J Forensic Sci, Apr. 1974, Vol. 19, No. 2

P. J. Matte,[1] *M.D., J.D.*

The Role of Forensic Jurisprudence in the Judicial Process

The Issues

The intent of this paper is a clarification of the role of forensic jurisprudence in the judicial process. Confronted with this task, one is left feeling rather like the man who has been persuaded to wrestle with an octopus: uncertain how best to begin. The question is most relevant to lawyers already engaged in that branch of the law which deals with evidence derived from the sciences and the scientifically based arts of our technological society. It seems therefore appropriate to focus initially on the confusion of roles and terminology, and the occasional conflicts of interest which are the inevitable lot of the lawyer who calls himself a forensic jurisprudent, and whose professional concerns include the conflicts of a society in collision with its technology.

Let us start with the obvious premise that jurisprudence and advocacy, both intellectual disciplines in legal context, are not necessarily the same. In the legal system of ancient Rome, from which we derive so many of our legal concepts, the distinction was, in general terms, both made and understood. The Roman law scholar, Adolf Berger [*1*], in defining *advocatus*, an advocate, puts it thus:

> *Advocatus.* The term is applied to persons who exercise the profession of an advocate (*advocatio*), i.e., a legal adviser, while *iurisperitus* is a legal scholar, expert in law, a man learned in law. The *advocatus* assisted his clients (*clientes*) with juristic advice before and during the trial, in both civil and criminal matters, and pleaded for them in court. The latter activity was originally reserved to persons specially trained in rhetoric (*oratores*). Under the Republic the *advocatus* was not paid for his services; under the Principate compensation was gradually permitted.

A modern definition of the advocate is, "One who assists, defends, or pleads for another; one who renders legal advice and aid, and pleads the cause of another before a court or tribunal, a counsellor" [*2*]. And *jurisprudence* is commonly defined as "the philosophy of law, or the science which treats of the principles of positive law and legal relations" [*2*].

The issue, then, is the distinction between the jurisprudent and the advocate. The specific question is: into which category, if either, is the forensic jurisprudent to be defined? In other words, is the forensic jurisprudent a forensic expert, or is he rather an advocate in cases of a technical nature?

Presented at the 25th Annual Meeting of the American Academy of Forensic Sciences, Jurisprudence Section, Las Vegas, Nev., 21 Feb. 1973. Received for publication 12 March 1973; accepted for publication 26 Sept. 1973.

[1] Director, Student Health Center, University of Arizona, Tucson, Ariz.

The Meaning of Forensic Jurisprudence

We start with the troublesome fact that the very term *forensic jurisprudence*, as commonly employed, is both a tautology and a contradiction in terms. For *forensic* means, of course, "pertaining to or employed in legal proceedings or argument" [*3*], that is, of the forum, while *jurisprudence*, in both ancient and modern definitions, refers to theoretical rather than pragmatic aspects of the legal system.

The result is that *forensic jurisprudence*, semantically defined, means either expertise in the law of legal proceedings, the stock in trade of any competent lawyer and thus meaningless as a distinctive discipline; or, alternatively, refers to a theoretical science of practical lawyering, at best an illogical juxtaposition of concepts and at worst a singularly ineffectual way to practice law. Nevertheless, the term survives and must be dealt with. Forensic jurisprudents do something other lawyers do not and must somehow be characterized. Let us look first at the notion of jurisprudence.

John Chipman Gray [*4*], an academic jurisprudent, tells us, somewhat didactically, that there are three kinds of jurisprudence: *general*, comparing all the legal systems of the world; *comparative*, comparing the law of two or more communities; and *particular*, the law of a particular community. Since the concerns of the forensic jurisprudent are seldom worldwide, rarely cross national barriers, and are most commonly related to a single system of law, it would appear that in the field of particular jurisprudence the forensic jurisprudent will find his place.

Gray, however, goes on to present the notion that particular jurisprudence can go no lower than "the manner in which a tribunal habitually judges this or that question" [*4*]. Courts are a requisite. Gray notes that the "worshipful company of bellows-menders" may have its jurisprudence only if it has courts with judicial functions.

