused raises a defence such as insanity, automatism, intoxication, lack of *mens rea* which is due to mental disorder (other than intoxication) falling short of insanity or automatism, infanticide or provocation, such defence is not infrequently countered by psychiatric or psychological evidence led by the prosecution which contradicts or is less favourable to the accused than the psychiatric or psychological opinion evidence led by the defence.

Specific tools used by psychiatrists or psychologists in the course of examination (that is, investigative tests within investigative tests), such as hypnosis, narcoanalysis, intelligence tests, behavioural questionnaires, projective tests, and so forth, may be particularly effective in assessing whether a given mental condition upon which the accused might otherwise seek to rely in fact exists. A particularly good example would be the use of narcoanalysis to test a defence of non-insane automatism. This might occur where an accused who raises the defence claims (as is often the case) to have no memory of the events surrounding the alleged offence.[235] In *R.* v. *Perras*[236] sodium pentothal was used by an examining psychiatrist to see whether an accused charged with murder was suffering from organic, hysterical or feigned amnesia in order to determine whether the accused had been, in effect, in a state of alcoholic automatism at the time of the offence.[237] Though in this case narcoanalysis was used by a defence-retained psychiatrist and the technique ultimately supported the accused's defence, it could just as have easily been used by a Crown-retained psychiatrist to refute such defence.

Physical tests performed on the accused to assist in psychiatric diagnosis (for example, blood tests, X-rays, EEG's pneumoencephalograms, urinalysis, and so forth) may also affect the opinion of a psychiatric expert as to the existence of various disorders that might otherwise have supported one of the total or partial defences mentioned above.

It is worth pointing out at this stage that the results of investigative tests need not be excluded from evidence by virtue of the fact that such tests may have been performed in whole or in part by medical personnel, in other words, on grounds of a "medical privilege" claimed by the accused. There does not appear to be any common law testimonial doctor-patient privilege,[238] although such privilege has, from time to time, been created by statute in some jurisdictions. Nor would the results of psychological[239] or psychiatric[240] examination ordinarily be subject to exclusion from evidence on the basis of any psychological or psychiatric privilege.[241] This fact was made amply clear in the case of *R.* v. *Burgess*.[242] There the Court admitted certain inculpatory statements made to a psychiatrist who had been instructed by the R.C.M.P. to "find out what he could" from a detained accused against whom they did not yet have sufficient evidence. Note that section 165 of the proposed new *Canada Evidence Act*[243] would create a limited psychiatric privilege with respect to statements made "to a qualified medical practitioner during the course of a court-ordered psychiatric observation, examination or assessment...."

J. Expert Evidence Damaging Credibility

The use of some investigative tests may result in expert opinion evidence damaging to the accused's credibility as a witness.

Once again, psychiatric evidence is the prime example. As indicated by the case of *R.* v. *Eades*,[244] it would appear that where an accused person chooses to testify, his or her credibility may be attacked by means of psychiatric evidence in the same manner as that of any other witness. In *Toohey* v. *Metropolitan Police Commissioner*[245] the value of psychiatric evidence on the issue of credibility was explained by the House of Lords when it stated: "Medical evidence is admissible to show that a witness suffers from some defect or abnormality of mind that affects the reliability

of his evidence.''[246] Moreover: ''Such evidence is not confined to a general opinion of the unreliability of the witness, but may give all the matters necessary to show not only the foundation of and reasons for the diagnosis but also the extent to which the credibility of the witness is affected.''[247] In giving expert testimony concerning the credibility of witnesses, psychiatrists have based their opinions (and have been permitted to disclose the basis of such opinions to the trier of fact) on both routine psychiatric examinations and the results of such investigative procedures as narcoanalysis[248] and polygraph (lie detector) examination.[249]

On the subject of expert opinion as to credibility based exclusively on polygraph tests, the law seems fairly clear. In *R.* v. *Phillion*[250] it was held by the Ontario Supreme Court that the evidence of a polygraph examiner did not meet the test for admissibility of expert opinion despite the Court's acknowledgement that ''[t]here could not be... in any case a more skilled examiner....'' The Court's main objection, apparently, was that the practice of polygraph analysis had not achieved an acceptable level of reliability so as to make any polygraph examiner a qualified ''expert.''[251]

Although in *R.* v. *Wong (No. 2)*[252] the British Columbia Supreme Court expressly disagreed with the decision of the Ontario Supreme Court in *Phillion*, and ruled that polygraphy was a sufficiently reliable scientific technique to permit the admissibility of opinion based thereon as expert opinion, this decision was disapproved of by the Supreme Court of Canada in its ultimate affirmation of Van Camp J.'s judgment in *Phillion*.[253] Speaking for the majority of the Court, Ritchie J. expressed the view that the polygraph examiner, experienced as he was, ''had neither the qualifications nor the opportunity to form a mature opinion of the propensity of the man he was subjecting to the test either as to truthfulness or otherwise.''[254] In light of this ruling, the British Columbia Court of Appeal subsequently held on appeal in *R.* v. *Wong (No. 2)*[255] that ''the opinion evidence about the polygraph tests should not have been admitted.''

What is interesting about the *Phillion* case is not so much the Court's rejection of the polygraph examiner's opinion on the issue of veracity as its acceptance of psychiatric opinion on the same issue. In holding that psychiatrists could express an opinion on the accused's veracity based *inter alia* on psychiatric interviews,

psychological tests *and the results of the polygraph tests*, the Courts have implicitly recognized the methods of psychiatry as having a higher degree of scientific accuracy and reliability than those of polygraphy. Though it might be noted that rejection of the polygraph examiner's opinion resulted from a fear expressed by Van Camp J., that ''a jury, by reason of the technicality of the evidence, might be tempted blindly to accept the witness' opinion,''[256] this fear should surely be present to an equal or even greater degree where the opinion evidence of members of such an esteemed profession as psychiatry is concerned. As Spence J. (with whom Laskin C.J.C. concurred) remarked in *Phillion*, allowing a psychiatrist to disclose the results of a polygraph test in showing the partial basis of his opinion resulted in such material being put before the jury ''in a much more persuasive fashion [than] it could ever have been put by a non-medical witness.''[257]

Is psychiatric evidence demonstrably more reliable and scientifically accurate than polygraph evidence? The question is an important one. As Ziskin has reasoned:

> It follows that if ... the grounds on which lie detector evidence is rejected are equally applicable to psychiatric ... evidence, and there is no proof of superior qualification in psychiatrists ... than in lie detector experts, then the evidence offered by psychiatrists should also be rejected.[258]

K. Physical Evidence to Counter Defences

The use of some investigative tests may produce physical evidence that may be used in rebuttal of a defence raised by the accused.

Where, for example, an accused has been subjected to a breathalyzer test or had blood or urine samples taken and analyzed shortly after his alleged commission of an offence, results indicating a low level (or the absence of) intoxicants in the blood might impede quite effectively the success of an intoxication defence raised by the accused at trial. This was the reasoning of the police in *R.* v. *Gowland*[259] where the accused, later charged with murder, had been asked to submit to a breathalyzer test following his arrest for what was then assault causing bodily harm. In this case, however, the accused refused the test and later raised the defence of drunkenness.

IV.

The Law Applicable to the Administration of Investigative Tests

Before proposing any statutory scheme for the regulation of investigative tests, we should first examine the various ways such tests are dealt with under the present law. Sections A, B and C of this part discuss briefly the extent to which investigative tests are currently authorized or prohibited, and the extent to which force may be used to compel accused persons to submit to various procedures. Sections D and E focus on other methods of ensuring compliance in situations where the use of force might not be appropriate. As the New Zealand Criminal Law Reform Committee noted in its 1978 *Report on Bodily Examination and Samples As a Means of Identification*:[260]

> There are a number of possible sanctions which might be applied to meet this problem. First, comment at any subsequent trial of the suspect could be permitted, or non-compliance could be dealt with as a contempt of Court. Alternatively, a separate offence of failing to comply with an order could be enacted.

A. Criminal Procedure

(1) Statutory Provisions

Certain investigative tests have been specifically sanctioned by statute. Perhaps the most obvious of these is the taking of breath samples under the various "breathalyzer" sections of the *Criminal Code*.[261]

By subsection 2(1) of the *Identification of Criminals Act*:[262]

> Any person in lawful custody, charged with, or under conviction of an indictable offence, or who has been apprehended under the *Extradition Act* or the *Fugitive Offenders Act*, may be subjected, by or under the direction of those in whose custody he is, to the measurements, processes and operations practised under the system for the identification of criminals commonly known as the Bertillon Signaletic System, or to any measurements, processes or operations sanctioned by the Governor in Council having the like object in view.[263]

P.C. 1954-1109 further states that "[f]or the purposes of the *Identification of Criminals Act*, the measurements, processes or operations of fingerprinting and photography are hereby sanctioned."[264]

Note that by section 2 of the Act the police are not generally permitted to fingerprint or photograph a suspect without such person's consent until after he or she has been arrested and charged, and only where the offence involved is an indictable offence. For the purpose of this section, hybrid offences have been held to be indictable where the Crown has made no election to proceed summarily.[265] Subsection 453.3(3) of the *Code* permits persons alleged to have committed indictable offences to be required by an appearance notice, promise to appear or recognizance to appear at a designated time and place for the purposes of the *Identification of Criminals Act*. Similar provision is made under subsection 455.5(5) with respect to the contents of a summons.

Investigative testing in the form of psychiatric examination is implicitly authorized with respect to certain persons charged with,or convicted of, criminal offences by various sections of the *Criminal Code*.[266] Other federal statutes and regulations contain provisions that authorize psychiatric examination and which, conceivably, could be used to examine accused persons prior to trial.[267] Once an accused person has been remanded to, or ordered to attend a psychiatric facility, two fundamental questions must be considered, namely: (1) what procedures the observers or examiners are authorized to perform; and (2) the extent to which the accused's consent is required in order for such procedures to be legal. The answer to both questions may depend upon the statute under which the order was made. As regards the first question, the *Criminal Code* provides no guidance whatsoever. The few judicial

dicta there are, however, would appear to suggest that psychiatrists and psychologists are *prima facie* permitted to use the standard techniques of their professions. In *Wilband* v. *The Queen*,[268] for example, Fauteux J. (as he then was) seems to have endorsed "examinations in accordance with recognized normal psychiatric procedures."[269] As to the second question, the *Criminal Code* is, once again, silent. The meagre case law suggests, however, that *Criminal Code* provisions do *not* authorize the use of force for the purpose of compelling an unwilling accused person to submit to psychiatric examination, and that in fact no penalties whatsoever may be imposed on a non-consenting examinee. As the Ontario Court of Appeal stated *per* Zuber J.A. in *R.* v. *Sweeney (No. 2)*,[270] "there is no lawful manner in which an accused can be obliged to speak." In *Re Chapelle and The Queen*[271] Craig J. of the Ontario High Court remarked that "[i]t is a serious matter to remand an accused person to a psychiatric institution for observation for 30 days ..."[272] and that "[i]f he is so remanded he might well refuse to converse with anyone at the psychiatric institution...."[273] The only penalty which His Lordship suggested might attend such refusal was the drawing of an adverse inference by the court.[274]

(2) The Common Law

In the absence of statutory provisions, authority for the administration of certain types of investigative tests may exist at common law. One might well ask, for example, whether certain investigative procedures would be permissible in the course of an examination of the accused initiated by the police in the exercise of their common law search powers.[275] According to New Zealand's Criminal Law Reform Committee:

> As to obtaining bodily samples, there is at common law no power to compel either a suspect who has not yet been arrested or a person who has and is already in custody to provide a sample of his blood, hair, saliva or other bodily matter. Any use of physical force to obtain such a sample, whether by the Police or by a doctor at their behest, would constitute an assault.[276]

This position would seem to accord, moreover, with that taken in Canadian decisions specifically relating to the taking of body substances.[277] In *R.* v. *Frechette*,[278] a case that involved blood tests and medical examination of an accused charged with dangerous

driving, a Québec Trial Court expressed the opinion that in the absence of statutory authorization, the non-consensual medical examination of an accused person was not permissible.[279] An appeal from the Court's ruling was subsequently dismissed without written reasons by the Court of King's Bench (Appeal Side).[280] While the common law illegality of obtaining samples from an accused without consent has implicitly been recognized in subsequent cases (such as *R.* v. *Burns*),[281] one legal commentator has remarked that "[o]ne may rather wonder why in the case of blood tests the Courts have felt 'that the person of the accused is inviolable,'"[282] since "[i]t would appear that the law does not afford such protection to the person in respect to other questions for example."[283]

As noted by A. E. Popple in a practice note to *R.* v. *Moore*,[284] "[i]t would appear that there is some doubt as to whether, apart from statutory enactment, the accused can be compelled to submit himself to physical examination which would tend to supply evidence to incriminate him...." As suggested by the cases of *R.* v. *Shaw*,[285] *R.* v. *Moore*, *supra*, and the prior case of *R.* v. *Ross*,[286] however, such doubt does not extend to the active performance by the accused of various physical tests (for example, for impairment) at the request of the police. Clearly, there is no obligation for the accused to co-operate to this extent, nor any lawful method (involving physical force or criminal penalty) by which such co-operation may be enforced.[287] Things become less clear, however, where all that is required of an accused is passive submission.[288]

In *Marcoux and Solomon* v. *The Queen*[289] the Supreme Court of Canada considered *inter alia* the extent to which compelling an accused person to participate in a lineup was an authorized police practice under the common law. Speaking for the Court, Dickson J. expressed the opinion that "the application of force to compel an accused or a suspect to take part in a line-up may raise a question as to the limits on the powers of the police in relation to detained persons,"[290] but that "[r]easonable compulsion to this end is ... an incident to the police power to arrest and investigate, and no more subject to objection than compelling the accused to exhibit his person for observation by a prosecution witness during a trial."[291] His Lordship went on to quote from the decision of England's Court of Appeal in *Dallison* v. *Caffery*,[292] where Lord Denning had said that:

> When a constable has taken into custody a person reasonably suspected of felony, he can do what is reasonable to investigate the matter, and to see whether the suspicions are supported or not by further evidence.... The constable can put the suspect up on an identification parade to see if he is picked out by witnesses. So long as such measures are taken reasonably, they are an important adjunct to the administration of justice....[293]

As Dickson J. further noted, however, the question as to what extent force may be authorized in the course of compelling a person to take part in a lineup is of little practical significance, since "the introduction of a struggling suspect into a line-up might [make] a farce of any line-up procedure."[294] As Glanville Williams has further pointed out:

> [I]f the suspect objects the police will merely have him "identified" by showing him to the witness and asking the witness whether he is the man. Since this is obviously far more dangerous to the accused than taking part in a parade, the choice of a parade is almost always accepted.[295]

Is fingerprinting permissible at common law? This issue has arisen in a number of reported cases.

In *R.* v. *A. N.*,[296] on the trial in juvenile court of a juvenile charged with breaking and entering a dwelling-house and thereby committing a delinquency contrary to the *Juvenile Delinquents Act*,[297] an issue arose as to the admissibility of fingerprint evidence. While it appears that the accused juvenile had not objected to the taking of the fingerprints, it was unclear whether he was "in custody" at the time and to what degree he had in fact "consented" to the procedure. Noting that the provisions of the *Identification of Criminals Act*[298] were clearly inapplicable where, as here, the subject was not "charged with ... an indictable offence," and did not fall within the other classes of persons described by subsection 2(1) of the Act, Murphy Prov. Ct. J. held that any authority for the fingerprinting of juveniles must be found in the common law. Relying on the cases of *R.* v. *Buckingham and Vickers*,[299] *Adair* v. *M'Garry*, *Byrne* v. *Her Majesty's Advocate*,[300] and *R.* v. *Hayward*,[301] Her Honour went on to state (1) that "in cases where [the *Identification of Criminals Act*] does not apply ... fingerprints can be taken under the common law;"[302] (2) that while force could be used in the taking of fingerprints in accordance with the *Identification of Criminals Act* to the extent that it is authorized by

that Act, "at common law force cannot be used ... and they can only be obtained by consent;"[303] (3) that the test for consent, at least so far as juveniles were concerned, was the same as that which applied to the taking of statements from juveniles;[304] and (4) that despite the Supreme Court of Canada's rulings in *R.* v. *Wray*[305] and *Hogan* v. *The Queen*,[306] where fingerprints had been obtained illegally from a juvenile the court retained a discretion to exclude them from the evidence at trial even where they were highly probative.[307] In the result, the fingerprint evidence was not admitted.

On appeal by the Crown to the British Columbia Supreme Court,[308] however, it was held, *per* Bouck J.: (1) that under the common law a subject's consent was not required for fingerprinting — even where such person was a juvenile — provided the person was in lawful custody, and the police would therefore be justified in using necessary force;[309] (2) that the fingerprinting of a person of any age who voluntarily submits to the procedure is lawful;[310] and (3) that even if the accused juvenile should have been in custody before the fingerprinting could be lawfully done, the evidence was still admissible on the basis of *Wray* and *Hogan*.[311]

Subsequent appeal by the accused to the British Columbia Court of Appeal[312] was dismissed on a unanimous application of the rule in *Wray* and *Hogan*. While Carrothers and Hinkson JJ. A. did not find it necessary to decide on the question of whether there existed a common law right to take fingerprints, however, Branca J. A. expressed the emphatic opinion that there was in fact no such right.[313] It was His Lordship's opinion that the case of *R.* v. *Buckingham and Vickers*,[314] a British Columbia case which had relied upon *Adair* for the proposition that such common law authority existed, had been incorrectly decided.[315] His Lordship cited as well the case of *Re Danilhik (Stone)*,[316] a decision of the Manitoba King's Bench wherein Robson C. J. K. B. had declared simply that: "[T]here was no lawful authority to require the accused to be fingerprinted as he did not come within the *Identification of Criminals Act*...."[317]

In the subsequent decision of *R.* v. *D. G.*,[318] *R.* v. *A. N.* had been expressly not followed by the Prince Edward Island Supreme Court. It had been the opinion of the learned Trial Judge that no issue as to common law authority to fingerprint need arise in the case of juveniles, as they were covered by the provisions of the

Identification of Criminals Act. In His Lordship's view, where a juvenile was charged with delinquency as the result of his or her allegedly having committed an indictable offence, he or she was in fact "charged with ... an indictable offence" for the purposes of subsection 2(1) of the *Identification of Criminals Act* and might be dealt with thereunder with or without his or her consent. This ruling was reversed on appeal, however, McQuaid J. stating that:

> An infraction of the *Criminal Code* which would constitute an "indictable offence" if committed by an adult is a "delinquency" when committed by a juvenile. A juvenile cannot be charged with an indictable offence. He can be charged only with a delinquency and that was the charge laid in the case at bar. If the offence is a delinquency and not an indictable offence, the *Identification of Criminals Act*, does not apply because that Act specifically states that it is applicable to indictable offences only.[319]

In *R.* v. *Jacobsen*[320] an Ontario District Court, while agreeing that the *Identification of Criminals Act* had no application to juveniles charged under the *Juvenile Delinquents Act*, expressed the view that there was in fact a common law right of the police to fingerprint an accused person with or without such person's consent provided no more than reasonable force was used.[321] Most recently, in *Brown* v. *Baugh and Williams*[322] the British Columbia Court of Appeal reversed a decision of the British Columbia Supreme Court in which it had been held: (1) that there existed no power under the *Identification of Criminals Act* to fingerprint a juvenile charged under the *Juvenile Delinquents Act* with a delinquency that is also an indictable offence; and (2) that the power to use reasonable force in the taking of fingerprints did not exist at common law. The Court of Appeal limited its reasons to the first point, however, expressly declining to comment on the latter.

In several reported cases in other jurisdictions, as noted earlier, it has been held that no common law power exists with regard to the photographing of criminal suspects upon arrest.[323] As England's Royal Commission on Criminal Procedure has observed, however, "[t]here is a distinction in law to be made between photographing and fingerprinting."[324] As it has pointed out:

> While fingerprinting will almost certainly require some physical contact between the police officer responsible and the person being fingerprinted, photography does not. Accordingly, whereas finger-

printing without statutory authority or the consent of the person concerned may constitute an assault, the English courts have never held the photographing of a suspect by a police officer to be unlawful, even where there is no consent or statutory authority.[325]

B. Liability for Conducting Investigative Tests

(1) Statutory Provisions

Where investigative test procedures are authorized by statute, they are sometimes accompanied by statutory provisions that allow the use of physical coercion. Section 2(2) of the *Identification of Criminals Act*, for example, provides that "[s]uch force may be used as is necessary to the effectual carrying out and application of such measurements, processes and operations." By subsection 3 of the Act, moreover, "[n]o one having the custody of any such person, and no one acting in his aid or under his direction ... incurs any liability, civil or criminal, for anything lawfully done under this Act."

As regards the criminal liability of peace officers and those who may be required to assist them in the administration of investigative tests, subsection 25(1) of the *Code* is an important provision to note. It provides that:

> Every one who is required or authorized by law to do anything in the administration or enforcement of the law (*a*) as a private person, (*b*) as a peace officer or public officer, (*c*) in aid of a peace officer or public officer, or (*d*) by virtue of his office, is, if he acts on reasonable and probable grounds, justified in doing what he is required or authorized to do and in using as much force as is necessary for that purpose.

Note also, however, that by section 26 of the *Code* "[e]very one who is authorized by law to use force is criminally responsible for any excess thereof according to the nature and quality of the act that constitutes the excess."

In the absence of statutory authorization for both the specific investigative test involved and the use of necessary force for the carrying out of that test, the non-consensual administration of a given test *may* constitute an actionable tort or criminal offence.[326]

In *Marcoux and Solomon* v. *The Queen*[327] Dickson J., speaking for the Supreme Court of Canada, noted that "the application of force to compel an accused or a suspect to take part in a line-up may raise a question as to the limits on the powers of the police in relation to detained persons."[328] It was His Lordship's opinion, however, that:

> Reasonable compulsion to this end is ... an incident to the police power to arrest and investigate, and no more subject to objection than compelling the accused to exhibit his person for observation by a prosecution witness during a trial.[329]

It is an interesting question to what extent procedures more intrusive than a simple police lineup would permit the use of force in their implementation where the use of such force has not been specifically authorized by statute.[330]

(2) Evidentiary Consequences

Even in cases where the non-consensual use of certain investigative test procedures would constitute an actionable tort (or criminal offence for that matter), the tortious or even criminal character of such actions would not *per se* render the results of these tests inadmissible in evidence.[331] This point has been made in numerous Canadian decisions involving blood tests.[332]

In *Attorney General of Québec* v. *Bégin* [333] Fauteux J. (with whom Taschereau and Cartwright JJ. concurred) discussed the admissibility of evidence obtained through the involuntary administration of various other investigative tests. His Lordship referred to *R.* v. *Voisin*,[334] where England's Court of Criminal Appeal held a compulsorily donated handwriting sample to be admissible saying:

> There is a difference between the admissibility of a statement and the admissibility of handwriting. A statement may be made under such circumstances that the true facts are not brought out, but it cannot make any difference to the admissibility of handwriting whether it is written voluntarily or under the compulsion of threats.[335]

The Court added:

> The mere fact that the words were written at the request of police officers, or that he [the accused] was being detained ... does not make the writing inadmissible in evidence. Those facts do not tend to

> change the character of handwriting, nor do they explain the resemblance between his handwriting and that upon the label, or account for the same misspellings occurring in both.[336]

In *R.* v. *Nowell*,[337] referred to as well by His Lordship, the English Court of Appeal declared the result of a non-consensual medical examination to be admissible on the issue of the accused's drunkenness.[338]

In *R.* v. *Martin*[339] the Alberta Supreme Court held that evidence as to the accused's performance on various tests designed to ascertain whether or to what extent the accused was impaired by alcohol or drugs was inadmissible unless it was established that the accused had submitted to them voluntarily.[340] This ruling was expressly not followed by the British Columbia Magistrates Court in *R.* v. *Moore*,[341] however, and was subsequently reversed by a majority of the Appellate Division of the Alberta Supreme Court.[342]

In *Hay* v. *Her Majesty's Advocate*[343] dental impressions were taken from twenty-nine persons in the course of the investigation of a homicide in which bite marks had been found on the victim's body. The procedure was repeated, again by consent, on five of the persons previously examined, with the result that the accused became the prime suspect. Upon his refusal to submit to the taking of further impressions and measurements, a warrant was obtained by police authorizing the procedure. On the accused's appeal from his ultimate conviction for murder, the Scottish High Court of Judiciary upheld the issuance of the warrant and the admissibility of the forensic evidence thereby obtained, despite the fact that no statutory authorization existed for the issuance of a warrant of this nature. As the commentary which follows this case in the Criminal Law Review has noted, the decision sanctions "a unique extension of police powers ..."[344] and represents "a landmark in the progress of forensic odontology...."[345]

C. The *Canadian Charter of Rights and Freedoms*

Evidence obtained through investigative test procedures that violate the provisions of the *Canadian Charter of Rights and Freedoms*[346] may be excluded by the operation of section 24 of the *Charter*.[347] More fundamentally, one must be cognizant of section

52(1) of the *Constitution Act, 1982*[348] which would render any law that is inconsistent with the *Charter* of no force and effect to the extent of such inconsistency (unless it were declared in accordance with subsection 33(1) that such law should operate notwithstanding the provisions in section 2 or sections 7 to 15 of the *Charter*).

There are four aspects of the *Canadian Charter of Rights and Freedoms* that merit particular examination in the context of investigative tests: (1) protection against self-incrimination; (2) security of the person; (3) unreasonable search or seizure; and (4) cruel and unusual treatment or punishment.

(1) Protection against Self-Incrimination

The first question to be considered is whether the use of any form of investigative testing could be construed as a violation of the statutory privilege against self-incrimination. Very little need be said on this point. The only provisions contained in the *Canadian Charter of Rights and Freedoms* that deal specifically with the so-called privilege against self-incrimination are sections 11(*c*) and 13. The former states that "[a]ny person charged with an offence has the right ... not to be compelled to be a witness in proceedings against that person in respect of the offence...." The latter states that "[a] witness who testifies in any proceedings has the right not to have any incriminating evidence so given used to incriminate that witness in any other proceedings, except in a prosecution for perjury or for the giving of contradictory evidence." While section 2(*d*) of the *Canadian Bill of Rights*[349] provides in more general terms *inter alia* that:

> [U]nless it is expressly declared by an Act of the Parliament of Canada that it shall operate notwithstanding the *Canadian Bill of Rights*, ... no law of Canada shall be construed or applied so as to ... authorize a court, tribunal, commission, board or other authority to compel a person to give evidence if he is denied ... protection against self crimination...

it is amply clear from the case law that the scope of this provision is in reality no wider than that of section 13 of the *Charter*. Pre-trial investigative procedures have been held to fall outside the ambit of section 2(*d*)'s prohibition on a number of occasions. In *Curr* v. *The Queen*,[350] for example, the Supreme Court of Canada dealt *inter alia* with the status of the breathalyzer sections (now

sections 235 and 237) of the *Criminal Code vis-à-vis* section 2(*d*) of the *Bill*. There Laskin J. (as he then was), in delivering the majority judgment,[351] held that "the compelled provision of a breath sample by a person, without concurrent protection against its use in evidence against him, does not offend against the self-crimination guarantee as it is expressed in section 2(*d*)."[352] In His Lordship's words:

> I cannot read section 2(*d*) as going any farther than to render inoperative any statutory or non-statutory rule of federal law that would compel a person to criminate himself *before a court or like tribunal through the giving of evidence*, without concurrently protecting him against its use against him.[353] [Emphasis added]

Ritchie J., who wrote a concurring judgment, expressed the similar opinion that:

> [T]he words "protection against self crimination" as they occur in section 2(*d*) of the Bill of Rights are to be taken as meaning protection against "self-incriminating statements" and not as embracing "incriminating conditions of the body" such as the alcoholic content of the breath or blood.[354]

In *R.* v. *Devison*[355] the judgments of Laskin and Ritchie JJ. were applied by the Appeal Division of the Nova Scotia Supreme Court to preclude the operation of section 2(*d*) with respect to the taking of blood samples. In *Marcoux and Solomon* v. *The Queen*[356] the Supreme Court of Canada decided unanimously that section 2(*d*) had no application to identification parades (that is, lineups). In *R.* v. *Sweeney (No. 2)*[357] the Ontario Court of Appeal dealt with section 2(*d*) in the context of pre-trial psychiatric examinations. Speaking for the Court, Zuber J. A. acknowledged that "a psychiatric or psychological examination does not readily fit within that classification which would make an accused a source of real or physical evidence"[358] and that "[a] mental examination obviously must draw from an accused verbal responses which will bear directly or indirectly on his guilt."[359] Nevertheless, His Lordship was of the opinion that:

> The privilege against self-incrimination in its modern form means only the right of a witness as qualified by the *Canada Evidence Act* ... to refuse to answer certain questions, if the answers will tend to incriminate the witness, and the absolute right of the accused to refuse to go into the witness box... [360]

Recent cases under the *Charter* indicate that such procedures as the taking of breath samples[361] under the *Code*'s breathalyzer provisions and the taking of fingerprints[362] under the *Identification of Criminals Act* do not violate section 11(*c*) of the *Charter*. Nor, it would appear, do such procedures violate the right "to be presumed innocent..." under section 11(*d*) of the *Charter*.[363]

(2) Security of the Person

Section 7 of the *Charter*, which is similar to section 1(*a*) of the *Bill of Rights*, states that "[e]veryone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the *principles of fundamental justice*."[364] [Emphasis added] It is, of course, too early to speculate on the exact meaning and scope of this provision. Recent cases have held, however, that it is not infringed by either the taking of breath samples[365] under the *Code*'s breathalyzer provisions, or by the taking of fingerprints[366] under the *Identification of Criminals Act*.

(3) Unreasonable Search or Seizure

Section 8 of the *Charter of Rights and Freedoms*, which has no clear equivalent in the *Bill of Rights*,[367] states that "[e]veryone has the right to be secure against unreasonable search or seizure." While it is, once again, too early to estimate the impact of this provision, recent cases have held that section 8 of the *Charter* is not infringed by the routine taking of fingerprints[368] from an accused person pursuant to the provisions of the *Identification of Criminals Act*, or by the taking of breath samples[369] in accordance with the *Code*'s breathalyzer provisions.

In the United States unreasonable search or seizure is prohibited by the Fourth Amendment. Although the question of unreasonableness must be determined on a case-by-case basis,[370] in general it would seem that searches without warrant are *prima facie* unreasonable unless justified by some exigent circumstance, namely, the protection of life or the preservation of evidence.[371] In determining the reasonableness of a given search, the courts are required to balance the need to search against the intrusiveness of such search.[372] Searches incident to arrest would appear to be *prima facie* reasonable, subject to possibly overriding "due process" considerations.[373] In *Cupp* v. *Murphy*[374] the non-consensual taking

of fingernail scrapings from a detained suspect was held by the United States Supreme Court not to be in violation of the Fourth and Fourteenth Amendments. In reaching this conclusion, the Court considered "the existence of probable cause, the very limited intrusion undertaken incident to the station house detention, and the ready destructibility of the evidence...."[375]

(4) Cruel and Unusual Treatment or Punishment

Section 12 of the *Charter* provides that "[e]veryone has the right not to be subjected to any cruel and unusual treatment or punishment." This section is similar to section 2(*b*) of the *Bill of Rights*, which provides that "no law of Canada shall be construed or applied so as to ... impose or authorize the imposition of cruel and unusual treatment or punishment...." Very little case law exists in Canada on the subject of what constitutes cruel and unusual treatment or punishment, although one recent case has held that the taking of fingerprints does not qualify as such under the *Charter*.[376] The possibility of a "cruel and unusual" argument being raised with respect to the involuntary administration of investigative tests of an extremely intrusive nature, however, should by no means be ruled out.

D. Penal Consequences of the Accused's or Suspect's Failure to Co-operate

Current provisions in the *Criminal Code* and other statutes make an accused or suspected person's failure to co-operate in various investigative tests the subject of a specific penalty. Perhaps the most obvious of these provisions are subsections 234.1(2) and 235(2) of the *Criminal Code*, which provide that every one who fails or refuses, without reasonable excuse, to comply with a peace officer's demand for a breath sample under subsections 234.1(1) or 235(1) respectively is guilty of a "hybrid" offence. Subsection 240.1(2) makes unreasonable failure or refusal to comply with a peace officer's request under section 240.1 a summary conviction offence.

Other statutes that govern the administration of investigative tests make no specific mention of any legal consequences for an accused's failure to co-operate. As pointed out in the case of *R.* v.

McLarty (No. 2),[377] for example, an accused who refuses to be fingerprinted under section 2(1) of the *Identification of Criminals Act* may not be compelled by court order to do so (although, by sections 133, 453.4 and 455.6 of the *Code*, failure to *appear* for such purpose may constitute an offence and give rise to the issuance of a warrant for the arrest of the accused for the offence with which he or she is charged).

Refusal to submit to some investigative tests might, however, constitute the offence of obstruction. According to section 118 of the *Criminal Code*:

> Every one who ... resists or wilfully obstructs a public officer or peace officer in the execution of his duty or any person lawfully acting in aid of such an officer ... is guilty of ... an indictable offence and is liable to imprisonment for two years, or ... an offence punishable on summary conviction.

No specific statutory penalty exists for failure to co-operate with psychiatrists or psychologists in the course of examinations authorized under the provisions of the *Criminal Code*. Where an accused has failed to "attend" for "observation" pursuant to a court order under one of the *Code*'s observation provisions, he or she could presumably be liable to contempt proceedings, although it is unclear whether having "attended" an accused could be penalized for refusing to undergo any investigative tests or procedures suggested.

E. Evidentiary Consequences of the Accused's or Suspect's Failure to Co-operate

A major consequence of an accused or suspected person's failure to co-operate with the police or other personnel in their efforts to conduct investigative tests is the possibility that an adverse inference may be drawn by the trier of fact therefrom. Sometimes provision for such possibility is made by statute. Subsection 237(3) of the *Criminal Code*, for example, provides that in any proceedings under section 234 (that is, for impaired driving):

> [E]vidence that the accused, without reasonable excuse, failed or refused to comply with a demand made to him by a peace officer

> under section 234.1 or subsection 235(1) is admissible and the court may draw an inference therefrom adverse to the accused.[378]

By section 240.3 of the *Code*, this provision is made applicable to proceedings under sections 240 (impaired navigation or operation of a vessel) and 240.2 (navigation or operation of a vessel when blood alcohol level is over .08) as well.[379]

Even in the absence of statutory provisions, it is clear from the case law that an accused or suspected person's failure to submit to certain investigative procedures may, in some circumstances, have adverse evidentiary consequences. In *Marcoux and Solomon* v. *The Queen*,[380] for example, evidence of one accused's refusal to participate in an identification lineup was admitted at his trial for breaking and entering and theft. Though the Trial Judge acknowledged in his charge to the jury that "[t]here is no statutory authority to force an accused person or a suspect or a person at a police station into a line-up,"[381] he nevertheless invited them "to decide on the totality of the evidence what significance you will attach to Mr. Marcoux's refusal to participate in a suggested line-up."[382] Though the accused's subsequent conviction was appealed on the grounds that evidence of the accused's refusal was inadmissible and that, if it were admitted, the Trial Judge should have instructed the jury that they could draw no adverse inference therefrom, the appeal was dismissed by a majority of the Ontario Court of Appeal,[383] and, ultimately, by the Supreme Court of Canada. Speaking for the Supreme Court, Dickson J. noted that the trial tactics of defence counsel had made this evidence admissible for the purpose of explaining the failure to hold an identification parade.[384]

An accused's refusal to participate in other investigative tests may not be admissible. In *R.* v. *Madden*,[385] for instance, evidence of an accused person's refusal to provide a sample of her handwriting to the police was held to be inadmissible at her trial on a charge of conspiracy to utter forged documents. Locke Co. Ct. J. distinguished the situation from that which existed in the case of *Marcoux and Solomon* on the basis that the accused here had not "opened up" the issue, presumably by suggesting a failure on the part of the police to obtain a handwriting sample. Reserving the right to re-rule in the event that the issue was opened up, His Honour expressed the view that in the circumstances:

> [T]o admit into evidence before the jury testimony as to a refusal to incriminate oneself by giving a handwriting sample, in my view, would impinge upon the presumption of innocence and virtually cast upon the accused a very real, actual burden of proving her innocence, which is not the state of our law at the present time.[386]

In *R.* v. *Shaw*[387] it was held on appeal by the Crown from the accused's acquittal on a charge of impaired driving that the Trial Judge had been correct in refusing to admit evidence of the accused's refusal to perform certain physical tests for the police to determine impairment.[388] As was pointed out in the subsequent case of *R.* v. *Brager*,[389] however, Crown counsel would be entitled to lead evidence of the accused's refusal to submit to such tests where the defence elicited the fact that they were not made.

In *R.* v. *Burns*[390] evidence of an accused's refusal to provide a blood sample to the police was held to be inadmissible at his trial for causing death by criminal negligence in the operation of a motor vehicle.[391]

In *R.* v. *Gowland*[392] the Crown, in response to the accused's raising the defence of drunkenness to a charge of murder, sought to introduce evidence of the accused's refusal to submit to a breathalyzer test some three hours after the killing. Such evidence was proffered by the Crown in part to show that the accused was aware that he was not severely intoxicated. The Trial Judge refused to admit this evidence, however, and his ruling was upheld by the Ontario Court of Appeal.[393]

One exceptional case worthy of comment (and referred to by Martin J.A., *supra*) is *R.* v. *Sweeney (No. 2)*.[394] There the accused had raised the defence of insanity to a charge of murder, and the Crown was permitted to lead rebuttal evidence at trial that the accused had refused to be examined by a Crown psychiatrist and psychologist. An interesting point is that the proposed examination had *not* in fact been authorized by court order, the Trial Judge having refused the Crown's application for an order under paragraph 465(1)(*c*) on the ground that there was no issue of the accused's unfitness to conduct his defence. On appeal to the Ontario Court of Appeal by the accused following his conviction, it was argued that evidence of the accused's refusal to submit to examination should not have been admitted. Speaking for the Court, however, Zuber J. A. dismissed the appeal on the grounds

inter alia: (1) that the accused's refusal was "a fact from which it could be inferred that the defence of insanity was either contrived or so weak that it could not withstand scrutiny,"[395] and was therefore relevant; (2) that although "there is no lawful manner in which an accused can be obliged to speak" and "in general terms, no adverse inference should be drawn from the fact that the accused does not speak...,"[396] an exception existed where the defence of insanity had been raised by the accused; and (3) that there was no reason for applying the "trifling probative value but of great prejudicial effect"rule to exclude the evidence.[397]

V.

Issues and Guidelines for the Statutory Regulation of Investigative Tests

As mentioned in Part I of this Working Paper, our desire to regulate and codify investigative test procedures is based essentially on our longstanding adherence to three principles recently enunciated by the Government of Canada. They are worth quoting again. The first principle is that "the criminal law should provide and clearly define powers necessary to facilitate the conduct of criminal investigations ... without unreasonably or arbitrarily interfering with individual rights and freedoms...."[398] The second principle is that "in order to ensure equality of treatment and accountability, discretion at critical points of the criminal justice process should be governed by appropriate controls...."[399] The third principle is that "the criminal law should ... clearly and accessibly set forth the rights of persons whose liberty is put directly at risk through the criminal law process...."[400] Having dealt in Parts II and III with the nature and forensic application of the major investigative tests in current use, and having outlined in Part IV the various legal provisions and considerations by which their administration is presently governed, it is appropriate that we now consider the types of provisions that should be included in any rational and comprehensive codification of investigative test procedures.

A. Prohibited Investigative Tests?

In devising any statutory scheme for the regulation of investigative tests, it is necessary to consider whether any forms of investigative tests ought specifically to be prohibited as "unrea-

sonably ... interfering with individual rights and freedoms...'' *per se*. From our review of the various types of tests discussed above, and of the legal issues that may be applicable to them, we are of the opinion that ''prohibitable'' tests might fall into two categories: (1) tests that have not been shown to be sufficiently reliable from a scientific standpoint; and (2) tests that are inherently inhumane. This having been said, however, there remains the very difficult task of deciding exactly which of those investigative tests discussed would fall into either one of these categories. We would, unfortunately, be forced to rely upon our own judgment and intuition in this regard. Rather than recommending the prohibition of various specific tests, therefore (and running the risk of erroneously omitting or including some tests), we prefer to: (a) enumerate those tests the lawful conducting of which should, in our opinion, be facilitated by either the use of reasonable force or the attachment of consequences for non-compliance; and (b) recommend that other tests be allowed only with the subject's consent.

B. Grounds for Investigative Testing

In order that investigative tests not ''arbitrarily [interfere] with individual rights and freedoms...,'' and ''to ensure equality of treatment and accountability...,'' we are obliged to consider the precise circumstances in which investigative tests should be allowed. It is apparent from our review of the legislation and proposed legislation in other jurisdictions that a number of options exist with respect to the various categories of tests with which we have dealt.

As a preliminary point, we feel that investigative test procedures should not generally be authorized until after the proposed subject has been arrested or charged with an offence, unless the subject has consented. Although pre-arrest investigative testing has been recommended by a majority of New Zealand's Criminal Law Reform Committee in its *Report on Bodily Examination and Samples As a Means of Identification*, primarily on the basis that: ''if the procedure applied only to the post-arrest situation, the Police might be tempted to make precipitate arrests to obtain [evidence] which may in fact exclude the suspect,''[401] we

find the position of the Committee's minority to be more persuasive on this point. As they have noted:

> The current standard of suspicion required for arrest is an important part of the remaining fabric of citizens' constitutional safeguards against over-ready interference and detention by State officials.... Though subject to limited statutory exceptions, the time-honoured rule remains that a suspect is free from interference with his person or liberty until he is arrested.[402]

Rather than protect suspected persons from over-zealous police investigators, the availability of non-consensual, pre-arrest investigative testing ''might be seen as raising the spectre of *police harrassment*....''[403]

If we exclude the possibility of non-consensual investigative testing prior to the arrest or charging of a proposed subject, there remain several possible options. One approach would be to make investigative testing (or at least some forms thereof) incidental to arrest where certain conditions are met. This approach has been taken in the American Law Institute's *Model Code of Pre-Arraignment Procedure*.[404] Another approach would be to make investigative testing (or at least some forms thereof) automatically permissible once the accused is in lawful custody charged with an offence. This approach has been taken in some Commonwealth jurisdictions.[405] As mentioned earlier, it has been taken under section 2 of the *Identification of Criminals Act*[406] with respect to indictable offences. Under a third approach, which has also been taken in some Commonwealth jurisdictions,[407] investigative testing (or at least some forms thereof) could be allowed only after the proposed subject has been charged and certain further conditions (such as reasonable grounds, and so forth) have been met. A fourth alternative, which has again been adopted in several Commonwealth jurisdictions,[408] would be to permit investigative testing (or at least some forms thereof) only upon the authorization of a senior police officer (and then only, perhaps, upon the meeting of certain conditions[409]). A fifth and final option, again adopted in the legislation of some Commonwealth jurisdictions, would be to require application for a judicial order.[410]

In deciding what circumstances will justify the use of investigative test procedures, we believe that at least three factors must be considered. First, there is the nature of the offence

involved. In the case of some offences, owing either to their intrinsic nature or to the particular circumstances involved, it may be extremely difficult to secure conviction in the absence of certain investigative test results. Driving with a blood alcohol level in excess of .08, for example, may be difficult to prove without the results of breath, blood or urine sample analysis. A second factor that bears consideration is the nature of the investigative test involved. Even where the administration of certain investigative tests is crucial to successful prosecution, there may be cases in which the intrusiveness of the particular test is not justified by the gravity of the offence. Third and finally, we must consider the likelihood that the particular investigative test with which we are dealing will yield probative and admissible evidence relevant to the issue of the accused's guilt *vis-à-vis* the particular offence in question.

It is our opinion, based on this analysis, that at least one of the five approaches to investigative testing discussed above, that is, automatic investigative testing, cannot be supported. Because all investigative tests involve interference with the physical or mental integrity of the subject to one degree or another, we believe that reasonable justification for any proposed test (that is, some legitimate purpose) must be a minimum logical requirement. Such requirement would *inter alia* eliminate the present practice of routinely fingerprinting and photographing all persons charged with indictable offences pursuant to section 2 of the *Identification of Criminals Act*.

One question that must be clearly addressed concerns the class or classes of offence the investigation of which should entail the possibility of compulsory submission to investigative tests. Other jurisdictions have dealt with this issue in a number of different ways. While some have allowed investigative testing (at least with regard to some procedures) only where offences carrying a certain minimum punishment are involved,[411] others have adopted a scheduling approach[412] or have focused on the circumstances of the offence[413] rather than its classification. Although balancing the nature and seriousness of the offence against the procedure involved in each instance might be the most rational approach, this type of fine tuning (assuming it were possible) would, in our opinion, introduce a significant degree of uncertainty and potential inequality into the law. For this reason we generally favour the approach taken in the *Identification of Criminals Act* of limiting

compulsory investigative testing to cases where an indictable offence is involved.

C. Procedural Safeguards

In those cases where investigative test procedures have been authorized by statute (or proposed legislation) in other jurisdictions, various requirements have been included concerning the manner in which such tests ought to be conducted and the uses to which their results may be put. The purpose of such procedural requirements is, presumably, to ensure that authorized investigative tests are conducted in as fair, reliable and uniform a manner as practical. It would appear, however, that the types of safeguards vary significantly depending on the type of test involved, and that there is considerable variation from one jurisdiction to another. Below are discussed the various types of safeguard provisions that may be incorporated into investigative test legislation, as a means of "clearly and accessibly [setting] forth the rights of persons whose liberty is put directly at risk through the criminal law process... "

(1) Warnings

The provisions of some statutes which authorize investigative test procedures require that persons under an obligation to undergo such procedures be warned in advance of the possible consequences of their failure or refusal to do so,[414] or of any right to request an additional test.[415] It is our opinion that the inclusion of warning requirements in any statutory scheme for the regulation of investigative tests would be in keeping with the principle enunciated above. As the Government has noted: "This Principle requires that Canadians be made better aware of their substantive and procedural rights *vis-à-vis* the criminal law."[416] We have, however, omitted from our recommendations below any requirement for a warning concerning the right not to submit to certain consensual (Class IV) investigative tests. In light of the complexity and uncertainty of the law regarding adverse inferences that may in some circumstances be drawn against the accused who exercises this right, we feel that any such warning would run the risk of being incomplete and perhaps dangerously misleading. We are therefore inclined for the time being to leave this matter to counsel.

(2) Maximum Privacy

Some investigative tests clearly involve an intrusion into personal privacy. In an effort to minimize such intrusion, various statutes and proposed statutes have included provisions calling for "the greatest practicable privacy"[417] or "all reasonable regard for privacy"[418] in the administration of investigative test procedures. We concur in principle with the underlying aim of these provisions.

(3) Qualified Personnel

As a basic and self-evident principle, we believe that investigative test procedures, in order to be as reliable and humane as possible, should only be conducted by trained and qualified personnel. This principle is embodied in investigative test provisions in various statutes and proposed statutes.[419]

(4) The Presence of Counsel

Few of the investigative test provisions in the statutes that we have examined expressly require or allow for the presence of the subject's counsel if requested by him or her.[420] Although we believe that arrested or detained persons should continue to enjoy their right under section 10(*b*) of the *Charter* "to retain and instruct counsel without delay and to be informed of that right...," we fear that any benefit accruing from a specific statutory right to have counsel present during investigative testing might be outweighed by the obvious potential problems inherent in its administration. If the other safeguards we are proposing were to be adopted, we would not see the right to have counsel present as an essential protection.

(5) The Presence of One's Own Physician

Another procedural safeguard that is built into the legislation in several jurisdictions where medical examination of accused persons is authorized is the right of the accused to be examined by, or in the presence of, a physician of his or her own choosing.[421] Generally, however, this is not an absolute right, and does not apply in cases where its application "is not reasonably practicable..."[422] or where the delay involved may allow the evidence to "be lost or destroyed or [to] otherwise disappear."[423] Again we are of the opinion that the potential problems inherent in

the administration of such a right might outweigh its potential benefits.

(6) Additional Optional Tests

In some jurisdictions, persons required to undergo certain forms of investigative testing (such as breath tests) are given the statutory option to have other tests that may be inherently more reliable (such as blood tests) performed on them as well.[424]

While we are of the opinion that the philosophy expressed in such provisions might in theory be applicable to all forms of investigative testing, we do not, as a practical matter, see how this philosophy could be statutorily implemented except in the case of blood-alcohol analysis.

(7) Independent Sample Analysis

In some jurisdictions, persons undergoing certain investigative tests have the right either to be given a portion of any samples taken, or to have a portion of any samples taken sent for independent laboratory analysis.[425] Such provisions are analogous to the unproclaimed portions of our current breathalyzer provisions which require that an accused be provided with a specimen of his or her own breath in an "approved container."[426] Although it has been held that the failure to proclaim these provisions does not *per se* infringe the "fair hearing" provisions in either section 2(*e*) of the *Bill of Rights*[427] or section 11(*d*) of the *Charter*,[428] it has been suggested in a recent *obiter dictum* that:

> It may be that on a charge under s. 236 (driving with more than 80 mg. of alcohol in the blood) where the breathalyzer test result is slightly over the legal limit, the failure to provide an accused with a sample so that he can demonstrate the possibility of error, will deprive him of a fair hearing.[429]

In many cases (for instance, in the case of fingernail scrapings where the samples are minute) it may not be practical to divide samples into two parts for separate analyses. In other cases (such as in the case of saliva samples taken for the purpose of ascertaining whether the donor is a "secretor") such procedure may not be necessary, since the accused will always be able to have the same samples taken independently at a later time. Where

the division and separate analysis of samples would be both practical and advantageous, however, we are of the opinion that such safeguard would be both warranted and necessitated by the intrusive and potentially incriminating nature of various investigative tests.

(8) Destruction of Records and Samples

One complaint that has come to our attention concerning the administration of the *Identification of Criminals Act* arises from the current practice under which fingerprint and photographic records of accused persons are retained by the police in a central data bank regardless of the outcome of prosecutions. One fear, apparently, is that such records may somehow fall into the wrong hands or be misused in some way that will prejudice innocent civilians in the pursuit of legitimate endeavours.[430] As the Law Reform Commission of Australia has further argued:

> In the case of an innocent person, the very knowledge that such information is so stored may be a source of anguish and discomfort. That discomfort may be particularly well founded in the case of photographs. As the Victorian Committee pointed out, one can easily envisage situations where the presence of one's photograph in a police "rogue's gallery," open to the inspection of lay victims and witnesses as well as policeman, might be damaging to one's reputation. Fingerprints, voice-prints and the like are less obviously a potential source of embarrassment. The objection in principle to their retention still holds, based on the privacy claim that individuals should have control, so far as is possible, over the information which is stored and disseminated about them.[431]

In some jurisdictions, such objections have been quelled by remedial provisions in various statutes.[432]

We share many of the concerns that have been expressed, and we acknowledge the importance of developing appropriate regulations with respect to the storage of investigative test records and samples, and access thereto. However, we are not persuaded that the retention of investigative test records or samples poses a threat to the rights of the individual which is of sufficient significance to require their destruction simply because the subject to whom they relate has been acquitted of, or not prosecuted with respect to, the offence charged. Rather, we are inclined to believe that the destruction of some records in these circumstances is more likely

to hamper the legitimate function of the police in the detection of crime and the protection of society as a whole than to constitute a useful and valuable safeguard for the privacy of innocent individuals. Fingerprint records, for example, might be crucial in the investigation of serious offences committed by persons who for one reason or another have escaped conviction for other offences of which they were in fact guilty. Where they have been reasonably and lawfully obtained, can it be said that their retention "unreasonably or arbitrarily [interferes] with individual rights and freedoms..."?

D. The Consequence of Violation of Procedural Requirements

Adherence to the procedural requirements of investigative test legislation may be enhanced *inter alia* by: (1) the enactment of a penalty for violation of such requirements (such as liability to criminal or police disciplinary proceedings); or (2) the exclusion of any evidence obtained as the result of such violation. The former method has, for example, been adopted in Part VI of the United Kingdom's *Police and Criminal Evidence Bill* of 1983.[433] The latter method has, however, been advocated in certain circumstances by the Royal Commission on Criminal Procedure in its 1981 *Report*. As the Commission has so eloquently argued:

> Where certain standards are set for the conduct of criminal investigations, citizens can expect, indeed they have a right, to be treated in accordance with those standards. If they are not so treated, then they should not be put at risk nor should the investigator gain an advantage.[434]

In their view:

> The courts have the responsibility for protecting the citizen's rights. The most appropriate way to do so in these circumstances is to remove from the investigator his source of advantage and from the accused the cause of his risk, that is to exclude the evidence. If this principle is applied, exclusion of good evidence irregularly obtained is the price to be paid for securing confidence in the rules of criminal procedure and ensuring that the public sees the system as fair.[435]

We are, with the greatest respect, in substantial agreement with the views of the Royal Commission. It is our opinion, however, that the question of whether exclusion should be automatic or discretionary remains to be considered. Under the provisions of some "investigative test" statutes, non-observance of only certain statutory requirements will automatically result in exclusion.[436] Under others, exclusion is discretionary.[437] In our view the possibility of having reliable evidence routinely excluded as the result of minor or inadvertent defects in formalities ought to be avoided. We believe that the consequences of a failure by the authorities to observe procedural requirements in the carrying out of investigative tests should vary depending on the nature and seriousness of the violation. We therefore recommend that exclusion not be automatic.