More particular varieties of "jurisprudence" Gray finds it impossible to defend, saying that such works as treatises on medical jurisprudence are not jurisprudences because, though useful compendiums of facts likely to arise in litigation, they possess no scientific unity or "any pretension to be considered law at all." It is a misnomer, Gray implies, to refer to the legal hazards and strictures of a specified trade as a jurisprudence. There cannot be, in a true sense, a "builder's jurisprudence," or a "jockey's jurisprudence," even a "medical jurisprudence" [*4*]. With this I am by no means certain I entirely agree. There is, however, a point at which knowledge of the legal problems of a particular human vocation becomes lawyering, or advocacy, rather than jurisprudence. Legal science, in the sense of jurisprudence, is general rather than particular, and must, like other sciences, become taxonomical, organized on a basis of categories and distinctions, orderly in terms of its material, and held together with some theory, or at minimum, a common objective.

Thus, Gray's analysis would tell us that expertise in cases of rear-end collisions of taxicabs in New York City or San Francisco scarcely qualifies as jurisprudence, and we should be fairly safe in assuming that the liability of hospitals in relation to the law of *respondeat superior* is not jurisprudence, but law in a practical operative sense, a matter for lawyers and advocacy. It is no less valuable for that. But the distinction is a necessary one, to separate jurisprudence from advocacy.

For, at the top, jurisprudence is abstract and general, concerned with legal philosophy, with absolutes, with human imperatives and social interactions, with commonalities between various states and cultures of man, with Aristotelian concepts of man as a political animal. It is at this level that we find jurisprudence sometimes uncomfortably akin to theology[2] for, at its highest, jurisprudence as a searching science seeks, if not perfection, reason and order in human relationships.

[2] Kelsen discusses this interrelationship in some detail in his collection of essays, *What is Justice?*, pp. 1–13, 25–81 (see Ref *9*).

In its middle reaches jurisprudence, tending toward the pragmatic at the expense of the theoretical, becomes a rationalization of the social order which supports it, and here we find the legal positivists, the Austinian notion of law as the enforced will of the sovereign. Here also are the "fact jurisprudence" of Jerome Frank [5][3] and the Holmesian school of legal realism.

At its base, in its broadest sense, we find a jurisprudence, perhaps improperly so called, of the commoner concerns of man, pragmatic, specific, technical, and manipulative in terms of those interests which it serves.

Somewhere between the lower and the middle reaches of jurisprudence, puristically defined, is to be found the jurisprudence of forensic science.

Toward a Jurisprudence of the Forensic Sciences

In carving out from the broad field of jurisprudence a jurisprudence of the forensic sciences, to be designated as *forensic jurisprudence*, and for practice by forensic jurisprudents, we must face frankly the fact that in our day the term *forensic*, whatever its original meaning, has come to have a smell of blood and death about it. At best it bears an aura of disaster, personal or collective, so that we find *forensic pathology* concerned with murder and suicide, with poisonings and conflagrations, with accident and injury. So far as *forensic medicine* is separable from pathology, it is concerned with iatrogenic illness and medical calamity; while *forensic toxicology* deals with drugs and chemicals and poisons in their deleterious impact on mankind, *forensic anthropology* occupies itself largely with the identification of human remains, and so on. Our word "forensic" is in truth a cheerless adjective as commonly employed. And what *we* mean by it is that in all these cases of calamity the forensic scientist employs his expertise at the legal interface of a technical or scientific discipline, in the forum, and, hopefully, in the interests of justice.

The forensic scientist is an expert in a technical field, differing from others trained in his discipline in his orientation to the law and the uses of his own science in the courtroom or administrative tribunal. Thus we may say, properly and descriptively of him, that he is a forensic pathologist, a forensic chemist, a forensic toxicologist, and so on.

But what of the forensic jurisprudent?

The forensic jurisprudent is already in the law—as a lawyer. His title would *seem* to say that he is an expert on the function of courts of justice, yet all who practice in the field will recognize that this is not exactly so. His area of special competence, if his title means anything, is in the area of evidence—of scientific or technical proof: biological, medical, chemical, and physical. His business is the conversion of technical data into legal fact. He is also, should he choose to be, something more. For his concerns include, if he would fly the flags of jurisprudence, the rationale and the social purposes of what he is doing. Thus, he becomes involved with such matters as the qualification and legal functions of the expert witness; with the admissibility of scientific and quasi-scientific evidence; with the limitations of the jury system in the resolution of technical conflict; with such judicial reform as is needed to make the courts more competent in technological controversy; with the tensions of man in a technological society; and with the development of rational precedent and consistent principles in the law, both adjectival and substantive, as these pertain to the social problems of our technology. In sum, the forensic jurisprudent is concerned with that complicated, legally technical process that leads from event and scientific data to verdict, judgment, and compensation, injunction, or conviction.