E. Ensuring the Subject's Co-operation

As mentioned in Part IV of this Working Paper, there are basically three ways by which we may seek to enforce the subject's compliance with any lawful investigative test procedures. One method would be to allow the use of reasonable force where necessary. This has been done in Canada's *Identification of Criminals Act* as well as in legislation and proposed legislation relating to investigative tests in other jurisdictions.[438] A second method for ensuring the subject's submission to investigative test procedures would be to enact a penalty for refusal to participate in such testing. This has also been done in the statutes of several jurisdictions.[439] In some jurisdictions, investigative test legislation allows for the imposition of a penalty for refusal to submit to various procedures *in addition to* authorizing the use of force by police officers.[440] A third available method of enforcement is the enactment of a provision permitting the trier of fact to draw an adverse inference at trial from the accused's failure to participate in a given investigative test.[441] In some jurisdictions, failure or refusal to undergo certain types of investigative tests may both allow the drawing of an adverse inference and render the accused liable for a separate offence. This, as mentioned in Part IV of this Working Paper, is the present situation under the current breathalyzer provisions of our *Criminal Code*.[442]

Having considered the available alternatives with reference to the investigative test procedures it approved of in its 1978 *Report on Bodily Examination and Samples as a Means of Identification*, a majority of the New Zealand Criminal Law Reform Committee ultimately opted for the first mentioned solution, namely, the allowing of a certain degree of force. As it stated:

> In the end ... we decided that it would be necessary to permit the use of such reasonable force as may be necessary to execute an order, even if this were to involve the overcoming of physical resistence to the order.[443]

The Committee went on to explain:

> We were driven to this conclusion by the weaknesses inherent in the other alternatives. Where the refusal to comply with an order is by a suspect who has not been arrested the evidence necessary to bring him to trial may never otherwise be obtained and thus the possibility of adverse comment at his trial may not eventuate. Meanwhile, to punish non-compliance as contempt or as a separate offence may have the practical effect of enabling the suspect to elect the offence for which he will be dealt with — the crime under investigation (which may be murder), or the relatively lesser offence of non-compliance with an order or contempt. This would of course defeat the purpose of the procedure.[444]

The Committee concluded:

> We therefore recommend that the person authorised by the order to carry out the examination or to take the sample, and any police officer assisting the person so authorised, be empowered to use such reasonable force as may be necessary to carry out the examination or to secure the samples that the order specifies.[445]

It is submitted, however, that the sanctioning of reasonable necessary force would not be practical in the case of investigative tests that require active participation on the part of the accused (see Part II.B. above). Any attempt to compel active participation through the use of force would necessarily amount to physical intimidation rather than reasonable force.

In its 1981 *Report*, the United Kingdom's Royal Commission on Criminal Procedure clearly felt that the manner by which submission to investigative test procedures should be enforced varied with the nature of the procedure involved. As it stated:

> There is a case in some circumstances for the police to be able to take samples from a suspect or to submit him to medical examination without his consent. But in respect of certain kinds of body sample, for example blood, semen and urine, it is difficult to see how procedures for these purposes could be made effective, or are even acceptable, whether with or without judicial authority.[446]

In the Commission's opinion: "The use of physical compulsion to obtain intimate body fluids, such as blood or semen, seems to us to be objectionable, and none of us would recommend that it should be made lawful to obtain such samples in this way."[447] On the other hand, the Commission felt that:

> [W]here the intrusion is not so intimate, for example the examination of the finger nails for forensic purposes, or the taking of samples of hair, or even of saliva, we consider that such physical examination or the taking of such samples should be permitted under compulsion, where evidence is sought tending to confirm or disprove the suspect's involvement in any grave offence. We do not see this as being any more serious an intrusion on the suspect's person than the type of body search to which we have referred in paragraph 3.118.[448]

We believe that the question of appropriate enforcement measures cannot be considered in isolation and should ideally be considered with reference to at least three factors: (a) the gravity of the offence involved; (b) the intrusiveness of the investigative test proposed; and (c) the potential probative value of evidence likely to be produced by the administration of the investigative test proposed.

F. Liability of Persons Conducting Investigative Tests

It goes without saying that persons acting competently within the confines of any statutory scheme for the regulation of investigative test procedures should be protected from legal liability.[449] As previously mentioned, provisions in various Canadian statutes have been enacted which accomplish this purpose in one way or another with respect to some investigative tests presently authorized.

G. Liability for Failure to Conduct Investigative Tests

Another question that must be considered is what statutory obligation (if any) ought to rest on physicians and other qualified personnel with regard to the conduct of investigative tests. Here, it would seem, there are three possible approaches. One approach would be statutorily to compel physicians (and others) to conduct certain investigative tests as a matter of course in certain circumstances. Legislation of this type has been enacted in at least one Commonwealth jurisdiction with regard to the taking of blood samples in motor vehicle accident cases.[450] A second approach would be to place physicians under compulsion to conduct certain investigative tests only where they have been specifically required by a law enforcement officer to do so. (This approach would, in effect, be an extension of paragraph 118(*b*) of the *Criminal Code* which presently makes every one who "omits, without reasonable excuse, to assist a public officer or peace officer in the execution of his duty in arresting a person or in preserving the peace, after having reasonable notice that he is required to do so..." guilty of an offence). Legislation of this type has again been enacted in at least one Commonwealth jurisdiction with regard to the taking of blood samples in motor vehicle accident cases.[451] A third approach, and the one favoured by this Commission, would be to forgo the enactment of any statutory provision that would compel physicians, or any other persons not employed by the government for that particular purpose, to conduct any form of investigative test under any circumstances. It is our opinion that the conscription of physicians into the area of criminal investigation and law enforcement would constitute both an unjustified infringement of the individual rights of private physicians and, in some instances, an unconscionable intrusion into the special relationship of doctor and patient.

H. Alcohol, Drugs and Driving Offences — Special Considerations

The use of certain investigative tests in the context of drug-related and alcohol-related driving offences may involve special considerations. It is arguable in fact that the placing of persons

who operate motor vehicles — particularly those who consume drugs or alcohol beforehand — outside the general regime is required in order to maintain the "balance between individual liberties and the provision of adequate powers for the state to allow for effective crime prevention and control...."[452] Such persons can fairly be taken to have waived certain rights; in light of the very grave danger to the public posed by intoxicated driving, they may, in our opinion, legitimately be the subject of more specialized procedures.

(1) The Problem

Many would view the *Code*'s current breathalyzer provisions as inadequate in at least two major respects. First, there is the problem that arises in the case of drivers whose physical condition (for example, respiratory problems, mouth injury) or mental condition (such as unconsciousness) impedes the providing of a breath sample. Although blood-alcohol concentration may be objectively determined by analysis of substances other than breath, the *Criminal Code* provides specifically in subsection 237(2) that:

> No person is required to give a sample of blood, urine or other bodily substance for chemical analysis for the purposes of this section except breath as required under section 234.1, 235 or 240.1, and evidence that a person failed or refused to give such a sample or that such a sample was not taken is not admissible nor shall such a failure or refusal or the fact that a sample was not taken be the subject of comment by any person in the proceedings.

In the absence of statutory authorization, the taking of blood, urine or other body substance samples will constitute an assault unless the consent of the subject is first obtained.[453] As indicated in sections 234.1, 235, 237, 240.1 and 240.3, moreover, the existence of a "reasonable excuse" will preclude both penal and adverse evidentiary consequences from arising as the result of any person's failure or refusal to comply with a demand for a breath sample.

The fact that the *Code* only authorizes the mandatory taking of breath samples points up what is perceived to be the second major inadequacy in the current provisions, namely, that which arises in cases where intoxication or the cause thereof cannot objectively be determined through breath analysis alone (for example, where drugs other than alcohol have been ingested).[454]

(2) The Alternatives

There are several alternative approaches that may be taken in order to meet the difficulties just described. Each involves consideration of two issues: expansion of the category of body substances that may be required; and methods of enforcement.

(a) Expanding the Category of Body Substances That May Be Required

There is a variety of body fluids and tissues that, like breath samples, may be analyzed to determine whether intoxicating substances have been ingested. Amongst the most useful are such substances as blood, urine, vitreous humour, stomach contents and liver tissue.[455] The usefulness of most of these substances for our purposes, however, is limited (a) by obvious practical problems involved in the taking of suitable specimens from living persons, and/or (b) by the difficulty in establishing a reliable correlation between the results of chemical analysis of the specimens and the degree (if any) of impairment at the relevant time. Suffice it to say that of the body substances we have considered, it is our opinion that (apart from breath) blood and urine are the only two that are even *potentially* acceptable from both a practical and scientific standpoint. An apparently similar view prevails in those Commonwealth jurisdictions that have enacted legislation requiring motorists to provide specimens of body substances other than, or in addition to, breath.[456] In assessing the comparative value of blood and urine specimens for our purposes, it is necessary that we consider three basic questions: (1) the extent to which the presence and proportion (if any) of alcohol or other drugs may be determined in each; (2) the extent to which the present proportion (if any) of alcohol or other drugs in each can be used to determine the proportion of alcohol or other drugs in the blood at the relevant time; and (3) the extent to which a useful inference can be made concerning impairment from the proportion of alcohol or other drugs in the blood at the relevant time.

Can the presence and proportion (if any) of alcohol or other drugs be determined?

As mentioned in Part II of this Working Paper, the presence and proportion (if any) of alcohol in a given sample of blood or urine may be quite reliably and accurately determined through the

use of a number of modern scientific techniques.[457] The presence, identity and proportion (if any) of a drug (or metabolite thereof) in a given sample of blood or urine may also be reliably and accurately determined in many cases, though such determination has its limitations and may be problematic due to a number of factors.[458]

Can the present proportion (if any) be used to determine the proportion (if any) of alcohol or other drugs in the blood at the relevant time?

It is generally agreed that relating the proportion of alcohol in a given blood sample to the proportion of alcohol in the donor's blood at the relevant time (namely, the point when the donor "drives a motor vehicle or has the care or control of a motor vehicle...") with any precision can pose significant problems.[459] Because it is likely that in most cases the sample will have been taken after peak blood-alcohol concentration has been reached, however,[460] the presumption contained in subparagraph 237(1)(*c*.1) of the *Code* is not unreasonable insofar as it will generally be favourable to the accused. As that provision states:

> [W]here a sample of blood of the accused has been taken, if the sample was taken as soon as practicable after the time when the offence was alleged to have been committed and in any event not later than two hours after that time, evidence of the result of a chemical analysis of the sample of blood is, in the absence of any evidence to the contrary, proof of the proportion of alcohol in the blood of the accused at the time when the offence was alleged to have been committed....

Because the dynamics of non-alcoholic drug absorption and removal may be far more complex, however, the logic and/or fairness of a similar presumption regarding blood-drug concentration would be more difficult to support. The extent to which an expert witness will be able to estimate previous blood-drug concentration from blood sample analysis will depend on a number of factors and will vary from case to case.

Urine samples are somewhat more problematic than blood samples as regards the problem of "relating back." Interpretation of test results may be confounded *inter alia* by questions as to how full the bladder was prior to drug or alcohol ingestion, and how long it has been since the bladder was last voided.[461] Although, in

the case of alcohol analysis, such problems can be largely alleviated by the taking of two samples,[462] interpretation of drug concentrations in urine poses more significant difficulties.[463]

Can a useful inference be made about impairment from the proportion (if any) of alcohol or drugs in the blood at the relevant time?

Although the ability of specific non-alcoholic drugs to impair skills that may be relevant to safe driving may be fairly well established, it is doubtful that any well-developed and validated system for detecting and measuring the impairing effects of non-alcoholic drugs on driving currently exists.[464] There is, however, a great deal more experimental evidence as to the impairing effect of alcohol ingestion on driving ability than presently exists regarding the effect of non-alcoholic drug ingestion on driving ability.[465] Perhaps for this reason, the current provisions of the *Criminal Code* contain a statutory inference of sorts concerning the effect of more than 80 milligrams of alcohol in 100 millilitres of blood.[466] While the creation of similar statutory inferences concerning the effects of specified amounts of non-alcoholic drugs would appear to be problematic (particularly when one considers the number of drugs that may induce impairment),[467] it is our view that this fact does not, in itself, constitute a conclusive argument against the enactment of body substance test provisions for the purposes of determining non-alcoholic drug impairment. As mentioned in Part III of this Working Paper, the current breathalyzer provisions may be resorted to for the purpose of gathering evidence with respect to the offence of impaired driving, despite the fact that proof of a given blood-alcohol level may not in itself be sufficient to establish impairment of the ability to drive for the purposes of section 234 or subsection 240(4) of the *Code*[468] and that expert evidence relating the accused's blood-alcohol content to impairment may be required.[469] More to the point is the fact that in many (or perhaps most) cases, it will be either extremely difficult or impossible for an expert to draw inferences as to impairment from blood-drug concentrations alone.[470] It is our opinion, however, that an inability to link impairment of the ability to drive to a given blood-drug level does not diminish the corroborative or explanatory value of blood-drug analysis in cases where there exists independent evidence of impairment. This fact was recognized by the Australian Law Reform Commission in 1976. Having noted that:

> In the present state of knowledge and given the presently available equipment and techniques the only appropriate legislative means of control is that afforded by the offence of driving under the influence of drugs or driving under the influence of alcohol or drugs[471]

the Commission went on to state that "it is appropriate to allow for likely technological advances in this area and to make provision accordingly that suspects may be required in certain cases and subject to proper limitations and restrictions, to provide body samples."[472] In their view:

> Legislation should allow as far as possible for development in methods of ascertaining from body samples the presence and quantity of drugs present in the body where the Breathalyzer, admissions or other available evidence do not explain impaired behaviour.[473]

(b) Methods of Enforcement

As mentioned earlier, there are basically three methods of ensuring compliance with any statutory scheme devised for the testing of body substances. One method is to enact a penalty for unreasonable failure or refusal to comply with a lawful demand for a sample. This method has been adopted in connection with the *Code*'s current breathalyzer provisions. It has been used for enforcing the requirement for other body substance samples in other Commonwealth jurisdictions.[474] A second alternative is to allow for the admission into evidence of any such unreasonable failure or refusal as a fact from which the court may draw an inference adverse to the accused. Once again, this method has been noted above in connection with the *Code*'s breathalyzer provisions. Adverse inferences have been statutorily permitted in other jurisdictions in connection with unreasonable failure to provide body substance samples.[475] Third and finally is the option of resort to reasonable force. Though not currently available for the purpose of obtaining body substances from drivers in Canada, reasonable force may be employed in analogous circumstances: for example, in the taking of fingerprints under section 2 of the *Identification of Criminals Act*.[476]

In our opinion, neither penalty nor adverse inference would be appropriate where what is being sought from the subject is a urine sample. While, for example, the cases in which a failure or refusal to comply with a lawful demand for a breath sample would be reasonable might be rare indeed, it is extremely doubtful that the

same could be said with regard to urine samples. Unlike breath samples, urine samples cannot generally be provided at will.[477] In any case where there has been a failure or refusal to comply, therefore, it may be difficult (if not impossible) to ascertain whether such failure or refusal was reasonable. While the technique of catheterization might in theory overcome some problems, it is difficult to see how any failure to submit to so unpleasant a procedure could ever be considered unreasonable. Resort to force would be clearly objectionable, particularly when one considers the limitations on the probative value of urine samples (discussed above) and the provisions of sections 7, 8, and 12 of the *Charter*.

Where blood samples are concerned, it is our view that a much stronger argument can be made in favour of a penalty for non-compliance. Venipuncture (perhaps the most suitable method for taking blood samples for drug or alcohol analysis) is a routine medical procedure which, when performed by qualified individuals under appropriate conditions, is both reasonably safe and painless.[478] It may result in the obtaining of relevant and, in many cases, highly probative evidence. We do not, however, recommend the statutory sanctioning of an adverse inference[479] to be drawn from the accused's unreasonable failure or refusal to submit to the taking of a blood sample. There may, in our opinion, be a variety of possible (albeit unreasonable) motives for such failure or refusal which have no logical link to consciousness of guilt.

It is also our opinion that resort to reasonable force ought not to be sanctioned where blood samples are sought in connection with an offence under sections 234, 236, subsection 240(4) or section 240.2 of the *Code*. Although the forcible taking of blood samples might in certain circumstances be justifiable in the course of investigating more serious offences, the higher risk to safety associated with force, coupled with the higher level of intrusiveness, dictates that it be restricted to exceptional situations and involve prior judicial authorization.

We have also considered the question of whether the non-consensual taking of blood specimens from unconscious drivers should be permitted. In the case of the unconscious driver believed by a peace officer on reasonable and probable grounds to have committed an alcohol-related offence of the type described in sections 234, 236, subsection 240(4) or section 240.2 of the *Criminal Code*, we believe it should. We decline, however, to make such a

recommendation in the case of (non-alcoholic) drug-related driving offences, in light of the probative limitations of blood-drug analysis discussed above.

Several arguments may, of course, be advanced in support of the contrary position. First, it may be argued that, unless medically indicated for treatment purposes, such procedure may unduly endanger the health or safety of the subject. Second, it may be argued that the non-consensual taking of blood specimens from unconscious drivers would place them in a worse position than conscious drivers who, though perhaps liable to criminal penalty, would be able to refuse to submit to the procedure. Finally, it may be argued that a special provision of the type contemplated is not really necessary; where samples are taken in the course of proper emergency treatment, it may be possible to arrange for their seizure and analysis at some later time.[480] These arguments may raise considerations under sections 7, 8, 12 and 15(1) of the *Charter*. On balance, however — and considering the enormity of the problem caused by drinking drivers, and in particular chronic offenders, in this country — we do not find them convincing. To begin with, as mentioned earlier, the standard techniques for the taking of blood specimens are routine and generally entail few risks. Any residual concerns as to health and safety could, in our view, be dealt with adequately by the enactment of provisions that permit such non-therapeutic blood sampling to be carried out (a) in cases where the person has been hospitalized or is undergoing emergency medical treatment, only once it has been ascertained that the attending physician does not object to the procedure on medical grounds; and (b) only if it is performed by persons qualified by professional training. In addition, it must be pointed out that if the taking of blood samples were only permissible if done pursuant to a demand, unconscious drivers — many of whom will have entered that state as a result of gross intoxication and/or serious accident — would enjoy an unfair advantage over conscious ones. Indeed, this state of affairs might act as an inducement for drinking drivers to feign unconsciousness in order to escape blood sample demands. It is our further belief that the effective prosecution of drinking drivers involved in serious accidents ought not to be contingent on the possibility of obtaining suitable evidence from "left-over" blood specimens outside the control of law enforcement officers or their agents. Provided that they are taken subject to the conditions mentioned earlier and pursuant to a warrant obtained upon reasonable and probable grounds, and taking into consideration the

provision contained in section 1 of the *Charter*,[481] it seems to us that the non-consensual taking of blood samples from unconscious drivers is entirely justifiable.

I. Our Recommendations

As the result of the foregoing discussion, we have formulated a number of recommendations regarding the manner in which the administration of investigative test procedures ought to be statutorily regulated. These recommendations, while not intended as an exhaustive and detailed prescription for the codification of investigative test procedures, comprise what we feel at least to be the basic guidelines for the creation of any such statutory scheme. In addition to our general recommendations, we have included some specific recommendations designed to deal with investigative tests in the context of drug-related and alcohol-related driving offences.

We wish to emphasize that our proposed regulation of investigative test procedures is *not* intended as a recommendation that adherence to the proposed procedures should automatically render the evidence thereby obtained admissible.

Our recommendations are as follows:

(1) General

(a) Definitions

RECOMMENDATION

1. That for the purpose of statutory codification the term "investigative test" should be defined as meaning one of the four classes of procedures defined in Recommendations 3 to 6 below.

The purpose of this recommendation, coupled with Recommendations 3 to 6 below, is to limit the types of investigative test procedures that may be conducted without the consent of the subject and without legal liability attaching to the persons who conduct them.

RECOMMENDATION

2. That, notwithstanding anything in these recommendations, for the purpose of statutory codification all classes of investigative tests should be defined so as to exclude from their scope:

(a) any procedure that does not require either physical contact with the subject or the subject's conscious co-operation; and

(b) any identification procedure to which a person convicted of a criminal offence may be subjected in a prison or penitentiary.

This recommendation is designed to make clear that we are not here concerned with the regulation of procedures: (a) that in no way interfere with, or constitute an intrusion upon, the physical or mental integrity of the subject; or (b) that are not really "investigative" in nature, since they occur after prosecution has been completed.

RECOMMENDATION

3. (1) That, subject to part (2) of this recommendation, for the purpose of statutory codification a Class I investigative test should be defined so as to include only the following procedures:

(a) inspection of the body of the subject for the sole purpose of detecting identifying features, which would not otherwise be visible to the naked eye, in the nature of tattoos, wounds, scars, birth marks or other physical peculiarities, etc.;

(b) medical examination (provided that such procedure does not involve the removal or attempted removal of substances from the interior of the subject's body, any surgical procedure, the taking of X-rays or fluoroscopic pictures, or the administration of any drug or other substance to the subject);

(c) the photographing of the subject;

(d) the taking of prints or impressions from any exterior part of the subject's body;

(e) the taking of hair combings or clippings from the subject;

(f) the taking of scrapings or clippings from the subject's fingernails; and

(g) the removal or attempted removal of residues or substances from the external body of the subject by means of washings, swabs or adhesive materials.

(2) That, notwithstanding part (1) of this recommendation, for the purpose of statutory codification Class I investigative tests should be defined so as to exclude from their scope any procedure that requires the subject to expose his or her private parts.

The purpose of this recommendation is to isolate what we feel are the least intrusive forms of allowable compulsory investigative tests in order that a distinct set of procedures may be attached to them.

RECOMMENDATION

4. That for the purpose of statutory codification a Class II investigative test should be defined so as to include only the following procedures:

(a) inspection of the body of the subject (as narrowly defined in Recommendation 3(1)(a) above) in which the subject is required to expose his or her private parts;

(b) medical examination (as narrowly defined in Recommendation 3(1)(b) above) in which the subject is required to expose his or her private parts, provided that such examination does not involve the removal or attempted removal of substances from the subject's private parts;

(c) the taking of saliva samples from the subject; and

(d) the making of dental or bite impressions.

The purpose of this recommendation is to isolate what we feel are the second least intrusive forms of allowable compulsory investigative tests in order that a distinct set of procedures may be attached to them.

RECOMMENDATION

5. That for the purpose of statutory codification a Class III investigative test should be defined as meaning the taking of blood samples from the subject.

CONTINUED

1 OF 2

The purpose of this recommendation is to isolate what we feel is the most intrusive form of allowable compulsory investigative test in order that a distinct set of procedures may be attached to it. In light of the intrusiveness of this procedure, we consider Recommendation 5 to be a very tentative one. If it were to be deleted, the taking of blood samples would automatically become a Class IV investigative test and would therefore be allowable only on consent (see below).

RECOMMENDATION

6. That for the purpose of statutory codification a Class IV investigative test should be defined as any procedure (excluding simple interrogation, surveillance, the search of a place and the search of the person for concealed or foreign objects or substances) that is not a Class I, II or III test, whereby a person in authority or any agent of such person endeavours to obtain or record from a person suspected or accused of having committed a criminal offence, information concerning, or an exhibition of:

(a) the physical or mental condition or characteristics of that person;

(b) the offence in question; or

(c) the location of possible evidence relating to the offence in question.

The purpose of this recommendation is to isolate those forms of investigative tests that, because of their nature, either cannot or should not be performed on unwilling subjects through the application of reasonable force, in order that a distinct set of procedures may be attached to them. Included in this class are tests that clearly require the active participation of the subject, and tests that are not included in other classes because of their extreme intrusiveness or because their scientific reliability has not been satisfactorily established.

(b) Procedure

RECOMMENDATION

7. That, except as may otherwise be provided in these recommendations, the carrying out of investigative test procedures

should be statutorily prohibited in the course of investigating summary conviction offences except with the consent of the subject.

The purpose of this recommendation is self-explanatory. As mentioned earlier in the Working Paper, we feel that compulsory investigative testing should generally only be permissible in the course of investigating the more serious (that is, indictable) offences.

RECOMMENDATION

8. That in no case should the carrying out of any Class I investigative test (as defined in Recommendation 3 above) be permitted except:

(a) with the subject's consent; or

(b) where the subject of the proposed investigative test has been arrested or charged with an offence, and

(i) a peace officer on reasonable and probable grounds believes that the carrying out of the proposed investigative test is likely to provide evidence of, or relating to, the offence in question, or

(ii) a peace officer on reasonable and probable grounds doubts whether the subject's identity has been sufficiently established, and believes on reasonable and probable grounds that the proposed test is likely to provide evidence of the subject's identity.

The purpose of this recommendation is to allow Class I investigative tests to be compulsorily conducted (see Recommendation 12) only in cases where some legitimate investigative function is served. The test is not designed to be very onerous, given the low degree of intrusiveness of the tests involved, although it should prevent totally random or arbitrary investigative testing.

RECOMMENDATION

9. (1) That in no case should the carrying out of any Class II investigative test (as defined in Recommendation 4 above) be permitted otherwise than:

(a) with the subject's consent; or

(b) pursuant to a judicial order issued for that purpose after the subject of the proposed investigative test has been arrested or charged with an offence; or

(c) pursuant to the written authorization of an "officer in charge" as defined by the *Criminal Code*.

(2) That in no case should an officer in charge be permitted to authorize the carrying out of any Class II investigative test except where:

(a) the subject of the proposed investigative test has been arrested or charged with an offence;

(b) the officer in charge on reasonable and probable grounds believes that the carrying out of the proposed investigative test is likely to provide evidence of, or relating to, the offence in question; and

(c) the officer in charge on reasonable and probable grounds believes that the delay that would be caused by applying for an investigative test order would result in the destruction or disappearance of the evidence toward which the proposed investigative test is directed.

(3) That, at a minimum, in no case should the issuance of a judicial investigative test order be authorized except where:

(a) the subject of the proposed investigative test has been arrested or charged with an offence; and

(b) there are reasonable and probable grounds to believe that the carrying out of the proposed investigative test is likely to provide evidence of, or relating to, the offence in question.

The purpose of this recommendation is to allow Class II investigative tests to be compulsorily conducted (see Recommendation 12) only in cases where some legitimate investigative function is served. Here, however, because the types of tests concerned are somewhat more intrusive than Class I tests, there is additional control on their use. This recommendation is designed to make application for a judicial order the procedure of choice, to be dispensed with only in exigent circumstances.

RECOMMENDATION

10. That, except as otherwise provided in these recommendations, in no case should the carrying out of any Class III investigative test (as defined in Recommendation 5 above) be permitted otherwise than:

(a) with the subject's consent; or

(b) pursuant to a judicial order issued for that purpose after the subject of the proposed investigative test has been arrested or charged with an offence.

The purpose of this recommendation is again to allow Class III investigative tests to be compulsorily conducted (see Recommendation 12) only in cases where some legitimate investigative function is served. Because the type of test involved is the most intrusive allowable, there is maximum control on its use. Although we have not specified in Recommendation 10 the exact conditions under which it would be appropriate for a judicial order authorizing a Class III investigative test to issue, we would envision a more onerous test than that described in Recommendation 9. In each case, the making of such an order should involve *inter alia* a careful weighing of the intrusiveness of the proposed procedure against the cogency of the evidence likely to be obtained.

RECOMMENDATION

11. That, except as otherwise provided in these recommendations, the carrying out of any Class IV investigative test (as defined in Recommendation 6 above) should in no case be permitted except with the consent of the subject.

The purpose of this recommendation has been explained in the commentary to Recommendation 6.

RECOMMENDATION

12. That where a person fails or refuses without reasonable excuse to submit to a Class I, II, or III investigative test the carrying out of which would be lawful in accordance with the above recommendations, reasonable force should be allowable for the purpose of compelling such person to do so.

This recommendation is self-explanatory. Because we are dealing with indictable offences, it is doubtful that any other method of enforcement (for instance, adverse inference or summary conviction offence resulting from failure or refusal to co-operate) would be effective. This recommendation is not intended to allow the use of force in order to carry out an investigative test to which the subject has consented where the subject has subsequently withdrawn his or her consent, unless the carrying out of the test is otherwise authorized under these recommendations.