Those who were exposed to philosophy in undergraduate years may recall the concept of the "Great Chain of Being." This ancient notion, Platonic and Aristotelian in origin,

[3] Frank's writings are the single best exposition of the legal philosophy of "fact-skepticism," and are highly relevant to evidentiary aspects of the forensic sciences.

medieval and scholastic in development, and Renaissance in fruition, serves as an excellent analogy to what I conceive to be the work of the forensic jurisprudent in a coherent discipline of the forensic sciences. To oversimplify, and perhaps to grate the sensibilities of competent philosophers, the notion of the Great Chain of Being is that all things in the universe hang together and are interrelated one to another; that each part is necessary to the whole; and that without *continuity* and *comprehensiveness* the universe, as we dimly conceive it, has no reality, cannot hang together, and collapses into chaos [*6*].[4] This nondoctrinal concept, common to Western and Eastern philosophies, has pointed application to the law. The trial lawyer will recognize it as an analogical blueprint of the well-put-together case, where the sum is in a very real sense dependent on the totality and the interrelationships of the parts, and where the absence or inadmissability of an essential bit of evidence can bring the most carefully conceived and executed legal edifice crashing down about counsel's ears.

As the Great Chain of Being was to the medieval philosophers, the "Chain of Evidence" is to the forensic jurisprudent of our day, in his capacity as a technician for technicians, and expert in the use of expertise for the purposes of law.

It seems to me that in this area of special expertise the lawyer finds his place as a forensic scientist. He is distinguished from other forensic scientists by the fact that while the science and the art of his fellows deals with measurement and evaluation of the tangible, hopefully demonstrable by one technical modality or another, and rests on a base of presumably replicable technical or scientific data, the science of the forensic jurisprudent lies in that special area which deals with the application of highly technical evidence to the legal process. His data base, from which derive his conclusions, his arguments, and his procedures, is that of precedent and practice in the law.

He is the catalyst without which the reaction will not occur, the sextant which keeps the ship on course, the alchemist who transmutes the base metal of technical data into the gold of adequate compensation.

He is, in a metaphor perhaps too pointed for ready acceptance, a different breed of cat, howling about the housetops while his fellow forensic scientists are digging deeply into the garbage cans of the social order.

Whether he is to function as advocate or jurisprudent is, however, quite another matter. While it is theoretically possible for the lawyer concerned with compensation for technological calamity to be both advocate and jurisprudent—as a politician may be, rarely, both politician and statesman—the dual role is notoriously difficult, subject to confusion and conflict of interest, and likely to lead to ineffectiveness in either role.

We must distinguish the jurisprudent from the advocate who, in the interest of a client, employs competent lawyering to reach serendipitously the heights of jurisprudence. As, for example, counsel for plaintiff in *Gottsdanker* [*7*] who, under the guise of warranty of fitness, imposed strict liability on manufacturers of vaccines and biologicals, thus demolishing at one stroke what Prosser called the citadel of privity, and the notion that in the manufacture of biologicals provable negligence is a prerequisite to liability. Or, counsel in *Darling* [*8*] who, mounted on a steed called *respondeat superior*, went crashing through the barrier which separated administrative from clinical acts of the hospital, bowled over the concept of the physician as an independent contractor, and impaled the hospital administrator on the lance from which once hung the innkeeper and the common carrier.[5]

[4] For those who care to refresh their knowledge of this concept, pp. 315–333 of Ref 6 provide a concise summary.

[5] In the process also destroying the locality rule for hospitals and stamping out final vestiges of charitable immunity in that jurisdiction.

These legal *tours de force* are, in professional context, worthy of our admiration. But exemplary as they may be of advocacy, they are not jurisprudence, in forensic or any other context.

Professor Graham Hughes used to tell his classes at Stanford that requisite to the jurisprudent was an ability to distinguish between the "ought" and the "is." The forensic advocate[6] works with the *is* of the event—the injury, the injured, and the liability law of a particular community and context.

For advocacy is not jurisprudence, and should not be. As has been said, the jurisprudent is an expert, ideally Olympian in outlook, less concerned with individual injustice than that the system should be sound. Such attitudes are anathema to the advocate, who wants to win his client's case, right now, and on the best terms possible. This is an ancient and proper orientation in the law. The jurisprudent is a theorist, concerned with symmetry and soundness; with how things *ought* to be. The advocate is a pragmatist, less concerned with generalities than with results.

Law students are often disturbed on being told that it is improper—and unprofessional—for the advocate to concern himself with justice; that the business of the advocate is to win his case. It is seldom possible for a single individual, especially the advocate in an adversary system, to determine where justice may lie. Hans Kelsen, who devoted a professional lifetime to the problem, admitted in his farewell lecture as an active member of the faculty at Berkeley, that he simply did not know [9].[7] Our entire legal system rests on the premise that justice—whatever this may be—is a product of the system rather than the case, and certainly not the product of individual counsel. Defenders of the adversary system—who to me appear to have the edge on its detractors—tell us that from the confrontation of capable champions on two sides of a controversy emerges a maximal accuracy of evidence. Thus, we have the requirement of confrontation and cross-examination and the mechanisms of admissibility and challenge, of impeachment and rehabilitation, of qualification and discreditation—all serving, in theory at least, as a crucible wherein is formed a legal fact, suitable to decision and impervious on appeal.

These are the functions of the advocate, and in the turmoil of the forum he practices jurisprudence at his peril. The jurisprudent, on the other hand, limits his authority to the degree that he becomes a champion, and loses that esteem which makes his opinion worth the listening. The jurisprudent is singularly ineffective as an advocate. What client wants a lawyer so steeped in ambiguities, so aware of both sides of the question, so conscious of the fine line between fact and presumption, as to be continually aware of the possible right and justice of his opponent's case? There are situations where an excess of intellectualization is a positive handicap, and this, like trauma surgery, is one of them. As Justice Holmes once remarked, the average man does not want justice, he wants to win his case. And he wants a lawyer who will help him do so.

Interrelationships of Jurisprudent, Advocate, and Expert

Every lawyer has a half-dozen favorite cases. In the context of the forensic sciences I have three, two already mentioned. I value *Gottsdanker* [7] because I teach pharmacy law

[6] This terminology still bothers me, but for want of better is used to refer to the advocate who occupies himself primarily with cases involving injury resulting from technological products or procedures.

[7] On p. 21 of Ref 9, Kelsen says:

"Absolute justice is an irrational ideal, or what amounts to the same thing, an illusion—one of the eternal illusions of mankind. From the point of view of rational cognition, there are only interests of human beings and hence conflicts of interests. . . .

"And indeed, I do not know, and I cannot say what justice is, the absolute justice for which man is longing. . . . I can only say what justice is to me . . . justice, to me, is that social order under whose protection the search for truth can prosper."

and find this case second only to *MacPherson v. Buick* [*10*] in delineating the responsibilities and liabilities of manufacturers. *Darling* [*8*] tells me more of hospital liability than I sometimes care to know. My third forensic favorite is *Washington v. United States* [*11*] because it states so clearly the proper relationship of the expert witness to counsel, court, and jury.

The *Washington* case concerns the defense of insanity for charges of rape, robbery, and assault with a deadly weapon. The insanity defense was not sustained by the evidence and the defendant was convicted, and appealed. In the Court of Appeals, D.C. Circuit, Judge Bazelon writing, *Held*, evidence supported finding that the defendant was not insane, and that in an insanity case the trial judge should limit the psychiatrist's use of medical labels such as "schizophrenia" and "neurosis."

The opinion traces the development of the insanity defense from *M'Naghten* [*12*] through *Durham* [*13*] to *McDonald* [*14*]. Judge Bazelon delineates with impeccable judicial clarity the respective functions of judge, jury, expert witness, and counsel in cases involving the testimony of experts. The opinion distinguishes the medical from the legal definition of insanity, looks beyond the opinion of the expert to the data base on which it is founded, requires explanation in lay terms of technical jargon, is critical of counsel for omission of available evidence and verbal obfuscation of evidence and issues, and is critical of the expert for the inconsistency—and sometimes the vapidity—of his explanations of the basis for his conclusions.