(2) Alcohol, Drugs and Driving Offences

RECOMMENDATION

13. That where a peace officer on reasonable and probable grounds believes that a person is committing, or at any time within the preceding two hours has committed, the offence of

(a) driving or having the care or control of a motor vehicle while his or her ability to drive is impaired by alcohol; or

(b) navigating or operating a vessel [or having the care or control of a vessel] while his or her ability to navigate or operate a vessel is impaired by alcohol; or

(c) driving or having the care or control of a motor vehicle after having consumed alcohol in such a quantity that the proportion thereof in his or her blood exceeds 80 milligrams of alcohol in 100 millilitres of blood [; or

(d) navigating or operating an aircraft, assisting in the navigation or operation of an aircraft, or having the care or control of an aircraft while his or her ability to navigate or operate an aircraft is impaired by alcohol; or

(e) navigating or operating a vessel or having the care or control of a vessel after having consumed alcohol in such a quantity that the proportion thereof in his or her blood exceeds 80 milligrams of alcohol in 100 millilitres of blood; or

(f) navigating or operating an aircraft, assisting in the navigation or operation of an aircraft, or having the care or control of an aircraft after having consumed alcohol in such a quantity that the proportion thereof in his or her blood exceeds 80 milligrams of alcohol in 100 millilitres of blood]

such peace officer should be entitled, by demand made to that person forthwith or as soon as practicable, to require him or her to provide then or as soon thereafter as is practicable such samples of his or her breath as in the opinion of a "qualified technician" (as defined in the *Criminal Code*) are necessary to enable a proper analysis to be made in order to determine the proportion, if any, of alcohol in his or her blood, and to accompany the peace officer for the purpose of enabling such samples to be taken.

The purpose of this recommendation is basically to retain the provisions in subsections 235(1) and 240.1(1) of the *Criminal Code* relating to breath sample demands, incorporating (in square brackets) the gist of those amendments set out in the recently proposed *Criminal Law Amendment Act, 1983* (issued by the Minister of Justice in July of 1983). We have included the portions in square brackets solely for the sake of completeness. Although we see no reason why there should not be substantial uniformity regardless of whether a motor vehicle, vessel or aircraft is involved, we do not consider the words in brackets as being essential to our recommendation.

RECOMMENDATION

14. That where a peace officer on reasonable and probable grounds believes that a person is committing, or at any time within the preceding two hours has committed, the offence of

(a) driving or having the care or control of a motor vehicle while his or her ability to drive is impaired, either wholly or in part, by a drug other than alcohol; or

(b) navigating or operating a vessel [or having the care or control of a vessel] while his or her ability to navigate or operate a vessel is impaired, either wholly or in part, by a drug other than alcohol [; or

(c) navigating or operating an aircraft, assisting in the navigation or operation of an aircraft, or having the care or control of an aircraft while his or her ability to navigate or operate an aircraft is impaired, either wholly or in part, by a drug other than alcohol]

such peace officer should be entitled, by demand made to that person forthwith or as soon as practicable, to require him or her to submit then or as soon thereafter as is practicable to having such a sample

of his or her blood taken from his or her body as in the opinion of a qualified medical practitioner is necessary to enable a proper analysis to be made in order to determine the proportion, if any, and identity, of any drugs in his or her blood, and to accompany the peace officer for the purpose of enabling such sample to be taken.

The purpose of this recommendation is to permit a demand for a blood sample to be made in cases similar to those in which breath samples can be demanded, where the reasonably believed (total or partial) cause of impairment is a drug other than alcohol. It is similar to provisions enacted in other Commonwealth jurisdictions.[482] This recommendation would not preclude the prior demand for a breath sample under the previous recommendation where the preconditions have been met; in many cases it might only be following breath analysis that non-alcoholic drug impairment is reasonably believed by the peace officer to exist.[483] As regards the words in square brackets, our comments on this point after Recommendation 13 apply here as well.

RECOMMENDATION

15. That, subject to Recommendation 17, when a person from whom it would otherwise be lawful under Recommendation 13 to require breath samples is unable by reason of injury or illness to provide such samples, a peace officer should be entitled, by demand made to that person forthwith or as soon as practicable, to require him or her to submit then or as soon thereafter as is practicable to having such a sample of his or her blood taken from his or her body as in the opinion of a qualified medical practitioner is necessary to enable a proper analysis to be made in order to determine the proportion, if any, of alcohol in his or her blood, and to accompany the peace officer for the purpose of enabling such sample to be taken.

The purpose of this recommendation is to permit a demand for a blood sample to be made in cases similar to those in which breath samples can currently be demanded under subsections 235(1) and 240.1(1) of the *Code* where the person is unable by reason of injury or illness to provide breath samples. It is similar to a provision enacted in the United Kingdom.[484]

It may be argued that a provision of the sort recommended here would contravene section 15(1) of the *Charter*. According to

that provision: "Every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on ... physical disability." In light of the fact that the taking of a blood specimen is a safe and virtually painless procedure, and that the direct analysis of a blood sample is the most accurate means of determining blood-alcohol concentration, however, it is our view that any curtailment of equality rights brought about by the implementation of this recommendation would constitute one of the "reasonable limits" which pursuant to section 1 of the *Charter* "can be demonstrably justified in a free and democratic society."

RECOMMENDATION

16. That, subject to Recommendation 18, when a person whom it would otherwise be lawful for a peace officer to require to supply breath samples under Recommendation 13 is unconscious, a peace officer should be permitted, if authorized by a warrant, to cause such a sample of his or her blood to be taken from his or her body as in the opinion of a qualified medical practitioner is necessary to enable a proper analysis to be made in order to determine the proportion, if any, of alcohol in his or her blood.

The reasoning behind this recommendation has been discussed fully above. Its purpose is to enable non-consensual blood samples to be taken from unconscious drivers (for example, those who have been involved in serious accidents) believed by a peace officer on reasonable and probable grounds to have committed one of several alcohol-related (but not drug-related) driving offences. The warrant envisioned in this recommendation would in all likelihood have to be telephonic in nature, that is, similar to that recommended in our recent Report on *Writs of Assistance and Telewarrants*.[485] We do not envision that its issuance would involve consideration of the issues alluded to in the commentary to Recommendation 10 above. Rather, we see it as a mechanism for ensuring that the requisite criteria have been fulfilled.

RECOMMENDATION

17. That when a person whom it would otherwise be lawful for a peace officer to require to supply breath samples under Recommendation 13 or to submit to having a blood sample taken from his

or her body under Recommendation 14 or 15 has been admitted to a hospital or is undergoing emergency medical treatment, a peace officer should not be permitted to require such person to provide a breath sample or to submit to having a blood sample taken from his or her body unless:

(a) the attending physician has been asked whether he or she objects to such requirement on the ground that it would be prejudicial to the proper care or treatment of the person; and

(b) the attending physician has not objected on this ground.

The purpose of this recommendation is to protect the health and safety of persons undergoing medical treatment as the result *inter alia* of motor vehicle accidents. It is similar to a provision enacted in the United Kingdom.[486]

RECOMMENDATION

18. That, notwithstanding the fact that a warrant has been obtained in accordance with Recommendation 16, where a person either has been admitted to a hospital or is undergoing emergency medical treatment a peace officer should not be permitted to cause a sample of blood to be taken from the body of a person under Recommendation 16 unless:

(a) the attending physician has been asked whether he or she objects to such procedure on the ground that it would be prejudicial to the proper care or treatment of the person; and

(b) the attending physician has not objected on this ground.

Like Recommendation 17, this recommendation is designed to protect the health and safety of the subject.

RECOMMENTATION

19. That where a person, without reasonable excuse, fails or refuses to comply with a lawful demand requiring him or her to supply breath samples or to submit to having a blood sample taken from his or her body, such unreasonable failure or refusal should constitute an offence of the same gravity as the offence with respect to which the demand was made.

The purpose of this recommendation is simply to retain the type of provision in subsections 235(2) and 240.1(2) of the *Criminal Code*.

(3) Safeguards

RECOMMENDATION

20. That the subject of any proposed investigative test should be statutorily entitled to a warning as to the possible consequences of his or her failure or refusal to undergo such test.

This recommendation is self-explanatory. The reasoning behind it has been adequately outlined in Part V.C.(1) above.

RECOMMENDATION

21. That the subject of any investigative test should be statutorily entitled to the greatest possible privacy during its administration, having regard to the nature of the test.

This recommendation is self-explanatory.

RECOMMENDATION

22. That the subject of any investigative test should be statutorily entitled to have such test conducted by persons qualified by professional training.

This recommendation is designed to ensure that investigative test procedures are conducted in the safest and most reliable manner possible. It means, for example, that no investigative test that involves procedures normally conducted by a qualified medical practitioner, qualified dentist, registered nurse or nurse's assistant should be lawful unless such test is conducted by the appropriate person.

RECOMMENDATION

23. That the subject of any investigative test should be statutorily entitled to have such test conducted in such a manner as to ensure minimum discomfort to the subject, having regard to the nature of the investigative test and the surrounding circumstances.

This recommendation is self-explanatory.

RECOMMENDATION

24. That a person from whom breath samples are taken under Recommendation 13 should be statutorily entitled to have a blood sample taken as well at his or her request, unless it would be impractical to arrange for such procedure to be conducted.

The purpose of this recommendation is to provide the person from whom breath samples have been taken with the opportunity to have the most accurate method of blood-alcohol content analysis done where this would be practical. Provisions for the taking of blood specimens at the request of persons required to provide breath samples have been enacted in several Commonwealth jurisdictions.[487]

RECOMMENDATION

25. That a person who is entitled to have a blood sample taken at his or her request should be statutorily entitled to be apprised of this right.

This recommendation is self-explanatory. The reasoning behind it is again set out in Part V.C.(1) above. A statutory provision of this type has been enacted in New Zealand.[488]

RECOMMENDATION

26. That a person from whom a blood sample is taken should be statutorily entitled to have half of the sample so taken sent to an independent analyst to be analyzed.

The purpose of ths recommendation is to ensure the accuracy of any blood sample analysis and to allow the results of any such analysis to be effectively challenged where indicated. Legislation of similar effect has been enacted in several Commonwealth jurisdictions.[489] Although some provisions of this nature have given the person from whom the sample was taken the right to be given the duplicate sample personally, it is our opinion that the type of provision envisioned in our recommendation would raise fewer potential problems with regard to continuity of evidence.

We are of the opinion that the type of safeguard suggested in this recommendation is both warranted and necessitated by the intrusive nature of blood testing.

RECOMMENDATION

27. That where a person is entitled to have any blood sample taken from him or her analyzed by an independent analyst, such person should be statutorily entitled to be apprised of this right.

This recommendation is self-explanatory. See Part V.C.(1) above.

RECOMMENDATION

28. That where there has been a substantial violation of any of the procedures outlined in the above recommendations, any evidence so obtained should not be admitted unless the court is of the opinion that its admission would not bring the administration of justice into disrepute, and such evidence would otherwise be admissible.

The procedures we are recommending in this Working Paper will, of course, have to be carried out in conformity with the standards provided in the *Charter*. In this sense, even if we did not provide for an exclusionary rule in these recommendations, section 24(2) of the *Charter* would protect persons insofar as breaches of these rules might also amount to breaches of the *Charter*. To say this, however, is not to say that all breaches of these rules, even substantial breaches, would necessarily violate the threshold standards provided in the *Charter*. Accordingly, in view of the fact that these rules would permit intrusions not presently contemplated by law, we believe that it is incumbent upon us to do more than rely on section 24 of the *Charter*. We believe it to be essential to attach an exclusionary rule directly to these rules.

Our recommendation is for an exclusionary rule that is different from, and involves a standard of protection slightly higher than, that in section 24(2) of the *Charter*. The rationale behind this recommendation has been adequately explained in Part V.D. above. Note, once again, that we have advocated *discretionary* (as opposed to automatic) exclusion, and only in cases where there has been a *substantial* violation of recommended procedures. In so doing, we have attempted to avoid the possibility of having reliable

evidence routinely excluded as the result of minor or inadvertent defects in formalities. Although we are strongly in favour of the discretionary aspect of this recommendation, we are not necessarily committed to the precise formulation set out above. We would welcome any suggestions in this regard.

In general, we view section 24(2) of the *Charter* as providing a threshold or minimum protection. In principle, the existence of section 24(2) should not preclude a different or higher standard of protection where policy reasons support such extension. The formulation of appropriate exclusionary rules is a matter of concern throughout our work in criminal procedure, and we shall be coming back to this question in future working papers and reports. We are sensitive to the practical reasons for avoiding, in our law, a proliferation of exclusionary rules of varying formulations, and this consideration will weigh heavily in our future deliberations on this important question. For the moment, however, and for the reasons we have given, we believe an exclusionary rule of the sort we have recommended here to be appropriate in view of the extended authority given to peace officers by our other recommendations.

RECOMMENDATION

29. That no medical practitioner or registered nurse should be liable for any failure or refusal to conduct any investigative test.

This recommendation is self-explanatory. The reasoning behind it has been adequately set out in Part V.G. above. In view of the fact that effective implementation of many of our recommendations will be dependent on the co-operation of certain medical, health and forensic science professionals, we realize that certain protections may also have to be implemented. Such protections might be necessary in order that the liability of these persons does not extend beyond liability for negligence as the result, for example, of a failure by a peace officer to comply with proper procedure, where the fact of such failure is not known by the medical, health or forensic science professional.

Endnotes

1. Government of Canada, *The Criminal Law in Canadian Society* (Ottawa: Government of Canada, 1982).

2. *Ibid.*, at p. 53.

3. *Ibid.*, at p. 54.

4. *Ibid.*, at p. 53.

5. R.S.C. 1970, c. C-34, as amended.

6. *Supra*, note 1, at p. 50.

7. See generally E. Ratushny, *Self-Incrimination in the Canadian Criminal Process* (Toronto: Carswell, 1979) at pp. 1-59.

8. *R.* v. *Robertson* (1975), 29 C.R.N.S. 141 (Ont. C.A.).

9. According to the report (at p. 167):

> The analyst gave opinion evidence that stepping in any of the pools of blood shown in the picture showing the position of the deceased when discovered (Ex. 9) would not produce the pattern of stains found on the boots. One smear on the right boot was tested and found to be human blood group "O" which was the blood group of the deceased. Approximately 42 per cent of the population have blood group "O". There were two human scalp hairs, similar to those taken from the deceased for purposes of comparison, on the outer side of the heel of the right boot. One hair was wedged between the rubber and the upper portion of the heel and the other was wedged between the sole layer and the body of the heel. The hairs had been stretched and the expert witness was of the opinion that the hairs could not have been picked up by walking over a floor on which the hairs were lying, as force would be required to wedge the hairs into the boot.

10. *Ullmann* v. *United States* (1956), 350 U.S. 422 (S.C.) *per* Douglas J. at p. 445.

11. *Brown* v. *Walker* (1896), 161 U.S. 591 (S.C.) *per* Field J. at p. 637.

12. Law Reform Commission of Canada, *Police Powers — Search and Seizure in Criminal Law Enforcement* [Working Paper 30] (Ottawa: Minister of Supply and Services Canada, 1983).

13. Being Part I of the *Constitution Act, 1982*, being Schedule B to *Canada Act 1982* (U.K.), 1982, c. 11.

14. Chief Justice's Law Reform Committee (Victoria), *Powers of Police After Arrest* (Melbourne: Government Printer, 1972) para. 46.

15. Law Reform Commission of Australia, *Criminal Investigation* [Report No. 2] (Canberra: Australian Government Publishing Service, 1975) para. 113 at p. 50.

16. Indian Law Institute, *Self-Incrimination: Physical and Medical Examination of the Accused* (Bombay: Tripathi, 1963) at p. 24.

17. A. D. Yarmey, *The Psychology of Eyewitness Testimony* (New York: Free Press, 1979) at p. 153.

18. See, *e.g.*: *Holt* v. *United States* (1910), 218 U.S. 245 (S.C.) (accused required to try on part of military uniform found at murder scene); *State* v. *Oschoa* (1926), 242 P. 582 (Nev. S.C.) (accused required to try on shirt found at murder scene); *Barrett* v. *State* (1950), 229 S.W. 2d 516 (Tenn. S.C.) (accused required to try on hat found at robbery scene); *State* v. *Taylor* (1965), 407 P. 2d 59 (Ariz. S.C.) (accused required to try on hat found at scene of crime).

19. See, *e.g.*, *People* v. *Clark* (1941), 116 P. 2d 56 (Cal. S.C.).

20. See, *e.g.*, *People* v. *Tomaszek* (1964), 204 N.E. 2d 30 (Ill. C.A.).

21. See, *e.g.*, *State* v. *Ah Chuey* (1879), 14 Nev. 79.

22. See, *e.g.*: *State* v. *Oschoa*, *supra*, note 18; *O'Brien* v. *State* (1890), 25 N.E. 137 (Ind. S.C); *State* v. *Miller* (1905), 60 A. 202 (N.Y.C.A.); *People* v. *Placido* (1945), 17 N.W. 2d 230 (Mich. S.C.); *Williams* v. *State* (1965), 396 S.W. 2d 834 (Ark. S.C.).

23. See, *e.g.*: *State* v. *Robinson* (1952), 58 So. 2d 408 (La. S.C.); *Williams* v. *State* (1963), 188 A. 2d 543 (Md. C.A.).

24. See D. C. James, "Constitutional Limitations on Body Searches in Prisons" (1982), 82 *Columbia L. Rev.* 1033 at p. 1033, n. 2.

25. See E. Rentoul and H. Smith, *Glaister's Medical Jurisprudence and Toxicology*, 13th ed. (London: Churchill Livingstone, 1973) at p. 440.

26. R.S.C. 1970, c. I-1.

27. J. R. Richardson, *Scientific Evidence for Police Officers* (Cincinnati: W. H. Anderson, 1963) at p. 295. Note that plain (*i.e.*, flat, as opposed to rolled) impressions may also be taken by simultaneously printing all the fingers. See W. Dienstein, *Technics for the Crime Investigator* (Springfield, Ill.: Charles C. Thomas, 1952) at pp. 158-159.

28. Richardson, *supra*, note 27 at p. 295. Comparison has been facilitated by the development of a standard system of classification in which papillary ridge patterns (with the exception of scarred or mutilated patterns) have been divided into arches (either plain or tented), loops (either ulnar or radial) and whorls (plain, central pocket, accidental or double loop): E. R. Menzel, "The Development of Fingerprints," in E. J. Imwinkelried, ed., *Scientific and Expert Evidence*, 2nd ed. (New York: Practising Law Institute, 1981) 619 at p. 648. According to A. A. Moenssens and F. E. Inbau, *Scientific Evidence in Criminal Cases*, 2nd ed. (Mineola, N.Y.: Foundation Press, 1978) at p. 360, loop patterns may be further subcategorized by the process of "ridge counting," and whorl patterns may be further subcategorized by the process of "ridge tracing." Comparisons are generally made with reference to four criteria: (1) similarity of general pattern type (if a type cannot be ascertained because of incompleteness, general likeness of the ridge flow must suffice); (2) qualitative similarity of ridge characteristics (*i.e.*, whether such characteristics as "bifurcations," "ridge dots," "ridge endings," "enclosures," etc. match); (3) quantitative similarity of ridge characteristics (it is generally agreed that positive identification requires at least eight matching ridge characteristics, and some experts require between ten and twelve); and (4) similarity of ridge characteristic location: Moenssens and Inbau, *supra*, at p. 366.

29. Moenssens and Inbau, *supra*, note 28, at pp. 379-381.

30. See: N. D. Sperber, "Forensic Odontology," in Imwinkelried, *supra*, note 28, 721 at pp. 736-746; R. B. J. Dorion, "Bite Mark Evidence" (1982), 12 *J. Canad. Dent. Assn.* 795.

31. As forensic odontologist Norman Sperber has written (*supra*, note 30, at p. 741):

> Suitable impressions may be obtained by employing the standard impression materials used in dental offices. The materials are placed in a dental impression tray, properly selected. An impression can be obtained within thirty seconds if rapid-setting materials are used. There is no pain and only minimal discomfort in taking dental impressions. The impression is then poured, utilizing a hard setting dental stone and in some cases a durable plastic medium. The result, of course, should be an accurate life size reproduction of the suspect's teeth and oral structures.
>
> ...
>
> Various materials such as wax can be placed between the teeth to record the proper relationship of the maxillary (upper) and mandible (lower) teeth. Such materials can then be utilized to place the upper and lower models in the proper relationship. In some cases, the suspect has been asked to bite into wax to duplicate the bite.

See also L. L. Luntz and P. Luntz, *Handbook for Dental Identification: Techniques in Forensic Dentistry* (Toronto: Lippincott, 1973) at pp. 152-153.

32. Sperber, *supra*, note 30 at p. 742; Luntz and Luntz, *supra*, note 31, at p. 153.

33. G. Gustafson, *Forensic Odontology* (New York: American Elsevier, 1966) at p. 156.

34. Criminal Law Reform Committee, *Report on Bodily Examination and Samples as a Means of Identification* (Wellington, N.Z.: Criminal Law Reform Committee, 1978), para. 17 at p. 9.

35. *Supra*, note 26.

36. *R.* v. *A.N.* (1977), 37 C.C.C. (2d) 9 (B.C. S.C.) at p. 14.

37. *Ibid.*

38. *Supra*, note 16, at p. 30.

39. Richardson, *supra*, note 27, at p. 323. See *Commonwealth* v. *Westwood* (1936), 188 A. 304 (Pa. S.C.) where this technique is described in detail.

40. Richardson, *supra*, note 27, at p. 324; Moenssens and Inbau, *supra*, note 28, at p. 184.

41. *Supra*, note 28, at pp. 184-185.

42. *Ibid.*, at p. 185. The authors have continued (at p. 185):

> Research discovered that many people who never fired a gun but whose profession, occupation, or happenstance, brought them in contact with nitrates can be expected to yield positive reactions to the test. Among them are photographers, engravers, match workers, farmers and gardeners handling fertilizers, etc. Other substances which may be expected to yield positive tests include bleaching agents, chemicals, cosmetics, explosives, certain types of foodstuffs, tobacco, and urine. At the first seminar on scientific aspects of police work conducted by the International Criminal Police (Interpol) in 1963, the participating experts of the several countries unanimously rejected the dermal nitrate test as without value, not only as evidence in court, but even as furnishing workable investigative leads to the police.

43. See H. C. Harrison and R. Gilroy, "Firearms Discharge Residues" (1959), 4 *J. For. Sci.* 184.

44. See the many techniques cited by Moenssens and Inbau, *supra*, note 28, at pp. 185-186, n. 6.

45. S. S. Krishnan, "Detection of Gunshot Residue on the Hands by Neutron Activation and Atomic Absorption Analysis," in Imwinkelried, *supra*, note 28, 289 at p. 301.

46. S. S. Krishnan, "Detection of Gunshot Residues on the Hands by Trace Element Analysis," in Imwinkelried, *supra*, note 28, 315 at p. 318.

47. *Ibid.*, at p. 319.

48. *Ibid.* This appears, however, to be the preferred technique where analysis is done by means of scanning electron microscopy.

49. P. L. Kirk, *Crime Investigation: Physical Evidence and Police Laboratory* (Toronto: John Wiley and Sons, 1966) at pp. 638-643.

50. Moenssens and Inbau, *supra*, note 28, at p. 412.

51. As regards the method by which hair samples may be taken from a criminal suspect for the purposes of such comparison, forensic scientist P. L. Kirk has written (*supra*, note 49, at pp. 165-166):

> Standard hairs, necessary for comparison with questioned hairs, are best collected from the head, pubes, or axillae, etc. of the individual suspected of being the source of the questioned hairs. A very suitable method of obtaining head hair is to use a clean, fine-toothed comb and comb the hair vigorously. This will provide in most instances a sample of hair most nearly comparable with the hair that would have been lost by the individual. There is no definite rule as to how much hair is to be taken since that will be determined by the number and extent of the examinations to be made. A sample of 100 hairs is desirable, but a smaller number is usually sufficient and even a single hair may yield valuable results.
>
> Combings usually give a more representative sample than a clipped lock which all comes from a certain point or region and may not be typical of the entire head. If the sample must be clipped, it is better to take just a few hairs from one region, a few more from another, and so on, until a widely representative sample is obtained. Clipping should be done close to the scalp and it is helpful if the hair can be laid parallel and the clipped end marked to allow compensation for any alterations along the hair. Pulled hair is probably preferable to clippings also since it provides a complete hair length. It is not essential to have the root in a standard sample and it is almost never worth the extra difficulty of obtaining it in this manner.
>
> Barber clippings are the least useful of standard hair samples. In the first place, the barber removes most of the hair from the nape and temple regions, which are not completely typical of crown hair which is most likely to occur in sweepings or droppings. Even more important is the fact that the clipper or shears used by the barber will almost always be contaminated by the hair of other individuals so that a standard taken this way may represent hair of two or more people and lead to uncertainty of source. If a prison barber is called upon to take such a sample unknown to the suspect, he should be instructed to clean his tools and comb very carefully before starting and to attempt to remove crown hairs by combing rather than to clip the nape and temple hairs for the sample.

52. R. E. Zumwalt and C. S. Petty, "Community Investigation of Rape and Sexual Assault," in W. J. Curran, A. L. McGarry and C. S. Petty, eds., *Modern Legal Medicine, Psychiatry, and Forensic Science* (Philadelphia: F. A. Davis, 1980) 553 at p. 560.

53. *Supra*, note 16, at p. 32.

54. "Venipuncture" is defined in W. H. L. Dornette, ed., *Stedman's Medical Dictionary*, 5th unabridged lawyers' edition (Cincinnati: Anderson, 1982) at p. 1548 in part as "[t]he puncture of a vein ... to withdraw blood...."

55. Law Reform Commission of Australia, *Alcohol, Drugs and Driving* [Report No. 4] (Canberra: Australian Government Publishing Service, 1976) para. 114 at p. 48.

56. *Ibid.*

57. L. A. Bear, *Law, Medicine, Science — and Justice* (Springfield, Ill.: Charles C. Thomas, 1964) at p. 576.

58. *Ibid.*

59. See: A. S. Curry, "Reliability and Significance of Results of Alcohol and Drug Analyses," in S. Israelstam and S. Lambert, eds., *Alcohol, Drugs and Traffic Safety: Proceedings of the Sixth International Conference on Alcohol, Drugs and Traffic Safety, Toronto, September 8-13, 1974* (Toronto: Addiction Research Foundation of Ontario, 1975) 469 at p. 476; H. J. Walls and A. R. Brownlie, *Drink, Drugs and Driving* (London: Sweet and Maxwell, 1970) at pp. 80-98.

60. See: Curry, *supra*, note 59, at pp. 476-477; Walls and Brownlie, *supra*, note 59, at pp. 109-110; Law Reform Commission of Australia, *supra*, note 55, para. 123 at p. 54; B. S. Finkle, "'Will the Real Drugged Driver Please Stand Up?' An Analytical Toxicology Assessment of Drugs and Driving," in Israelstam and Lambert, *supra*, note 59, at pp. 608-609; F. B. Benjamin, *Alcohol, Drugs and Traffic Safety: Where Do We Go From Here?* (Springfield, Ill.: Charles C. Thomas, 1980) at pp. 52-53. For descriptive reports on various techniques see, *e.g.*: W. T. Lowry and J. C. Garriott, *Forensic Toxicology: Controlled Substances and Dangerous Drugs* (New York: Plenum, 1979) at pp. 103-115; J. Wells, G. Cimbura and E. Koves, "The Screening of Blood by Gas Chromatography for Basic and Neutral Drugs" (1975), 20 *J. For. Sci.* 382; R. C. Permisohn, L. R. Hilpert and L. Kazyak,

"Determination of Methaqualone in Urine by Metabolite Detection Via Gas Chromatography" (1976), 21 *J. For. Sci.* 98; N. C. Jain, D. M. Chinn, R. D. Budd, T. S. Sneath and W. J. Leung, "Simultaneous Determination of Cocaine and Benzoyl Ecgonine in Urine by Gas Chromatography with On-Column Alkylation" (1977), 22 *J. For. Sci.* 7; R. Saferstein, J. J. Manura and P. K. De, "Drug Detection in Urine by Chemical Ionization Mass Spectrometry" (1978), 23 *J. For. Sci.* 29; M. A. Peat and L. Kopjak, "The Screening and Quantitation of Diazepam, Flurazepam, Chlordiazepoxide, and Their Metabolites in Blood and Plasma by Electron-Capture Gas Chromatography and High Pressure Liquid Chromatography" (1979), 24 *J. For. Sci.* 46; K. Sprague and A. Poklis, "Determination of Barbiturates in Postmortem Blood by High Pressure Liquid Chromatography: A Comparison with a Differential Ultraviolet Spectrophotometric Method" (1980), 13 *Can. Soc. Forens. Sci. J.* 31.