It may be of interest to know that Judge Bazelon reads the *Journal of Forensic Sciences*. He cites in this opinion Suarez's 1967 article [*15*] on psychiatric expert testimony in reference to the problem of the psychiatrist as a "thirteenth juror." In discussing the history of the *Durham-McDonald* rule, the opinion says (Ref *11* at 453):

> . . . We assumed that the expert could separate the medical judgments which he was supposed to make from the legal and moral judgments which he was not supposed to make. It has become abundantly apparent that this theory has not worked out.

Elsewhere the opinion states (Ref *11* at 451):

> . . . The chief value of an expert's testimony in this field, as in all other fields, rests upon the material from which his opinion is fashioned and the reasoning by which he progresses from his material to his conclusion. . . .

Finally, with an air of "enough is enough," the opinion ends with an Appendix in which is set forth a required *Courts Instruction to Expert Witnesses in Cases Involving the Insanity Defense*, with a statement (Ref *11* at 457) that its purpose is "that psychiatrists will be advised of the kind of information they are expected to provide, [And] to insure that counsel and jury are also so advised, the trial judge should give the explanatory instructions in open court to the first psychiatrist witness immediately after he is qualified as an expert."

I cite this case neither as precedent nor as criticism of the forensic psychiatrist, but rather as a superlative analysis of the problems confronting judge, jury, counsel, and witness in the use of expert testimony. It demonstrates with greater force and brevity than I can muster the difficulties which arise when the expert appoints himself a member of the jury, and when counsel presumes to expertise he does not in truth possess. The case might well serve as the basis of a postgraduate seminar on expert testimony. It provides an example of what I have attempted to define as forensic jurisprudence, and shows it at its best.[8] And, for whatever utility this may have, it also shows forensic advocacy at its worst.

[8] It also demonstrates Judge Bazelon as probably the most competent sociological jurisprudent sitting on the Federal bench today.

My argument from this case is that in a jurisprudence of the forensic sciences, the roles of advocate, of expert witness, and of forensic jurisprudent are distinct and separate. Their simultaneous performance by any single member of this triad leads at best to confusion and sloppy lawyering, and at worst to conflicts of interest and potential judicial outrage, in the long haul destructive to the development of a coherent and respected discipline of forensic science. Whether the forensic advocate, in the interest of a reasonable doubt, or in diminishing the weight of opposing evidence, is justified in flinging technological sand into the eyes of unsophisticated jurors, I am not personally prepared to say. It is an ancient question whether the necessities of the day justify the harvest of the future. Each professional must strike a balance between his immediate interest and the status of his profession.

The Forensic Jurisprudent: Conclusions and Suggestions

I have argued that the expertise of the forensic jurisprudent is in the application of technical data to the purposes of the law.[9] Based on ancient terminology and tradition, I have subdivided him, for working purposes, into forensic advocate and jurisprudent proper, the former a pragmatic counsellor, the latter primarily a legal scholar, theoretician, and consultant. I have suggested that while one man may perhaps at different times serve in both capacities, that to the extent that he permits confusion of these separate roles, he diminishes his effectiveness. I have urged that the lawyer who is also a forensic scientist must have mastery of the law of evidence, on the obvious premise that the most irrefutable of scientific fact is useless to the judicial process unless it can be rendered admissible, probative, and understandable by judge and jury.

In devising educational programs in the field of forensic jurisprudence, we need first to remember that jurisprudence, of whatever kind, is but a specialized area of the study and practice of law. It seems unlikely that a student will aspire to the field of forensic jurisprudence who is not already inclined, if not to lawyering, at least to law. Our candidate for training is thus most likely to be either a young lawyer or a recent graduate in law. Not every lawyer is suited to forensic jurisprudence; something more is required than those attributes which make for general competence in law. The practice of forensic jurisprudence requires sufficient breadth and flexibility of mind to comprehend technology, the type of intelligence which can deal simultaneously and comfortably with scientific causality and proximate cause.

The truly competent forensic jurisprudent must somehow encompass within himself what the writer-scientist C. P. Snow has called "two cultures": the humanistic and the scientific [*16*],[10] if he is to be sure of his footing on both sides of the interface at which he will spend his professional career. Law is essentially a humanistic profession, more concerned with man and the human condition than with the defining and measuring of things. The better law schools are aware of this, and there has been a recent movement toward curricular revisions designed to broaden the perspectives of the lawyer, and in partial response to complaints from lawyers and public alike that the lawyer is too often an intellectually inbred practitioner of a trade, immune to social values and impervious to information which does not fit the models of his discipline. Efforts to increase the humanization of the lawyer require our sympathy, conducted as they are in the face of demands for shortening of the formal curriculum, and confronted with the clamor of pragmatic students

[9] An obvious definition of the forensic jurisprudent, should one be needed, is: A legal expert in the use of technical data in the judicial process.

[10] The original dichotomy was between the scientific and the "literary intellectual." The latter category was subsequently redefined by Snow in terms of the "humanities," particularly in the United States.

and the organized bar for more emphasis on "clinical"[11] training in the nuts and bolts of practical lawyering. Schools of medicine have determined similar objectives and are having analogous problems. To the extent that these can be solved in medicine and law, the tasks of forensic jurisprudence and the training of its practitioners will be made easier.

Law practice in our technological society is as different from the county courthouse practice of yesterday as the professional work of an astronaut differs from the tasks of a bargeman on the Erie Canal. Recognition of technologically induced changes in the work of the practicing lawyer has been slow in coming to even the better of our law schools, many of which continue in curricula whose content appears based on an assumption that the Industrial Revolution has not occurred, or if it did, was limited to a minor skirmish in some outlying province of the law. The time is long overdue for inclusion in the law schools of specific teaching in the methodology and the value systems of mensurative science. Such courses are a requisite, most commonly in seminar form, in our better graduate schools of science. For, as lawyers are taught to think like lawyers, scientists come to think like scientists, and such thinking can be taught, and learned. Such teaching in the law school would come most effectively in the third year, when the student has sorted out the common patterns of legal thought but before these have congealed into a permanent bias, excluding other constructs of man's relation to his environment.

In discussing science teaching in the law schools, I have perhaps poached slightly on what are not properly my own preserves, since our present interest is primarily in the training of the forensic jurisprudent. My argument, however, is not for moving his training into the law schools, or for training all lawyers in a smattering of his discipline. It is rather a recognition that the work of the forensic jurisprudent is that which any lawyer may be called upon to do from time to time, however well or badly, and that all lawyers need, at minimum, an understanding of the conceptual bases on which are determined the interrelationships between science, society, and law.

The formal training of the forensic jurisprudent should be considered a graduate program, building on a basic training in the law, and of such intellectual content as to qualify the candidate for an LLM or equivalent degree. So far as outline content is concerned, I would place first and early a course in *criminology*, as orientation to the sociological bases of existing systems for maintaining social order. The basics of this discipline can be taught in relationship to traditional courses in criminal law, and a few law schools have begun to move in this direction. For practical introduction to the work of the forensic jurisprudent, I would place next a course in *criminalistics*, not only for its general utility, but because the discipline is practiced largely in the so-called "crime labs," or forensic laboratories, where analysis and identification of physical evidence, including that related to the biological sciences, provides a veritable smorgasbord of science as applied to law.

These preliminaries aside, I would require the candidate to spend a minimum of three months in the office of a medical examiner, working at both desk and autopsy table, for necessary exposure to pathology, forensic medicine, and various subdisciplines of forensic biology: toxicology, hematology, immunology, pharmacology, anthropology, and the like. Here also can be included sufficient instruction in gross and microscopic anatomy, with the laboratory readily at hand. In addition to practical experience in forensic biology, a period of time in the medical examiner's office would also provide a practical exposure to courtroom procedure as it relates to technical evidence and expert testimony.

Such a program may seem too practical, even pedestrian, to the true enthusiast, for it creates no new worlds, suggesting only a structured utilization of existing courses and

[11] This is an unfortunate but growing usage of the term. The word comes from the Greek *klinikē*, and means medical treatment at the bedside, from *klinē*, bed.

training modes in and out of the university, held together by a common concept and aimed at the production of expertise in a specialized field of law. It has the advantage that there are already available in the American Academy of Forensic Sciences personnel and facilities to implement such training and to certify those candidates who complete it. I believe the basic program could be completed in a single year, particularly if more general and didactic material could be offered as electives within the law school.