61. See: Moenssens and Inbau, *supra*, note 28, at pp. 298 and following; Richardson, *supra*, note 27, at pp. 161-164.

62. Bear, *supra*, note 57, at p. 577.

63. *Supra*, note 34, para. 17 at p. 9.

64. *Stedman's Medical Dictionary*, *supra*, note 54, at p. 237.

65. See, *e.g.*: *People* v. *Scott* (1978), 578 P. 2d. 123 (Cal. S.C. in Bank); *R.* v. *Turnick (No. 2)* (1920), 54 N.S.R. 69 (S.C.).

66. In *Scott*, *supra*, note 65, where the accused was alleged to have transmitted trichomoniasis to the victim in the course of having unlawful intercourse with her, it was stated (at p. 128) that:

> [A]t trial it was explained that "positive" results were a reliable indicator of the infection, but that if the results were "negative" there remained a 30 percent statistical chance that the infection was nonetheless present. Thus, not only was the procedure not a "highly effective means" of establishing the presence or absence of trichomoniasis, its unreliability was biased against the defendant.

In *Turnick (No. 2)*, *supra*, note 65, it was reported (at p. 78) that the doctors who examined an accused alleged to have transmitted gonorrhea to a rape victim were unable to give positive evidence that the accused in fact had gonorrhea.

67. I. R. C. Batchelor, *Henderson and Gillespie's Textbook of Psychiatry*, 10th ed. (London: Oxford University Press, 1969) at p. 338. See also J. M. Macdonald, "Truth Serum" (1955-56), 46 *J. Crim. L., Crim. and Pol. Sci.* 259, at p. 259.

68. Scopolamine was formerly the most commonly used drug. See Macdonald, *supra*, note 67, at p. 259. Amphetamines may, apparently, be used to achieve similar results, though their use would not be termed "narcoanalysis." See I. Gregory, *Psychiatry: Biological and Social* (Philadelphia and London: W. B. Saunders, 1961) at p. 81; R. B. McGraw and J. F. Oliven, "Miscellaneous Therapies," in S. Arieti, ed., *American Handbook of Psychiatry*, vol. 2 (New York: Basic Books, 1959) 1552 at pp. 1560-61.

69. Macdonald *supra*, note 67, at p. 259; J. M. Macdonald, "The Use of Drugs in the Examination of Suspected Criminals" (1956), 3 *J. Forensic Medicine* 2, at p. 2; C. W. Muehlberger, "Interrogation Under Drug Influence: The So-Called 'Truth Serum' Technique" (1951-52), 42 *J. Crim. L., Crim. and Pol. Sci.* 513, at p. 521; Gregory, *supra*, note 68, at p. 81; McGraw and Oliven, *supra*, note 68, at p. 1572.

70. See: F. C. Redlich, L. J. Ravitz and G. H. Dession, "Narcoanalysis and Truth" (1951), 107 *Am. J. Psychiat.* 586; J. C. Gall, "The Case Against Narcointerrogation" (1962), 7 *J. For. Sci.* 29; M. E. Schiffer, *Psychiatry Behind Bars: A Legal Perspective* (Toronto: Butterworths, 1982) at pp. 45-47.

71. (1978), 3 C.R. (3d) 7 (Alta. S.C.A.D.).

72. *Ibid.*, at p. 24.

73. A good description of several of these tests is provided by the North Carolina Traffic Safety Council:

> Balance: Balance tests involve steadiness in an upright position. First, have the subject stand on one foot with arms outstretched, then have him transfer his weight to the other foot. Next, have him stand erect with his heels together, toes pointed straight ahead, head back and eyes closed. Actions such as swaying, a jerky motion used in attempting to recover balance, and shifting of feet should be noted.
>
> Walking: Walking tests involve ability to walk a straight line. The subject should be asked to walk a straight line (sidewalk line or an imaginary line between two points) for a distance of approximately 20 feet, with the heel of one foot being placed

against the toe of the other foot. Upon reaching the end of the specified distance, he should be directed to turn quickly about and walk heel to toe back to the starting point.

Turning: Particular attention should be paid to the manner in which he turns around and to any difficulty he experiences in this action while performing the walking test.

Finger to Nose: These test coordination of motor impulses of the arms. The subject should be asked to stand erect, feet together, eyes closed and arms extended horizontally with each index finger extended. Keeping his eyes closed, he should be asked to prescribe an arc with one arm at a time and touch the tip of his nose with his index finger. This procedure should be repeated with the other arm. In each instance, it should be noted if and where the index finger touches the face and the degree of sureness with which the operation was performed.

Coins: Coin pick-up is a good measure of muscular coordination in the fingers as well as balance. Arrange nine coins on the floor, such as three pennies, three nickels, and three dimes, in order, with the heads or tails all up. Each time, tell the suspect what type of coin he is to pick up, have him pick up each coin as you direct him, identify heads or tails (whichever was up on the floor) and hand to you. Note his balance while attempting to pick up coins.

See North Carolina Traffic Safety Council, Inc., *Sample Instructional Bulletin on the Use of the Alcoholic Influence Report Form*, quoted by L. P. Watts, "Some Observations on Police-Administered Tests for Intoxication" (1966), 45 *North Carolina L. Rev.* 34, at pp. 44-45, n. 36.

74. *Supra*, note 73, at pp. 44-45.

75. R. E. Erwin, *Defense of Drunk Driving Cases* (New York: Matthew Bender, 1963) s. 8.13 at pp. 142-143, and s. 8.16 at p. 146, cited by Watts, *supra*, note 73, at p. 45.

76. On the question of accuracy, see: O. Hilton, "Can the Forger Be Identified from His Handwriting?" (1952-53), 43 *J. Crim. L., Crim. and Pol. Sci.* 547; T. V. McAlexander, "The Meaning of Handwriting Opinions" (1977), 5 *J. Pol. Sci. and Admin.* 43.

77. M. Casey, "Questioned Document Examination," in Curran, McGarry and Petty, *supra*, note 52, at p. 1225. As the author has continued:

> [T]he presence of one fundamental divergent characteristic between the known and questioned writings would serve to indicate that the writings are by different authors. A fundamental divergent characteristic is one that is repeated consistently throughout a writing, indicating it to be a personal habit of the author and, significantly, not found in the comparison writing. Essentially, in an identification, all of the characteristics of the questioned writing will fall within the range of the known writing and be capable of explanation through the known writings....

See also H. F. Sulner, *Disputed Documents: New Methods for Examining Questioned Documents* (New York: Oceana, 1966) at p. 46.

78. Casey, *supra*, note 77, at p. 1227: "Normally, the greater the variation in a person's hand, the greater amount of writing required to encompass the full range of writing characteristics."

79. *Ibid.* According to the author:

> [I]f the writing in question consists of a limited amount of material (*e.g.*, one sentence or less), more known material will be required for comparison than would be needed if the questioned document were an extended piece of writing, such as a letter. This is because extended writing exhibits a more extensive picture of the individual's writing habits.

80. Casey, *supra*, note 77, at p. 1228:

> To be suitable for comparison with the questioned material, known writing should approximate the type of matter and conditions under which the questioned document was prepared. For example, it is necessary to compare disputed signatures with genuine signatures; general handwritten material with general handwritten material; hand-printed material, whether upper case, lower case, or block style, with hand-printing of a similar nature; and numerals with numerals....

81. Casey, *supra*, note 77, at pp. 1228-1229.

82. *Ibid.*, at p. 1229. See also Moenssens and Inbau, *supra*, note 28, at p. 467.

83. For a complete description of the use of the breathalyzer machine, see D. M. Lucas, "The Breathalyzer — How It Works," in R. M. McLeod, J. D. Takach and M. D. Segal, *Breathalyzer Law in Canada*, 2nd ed. (Toronto: Carswell, 1982) at pp. 19-2 and 19-3.

84. *Ibid.*, at p. 19-3; Moenssens and Inbau, *supra*, note 28, at p. 82. Lucas has pointed out (at pp. 19-3 and 19-4):

> All breath tests determine the alcohol content of arterial blood, whereas the blood sample normally used for analysis is venous blood. The alcohol content of these will generally be similar except during the twenty to thirty minute period of rapid alcohol absorption that occurs after the commencement of drinking. During this period, the arterial blood will contain a greater proportion of alcohol than the venous blood and will more closely reflect the concentration of alcohol in the brain and therefore the condition of the subject. This brief interval of arterio-venous lag does not present a practical problem since persons are rarely if ever tested during it.

85. Lucas, *supra*, note 83, at p. 19-4.

86. *Ibid.*, at p. 19-5; Moenssens and Inbau, *supra*, note 28, at p. 83.

87. Lucas, *supra*, note 83, at p. 19-3.

88. *Ibid.*

89. C. K. McKnight, "The Polygraph (Lie Detector)" (1973), 21 C.R.N.S. 172 at pp. 172-173.

90. *Ibid.*, at p. 173.

91. *Ibid.*

92. Moenssens and Inbau, *supra*, note 28, at pp. 605-606.

93. *Ibid.*

94. *Ibid.*

95. *Ibid.*

96. S. Abrams, "Polygraphy," in Imwinkelried, *supra*, note 28, 775 at p. 778.

97. *Supra*, note 28, at p. 604.

98. Richardson, *supra*, note 27, at p. 122, citing F. E. Inbau, *Lie Detectors and Criminal Interrogation*, 2nd ed., 1948.

99. *Ibid.*

100. *Ibid.*

101. *Ibid.*

102. *Ibid.*

103. *Ibid.*

104. N. Laurendi, "Opposition to the Admissibility of Lie Detector Tests in Criminal Cases," in Imwinkelried, *supra*, note 28, 805 at p. 813.

105. *Ibid.*

106. *Ibid.*, at p. 816; M. Abbell, "Polygraph Evidence: The Case against Admissibility in Federal Criminal Trials," in Imwinkelried, *supra*, note 28, 825 at p. 838.

107. Nevertheless, in assessing the reliability and accuracy of the polygraph technique, Moenssens and Inbau have written (*supra*, note 28, at p. 616):

> In the examination of approximately twenty-five percent of the subjects presented to a competent Polygraph examiner, truthfulness or deception may be so clearly disclosed by the nature of the reactions to relevant or control questions that the examiner will be able to point them out to any layman and satisfy him of their significance. In approximately sixty-five percent of the cases, however, the indications are not that clear; they are sufficiently subtle in appearance and significance as to defy satisfactory explanation to non-experts. In about five to ten percent of the cases the examiner may be unable to make any diagnosis at all because of a subject's physiological or psychological characteristics or because of other inhibiting factors.
>
> ...
>
> The accuracy of the Polygraph Technique is difficult to estimate. In many cases, the truth about who committed an offense may never be learned from confessions or from subsequently developed factual evidence. Proof is often lacking, therefore, that the examiner in any given case is either right or wrong in his diagnosis. However, in the 1977, second edition of *Truth and Deception: The Polygraph ("Lie-Detector") Technique*, by John E. Reid and his co-author Fred

> E. Inbau, it is reported that when the technique is properly applied by a trained, competent examiner, it is very accurate in its indications, with a *known* error percentage of less than one percent. That conclusion is based upon the examinations of over 100,000 persons suspected or accused of criminal offenses or involved in personnel investigations initiated by their employers, almost all of which examinations were conducted at the extensive facilities of John E. Reid and Associates. It is also supported by validation studies reported in Journal articles reproduced in the Appendices of the Reid and Inbau book.
>
> Of perhaps particular interest, the authors of the above mentioned book report that the errors which do occur favor truthful subjects, since the known mistakes in diagnosis almost always involve a failure to detect deception rather than a diagnosis of deception on the part of a truthful person.

For a detailed discussion of the difficulties in evaluating the accuracy of the polygraph technique, see D. T. Lykken, *A Tremor in the Blood: Uses And Abuses of the Lie Detector* (New York: McGraw-Hill, 1981) at pp. 64-81.

108. K. Thomas, "Voiceprint — Myth or Miracle," in Imwinkelried, *supra*, note 28, 1015 at p. 1020.

109. Moenssens and Inbau, *supra*, note 28, at p. 571.

110. *Ibid.*

111. O. Tosi, "Voice Identification," in Imwinkelried, *supra*, note 28, 971 at p. 973.

112. Thomas, *supra*, note 108, at p. 1025.

113. According to one of its detractors (Thomas, *supra*, note 108, at p. 1026):

> However attractive it may seem, speech scientists agree that the theory is not established as a scientific fact. There is a dearth of scientific data to support the theory. On the contrary, controlled scientific experiments indicate that frequently the vocal equipment and its use by two different speakers produce results more similar than the results produced by the same speaker on two different occasions.
>
> It is known that anatomical differences do not produce reliable indicators of individual uniqueness or reliable identification cues. A classic case of the erroneous acceptance of identification methods based on anatomical differences was the so-called Bertillon System of identification used extensively in the nineteenth and early twentieth centuries. A standard set of body measurements, in combination, was thought to be unique for each individual. The use of this system caused such confusion and misidentification that its reliability was repudiated and its use abandoned.
>
> To supplement the inadequacies of a theory based on differences in bodily characteristics alone, proponents of the voiceprint technique theorize that such physical differences, in combination with use-patterns developed during growth, produce the uniqueness that particularly characterizes a given speaker. Again the theory is grossly unsupported by scientific data and runs contrary to general principles concerning the need to communicate and the human phenomenon known as dialect.

Voice identification expert Oscar Tosi, (*Voice Identification: Theory and Legal Applications* (Baltimore: University Park Press, 1979)), on the other hand, is somewhat more positive. The various empirical studies on spectrographic and other methods of voice identification, he has pointed out (at p. 55), confirm that "[o]rganic and learned differences are the sources of intertalker variability." While he has conceded that "there is little hope of ever developing a method ... that could provide a positive talker identification or elimination in 100% of all cases examined," he has nevertheless asserted (at p. 56):

> To demand that a system of voice identification be resistant to disguise, noise, or other distortions for practical use is unrealistic and unfair. No system of identification is resistant to drastic distortions, including fingerprinting, handwriting analysis, etc.
>
> On the other hand, most of the variables discussed could increase the percentage of no-opinion decisions, or at the worst the percentage of errors of false elimination, rather than the errors of false identification. Indeed, most of these distortions tend to increase the intraspeaker differences, which only can lead toward false elimination rather than toward false identification. This type of error is not so costly for our system of justice as the error of false identification is.

114. Tosi, *supra*, note 113, at pp. 110-111.

115. See, *e.g.*: *State* v. *McKenna* (1967), 226 A. 2d 757 (N.J. Co. Ct.); *Stovall* v. *Denno* (1967), 388 U.S. 293 (S.C.).

116. See, *e.g.*: *Commonwealth* v. *Sliva* (1964), 198 A. 2d 354 (Penn. S.C.); *State* v. *King* (1965), 209 A. 2d 110 (N.J.S.C.); *People* v. *Juarez* (1966), 52 Cal. R. 556 (Dist. C.A.); *United States* v. *Wade* (1967), 388 U.S. 218 (S.C.).

117. Schiffer, *supra*, note 70, at p. 23.

118. *Ibid.*

119. *Ibid.*, at pp. 24-25.

120. *E.g.*: the Stanford-Binet test or Wechsler-Bellevue Intelligence Scale for Adolescents and Adults (WAIS).

121. *E.g.*: the Minnesota Multiphasic Personality Inventory (MMPI).

122. *I.e.*, the Thematic Apperception Test (TAT).

123. *I.e.*, the Rorschach Test.

124. *I.e.*, the Draw-A-Person (DAP) Test.

125. *E.g.*: the Bender-Gestalt, Goldstein-Scheerer, Shipley-Hartford, Graham-Kendall Memory for Designs or Wechsler Memory Scale Tests.

126. H. S. Sullivan, *The Psychiatric Interview* (New York: W. W. Norton, 1970) at p. 4 (emphasis included). See also C. D. Webster, R. J. Menzies and M. A. Jackson, *Clinical Assessment Before Trial: Legal Issues and Mental Disorder* (Toronto: Butterworths, 1982) at pp. 24-27.

127. I. Stevenson, "The Psychiatric Interview," in S. Arieti, ed., *American Handbook of Psychiatry*, 2nd ed., vol. 1 (New York: Basic Books, 1974) 1138 at p. 1138.

128. I. Stevenson and W. M. Sheppe, Jr., "The Psychiatric Examination," in Arieti, *supra*, note 127, 1157 at pp. 1162-1170.

129. *Ibid.*, at p. 1172.

130. H. A. Davidson, *Forensic Psychiatry*, 2nd ed. (New York: Ronald Press, 1965) at p. 36.

131. L. C. Kolb and H. K. H. Brodie, *Modern Clinical Psychiatry*, 10th ed. (Toronto: W. B. Saunders, 1982) at p. 764.

132. For a more complete discussion of the subject of hypnosis of criminal suspects and accused persons, see Schiffer, *supra*, note 70, at pp. 29-44.

133. See L. R. Wolberg, "Hypnotherapy," in Arieti, *supra*, note 68, 1466 at pp. 1468, 1473-74; Kolb and Brodie, *supra*, note 131, at p. 766; Schiffer, *supra*, note 70, at pp. 30-32.

134. See G. J. Dudycha, *Psychology for Law Enforcement Officers* (Springfield, Ill: Charles C. Thomas, 1955) at p. 96; M. S. Guttmacher and H. Weihofen, *Psychiatry and the Law* (New York: W. W. Norton, 1952) at p. 370; Schiffer, *supra*, note 70, at pp. 32-34.

135. H. Arons, *Hypnosis in Criminal Investigation* (Springfield, Ill.: Charles C. Thomas, 1967) at p. 172.

136. *Ibid.*

137. See Sir R. Cross, *Evidence*, 5th ed. (London: Butterworths, 1979) at p. 60.

138. (1973), 412 U.S. 291 (S.C.).

139. (1957), 134 A. 2d 425 (R.I.S.C.), *cert. denied* (1957), 355 U.S. 898 (S.C.). See also: *State* v. *Baldwin* (1966), 221 A. 2d 199 (N.J.S.C.) *petition* for certif. to App. Div. denied (1968), 246 A. 2d 459, *cert. denied* (1966), 385 U.S. 980 (S.C.); *State* v. *Barber* (1971), 179 S.E. 2d 404 (N.C.S.C.).

140. See, *e.g.*: *People* v. *Marx* (1975), 126 Cal. R. 350 (C.A.); *People* v. *Milone* (1976), 356 N.E. 2d 1350 (Ill. App. Ct.); *People* v. *Johnson* (1972), 289 N.E. 2d 722 (Ill. App. Ct.).

141. (1954), 263 S.W. 2d 779 (Tex. C.C.A.).

142. P. K. McWilliams, *Canadian Criminal Evidence* (Toronto: Canada Law Book, 1974) at p. 309.

143. Sir C. Philips, *Report of the Royal Commission on Criminal Procedure* (London: HMSO, 1981) para. 3.125 at p. 64 .It should be remembered, however, that fingerprint evidence is only a form of opinion evidence. See: *R.* v. *Wiswell* (1935), 63 C.C.C. 94 (N.S. S.C.) at p. 95; *R.* v. *De'Georgio and Servello*, [1934] 3 W.W.R. 374 (B.C. Co. Ct.) at p. 379; J. F. Wiley, "A Short Survey of the Reported Cases on Fingerprint Evidence" (1974) January, *Crown's Newsletter* 1.

144. (1956), 116 C.C.C. 306 (N.B. S.C.A.D.).

145. *Ibid.*, at p. 308.

146. (1838), 2 Lewin 227, 168 E.R. 1136 (at pp. 1136-7), where the jury were instructed that in order to find the accused guilty they must be satisfied "not only that those circumstances were consistent with his having committed the act, but ... that the facts were such as to be inconsistent with any other rational conclusion...."

147. (1966), 50 C.R. 208 (Qué. Q.B.).

148. (1970), 1 C.C.C. (2d) 360 (Sask. C.A.). See also *R.* v. *Castleton* (1909), 3 Cr. App. R. 74 (C.C.A.); *R.* v. *Buckingham and Vickers* (1943), 86 C.C.C. 76 (B.C. S.C.) .

149. Moenssens and Inbau, *supra*, note 28, at p. 292.

150. *Ibid.*, at p. 301.

151. In *R.* v. *Milgaard* (1971), 2 C.C.C. (2d) 206 (Sask. C.A.) at p. 214, for example, Culliton C.J.S. summarized the results of seminal fluid analysis in a rape-murder case as follows:

> On the afternoon of January 31st, Lieutenant Penkala, in examining the area in which Gail Miller's body was discovered, found two frozen lumps in the snow, yellowish in colour. He retrieved these two lumps and placed them in vials. These vials were delivered to the R.C.M.P. Laboratory in Regina. On an analysis by Staff Sergeant Paynter, one lump was found to contain seminal fluid. There were also found in the substances "A" antigens. According to the expert's testimony, 85% of people are secretors, that is, people who secrete blood group antigens in their other body fluids. According to the evidence, "A" antigens would be secreted by a person whose blood group was "A", but "A" antigens would not be secreted by persons whose blood group was either "B" or "O". Samples of blood were taken from the deceased, from Milgaard, and from Wilson. On examination, the blood group of the deceased was found to be "O" and that of Wilson to be "B"; that of Milgaard was found to be "A".

152. See J. Hannan, "New Zealand Criminal Law Reform Committee on Bodily Samples and Identification," [1980] 4 *Crim. L.J.* 210 at p. 227, where it is noted: "Blood grouping terminology is rapidly evolving, and the writer is informed that by the end of the century it is possible that blood groupings will be as distinctive as fingerprints." And see Centre of Forensic Sciences, *Laboratory Aids for the Investigator*, 3rd ed. (Toronto: Ministry of the Solicitor General of Ontario, 1978) at p. 28.

153. *Supra*, note 28, at p. 650.

154. The authors have assessed the overall value of bite mark evidence in these terms (at p. 657):

> In the case of bitemark evidence, a fair evaluation of all of the literature, with due consideration being given to the relative reputation of the authors within the profession of forensic odontology, leads one to the conclusion that bitemark identification can only be rarely positive. The paucity of details, the changeable nature of the details, and the uncertainties of what constitute reliable indicia of identity in bitemarks, contribute to relegate the process to one of possible eliminations or *possible* identifications, rather than *positive* identifications. In most bitemark cases, then, a careful examination of the bite impressions may yield valuable investigative leads; in the most unusual ones only can we expect to be able to arrive at a positive identification.
>
> Compounding the difficulty is that there is no generally accepted scientific procedure for comparing teeth with bitemarks. Unlike in fingerprint identification, forensic odontologists refer to "points of similarity" without ever having reached any agreement within the profession on what details constitute acceptable points of similarity.

See also E. H. Dinkel, Jr. and M. S. Captain, "The Use of Bite Mark Evidence as an Investigative Aid" (1974), 19 *J. For. Sci.* 535.

155. Moenssens and Inbau, *supra*, note 28, at pp. 406-407.

156. *Ibid.*, at pp. 406-410.

157. B. Wraxall, "Forensic Serology," in Imwinkelried, *supra*, note 28, 897 at p. 922.

158. Moenssens and Inbau, *supra*, note 28, at pp. 451-452.

159. S. S. Krishnan, "Merits and Demerits of Forensic Activation Analysis When Compared to Other Trace Analysis Methods," in Imwinkelried, *supra*, note 28, 303 at p. 306.

160. See Moenssens and Inbau, *supra*, note 28, at p. 452.

161. (1923), 293 F. 1013 (U.S.C.A., D.C. Cir.) at p. 1014. Recently there appears to have been a loosening of the *Frye* rule in some American jurisdictions. See E. J. Imwinkelried, "A New Era in the Evolution of Scientific Evidence — A Primer on Evaluating the Weight of Scientific Evidence" (1981), 23 *William and Mary L. Rev.* 261.

162. (1978), 6 C.R. (3d) 185 (Man. C.A.) at p. 200.

163. His Lordship went on to quote the decision of the United States Court of Appeals for the Sixth Circuit in *United States* v. *Brown* (1977), 557 F. 2d 541 (U.S.C.A., 6th Cir.) where the case of *United States* v. *Baller* (1975), 519 F. 2d 463 (U.S.C.A., 4th Cir.) at p. 466 was quoted to the following effect:

> There are good reasons why not every ostensibly scientific technique should be recognized as the basis for expert testimony. Because of its apparent objectivity, an opinion that claims a scientific basis is apt to carry undue weight with the trier of fact. In addition, it is difficult to rebut such an opinion except by other experts or by cross-examination based on a thorough acquaintance with the underlying principles. In order to prevent deception or mistake and to allow the possibility of effective response, there must be a demonstrable, objective procedure for reaching the opinion and qualified persons who can either duplicate the result or criticize the means by which it was reached, drawing their own conclusions from the underlying facts.

The Court in *Brown* continued (at p. 556):

> A courtroom is not a research laboratory. The fate of a defendant in a criminal prosecution should not hang on his ability to successfully rebut scientific evidence which bears an "aura of special reliability and trustworthiness," although in reality the witness is testifying on the basis of an unproved hypothesis in an isolated experiment which has yet to gain general acceptance in its field.

164. (1974), 26 C.R.N.S. 339 (Ont. Prov. Ct.).

165. *Ibid.*, at p. 345.

166. *Ibid.*

167. *Ibid.*, at p. 346. As to the weight which such evidence should be given, His Honour continued (at pp. 346-347):

> The opinion of an expert once admitted is admissible for the purpose of aiding the jury or the fact finder in a field where he has no particular knowledge or training. The weight and the credibility to be given to the opinion of an expert lies with the fact finder. It is no different in this field than any other. In view of the fact that identification by aural voice comparison either respecting telephone conversations or not and whether recorded by mechanical means or not is admissible and it being admitted that voice comparisons by spectrograms corroborate identification by means of ear, it is obvious that spectrograms ought to be admissible at least for the purpose of corroborating opinions as to identification by means of ear alone.
>
> They ought also to be admissible for the purpose of impeachment. The weight and credibility of such evidence lies with the finder of facts but that does not involve the question of the admissibility. In this case Lieutenant Nash not only tendered spectrograms of the known and unknown voices and compared them in court to show that they were made by one and the same person, namely, Vincent Montani, but he also testified that he made aural examinations of the tape recordings and I therefore not only rule that Lieutenant Nash's evidence is admissible but that in this case at least great weight must be given to his evidence.

168. *Supra*, note 162.

169. Moenssens and Inbau, *supra*, note 28, at p. 411. As the authors have continued:

> In some cases, it can do what no other technique does; in others, it is merely confirmatory. In hair identification ... it is sometimes suggested that through NAA it may become possible to definitely link a hair with one particular individual.

170. *Supra*, note 28, at pp. 411-412.

171. See the authorities cited by D. M. Lucas and S. E. Brown, "The Examination of Human Hairs: Comments on the Hair Evidence in *Reg.* v. *Roberts*" (1978) March, *Crown's Newsletter* 9, at pp. 11-13.

172. Unreported, but described by Lucas and Brown, *supra*, note 171.

173. Quoted in Lucas and Brown, *supra*, note 171, at p. 9.

174. *Ibid.*

175. *Ibid.*, at p. 10.

176. See McWilliams, *supra*, note 142, at p. 309.

177. (1952), 104 C.C.C. 349 (N.S. S.C.).

178. (1959), 124 C.C.C. 332 (Ont. C.A.).

179. See, *e.g.*, the authorities cited in the recent Study Paper on *Police Guidelines for Conducting Pretrial Eyewitness Identification Procedures* prepared for the Law Reform Commission of Canada by Professor Neil Brooks.

180. (1951), 99 C.C.C. 141 (B.C. C.A.) at p. 147.

181. *R.* v. *Smith*, [1952] O.R. 432 (C.A.) *per* Mackay J.A. at p. 436.

182. *R.* v. *Howarth* (1970), 13 C.R.N.S. 329 (Ont. C.A.) *per* Jessup J.A. at p. 332. His Lordship continued (at p. 332):

> Having so cautioned the jury in such general terms applicable to all witnesses as to identity regardless of their credibility, I think the trial Judge should then review the circumstances enhancing or detracting from the reliability of the identification evidence in the case before the jury, including the presence or the absence of either confirmatory or corroborative evidence. In saying that, I do not mean to say it is essential that there should be corroborative evidence or, indeed, confirmatory evidence, but that the presence or absence of that type of evidence will be among the circumstances to which the trial Judge will draw the jury's attention after having given a general caution with respect to the inherent frailties of all identification evidence.

See also *R.* v. *Spatola* (1970), 10 C.R.N.S. 143 (Ont. C.A.).

183. McWilliams, *supra*, note 142, at p. 294.

184. See R. Cross, *supra*, note 137, at p. 57, citing *R.* v. *Chapman* (1911), 7 Cr. App. R. 53 (C.C.A.); *R.* v. *Cartwright* (1914), 10 Cr. App. R. 219 (C.C.A.). See also S. A. Cohen, *Due Process of Law: The Canadian System of Criminal Justice* (Toronto: Carswell, 1977), at p. 82.

185. *Supra*, note 137, at p. 57.

186. *Ibid.*, at pp. 59-60, citing *R.* v. *Christie*, [1914] A.C. 545 (H.L.).

187. *Supra*, note 186, at p. 551.

188. As the Australian Law Reform Commission noted in 1975:

> There is considerable evidence now accumulated as to the unreliability of identification parades, and an English committee under the chairmanship of Lord Devlin is presently making a thorough investigation of the whole question. A memorandum to the committee from the National Council for Civil Liberties lists fifteen cases over a period of two years in which there was either admitted or strong evidence of persons convicted or remanded as a result of mistaken identification by witnesses. The Criminal Law Revision Committee, in its Eleventh Report, said that it regarded mistaken identification as 'by far the greatest cause of actual or possible wrong convictions.'

See Law Reform Commission of Australia, *supra*, note 15, para. 118 at p. 52. See also Hon. Lord Devlin, *Report to the Secretary of State for the Home Department of the Departmental Committee on Evidence of Identification in Criminal Cases* (London: HMSO, 1976).

189. (1941), 76 C.C.C. 270 (Ont. C.A.), at p. 271.

190. *Supra*, note 184, at p. 87. See also *R.* v. *Watson* (1944), 81 C.C.C. 212 (Ont. C.A.), where Robertson C.J.O. stated (at p. 215) that "[w]ithin proper limits, the use of photographs is not only helpful to the administration of justice, but is often indispensable."

191. See: *R.* v. *Ostrowski*, [1958] O.R. 708 (H.C.); *R.* v. *Akerholdt*, [1971] 3 W.W.R. 545 (Y.T. Mag. Ct.); *R.* v. *Friesen* (1977), 9 A.R. 361 (Dist. Ct.); *R.* v. *Lord* (1958), 120 C.C.C. 175 (Ont. H.C.); *R.* v. *Serré* (1980), 29 N.B.R. (2d) 324 (Q.B.); I. M. Rabinowitch, "Medicolegal Aspects of Chemical Tests of Alcoholic Intoxication" (1948), 26 *Can. Bar Rev.* 1437. But see also: *R.* v. *Oliver* (1972), 9 C.C.C. (2d) 526 (N.S. Co. Ct.); H. R. S. Ryan, "Use of Chemical Tests to Prove Impairment by Alcohol" (1959-60), 2 *Crim. L.Q.* 41. And see generally: McLeod, *supra*, note 83, at pp. 1-109 — 1-117.

192. See: *R.* v. *Servello* (1962), 40 W.W.R. 306 (B.C. Co. Ct.); *R.* v. *Miller* (1963), 42 W.W.R. 150 (B.C. Co. Ct.); *R.* v. *Adams* (1958), 30 W.W.R. 429 (Alta. Dist. Ct.); *R.* v. *Arnold* (1961), 38 W.W.R. 449 (Sask. Dist. Ct.); *R.* v. *Hann*, [1968] 4 C.C.C. 301 (N.S. Co. Ct.); *R.* v. *Brissette* (1966), 57 W.W.R. 1 (B.C. S.C.); *R.* v. *Bunniss* (1964), 50 W.W.R. 422 (B.C. Co. Ct.); *R.* v. *Lord*, *supra*, note 191. And see McLeod, *supra*, note 83, at pp. 1-109 — 1-117.

193. *Supra*, note 137, at p. 442.

194. Gibson J., cited by Cross, *supra*, note 137, at p. 448.

195. Cross, *supra*, note 137, at p. 448.

196. See: *R.* v. *Miller*, *supra*, note 192; *R.* v. *Dixon*, [1965] 2 O.R. 540 (Dist. Ct.); *R.* v. *Pollock* (1947), 90 C.C.C. 171 (Alta. Dist. Ct.); *R.* v. *Beauvais*, [1965] 3 C.C.C. 281 (B.C. S.C.); *R.* v. *Zarins* (1960), 125 C.C.C. 375 (Ont. C.A.). See also McWilliams, *supra*, note 142, at pp. 148-149.

197. (1980), 30 O.R. (2d) 247 (C.A.) at p. 260.

198. (1983), 31 C.R. (3d) 289 (S.C.C.).

199. [1965] 4 C.C.C. 318 (Ont. Dist. Ct.) *per* Robinson D.C.J. at p. 328.

200. *Ibid.* See Watts, *supra*, note 73, at pp. 45-46, where it is observed that:

> Despite the ambiguity of the results of the tests in a number of instances, in the usual case there is no substantial question in the officer's mind of the defendant's impairment, and these tests serve essentially to provide an extension of the number of different situations in which the defendant's behaviour may be noted. They allow the officer to take notes, give the jury objective descriptions of clinical symptoms, and add convincing detail to the stock description of slurred speech, staggering gait, fumbling with wallet, bloodshot eyes, odor of alcohol, and disarray of clothing.

201. *Supra*, note 199, at p. 328.

202. (1955), 111 C.C.C. 317 (Alta. Dist. Ct.).

203. *Ibid.*, *per* Sissons C.J.D.C. at p. 319.

204. *Ibid.*

205. (1953), 107 C.C.C. 220 (Nfld. S.C.) *per* Winter J. at p. 223.

206. [1914] A.C. 599 (P.C.) at p. 609.

207. See, *e.g.*: *R.* v. *Leggo* (1962), 133 C.C.C. 149 (B.C. C.A.); *R.* v. *Johnston*, [1965] 3 C.C.C. 42 (Man. C.A.); *R.* v. *McKenzie*, [1965]

3 C.C.C. 6 (Alta. S.C.A.D.); *Wilband* v. *The Queen*, [1967] S.C.R. 14; *Perras* v. *The Queen* (1973), 11 C.C.C. (2d) 449 (S.C.C.).

208. (1951), 98 N.E. 2d 553 (N.Y.C.A.) at p. 558.

209. (1979), 7 C.R. (3d) 97 (S.C.C.). See also *Ward* v. *The Queen* (1979), 7 C.R. (3d) 153 (S.C.C.).

210. His Lordship stated (at p. 139):

> I wish to add that the accused's absolute right to remain silent includes not only the right to censor any information which is on his conscious mind, but also the right to control the administration of artificial processes whereby unconsciously held information might emerge into consciousness. In this sense, the accused has the absolute right to censor his unconscious mind as well as his conscious one. The police must take the accused as they find him, and if it so happens that he suffers from hysterical amnesia, he has the right not to be cured against his will by the use of extraordinary means, however desirable his cure might be from a police or medical point of view.
>
> It would appear that hypnosis and narcoanalysis are used on a consensual basis by certain police forces as well as by the defence, and it has been argued that they can serve useful purposes: Spector and Foster, ante; Lowter [sic], ante.
>
> I refrain from commenting on such practices, short of noting that even the consensual use of hypnosis and narcoanalysis for evidentiary purposes may present problems; under normal police interrogation, a suspect has the opportunity to renew or deny his consent to answer each question, which is no longer the case once he is, although by consent, in a state of hypnosis or under the influence of a "truth serum."

211. As Garfinkel Prov. J. remarked in the case of *R.* v. *K.* (1979), 10 C.R. (3d) 235 (Man. Prov. Ct. (Fam. Div.)) at p. 250 with respect to statements obtained with the aid of hypnosis:

> Hypnotism is not infallible, and there are difficulties in obtaining truth from a hypnotized subject. The subject can mingle fact with fantasy. There may be a subconscious desire on the part of the subject to co-operate with the hypnotist.... The subject can give results, or may intend to give results, expected of him, or results which the subject feels will please the hypnotist. The subject, under hypnosis, may lie or distort the actual events in his mind. The hypnotist ... could suggest a

response or answer and easily effect the memory recall of the subject. This could come about unintentionally just by his association.... The subject could also intentionally and willfully lie to the hypnotist. Hypnosis itself does not guarantee truth.

212. (1928), 50 C.C.C. 271 (Alta. S.C.).

213. Macdonald, *supra*, note 67, at p. 261.

214. Redlich, *supra*, note 70.

215. See: R. S. Spector and T. E. Foster, "Admissibility of Hypnotic Statements: Is the Law of Evidence Susceptible?" (1977), 38 *Ohio St. L.J.* 567 at p. 582; L. M. Despres, "Legal Aspects of Drug-Induced Statements" (1947), 14 *U. Chi. L. Rev.* 601 at p. 606; D. K. Lowther, "Should Statements Made During Drug Interview Be Admissible into Evidence in Criminal Cases?" (1975), 7 *U.W.L.A.L. Rev.* 222 at p. 227; *State* v. *Hudson* (1926), 289 S.W. 920 (Mo. S.C.); *State* v. *Lindemuth* (1952), 243 P. 2d 325 (N.M.S.C.); *Orange* v. *Commonwealth* (1950), 61 S.E. 2d 267 (Va. S.C.A.); *People* v. *Harper* (1969), 250 N.E. 2d 5 (Ill. App. Ct.); 111 Ill. App. 2d 204; *Merritt* v. *Commonwealth* (1965), 386 S.W. 2d 727 (Ky. C.A.).

216. (1949), 7 C.R. 464 (Ont. H.C.).

217. There McRuer C.J.H.C. stated (at p. 478):

> Where the discovery of the fact confirms the confession — that is, where the confession must be taken to be true by reason of the discovery of the fact — then that part of the confession that is confirmed by the discovery of the fact is admissible, but further than that no part of the confession is admissible. Of all the authorities referred to, Taylor most nearly agrees with this view of the law.
>
> It is therefore permissible to prove in this case the facts discovered as a result of the inadmissible confession, but not any accompanying statements which the discovery of the facts does not confirm. Anything done by the accused which indicates that he knew where the articles in question were is admissible to prove the fact that he knew the articles were there when that fact is confirmed by the finding of the articles; that is, the knowledge of the accused is a fact, the place where the articles were found is a fact. If he does or says something that indicates his knowledge of where the articles are located, and that is confirmed by the finding of the articles, then the

fact of his knowledge is established. On the other hand, it is not admissible to show that the accused said he put the articles where they were found, as the finding of them does not confirm this statement. The finding of them is equally consistent with the accused's knowledge that some other person may have put them in the place where they were found.

218. See, *e.g.*: *R.* v. *Downey* (1954), 20 C.R. 213 (B.C. C.A.); *R.* v. *Briden* (1960), 33 C.R. 159 (Ont. C.A.); *R.* v. *Haase*, [1965] 2 C.C.C. 56 (B.C. C.A.); *R.* v. *Bird*, [1967] 1 C.C.C. 33 (Sask. Q.B.); *R.* v. *Armstrong* (1970), 11 C.R.N.S. 384 (N.S. S.C.A.D.).

219. [1971] S.C.R. 272. See also *John* v. *The Queen*, [1971] S.C.R. 781.

220. See Cross, *supra*, note 137, at p. 462.

221. [1978] 1 S.C.R. 18 at p. 24. And see: *R.* v. *Abbey* (1982), 29 C.R. (3d) 193 (S.C.C.) at pp. 208-214; *R.* v. *Campeau* (1983), 4 C.C.C. (3d) 13 (Alta C.A.).

222. *Supra*, note 207. And see: *R.* v. *Abbey*, *supra*, note 221, at pp. 208-214; *R.* v. *Campeau*, *supra*, note 221.

223. His Lordship stated (at pp. 459-460):

> [I]t is said... that whatever factual evidence would have been given by Dr. Demay as to statements made to him by the appellant could not have been accepted as evidence of the truth or falsity of their contents but only as the material upon which Dr. Demay could base his opinion and that had such evidence gone in before the jury it would have been the duty of the learned trial Judge to so instruct the jury in his charge. That kind of submission is most attractive as a legal theory. After many years of experience as a trial Court Judge, I am of the opinion that its practice is well nigh impossible. If a jury heard detailed before them statements made by the accused at length on April 25th and 27th of events which had occurred on the night of April 24th and 25th, they would be quite incapable of refusing to accept that evidence as applicable to the truth of such facts rather than limiting the effect of the evidence to merely establishing the basis for Dr. Demay's opinion. That difficulty was recognized by the learned trial Judge and was admitted by the Crown counsel in the following exchange:
>
> THE COURT: Because he happens to be a psychiatrist sent there by the Crown to examine the accused does this make

that admissible? Can I say to the Jury you recognize this evidence for what it is, that is, psychiatric evidence to rebut Dr. Coburn but not to determine the guilt or innocence of the accused as to whether or not he did the shooting?

MR. PICK: No, I don't think you can.

THE COURT: I can't.

See also M. Manning and A. W. Mewett, "Psychiatric Evidence" (1975-76), 18 *Crim. L.Q.* 325 at pp. 352-353.

224. *Supra*, note 212.

225. *Supra*, note 219.

226. *Supra*, note 13.

227. *R.* v. *Rowton* (1865), 10 Cox C.C. 25 (C.C.A.) *per* Cockburn C.J. at p. 29.

228. *Thompson* v. *The King*, [1918] A.C. 221 (H.L.) at p. 235.

229. *Thompson* v. *The King*, *supra*, note 228; *R.* v. *Robertson*, *supra*, note 8.

230. [1972] 1 O.R. 403 (C.A.) at p. 405.

231. *R.* v. *Lupien*, [1970] S.C.R. 263, *per* Ritchie J. at pp. 275-278.

232. J. Ziskin, *Coping With Psychiatric and Psychological Testimony*, 3rd ed., vol. 1 (Venice, Calif.: Law and Psychology Press, 1981) at p. 251.

233. *Ibid.*, at p. 260.

234. Comment, "The Psychologist as Expert Witness: Science in the Courtroom?" (1979), 38 *Maryland L. Rev.* 539 at pp. 565-566. Commenting specifically on projective tests, the author has continued (at pp. 573-574):

> Most projective techniques appear to lack adequate standardization with respect to both administration and scoring. Even subtle differences in the phrasing of verbal instructions and in examiner-subject relationships can appreciably alter performance on these instruments. Factors such as verbal ability, hunger, lack of sleep, drugs, anxiety, and frustration have also been shown to affect test results. In short, projective

> technique responses can be meaningfully interpreted only when the examiner has extensive information about the circumstances under which they were obtained and the aptitudes and experiential background of the examinee. The normative data for many projective instruments may be completely lacking, grossly inadequate, or based on vaguely described populations. There is also a distinct lack of objectivity in the evaluation of projective instruments, and clinicians tend to rely solely on their "general clinical experience" to interpret test results.

In light of these difficulties, the author has concluded (at p. 575) that "[t]he continued popularity of psychological testing among clinicians despite all the negative data available concerning test accuracy remains a mystery."

235. As M. E. Schiffer has pointed out in his text on *Mental Disorder and the Criminal Trial Process* (Toronto: Butterworths, 1978) at pp. 88-89:

> Amnesia, though it is nearly always present after an automatic episode, is not in itself medical proof of automatism either. Usually, however, memory is irretrievable in true cases of automatism. This fact can be explained by reference to the well-recognized theory in psychiatry that memory involves three consecutive processes: *registration*, *retention* and *recall*. Suffice it to say that registration is something analogous to the formation of an image on a photographic plate. Basically it is the simple result of one's paying attention. Psychiatrists have found that mental disorder may impair attentiveness. Retention means exactly what it says: the permanent fixing of a memory in the mind once it has registered. Lastly, recall is the ability to "remember" a memory which has been registered, retained and, in effect, filed away. Psychogenic automatism (*i.e.*, automatism resulting from inorganic causes) and so-called "normal" automatism (*e.g.*, somnambulism) are said to impair registration, thus making recall impossible. This seems logical since, by definition, an automaton is unconscious and registration depends on attentiveness. Organic automatism (*i.e.*, caused by cerebral trauma, drugs, alcohol, temporal lobe epilepsy, etc.) will perhaps impair retention as well as registration. Grossly defective recall, on the other hand, may simply be feigned amnesia or may be symptomatic of a genuine *hysterical* amnesia. Hysterical amnesia which represents a failure of recall alone is *not* indicative of automatism, being merely an exaggeration of the natural human tendency to repress unpleasant memories. Furthermore, the fact that this form of amnesia is potentially recoverable — either through

hypnosis, the use of abreactive drugs, or quite often spontaneously — is proof of prior registration and retention. In short, the presence of this form of amnesia points to conscious behaviour rather than to automatism. Some writers have gone so far as to argue that repression is indicative of guilt and that amnesia due to failure of recall should weigh against the accused rather than in his favour.

236. (1972), 8 C.C.C. (2d) 209 (Sask. C.A.); aff'd (1973), 11 C.C.C. (2d) 449 (S.C.C.).

237. Woods J.A. of the Saskatchewan Court of Appeal summarized the psychiatric evidence as follows ((1972), 8 C.C.C. (2d) 209 at pp. 210-211):

> Dr. Coburn found symptoms of what might be amnesia in Perras. These he stated might be related to a heavy ingestion of alcohol, to hysterical amnesia, or to shamming. Hysterical amnesia usually arises when the recall of the forgotten material is so upsetting or so distressing that the mind blocks it out and refuses to remember it. Dr. Coburn administered sodium pentothal to Perras, a drug used to reduce the function of that part of the brain which registers memory. This part, known as the cortex, is used both in lying and in blocking of memory by hysteria. The witness stated that this drug is usually effective in breaking through hysterical amnesia. However, in the present case he was unable to overcome the amnesia and get back the memory of the events in question.
>
> Dr. Coburn concluded that Perras had suffered from organic amnesia rather than hysterical amnesia. In organic amnesia there is something wrong in the function of the brain and the only source of this on the information available appeared to Dr. Coburn to be alcohol. In organic amnesia there is no registration of the event on the mind. There can, therefore, be no recall. Therefore, reducing the function of the cortex by drugs produces no results.

The witness further testified in part as follows (at p. 211):

> MR. KLASSEN: Did the conclusion that you came to as to the type of amnesia that Mr. Perras was suffering from, did that indicate anything to you about the state of his mind regarding other functions at the time of the act, Dr. Coburn?
>
> A. Yes, if a person is sufficiently impaired in the function of his brain to be unable to register events then at the time the events occur he is unable to bring up into his mind the relative experience that makes those events meaningful.

> An event, an act perhaps is the easier way to put it, an act that we do has meaning because we have memories about similar acts or what we have been told about acts. We have feelings, we have emotions, we have certain types of knowledge about moral values or legal values. But if your mind is so impaired that you can't register then you are not able to register those things from your own background. So that acts which occur in a state of mental impairment great enough to produce an organic amnesia are not governed by the usual sort of emotional, moral, legal feeling controls, because they are not operative at the time of this act.
>
> THE COURT: Unable to form a judgment?
>
> A. Unable to form a judgment, yes.
>
> THE COURT: Or intent.
>
> A. The intent in a sense must be there but it is an intent which arises out of the individual's unconscious.
>
> THE COURT: Yes, but uncontrolled by judgment.
>
> A. Uncontrolled by judgment.

238. See: *Wheeler* v. *LeMarchant* (1881), 17 Ch. D. 675 (C.A.); *Attorney General* v. *Mulholland*; *Attorney General* v. *Foster*, [1963] 1 All E.R. 767 (C.A.).

239. See *R.* v. *Warren* (1973), 14 C.C.C. (2d) 188 (N.S. S.C.A.D.).

240. See: *R.* v. *Potvin* (1971), 16 C.R.N.S. 233 (Qué. C.A.); *Dembie* v. *Dembie* (1963), 21 R.F.L. 46 (Ont. H.C.) at pp. 47-48; *Re S.A.S.* (1977), 1 *L. Med. Q.* 139 (Ont. Prov. Ct. (Fam. Div.)) at p. 141.

241. Psychiatric and psychological disclosures have been excluded from evidence by virtue of the operation of statute, on the exercise of judicial discretion, and as "work done in contemplation of litigation," however. See, *e.g.*: *Dembie* v. *Dembie*, *supra*, note 240, and *Kowall* v. *McRae and McRae* (1980), 2 Man. R. (2d) 78 (C.A.).

242. [1974] 4 W.W.R. 310 (B.C. Co. Ct.).

243. *Bill S-33* of 1982.

244. [1972] Crim. L.R. 99.

245. [1965] 1 All E.R. 506 (H.L.). See also *R.* v. *Dunning*, [1965] Crim. L.R. 372 (C.C.A.).

246. *Supra*, note 245, at p. 512.

247. *Ibid.*

248. See *R.* v. *Phillion* (1972), 10 C.C.C. (2d) 562 (Ont. H.C.); appeal dismissed on another point, 37 C.R.N.S. 361 at p. 362 (C.A.); aff'd [1978] 1 S.C.R. 18. But see: *R.* v. *McKay*, [1967] N.Z.L.R. 139 (C.A.); *Thomas* v. *The Queen*, [1972] N.Z.L.R. 34 (C.A.).

249. See *R.* v. *Phillion*, *supra*, note 248.

250. *Supra*, note 248.

251. In the words of Van Camp J. (at pp. 563-564):

> There is no question that through the years the matters calling for expert evidence have varied from time to time. There is no question that increasingly experts have tended to give evidence on matters which would seem to be exclusively for the jury; that more and more they have been permitted to assist; but one main reason for the exclusion of this kind of evidence of opinion must remain, and that is when its reception would not assist and might mislead. Where a jury, by reason of the technicality of the evidence, might be tempted blindly to accept the witness' opinion, then it is important that the witness' opinion must be free from all possibility of error; and in assessing this test I am indebted to the witness, who has made no exaggeration of its claims; who, on the basis of over thirty years of experience and the examination or supervision of examination of some forty thousand people, has reported on how the examination is given. In his cross-examination he stated that since 1960 there have been no major changes in the instrument used and so I am also indebted to the article in the Yale Law Journal, vol. 70, by Mr. Skolnick, for the analysis of such a test, which analysis was again in many respects corroborated by the witness.
>
> I find that in the test it is stated that the design of the questions affect the accuracy; that it is important to obtain the confidence of the subject; that the accuracy figures of one per cent possible error (and this was a maximum, because even only one-tenth of one per cent has been proven) and ten per cent inconclusive tests are unsatisfactory, in that only a part of the tests have been checked and, even if checked, the results were inconclusive as there was no independent means of checking.

> The theory is based on two fundamental assumptions: that there is a regular relationship between lying and the emotional state, and a regular relationship between emotional state and body change. It was given in evidence that the act of lying evoked a variety of responses and that there were individuals who, for various reasons, believe in or are unconcerned about lies. The examiner had to assess whether the subject was physiologically, socially, mentally or emotionally disabled; the examiner had to assess his emotional tendencies, his control of his emotions and his behaviour attitude. The questions are adjusted accordingly and an erroneous conclusion on any of those would affect the questions and accuracy. Multiple skills are demanded of the examiner: interpretation is required by the examiner and the examiner is asked to state, not only a general tendency, but whether there has been a particular lie.
>
> The point that causes difficulty is that the test may provide as good if not a better clue as to veracity than visual observation; but because of the weight that is put upon it and because of the various factors which introduce variables, I cannot find that it satisfies the test of expert opinion.

252. (1977), 33 C.C.C. (2d) 511 (B.C. S.C.).

253. [1978] 1 S.C.R. 18.

254. *Ibid.*, at p. 25.

255. [1978] 4 W.W.R. 468 (B.C. C.A.) at p. 470.

256. *Supra*, note 248, at p. 563.

257. *Supra*, note 253, at p. 20.

258. *Supra*, note 232, at p. 4.

259. (1978), 45 C.C.C. (2d) 303 (Ont. C.A.).

260. Criminal Law Reform Committee of New Zealand, *supra*, note 34, para. 49 at p. 20.

261. Subsection 235(1) of the *Code* provides, for example, that:

> Where a peace officer on reasonable and probable grounds believes that a person is committing, or at any time within the preceding two hours has committed, an offence under section 234 or 236, he may, by demand made to that person forthwith

> or as soon as practicable, require him to provide then or as soon thereafter as is practicable such samples of his breath as in the opinion of a qualified technician referred to in subsection 237(6) are necessary to enable a proper analysis to be made in order to determine the proportion, if any, of alcohol in his blood, and to accompany the peace officer for the purpose of enabling such samples to be taken.

By subsection 240.1(1) of the *Code* an identical procedure is authorized "[w]here a peace officer on reasonable and probable grounds believes that a person is committing, or at any time within the preceding two hours has committed, an offence under subsection 240(4)...", *i.e.*, impaired navigation or operation of a vessel. Subsection 234.1(1) of the *Code*, which is somewhat different from the above provisions, states that:

> Where a peace officer reasonably suspects that a person who is driving a motor vehicle or who has the care or control of a motor vehicle, whether it is in motion or not, has alcohol in his body, he may, by demand made to that person, require him to provide forthwith such a sample of his breath as in the opinion of the peace officer is necessary to enable a proper analysis of his breath to be made by means of an approved road-side screening device and, where necessary, to accompany the peace officer for the purpose of enabling such a sample of his breath to be taken.

This provision relates essentially to screening, rather than to the investigation of, and the gathering of potential evidence with respect to, driving offences believed by a peace officer (on reasonable and probable grounds) to have been committed.

262. *Supra*, note 26.

263. For limitations on the operation of this provision, see: *R.* v. *McLarty (No. 2)* (1978), 40 C.C.C. (2d) 72 (Ont. Co. Ct.); *Re Michelsen and the Queen* (1983), 4 C.C.C. (3d) 371 (Man. Q.B.).