Beyond a first year, further training should be specialized, in accordance with the interests and aptitudes of the student. And here again the Academy could play a part, if only in getting the right persons and facilities in contact with each other.

I do not believe our graduate would lack gainful employment. If advocacy is his field, he will have acquired in a single year a substantial expertise in the basic techniques of forensic science, of general utility in almost any field of law. Should he become a theorist, and disappear behind the ivied walls, the literature of academia should be to that degree improved. Whether he elects advocacy or academia, the forensic jurisprudent is a legal specialist whose time has come. The *Journal of the American Bar Association* for February 1973 [*17*] contains the report of a survey of 2300 attorneys active in the area of natural resources and environmental law. A primary consensus of the survey is that communication between scientists and lawyers is inadequate and that there is a need for interdisciplinary programs to broaden the perspective of both lawyers and scientists. Although concerned primarily with environmental law, respondents to the survey were highly critical of scientists in terms all too familiar to lawyer-members of this Academy: "Scientists tend to specialize in professional subareas and the positions they advocate fail to recognize the broader general implication. . . . Scientists do not understand the role of law or the nature of law in resolving societal problems." The report concludes with arguments for interdisciplinary curricula in institutions of higher learning, and for symposia bringing lawyers and scientists together; it urges professional associations to assume leadership in developing interprofessional communication, and points to the support of this concept by Federal funding of interdisciplinary and interprofessional programs.

At risk of being hanged in effigy by certain of my confreres in medicine, I dare to suggest that a forensic jurisprudent, trained in such a program as I have outlined; understanding the methodology of science and the essential data bases and techniques of toxicology, hematology, pathology, and physical evidence; acquainted with the sociological aspects of criminology; and familiar with evidence, courts, and procedure could serve to alleviate the presently irremedial shortage of forensic pathologists. He could relieve these scarce practitioners of legal and administrative tasks they do because they must, with loss of professional time which could more profitably be used in the practice of their primary discipline. Such a reallocation of professional tasks might permit placing on an official, ongoing basis the present *ad hoc* sharing of trained forensic pathologists by jurisdictions unable to find one of their own.

In the conversion of coroner's offices to those of medical examiner, a project of continuing medical and political interest, I am by no means certain there is not a middle ground with a forensic jurisprudent somewhere in a Department of Public Safety, holding the whole thing together, interrelating scientific and technical investigation, comprehending the necessary expertise, seeing that the right things are done by the necessary expert, and insuring that the evidence is as adequate and as valid as science can make it. Consideration should be given to the possibility that the most appropriate director for a truly regional forensic laboratory might well be the lawyer with graduate training in forensic jurisprudence.

The pieces are there, if we can but put them together in some coherent pattern. There is no shortage of technical expertise in these United States. On every campus in the country can be found teachers and researchers in chemical, physical, and biological science who have not even heard of forensic science. Among them are competent and potentially interested persons who, if welcomed and instructed in the legal aspects of their disciplines, and their expertise properly solicited and monitored, could do much to resolve our present social crisis: man in conflict with his technology.

It is my personal conviction that here lies the future of the American Academy of Forensic Science, its social purpose, and the reason for its being. There are young lawyers out there, if we can but contrive to reach and teach them, who can serve themselves and their society in a personally and professionally satisfying career in forensic jurisprudence, at the interface of science and the law.

Summary

This paper examines the role of the lawyer as a forensic jurisprudent. The historical distinction between the legal theoretician as scholar, teacher, and consultant, and the legal advocate as champion of his client's cause, is reviewed. This dichotomy is examined in the context of forensic science. Interrelationships between the trial lawyer, the expert witness, and the forensic consultant in the evidentiary process are discussed. Confusion between incompatible roles of the lawyer in the field of forensic science is suggested as a factor in many of the professional, ethical, and legal problems which have arisen in cases turning on scientific and quasi-scientific evidence in the past. Analogies are drawn to similar problems in the field of forensic psychiatry. A definition of the forensic jurisprudent in terms of his alternate roles is offered and suggestions as to educational programs to improve his function in the judicial process are made.

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Student Health Center
University of Arizona
Tucson, Ariz. 85721