264. C.R.C. 1955, p. 1855. This does not appear in C.R.C. 1978, though it has not been revoked.

265. *R.* v. *Toor* (1973), 11 C.C.C. (2d) 312 (B.C. S.C.).

266. It is interesting that these provisions do not specifically refer to psychiatric examination but refer only to "observation." See ss. 465, 543, 608.2, 691 and 738.

267. See, *e.g.*, s. 12 of the *Penitentiary Service Regulations*, C.R.C. 1978, c. 1251, as amended, under the *Penitentiary Act*, R.S.C. 1970, c. P-6, as amended.

268. [1967] 2 C.C.C. 6 (S.C.C.).

269. *Ibid.*, at p. 9. See Schiffer, *supra*, note 70, at p. 22. See also *Perras* v. *The Queen*, *supra*, note 207, at p. 451, where Crown counsel was quoted as having referred at trial to "the question of whether [the examinations of the accused by a Crown-retained psychiatrist] were in keeping with established and recognized psychiatric investigatory procedures."

270. (1977), 35 C.C.C (2d) 245 (Ont. C.A.) at p. 251. See also *R.* v. *Johnston*, *supra*, note 207, *per* Miller C.J.M. at p. 50, and *R.* v. *McAmmond*, [1970] 1 C.C.C. 175 (Man. C.A.) *per* Dickson J. A. (as he then was) at p. 178. In both cases there were *obiter dicta* to the effect that an accused who was the subject of a dangerous sexual offender application need not submit to the psychiatric examinations which were implicitly contemplated by the *Code*. While the accused had not in either case actually been *remanded* for observation since in fact there was at that time no provision in the *Code* for remand prior to a dangerous sexual offender hearing for the specific purpose of gathering psychiatric information relevant to the question of whether the accused was a dangerous sexual offender [see now s. 691], Professor A. W. Mewett has expressed the opinion that the *dicta* in *Johnston* and *McAmmond* "apply in respect of all psychiatric remands." See A. W. Mewett, "Note on Psychiatric Remands over Defence Objection" (1975-76), 18 *Crim. L.Q.* 27 at p. 28.

271. (1980), 52 C.C.C. (2d) 32 (Ont. H.C.).

272. *Ibid.*, at p. 37.

273. *Ibid.*

274. *Ibid.*, at p. 38. Where provincial mental health statutes are used, the situation may be different. Provisions in a number of statutes, rather than merely authorizing the *remand* of an accused for "observation" or the ordering of an accused to *attend* for "observation," authorize courts to order the actual psychiatric examination of accused persons. Some statutes, moreover, contain separate provisions for compelling the co-operation of accused persons who refuse to be examined.

275. It is difficult to separate completely the powers of search and seizure which are incident to arrest from the notion of investigative

testing. As the Australian Law Reform Commission has noted: "There is a very close overlap between the kind of activity which might constitute personal search incident to arrest ... and medical examinations." See Law Reform Commission of Australia, *supra*, note 15, para. 133 at p. 58.

276. *Supra*, note 33, para. 9 at p. 4. As the Australian Law Reform Commission has noted with regard to medical examinations performed on accused persons and criminal suspects (*supra*, note 15, para. 130 at p. 57):

> [T]he common law clearly does not require arrested or suspected persons to submit to medical examination without consent. The use of physical force, whether by a member of the police force, a medical practitioner or anyone else, to compel a person to submit to examination, or to furnish a sample of his blood, urine or other body sample, would constitute an assault and battery.

See *Ex parte Kearney*, [1966] Qd. R. 306 (S.C.) at p. 311.

277. In *R.* v. *Turnick (No. 2)*, *supra*, note 65, for example, samples of a discharge were taken from the accused's penis by means of prostate massage and the use of a catheter to be analyzed for gonorrheal infection. The accused in this case was charged with raping a seven-year-old girl who allegedly contracted gonorrhea from him. Mellish J. expressed doubts as to the legality of forcing an accused person to submit to medical examination, saying (at p. 77):

> ... I do not think it at all clear that the accused, who is apparently a foreigner unable to speak English, consented to the examination. On the other hand, I think it more probable that the accused thought he had to submit to such an examination. I think it was at least incumbent on the Crown *in limine* to prove circumstances which would render such an examination ... permissible, if such a state or circumstances could exist, as to which I offer no suggestion.

278. (1948), 93 C.C.C. 111 (Que. Sess.).

279. In its view (at p. 113):

> At the present stage of the economy of the criminal law, it can be said that the person of the accused is inviolable and that the right that each individual reserves as to his person cannot be taken away. This is forbidden domain. We must be imbued with the principle that the accused is free. It behooves the representatives of authority to find the evidence to bring

> about the conviction of an accused when they believe him guilty, but he is not obliged to help them in this work by incriminating himself. A blood test constitutes an attack upon the human body and it is not within the power of a Judge to order it if the law does not authorize it. Taking the pulse and blood pressure are basically merely similar means to the conviction of the accused. It is different when it is a matter of finger prints because a special statute permits their being taken.

280. (1949), 94 C.C.C. 392 (Qué. K.B.).

281. [1965] 4 C.C.C. 298 (Ont. H.C.). See also: *W.* v. *W. (No. 4)*, [1963] 2 All E.R. 386, aff'd [1963] 2 All E.R. 841 (C.A.).

282. C. C. Savage, "Blood Tests in Intoxication Cases" (1950), 96 C.C.C. 241 at p. 244.

283. *Ibid.*

284. (1961), 36 C.R. 243 (B.C. Mag. Ct.) at p. 243. See *R.* v. *Weller* (1917), 40 O.L.R. 296 (H.C.) where the legality of subjecting the accused to medical examination was not commented upon. It is not clear from the report of this case, however, whether the accused had submitted voluntarily.

285. [1965] 1 C.C.C. 130 (B.C. C.A.).

286. (1952), 103 C.C.C. 175 (N.S. S.C.).

287. But see *R.* v. *Whittaker* (1924), 42 C.C.C. 162 (Alta. S.C.) where it was held that an accused person testifying in his own behalf could be ordered by a magistrate to supply a sample of his handwriting regardless of whether this would tend to incriminate him, since the relevant provision of the *Canada Evidence Act* applied only to the answering of questions. See *contra*: *R.* v. *Grinder* (1905), 10 C.C.C. 333 (B.C. S.C.); *R.* v. *Henderson* (1911), 18 C.C.C. 245 (Qué. Gen. Sess.) which were expressly disapproved of in *Whittaker*.

288. See Indian Law Institute, *supra*, note 16, at pp. 12-13. See also L. House, "Criminal Procedure — Self-Incrimination — Scientific Tests of Body Substances as Evidence" (1955-56), 44 *Kentucky L.J.* 353 at p. 358 where it is noted that "[t]here are factual situations where it would be difficult to analyze the conduct of the accused as to active or passive behaviour."

289. (1975), 24 C.C.C. (2d) 1 (S.C.C.).

290. *Ibid.*, at p. 7.

291. *Ibid.*

292. [1964] 2 All E.R. 610 (C.A.).

293. *Ibid.*, at p. 617.

294. *Supra*, note 289, at p. 8.

295. G. Williams, "Identification Parades—I," [1963] *Crim. L.R.* 479, at pp. 480-481.

296. (1977), 77 D.L.R. (3d) 252 (B.C. Prov. Ct. (Fam. Div.)).

297. R.S.C. 1970, c. J-3, as amended.

298. *Supra*, note 26.

299. *Supra*, note 148.

300. [1933] S.L.T. 482.

301. (1957), 118 C.C.C. 365 (N.B. S.C.A.D.).

302. *Supra*, note 296, at p. 276.

303. *Ibid.*

304. *Ibid.*, at p. 277.

305. *Supra*, note 219.

306. (1974), 18 C.C.C. (2d) 65 (S.C.C.).

307. *Supra*, note 296, at pp. 281-282.

308. *Supra*, note 36.

309. *Ibid.*, at p. 18.

310. *Ibid.*

311. *Ibid.*, at p. 19.

312. (1978), 2 C.R. (3d) 55 (B.C. C.A.).

313. *Ibid.*, at p. 73. His Lordship's conclusion was based on a thorough analysis of the Scottish and Canadian cases cited by the learned Trial Judge. The first of these was *Adair* v. *M'Garry* (*supra*, note 300). There Lord Justice-General Clyde had considered fingerprinting to be an incident of arrest analogous to a body search. Lord Sands and Lord Morison expressed similar opinions. As Branca J.A. (*supra*, note 312, at pp. 63, 65) pointed out, however, His Lordship cited no actual authority to demonstrate that the justification for such procedure was based upon the common law of England. Lord Justice-Clerk Alness, on the other hand, took the position that as fingerprinting was a fairly modern technique, one could hardly expect to find established common law authority for its specific practice. Nevertheless, it was his opinion (at p. 489) that:

> [T]he power claimed by the police is a reasonable and proper power, necessary for the investigation of crime and for the detection of the criminal, and ... it involves no undue invasion of the rights of the individual. To balance the claims of public interest on the one hand and the claims of private interest on the other is often not an easy task; but in this case I do not think it is difficult. There is, as the Lord Advocate said, no suggestion that the police, who have in the past claimed and exercised the powers which in this case are challenged, have abused these powers; there is no public outcry against the system; and, as the right claimed by the Crown is not withheld by the common law, and would in my opinion, if denied, hamper the police in the investigation and detection of crime, I am for sanctioning the right which the Crown claims, and I am for rejecting the argument which would negative its existence.

His Lordship went on to add, however (at p. 489):

> Since writing the above opinion my attention has been drawn to a circular issued by the Home Office on 14th January 1926 (481468/34), which seems to proceed on the view that the police in England have at common law no power to take the finger-prints of an accused person, and that these finger-prints may only be taken — should the accused object — after he has been "remanded to prison," and an order authorising the taking of finger-prints has been obtained either from the Secretary of State or from a Justice of the Peace. No similar circular has, I am informed, been issued in Scotland; and

nothing in the Home Office circular would lead me to think that the views regarding the law of Scotland which I have expressed in my opinion are otherwise than sound.

In Branca J. A.'s opinion, "[t]his portion of his judgment indicates to me that at least the home office in England was of opinion that the police had no power at all, based upon the common law of England, to take fingerprints." (p. 65)

Lord Hunter, who considered the question at length, concluded that there was in fact no common law power of the police with regard to the fingerprinting of suspects. He said (at pp. 489-90):

> It may well be asked whether the right claimed for the police — for it involves a right to commit assault upon the person of a suspect — is consistent with the common law doctrine of the personal liberty of the subject.
>
> When the point was raised and argued before me in the case of *Inglis* (Glasgow Circuit, 14th December 1932, not reported) I asked counsel for the Crown whether he could cite any passage from any authoritative writer on Scots criminal law or from the considered opinion of any Scots judge who had presided over a criminal trial in favour of his contention. No such citation was forthcoming. On the other hand, counsel for the accused referred me to a civil case (*Adamson* v. *Martin*, 1916 S.C. 319) where the judges expressly negatived the claim made by the Crown. In that case a youth of seventeen was charged with the commission of a criminal offence. He was not arrested, a day was fixed for his trial and he was liberated on bail. After he had been charged a representative of the police, without his consent, obtained a photograph of him and took his finger-prints. At his trial he was acquitted, and he then brought an action to have the photograph and finger-tip impressions destroyed and for damages. It was held that the detective's actings in taking the photograph and finger-tip impressions were illegal, and had no warrant either at common law or under statute. It appears clear that, if the contention of the Crown in this case be sound, the Court could not have found that the detective's actings were a wrong at common law. As the accused had not been committed to prison pending trial the detective was not in a position to apply for warrant under the regulations to which I shall subsequently refer. The accused was, however, a person suspected by the police of having committed a crime. In the forefront of the argument for the pursuer, as appears from the report, it was maintained — and had to be maintained, I think, as a condition of success —

> that the police had no right at common law to take photographs or finger-prints of prisoners. The Lord Justice-Clerk in the course of his opinion said (at p. 324):
>
> > In my opinion there is no common law which would authorise what here was done in the way of photographing the pursuer and taking imprints of his fingers.

Having considered the various judgments in *Adair*, Branca J. A. concluded (at p. 71) that "[t]he foregoing analysis of the case completely destroys any suggestion that the taking of fingerprints, aside from statutory authority, is authorized by the common law of England."

314. *Supra*, note 148.

315. *Supra*, note 312, at p. 73.

316. (1944), 82 C.C.C. 264 (Man. K.B.).

317. *Ibid.*, at p. 267.

318. (1978), 45 C.C.C. (2d) 157 (P.E.I. S.C.A.D.), rev'g (1978), 4 C.R. (3d) 353.

319. *Ibid.*, at p. 161.

320. Unreported, Jan. 31, 1978 (Ont. Dist. Ct.); (1977-78), 2 W.C.B. 184.

321. Relying on the case of *Marcoux and Solomon* v. *The Queen*, Vannini J. stated (at pp. 3-4 of the original judgment):

> There is no difference in my view between compelling a suspect to take part in a lineup for purposes of making an identification from compelling an accused to submit himself to fingerprinting for purposes of identification and in respect of the forceful taking from a suspect of his finger prints it is subject to the same caution laid down in *Marcoux and Solomon* v. *The Queen* in respect to the application of force to compel an accused or a suspect to take part in a lineup but that *reasonable compulsion in the taking of fingerprints in situations not covered by the Identification of Criminals Act is an incident to the police power to arrest and investigate* and admissible in evidence....
>
> I also hold that there is no obligation upon the police officer to have informed the accused that it was his right to refuse to submit himself to fingerprinting any more than there is an

obligation on a police officer, having regard to *Marcoux and Solomon*, to inform the accused that it is his right to refuse to participate in a lineup for the Court there held that to require an accused to do so is an incident to the police power to arrest and investigate and that it is the right of the police to do so and not the right of an accused to refuse to take part in a lineup or to refuse to submit to being fingerprinted. [Emphasis added]

322. (1982), 70 C.C.C. (2d) 71 (B.C. C.A.) rev'g (1981), 64 C.C.C. (2d) 155 (B.C. S.C.). Leave to appeal to S.C.C. granted Oct. 22, 1982.

323. See: *R.* v. *Ireland* (1970), 126 C.L.R. 321 (Aust. H.C.) *per* Barwick C.J. at p. 334; *R.* v. *Hass*, [1972] 1 N.S.W.L.R. 589 (C.C.A.); *Adamson* v. *Martin*, [1916] S.C. 319.

324. Sir C. Philips, *Royal Commission on Criminal Procedure: The Investigation and Prosecution of Criminal Offences in England and Wales: The Law and Procedure*, Cmnd. 8092-1 (London: HMSO, 1981), para. 95 at p 34.

325. *Ibid.*

326. See: *Attorney General of Québec* v. *Begin* (1955), 21 C.R. 217 (S.C.C.); "Police Warned of Civil Suits," *Globe and Mail*, Nov. 20, 1981, p. 10.

327. *Supra*, note 289.

328. *Ibid.*, at p. 7.

329. *Ibid.*

330. See *Marcoux and Solomon*, *supra*, note 289, at p. 7. And see our analysis of the "advancement of justice" defence at pp. 111-119 of Working Paper 29 on *The General Part: Liability and Defences* (Ottawa: Supply and Services, 1982).

331. See *R.* v. *McIntyre*, [1952] 2 D.L.R. 713 (Alta. S.C.).

332. In *R.* v. *McNamara* (1950), 11 C.R. 147 (Ont. C.A.), for example, where a blood sample was taken from an injured but consenting accused at the request of the police, evidence of its analysis was later held to be admissible at the accused's trial on a charge arising out of the car accident in which he was injured. This ruling was upheld on appeal. As the Trial Judge (quoted with approval at pp. 150-51) had stated:

I am not prepared to hold in this case that there was anything improper in the actions of the doctor in taking the sample of the prisoner's blood. The doctor asked the prisoner if he might take it and the prisoner assented to his doing so. I am not prepared to assume that the prisoner was in such a state of mind that he could not give a valid consent. I do not believe that there is enough evidence before me to lead me to the conclusion that there is even a reasonable doubt as to his being so bereft of his senses that he could not give a valid consent, but, *even if this specimen were taken without his consent and against his will, while such action would be an invasion of this man's private rights, and would in fact constitute a trespass to his person, he would at most have a cause of action against the doctor sounding in tort. I am not prepared to hold that the sample or the analysis of it may not be offered in evidence either for or against the accused.* [Emphasis added]

In *R.* v. *Baker* (1952), 14 C.R. 289 (Ont. Dist. Ct.) blood had been taken from an accused person while he was unconscious in hospital following a car accident. This was done by the attending physician following the request of an investigating police officer. Though it was argued at the accused's trial on a charge of driving while intoxicated that the effect of ss. 285(4*d*) and (4*e*) (similar to what are now ss. 237(1)(*b*) and 237(2)) was to render inadmissible evidence concerning analysis of a blood sample taken without the accused's consent, this argument was rejected.

In *R.* v. *Devison* (1974), 21 C.C.C. (2d) 225 (N.S. S.C.A.D.), blood was taken from an injured accused in hospital after he had allegedly been told that the purpose of such procedure was to determine his blood alcohol level and after he had allegedly signed a consent form. The results of the blood test were admitted as evidence at the accused's subsequent trial for criminal negligence causing death despite the accused's insistence that he did not remember consenting to the taking of blood. As the learned Trial Judge said (at p. 230): "Evidence of the condition of the body however illegally it may have been obtained" would be admissible, "even if he had been knocked down and beaten and the blood sample extracted from him...." The accused's appeal from his conviction was subsequently dismissed by the Appeal Division of the Nova Scotia Supreme Court, Macdonald J. A. stating simply with regard to this point (at p. 234) that: "[I]t matters not ... whether the blood sample was taken with or without consent — the sample and the results of the chemical analysis were admissible in evidence." In so ruling, it is clear that His Lordship placed considerable reliance on

the decision of the Supreme Court of Canada in *Attorney General of Québec* v. *Begin*. There Kerwin C.J.C. (with whom Abbott J. concurred) had said (*supra*, note 326, at p. 219):

> In the present case the accused consented, but I agree with the judgment in the *McNamara* case that even if he had not been asked and therefore had not consented the evidence would be admissible. To the same effect is the judgment of the Court of Criminal Appeal in England in *Rex* v. *Nowell*, [1948] 1 All E.R. 794, 32 Cr. App. R. 173. It was not suggested in that case that force had been used to examine Nowell and there is no suggestion in the present case that any force had been exercised. As stated by the Judicial Committee of the Privy Council in *Kuruma* v. *The Queen*, [1955] A.C. 197 at 203:
>
> > ... the test to be applied in considering whether evidence is admissible is whether it is relevant to the matters in issue.
>
> And at p. 204, it was pointed out that
>
> > ... when it is a question of the admission of evidence strictly it is not whether the method by which it was obtained is tortious but excusable but whether what has been obtained is relevant to the issue being tried.

333. *Supra*, note 326.

334. [1918] 1 K.B. 531 (C.C.A.).

335. *Ibid.*, at p. 533.

336. *Ibid.*, at p. 538.

337. [1948] 1 All E.R. 794 (C.C.A.).

338. Having referred to these cases, His Lordship went on to say (*supra*, note 326, at p. 230):

> [I]n the two cases just cited, the English Court of Appeal ... did not give effect to this theory of inviolability of the person which was in question in *Rex* v. *Fréchette*, *supra*. Also to my knowledge there has never been, for these reasons, exclusion, as inadmissible, from the evidence at the trial, of the report of facts definitely incriminating the accused and which he supplies involuntarily, as for example: — his bearing, his walk, his clothing, his manner of speaking, his state of sobriety or intoxication; his calmness, his nervousness or hesitation, his

> marks of identity, his identification when for this purpose he is lined up with other persons; the presence on him of stolen objects or objects the possession of which, being forbidden to the public, constitutes a breach of the law and affords ground for criminal prosecution, such as narcotics, spiritous liquors unlawfully manufactured or imported, and others. Without doubt, the method used for obtaining this kind of evidence may, in certain cases, be illegal and may even give occasion for recourse to civil or even criminal action against those who have used it, but there is no longer any discussion of the proposition declaring that in such cases the illegality affecting the method of obtaining the evidence does not affect, *per se*, the admissibility of this evidence at the trial.

339. (1961), 34 C.R. 350 (Alta. S.C.).

340. In the words of Milvain J. (at p. 354):

> In my view the blood test cases do not apply to tests such as were imposed in the case at bar. Here the accused was asked to do things that were within the control of his own volition and might well be affected by his state of mind. If he was frightened or made nervous by those in authority his control of his members might well become shaky and uncontrolled. I am therefore of the view that no such tests can be placed in evidence unless they are established as being voluntary in the same manner as must an oral or written statement.

341. *Supra*, note 284.

342. (1961), 35 C.R. 276. There Macdonald J. A. (Smith C. J. A. and Kane J. A. concurring) said *inter alia* (at pp. 280-289):

> To establish whether or not a statement made by an accused is admissible, there is a "trial within a trial," commonly called a "*voir dire*." At such *voir dire* evidence of all the circumstances surrounding the making of the statement must be given, including the production by the Crown, at least for cross-examination, of all witnesses who were present when the statement was made unless an adequate explanation is given for the absence of any such witnesses. At such *voir dire*, the accused has the right to call witnesses, including himself, in an endeavour to demonstrate that there may be other circumstances that would cause the trial judge to doubt the voluntary character of the statement.
>
> Do tests performed by an accused at the request of the police fall into the same category? In other words, is the

burden on the Crown to satisfy the Court that the tests were voluntarily made in the same sense that voluntary statements of the accused are admitted in evidence? It does seem to me that there is no analogy between the taking of such tests by policemen and the taking of a statement which is not voluntary for there is a fundamental difference between statements made by an accused and the actions and conduct of an accused.

Experience teaches that under certain circumstances and stresses some persons may make statements that are entirely untrue, even to the extent that they may falsely acknowledge guilt.

In dealing with the subject that a confession made under certain circumstances is testimonially untrustworthy, Wigmore, 3rd ed., vol. 3, states at p. 246:

> The principle, then, upon which a confession may be excluded is that it is, under certain conditions, *testimonially untrustworthy*.

...

On the other hand, it seems to me that the question of the admissibility of evidence of the police of their observation of tests made in the present case rests on entirely different footing. That evidence falls from lips other than the accused's. The accused was at the police headquarters in the presence of two constables and was asked by Sergeant Grandis to perform certain tests, (a) To walk down the corridor from the waiting room to the cell block; (b) To stand on one foot and with one hand pick up a coin from the floor; (c) To close his eyes and with his right index finger touch his nose; (d) The sergeant having placed his elbow on the counter, with forearm and index finger upraised, the accused was asked to touch the raised finger with his own forefinger.

The evidence of what the accused did in relation to the tests in question is factual. Each policeman present during such test could testify as to the manner in which the accused person performed such tests. Each would be testifying as to his observations. While each would be testifying as to a fact, the evidential value of such observations would be for the tribunal to assess, in the light of all the circumstances of the case. Such evidence is clearly relevant to the question as to whether the accused was or was not under the influence of liquor.

...

I am clearly of the opinion that the rule requiring the prosecution to prove that a statement of an accused was

> voluntary before it can be introduced into evidence does not apply to evidence of sobriety tests of an accused by policemen.

Johnson J.A., though he concurred with the judgment of Macdonald J.A., did so with some reservations. He said (at pp. 292-293):

> Reference has been made to the blood test cases and it has been argued before us that these decisions should by analogy be applied to the present case. There is one important difference in this case in that the acts of the accused while performing the tests were exercising volition, while blood tests are unaffected by the conduct of the accused. Because the accused could, if he were induced to do so, feign a greater degree of drunkenness than actually existed, the learned judge appealed from has held that the rules relating to the admission of incriminating statements and confessions should be applied to tests of the kind which the accused was asked to perform in this case.
>
> The reason why evidence of confessions and incriminating statements has been hedged about by rules which must be observed before it can be admitted is because experience has shown that such evidence is often unreliable. For several centuries it has been recognized that confessions induced by torture are of little or no value. Equally suspect are such statements when they follow coercion of a type which is commonly called "the third degree." The more subtle inducement by threat or promise can readily extract confessions of doubtful value when they are obtained from persons who find themselves, often for the first time, in serious trouble, and who believe that such statements are the easiest and surest method of getting free. It is a natural reaction of persons in trouble to want to explain how misfortune overtook them. Persons in authority who are not too scrupulous can play upon the anxiety and fear of such persons and by threats and promises obtain statements whose truth the law has rightly held to be suspect, and has required that before any confession or incriminating statement is tendered in evidence in a criminal case, it first must be proved to have been given voluntarily.
>
> I suppose it is possible to conceive of circumstances, when induced by threats or promises, a person suspected of being intoxicated might be induced to exaggerate his actions to indicate a greater degree of intoxication and if it can be proved that such is the case, evidence in the form of observation of such conduct should not be acted upon.

Nevertheless, His Lordship felt (at p. 293):

> The chances that a person may be induced to sham intoxication in this way are so remote that rules such as surround the admission of confessions and incriminating statements are, in my opinion, unnecessary. The two kinds of evidence, *i.e.*, the giving of statements and the performing of tests, are so different (and the desire to explain which is so easy to prey upon is entirely absent in the present case) that one cannot supply an analogy for the other.

Porter J.A. dissented, however, stating (at pp. 291-292):

> It is said that the prospect of an accused person feigning drunkenness in these tests is remote. Of that there can be no doubt. It is not, however, so remote that in the face of an appropriate threat or reward, an accused person might not feign impairment during the test. That the prospect is remote does not justify a change in the rule, because any rules affecting the liberty of the subject, and this one does, must be designed to prevent injustice every time and not just most of the time.

It is submitted that in deciding whether the investigative test procedures in question were sufficiently analogous to confessions so that the voluntariness rule ought to apply thereto as well, the majority in *Martin* have obfuscated what is surely the valid distinction drawn by Porter J. A. and the learned Trial Judge between blood test evidence and evidence arising from less inherently reliable investigative tests.

343. [1969] Crim. L.R. 39.

344. *Ibid.*, at p. 40

345. *Ibid.*

346. *Supra*, note 13.

347. By s. 24(2):

> Where, in proceedings under subsection (1), a court concludes that evidence was obtained in a manner that infringed or denied any rights or freedoms guaranteed by this Charter, the evidence shall be excluded if it is established that, having regard to all the circumstancs, the admission of it in the proceedings would bring the administration of justice into disrepute.

348. *Supra*, note 13.

349. R.S.C. 1970, App. III.

350. (1972), 18 C.R.N.S. 281 (S.C.C.).

351. Abbott, Hall, Spence and Pigeon JJ. concurring.

352. *Supra*, note 350, at p. 296.

353. *Ibid.*, at p. 300.

354. *Ibid.*, at p. 285.

355. *Supra*, note 332.

356. *Supra*, note 289.

357. *Supra*, note 270.

358. *Ibid.*, at pp. 250-51.

359. *Ibid.*, at p. 251.

360. *Ibid.*, p. 250.

361. See: *R.* v. *Altseimer* (1982), 29 C.R. (3d) 276 (Ont. C.A.); *R.* v. *Holman* (1982), 28 C.R. (3d) 378 (B.C. Prov. Ct.); *R.* v. *MacDonald* (1982), 1 C.C.C. (3d) 385 (Ont. Co. Ct.); *R.* v. *Stasiuk* (1982), 8 W.C.B. 256 (Ont. Prov. Ct.).

362. See *Re Jamieson and the Queen* (1982), 70 C.C.C. (2d) 430 (Qué. S.C.).

363. See: *R.* v. *McGregor* (1983), 3 C.C.C. (3d) 200 (Ont. H.C.); *R.* v. *Glass* (1982), 9 W.C.B. 164 (B.C. Prov. Ct.); *R.* v. *Holman*, *supra*, note 361; *Re Jamieson and the Queen*, *supra*, note 362.

364. Emphasis added.

365. See *R.* v. *Holman*, *supra*, note 361. And see *Curr* v. *The Queen*, *supra*, note 350.

366. See *Re Jamieson and the Queen*, *supra*, note 362.

367. See, however, s. 5(1) of the Bill, which states that "[n]othing in Part I shall be construed to abrogate or abridge any human right or fundamental freedom not enumerated therein that may have existed in Canada at the commencement of this Act." According to R. E. Salhany, *Canadian Criminal Procedure*, 3rd ed. (Toronto: Canada Law Book, 1978) at pp. 50-51: "It is the fundamental right of every citizen in Canada to be secure against unreasonable and arbitrary searches by the police...."

368. See *R.* v. *Glass*, *supra*, note 363.

369. See *R.* v. *Holman*, *supra*, note 361.

370. See: *Bell* v. *Wolfish* (1979), 441 U.S. 520 (S.C.); *Ker* v. *California* (1963), 374 U.S. 23 (S.C.).

371. See: *Arkansas* v. *Sanders* (1979), 442 U.S. 753 (S.C.); *Mancusi* v. *DeForte* (1968), 392 U.S. 364 (S.C.); *Michigan* v. *Tyler* (1978), 436 U.S. 499 (S.C.); *Pennsylvania* v. *Mimms* (1977), 434 U.S. 106 (S.C.); *Terry* v. *Ohio* (1968), 392 U.S. 1 (S.C.); *Warden* v. *Hayden* (1967), 387 U.S. 294 (S.C.).

372. See *Terry* v. *Ohio*, *supra*, note 371, at p. 21; H. D. Hanes, "Constitutional Law: Search and Seizure: An Analysis of Federal and Oklahoma Law in Light of Recent Chicago Strip Search Cases" (1981), 34 *Okla. L. Rev.* 312 at pp. 316-17. Note that under Rule 312(e) of the United States Military Rules of Evidence, intrusive body searches, including the forced ingestion of substances to compel bodily elimination of whatever is being searched for, is expressly permitted. See M. W. Merritt, "Significant Intrusions under the Military Rules of Evidence" (1981), 67 *Va. L. Rev.* 1069.

373. See: *United States* v. *Robinson* (1973), 414 U.S. 218 (S.C.) at p. 236; *Rochin* v. *California* (1952), 342 U.S. 165 (S.C.); Hanes, *supra*, note 372, at pp. 322-23.

374. *Supra*, note 138.

375. *Ibid.*, at p. 296.

376. See *R.* v. *McGregor*, *supra*, note 363.

377. *Supra*, note 263.

378. See *R.* v. *Graling* (1978), 17 A.R. 347 (Dist. Ct.).

379. Subsection 237(2) of the *Code*, however, (which, by virtue of s. 240.3, applies to proceedings under ss. 240 and 240.2 in addition to proceedings under ss. 234 and 236) provides expressly that:

> No person is required to give a sample of blood, urine or other bodily substance for chemical analysis for the purposes of this section except breath as required under section 234.1, 235 or 240.1, and evidence that a person failed or refused to give such a sample or that such a sample was not taken is not admissible nor shall such a failure or refusal or the fact that a sample was not taken be the subject of comment by any person in the proceedings.

380. *Supra*, note 289. See also: *R.* v. *Belanger* (1975), 24 C.C.C. (2d) 10 (Ont. C.A.); *R.* v. *Holberg and Russell* (1978), 42 C.C.C. (2d) 104 (Ont. Co. Ct.).

381. Quoted at p. 3.

382. *Ibid.*

383. (1973), 13 C.C.C. (2d) 309.

384. His Lordship ruled (at pp. 8-10) as follows:

> As to the admissibility of evidence of refusal by Marcoux to participate in a line-up, it is only necessary to observe that the trial tactics of defence counsel made this evidence admissible beyond any question; admissible, not for the purpose of proving guilt, but to explain the failure to hold an identification parade and the necessity, as a result, to have Fleskes confront Marcoux, a procedure which counsel for Marcoux so roundly criticized: see *R.* v. *Brager*, [1965] 4 C.C.C. 251 at p. 253, 47 C.R. 264, 52 W.W.R. 509.
>
> ...
>
> I find nothing wrong with the Judge's charge to the jury. He told the jury there was no statutory authority to force an accused person or a suspect or a person at a police station into a line-up. That is a correct statement; if it is subject to any criticism, it is that it is too favourable to the accused. The Judge then told the jury it was up to them to decide on the totality of the evidence what significance they would attach to Marcoux's refusal to participate in a suggested line-up. I do not think the Judge erred in so instructing the jury. The evidence of the refusal was simply one more piece of evidence bearing upon the single issue, identification. It explained the

failure to hold a line-up. The jury could take it into account. It was relevant and admissible and an inference could be drawn from it — if it was not open to any inference it was not relevant and not admissible. Even in such a matter as the failure of an accused to testify, although neither Judge nor counsel can comment upon the failure, a jury is free to draw, and I have no doubt frequently does draw from the failure, an inference adverse to the accused.

I would dismiss the appeals.

385. (1977), 41 C.C.C. (2d) 413 (Ont. Co. Ct.).

386. *Ibid.*, at p. 415.

387. *Supra*, note 285.

388. Speaking for the British Columbia Court of Appeal, Davey J.A. said (at p. 131):

> [T]here was no obligation resting on the respondent to perform tests calculated to prove or disprove the alleged impairment. It was clearly his common law right to refuse to incriminate himself by performing these tests, and to require the Crown to prove its case against him at the trial without his assistance. In my respectful opinion, no inference of guilt can be drawn against the respondent because he stood on those rights and refused to submit to the physical tests.

389. (1965), 47 C.R. 264 (B.C. C.A.) at p. 266.

390. *Supra*, note 281.

391. In the words of Gale C.J.H.C. (at pp. 299-300):

> The accused was acting within his common law legal rights in refusing to provide a sample of his blood to the police. To admit evidence at this stage that he declined to do so would, in my view, be most unfair. The only purpose for which this evidence is put forward is to suggest the inference that the accused felt he had something to hide. The accused had a right to refuse, and I do not think that the jury should be invited to draw an inference prejudicial to him because of his exercise of that right.
>
> This position is logically consistent with the provisions of s. 224(4) [now 237(2)]. Had the accused been charged under s. 223 [now 234] with driving while impaired, a much less

grave offence, the fact that he refused to give a sample could not be given in evidence at the trial. A far greater reason to follow the same course exists, as it seems to me, in logic and in reason, when he is charged with causing death by criminal negligence, where the criminal negligence is based upon an allegation of impairment.

392. *Supra*, note 259.

393. Speaking for that Court, Martin J.A. said (at p. 310):

> The respondent in refusing to provide a sample was acting within his common law rights in so refusing. The admission of evidence of his refusal to provide the sample might, however, cause the jury to conclude that the respondent had something to hide and be gravely prejudicial to him: see *R.* v. *Burns*, [1965] 4 C.C.C. 298, 51 D.L.R. (2d) 393, [1965] 2 O.R. 563. The defence had not opened up the subject by cross-examination as to whether the respondent had been subjected to any tests, which would, of course, have entitled the Crown to show that a test had been offered and refused: see *R.* v. *Brager*, [1965] 4 C.C.C. 251 at p. 253, 47 C.R. 264, 52 W.W.R. 509. This was not a case where there was an attack upon the police for failing to follow proper procedures, which the Crown was entitled to rebut by showing that the accused's refusal to co-operate prevented the appropriate procedures from being followed: see *Marcoux and Solomon* v. *The Queen* (1975), 24 C.C.C. (2d) 1, 60 D.L.R. (3d) 119, [1976] 1 S.C.R. 763. Nor do we think that, in the circumstances of this case, evidence that the respondent refused the test was necessary to prevent a distorted picture from being presented to the jury as in *R.* v. *Sweeney (No. 2)* (1977), 35 C.C.C. (2d) 245, 76 D.L.R. (3d) 211, 16 O.R. (2d) 814.
>
> We are also of the view that, even if there were some tenuous ground for holding evidence of the respondent's refusal to take the test to be admissible, the trial Judge in the circumstances, because of the gravely prejudicial nature of the evidence, would have been justified in excluding it in the exercise of his discretion.

394. *Supra*, note 270.

395. *Ibid.*, at p. 249.

396. *Ibid.*, at p. 251.

397. In Zuber J. A.'s words (at p. 252):

It is, after all, the accused who has raised the defence and made his sanity an issue. Can it be said he has the exclusive right to call psychiatric evidence and also to deny the prosecution even the ability to explain why the Crown has called no evidence to meet this issue? It has been submitted that the Crown psychiatrists can testify on a hypothetical basis, or from having observed the accused in the court-room. However,the cross-examination of the Crown's psychiatrists and the address to the jury by defence counsel could not avoid emphasizing the superiority of the witnesses who had examined the accused.

His Lordship added (at p. 252):

> While the issue is new in this jurisdiction, and as far as I have been able to discover, in this country, American Courts have already met this problem, and many have concluded that the refusal of an accused to be interviewed by prosecution psychiatrists is admissible: see, for example, *People* v. *French*, 87 P. 2d 1014. There are in the American cases many statutory and procedural differences from the law in Canada and they must be read with these differences in mind. It is, however, remarkable that in jurisdictions where the concept of privilege against self-incrimination is given a somewhat wider meaning than in Canada, Courts in one manner or another have found this type of evidence admissible: *e.g.*, *Lee* v. *County Court of Erie County*, 267 N.E. 2d 452; *State* v. *Huson*, 440 P. 2d 192.

398. *Supra*, note 1, at p. 53.

399. *Ibid.*, at p. 54.

400. *Ibid.*, at p. 53.

401. *Supra*, note 34, para. 27 at p. 14.

402. Minority Report, para. 3 at pp. 1-2.

403. *Ibid.*, para. 7 at p. 3.

404. American Law Institute, *A Model Code of Pre-Arraignment Procedure* (Philadelphia: American Law Institute, 1975) s. SS230.

405. See, *e.g.*, New Zealand's *Police Act 1958*, S.N.Z. 1958, No. 109, as amended, s. 57(1).

406. *Supra*, note 26.

407. See, *e.g.*, Tasmania's *Criminal Process (Identification and Search Procedures) Act 1976*, S.T. 1976, No. 3, as amended, s. 6.

408. See, *e.g.*, Tasmania's *Criminal Process (Identification and Search Procedures) Act 1976*, *supra*, note 407, s. 3.

409. See, *e.g.*: New South Wales' *Crimes Act 1900*, S.N.S.W. 1900, No. 40, as amended, s. 353A; South Australia's *Police Offences Act 1953*, S.S.A. 1953, No. 55, as amended, s. 81(2); Queensland's *Criminal Code Act 1899*, 63 Vic., No. 9, as amended, s. 259; Australia's *Criminal Investigation Bill 1981* (not enacted), s. 34; Queensland's *Vagrancy, Gaming and Other Offences Act 1931*, 22 Geo. 5, No. 27, as amended, s. 43.

410. See, *e.g.*: Australia's *Criminal Investigation Bill 1981*, *supra*, note 409, ss. 34, 38; Tasmania's *Criminal Process (Identification and Search Procedures) Act 1976*, *supra*, note 407, s. 7; England's *Magistrates Courts Act 1980*, 1980 (U.K.), c. 43, s. 49.

411. See, *e.g.*: Tasmania's *Criminal Process (Identification and Search Procedures) Act 1976*, *supra*, note 407, s. 7; A.L.I. *Model Code of Pre-Arraignment Procedure*, *supra*, note 404, s. 170.1.

412. See, *e.g.*, Tasmania's *Criminal Process (Identification and Search Procedures) Act 1976*, *supra*, note 407, s. 6.

413. See, *e.g.*: New South Wales' *Crimes Act 1900*, *supra*, note 409, s. 353A; Queensland's *Criminal Code Act 1899*, *supra*, note 409, s. 259.

414. See, *e.g.*, the United Kingdom's *Road Traffic Act 1972*, 1972 (U.K.), c. 20, s. 8(8), as amended by s. 25(3) and Schedule 8 of the *Transport Act 1981*, 1981 (U.K.), c. 56.

415. See, *e.g.*, New Zealand's *Transport Act 1962*, S.N.Z. 1962, No. 135, as amended, s. 58(4)(*a*).

416. *Supra*, note 1, at p. 60.

417. See, *e.g.*, Victoria's *Motor Car Act 1958*, S.V. 1958, No. 6325, as amended, s. 80F(10).

418. See, *e.g.*, the A.L.I. *Model Code of Pre-Arraignment Procedure*, *supra*, note 404, s. SS230.3(3).

419. See, *e.g.*, the A.L.I. *Model Code of Pre-Arraignment Procedure*, *supra*, note 404, s. 160.2(6).

420. But see the A.L.I. *Model Code of Pre-Arraignment Procedure*, *supra*, note 404, s. 160.3.

421. See, *e.g.*: South Australia's *Police Offences Act 1953*, *supra*, note 409, s. 81(3); Australia's *Criminal Investigation Bill 1981*, *supra*, note 409, s. 38(6); Tasmania's *Criminal Process (Identification and Search Procedures) Act 1976*, *supra*, note 407, s. 6(2).

422. Tasmania's *Criminal Process (Identification and Search Procedures) Act 1976, supra*, note 407, s. 6(2).

423. Australia's *Criminal Investigation Bill 1981*, *supra*, note 409, s. 38(7).

424. See, *e.g.*: Victoria's *Motor Car Act 1958*, *supra*, note 417, s. 80F(13); New Zealand's *Transport Act 1962*, *supra*, note 415, s. 58(4).

425. See, *e.g.*: the United Kingdom's *Road Traffic Act 1972*, *supra*, note 414, s. 10(6); New Zealand's *Transport Act 1962*, *supra*, note 415, s. 58B.

426. See *Criminal Code*, ss. 237(1)(*c*)(i) and 237(1)(*f*)(iii)(A). In s. 237(6) "approved container" is defined as "a container of a kind designed to receive a sample of the breath of a person for chemical analysis and that is approved as suitable for the purposes of this section by order of the Attorney General of Canada...."

427. *Duke* v. *The Queen*, [1972] S.C.R. 917.

428. *R.* v. *MacDonald*, *supra*, note 361. See also *R.* v. *Potma* (1983), 31 C.R. (3d) 231 (Ont. C.A.).

429. *R.* v. *MacDonald*, *supra*, note 361, *per* Salhany Co. Ct. J. at p. 396.

430. See M. Strauss, "Lawyer Challenges Fingerprinting System," *Globe and Mail*, Nov. 25, 1981.

431. Law Reform Commission of Australia, *supra*, note 15, para. 116 at p. 51.

432. See, *e.g.*: New Zealand's *Police Act 1958*, *supra*, note 405, s. 57(3); England's *Magistrates Courts Act 1980*, *supra*, note 410, s. 49(4); Tasmania's *Criminal Process (Identification and Search Procedures) Act 1976*, *supra*, note 407, s. 3(4); Queensland's *Vagrancy, Gaming and Other Offences Act 1931*, *supra*, note 409, s. 43; Australia's *Criminal Investigation Bill 1981*, *supra*, note 409, s. 38(9); the United Kingdom's 1983 *Police and Criminal Evidence Bill* (Bill 115, March 1983 version, as amended by Standing Committee J) s. 49.

433. *Supra*, note 432, s. 51(9). See also the Home Office's *Draft Codes of Practice for the Treatment, Questioning and Identification of Persons Suspected of Crime* (London: Home Office, 1983).

434. *Supra*, note 143, para. 4.130 at p. 115.

435. *Ibid.*

436. See, *e.g.*: New Zealand's *Transport Act 1962*, *supra*, note 415, s. 58(4)(*a*); the United Kingdom's *Road Traffic Act 1972*, *supra*, note 414, s. 10.

437. See, *e.g.*, the A.L.I. *Model Code of Pre-Arraignment Procedure*, *supra*, note 404, s. 160.7.

438. See, *e.g.*, Australia's *Criminal Investigation Bill 1981*, *supra*, note 409, s. 34(6).

439. See, *e.g.*: the United Kingdom's *Road Traffic Act 1972*, *supra*, note 414, ss. 7(4) and 8(7); Victoria's *Motor Car Act 1958*, *supra*, note 417, ss. 80DA(6), 80E, 80F.

440. See, *e.g.*, New Zealand's *Police Act 1958*, *supra*, note 405, s. 57.

441. But see Victoria's *Motor Car Act 1958*, *supra*, note 417, s. 80D(12) of which expressly prohibits the drawing of an adverse inference.

442. See also New Zealand's *Transport Act 1962*, *supra*, note 415, s. 58C.

443. *Supra*, note 34, para. 49 at p. 20.

444. *Ibid.*, para. 50 at p. 21.

445. *Ibid.*

446. *Supra*, note 143, para. 3.135 at p. 67.

447. *Ibid.*, para. 3.137 at p. 68.

448. *Ibid.*

449. See the legislative provision we have proposed in *The General Part* [Working Paper 29], *supra*, note 330 at p. 113. For more specific formulae, see: Victoria's *Motor Car Act 1958*, *supra*, note 417, ss. 80D(10), 80DA, 80F(9); Tasmania's *Criminal Process (Identification and Search Procedures) Act 1976*, *supra*, note 407, s. 6(4).

450. See Victoria's *Motor Car Act 1958*, *supra*, note 417, s. 80DA.

451. See New Zealand's *Transport Act 1962*, *supra*, note 415, s. 58D.

452. Government of Canada, *supra*, note 1, at p. 50. See *R.* v. *Holman*, *supra*, note 361, at p. 394, where McCarthy Prov. J. stated with regard to the current breathalyzer provisions: "[T]here must be a proper balance between the rights and freedoms of the individual, on the one hand, and the interests of society, on the other. I find that such a balance does exist here vis-à-vis s. 235."

453. See: *R.* v. *Frechette*, *supra*, note 278; *R.* v. *Burns*, *supra*, note 281; *W.* v. *W. (No. 4)*, *supra*, note 281; Criminal Law Reform Committee of New Zealand, *supra*, note 34, para. 9 at p. 4.

454. The types of concerns just discussed, particularly the first, have recently prompted action by the provinces. See, *e.g.*: British Columbia's *Motor Vehicle Act*, R.S.B.C. 1979, c. 288, as amended by *Motor Vehicle Amendment Act (No. 2), 1982*, S.B.C. 1982, c. 73; *The Vehicles Act, 1983* of Saskatchewan, S.S. 1983, c. V-3.1, s. 168; *The Blood Test Act* of Manitoba, S.M. 1980, c. 49. The problem, by its very nature, is not easily quantifiable by empirical data. Statistics do indicate, however, that hospitalized drinking drivers are only rarely prosecuted for impaired driving. In a relatively recent British Columbia study in which blood samples were consensually taken from hospitalized traffic accident victims, with the assurance that the results of analyses would not be used as evidence against them, it was found that only "[s]eventeen per cent of the drivers exceeding a BAC of .08 and 25 per cent of those exceeding .15 were charged for impaired driving under the Criminal Code." See R. A. Rockerbie, *Blood Alcohol in Hospitalized Traffic Crash Victims* (Victoria, B.C.: Ministry of the Attorney General, 1979) at p. 8. See also G. Cimbura, R. A. Warren, R. C. Bennett,

D. M. Lucas and H. M. Simpson, *Drugs Detected in Fatally Injured Drivers and Pedestrians in the Province of Ontario* (Ottawa: Traffic Injury Research Foundation of Canada, 1980) at p. 62 where it was found that 26 per cent of those fatally injured drivers studied had drugs other than alcohol in their bodes. On the basis that "in most substances (with the possible exception of the LSD findings), drugs detected in urine, but not in blood, usually indicate long-term prior consumption rather than recent consumption of the drug" (p. 65), it was concluded (at pp. 65-66) that in 11 per cent of the fatalities studied "*the possibility of contributory effects of drugs or drug combinations could not be eliminated*" [emphasis included]. And see J. C. Garriott and N. Latman, "Drug Detection in Cases of 'Driving Under the Influence'" (1976), 21 *J. For. Sci.* 398, a study done in Dallas, Texas, in which blood samples of individuals arrested for "driving under the influence" were analyzed in cases where breathalyzer results were "lower than the apparent degree of intoxication..." (p. 398) or where "evidence of drug use [was] apparent from questioning, symptoms, or drug samples found in the individual's possession..." (p. 398). In that study, drugs (usually methaqualone, diazepam or barbiturates) were detected in 72 per cent of the blood samples analyzed. As suggested below, however (see note 464 and accompanying text), the traffic safety implications of drugs are not statistically clear.

455. See Cimbura, *supra*, note 454, at p. 15.

456. See, *e.g.*: the United Kingdom's *Road Traffic Act 1972*, *supra*, note 414; Victoria's *Motor Car Act 1958*, *supra*, note 417; and New Zealand's *Transport Act 1962*, *supra*, note 415. See also: British Columbia's *Motor Vehicle Act*, *supra*, note 454; *The Vehicles Act, 1983* of Saskatchewan, *supra*, note 454.

457. See the authorities cited *supra*, in note 59.

458. See the authorities cited *supra*, in note 60.

459. See: Special Committee of the British Medical Association, *Report: The Medico-Legal Investigation of the Drinking Driver* (London: British Medical Association, 1965) at pp. 32-33; Law Reform Commission of Australia, *supra*, note 55, para. 122 at pp. 53-54; Walls and Brownlie, *supra*, note 59, at p. 102.

460. Special Committee of the British Medical Association, *supra*, note 459, at p. 33.

461. See: Moenssens and Inbau, *supra*, note 28, at pp. 77-78; Law Reform Commission of Australia, *supra*, note 55, para. 284 at p. 122.

462. See R. E. Erwin, *Defense of Drunk Driving Cases*, vol. 2, 3rd ed. (New York: Matthew Bender, 1983) at p. 25-4, where it is stated that:

> [T]he only way to avoid ... error is to obtain a specimen of urine which is not part of a pool that has been accumulating in the bladder for any appreciable time. This can be done by having the subject empty [his] bladder first. This urine is discarded. As soon as possible thereafter a second sample is obtained. The latter will more closely reflect the alcohol content of the blood at the time.

This procedure has, in effect, been adopted in the United Kingdom's *Road Traffic Act 1972*, *supra*, note 414.

463. Curry, *supra*, note 59, at pp. 478-479. Urine samples may, however, be valuable for screening purposes.

464. Cimbura, *supra*, note 454, at p. 4, citing K. B. Joscelyn and R. P. Maickel, *Drugs and driving: a research review*, NHTSA, 1975 at p. 46. See also Benjamin, *supra*, note 60, at pp. 53 and 61.

465. Law Reform Commission of Australia, *supra*, note 55, para. 123, at p. 54; Walls and Brownlie, *supra*, note 59, at p. 107. For examples of the numerous studies on the effect of alcohol ingestion on driving ability, see: Commission on "Driving While under the Influence of Drink or a Drug," *Report* (Dublin: Stationery Office, 1963) at pp. 27-29; Walls and Brownlie, *supra*, note 59, at pp. 45-61.

466. See *Criminal Code*, R.S.C. 1970, c. C-34, ss. 236 and 240.2.

467. See Cimbura, *supra*, note 454, at pp. 2-4, and the studies cited therein. See also Law Reform Commission of Australia, *supra*, note 55, para. 235 at pp. 100-101.

468. See *supra*, note 191.

469. See *supra*, note 192.

470. Curry, *supra*, note 59, at pp. 479-480; R. Bonnichsen, "Aspects of Drug Analyses in Relation to Road Traffic Legislation and Supervision," in Israelstam and Lambert, *supra*, note 59, at pp. 503-504. As Bonnichsen has noted (at p. 504):

> Conclusions drawn from blood analysis about a driver's impairment are ... limited. Other circumstances must be considered including the driving, the police observations, witnesses, the doctor's examination... and finally the result of the analysis that could at least give a reason for the symptoms of the intoxication.

471. *Supra*, note 55, para. 235 at p. 101.

472. *Ibid.*

473. *Ibid.*

474. See, *e.g.*: s. 8(7) of the United Kingdom's *Road Traffic Act 1972*, *supra*, note 414; s. 58C of New Zealand's *Transport Act 1962*, *supra*, note 415. See also: s. 220.3 of British Columbia's *Motor Vehicle Act*, *supra*, note 454; s. 168(5) of *The Vehicles Act, 1983* of Saskatchewan, *supra*, note 454.

475. See, *e.g.*, s. 58C of New Zealand's *Transport Act 1962*, *supra*, note 415.

476. *Supra*, note 26.

477. See W. D. Glauz and R. R. Blackburn, "Drug use among drivers" (Technical Contract Report for the U.S. Department of Transportation, National Highway Traffic Safety Administration, February, 1975), cited by Cimbura, *supra*, note 454 at p. 7. In the voluntary study described therein, only three quarters of the participant motorists were able to produce a urine specimen upon request. See also the Commission on "Driving While under the Influence of Drink or a Drug," *supra*, note 465, para. 58 at p. 47.

478. See Walls and Brownlie, *supra*, note 59, at p. 67.

479. See, ss. 237(3) and 240.3 of the *Code*.

480. See *R.* v. *Carter* (1983), 31 C.R. (3d) 76 (Ont. C.A.). It may even be possible to obtain blood samples from the scene of the accident. See *R.* v. *LeBlanc* (1981), 64 C.C.C. (2d) 31 (N.B. C.A.), leave to appeal to S.C.C. refused Feb. 1, 1982.

481. As that section states: "The *Canadian Charter of Rights and Freedoms* guarantees the rights and freedoms set out in it subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society."

482. See, *e.g.*, the United Kingdom's *Road Traffic Act 1972*, *supra*, note 414, ss. 8(1)(*b*) and 8(3)(*c*); New Zealand's *Transport Act 1962*,

supra, note 415, s. 58B(1)(*e*). See also *The Vehicles Act, 1983* of Saskatchewan, *supra*, note 454.

483. See Law Reform Commission of Australia, *supra*, note 55, para. 123 at p. 54, where it is noted:

> [B]reath analysis may be of assistance in a negative way. A 'clear' breath analysis in the case of a person apparently under the influence of alcohol may properly lead to further tests being carried out to determine the cause of bizarre or unusual behaviour.

484. See the United Kingdom's *Road Traffic Act 1972*, *supra*, note 414, s. 8(3)(*a*). See also *The Vehicles Act, 1983* of Saskatchewan, *supra*, note 454, s. 168(3).

485. Law Reform Commission of Canada, *Writs of Assistance and Telewarrants* [Report 19] (Ottawa: Supply and Services Canada, 1983).

486. See the United Kingdom's *Road Traffic Act 1972*, *supra*, note 414, s. 9.

487. See, *e.g.*: the United Kingdom's *Road Traffic Act 1972*, *supra*, note 414, s. 8; Victoria's *Motor Car Act 1958*, *supra*, note 417, s. 8OF; New Zealand's *Transport Act 1962*, *supra*, note 415, s. 58B.

488. See New Zealand's *Transport Act 1962*, *supra*, note 415, s. 58(4)(*a*).

489. See: Law Reform Commission of Australia, *supra*, note 55, para. 68 at p. 27; the United Kingdom's *Road Traffic Act 1972*, *supra*, note 414, s. 10(6); New Zealand's *Transport Act 1962*, *supra*, note 415, s. 58B.

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