

MEDICAL WITNESSES IN WORKMEN'S COMPENSATION

IVAN C. RUTLEDGE†

The essential characteristic of workmen's compensation schemes has been their elimination or de-emphasis of the notion of fault on the part of the employer.¹ One of the intended effects of the elimination of questions of fault was to accelerate the disposition of contested cases, as well as to make it easier for the workman to obtain benefits in at least some amount. Questions of fault having been either eliminated or largely reduced, the focus has shifted to medical questions—the nature of the injury or disease, its relationship to the employment, and its disabling effects. In the current outlook of our secular society, there is little or no authoritative morality except as it is pronounced in law by politically selected officers, so questions of fault are peculiarly adapted to resolution by adversary litigation. In medicine the contrary is generally true, the authority of Science tends to sustain the pronouncements of one who can claim its authority on the strength of his profession. Processes of litigation as we know them today were developed in the context of questions of fault, but such questions have receded in workmen's compensation and, although litigation was transferred to newly invented tribunals, it was preserved. So it is that litigation has been preserved for the resolution of medical questions, for which it is ill-adapted. It is not necessary to demonstrate that litigation looks most clumsy when it undertakes to deal with questions of expert opinion.² It may be possible, however, to

† Professor of Law, Indiana University School of Law. This paper was presented to the First Wisconsin Conference on Work and the Heart, Wisconsin Heart Association and Marquette University School of Medicine.

1. An alternative emphasis has been placed upon their function as part of a system of income protection by insurance, a philosophy especially germane to calculating the monetary level of benefits and calculating disability by occupational rather than physical or mental impairment. See Larson, *Changing Concepts in Workmen's Compensation*, 14 NACCA L.J. 23 (1954), Riesenfeld, *Contemporary Trends in Compensation for Industrial Accidents Here and Abroad*, 42 CALIF. L. REV. 531 (1954).

2. For example, in *Flowers v. State*, —Ind.—, 139 N.E.2d 185, 196 (1956), the court approved this instruction. "the law of Indiana recognizes temporary insanity. You are not to be influenced by the statement of any medical physician who testifies, if they testify that there is no such thing as temporary insanity. There is a distinction between the definition of temporary insanity in the law and in medicine and it is the law in Indiana that if a person is temporarily insane at the time of the commission of the alleged act then you must find him not guilty." Of course no court would so reprobate medical testimony that there is no such thing as being bewitched, even if the code denounced witchcraft as a crime. Cf. *Reg. v. Machekequonabe*, 28 Ont. Rep. 309 (1898), taking judicial notice that there is no such thing as a *Wendigo*, or evil spirit, clothed in human form which eats human beings. See also *Thayer, Trial by Jury of Things Supernatural*, LEGAL ESSAYS 325 (1908).

examine the administration of workmen's compensation to determine what, if any, opportunities it may afford for somehow avoiding the notorious battle of the experts.

Three parts of the problem may for convenience be taken as ways of seeing into it. First, the determination of the nature of an injury or disease with particular reference to its connection with an employment, and to some extent with reference to the extent of its disabling effects, depends in large part for its reliability upon the accumulation and preservation of information upon which medical inferences leading to the determination must be based. Second, the reliability of the determination may, in some of the most difficult cases, equally depend upon the quality of expert opinion brought to bear on the data that have been accumulated and preserved. Finally, even with the most thoroughgoing processes of investigation and recording, and the employment of the best current medical opinion, the final results may be unsatisfactory unless the method of organizing the processes by which expert opinion is brought to bear upon the data is such as to provide safeguards against its misapplication. These aspects, then, (1) the accumulation and preservation of information, (2) the mobilization of expert opinion, and (3) the organization of the methods by which it is brought to bear upon the information, are the three windows chosen here for a view of medical testimony in the administration of a plan of workmen's compensation.

Although questions of fault are less prominent and questions of medicine more so under workmen's compensation plans, it would be a mistake to suppose that the conclusion should be in favor of placing their administration in the hands of medical referees or panels. Perhaps the most significant argument for lay administration can be suggested by relating an episode in *Jenkins v. Industrial Commission*.³ A workman was handling an automobile battery when it exploded, causing him to jerk his head back suddenly and slap at his eyes with such force that the frames of his spectacles were bent. Three weeks later an operation to correct a separation of the retina in his right eye failed, and he subsequently received compensation for loss of vision in the right eye. Four months later a physician observed loss of vision in the left eye, which he estimated as 75%. In proceedings for compensation for injury to the left eye, the commission appointed three eye specialists to examine the record in the case and give an opinion on the relationship of the accident to detachment of the retina in the left eye. In their report they said:

3. 77 Ariz. 377, 272 P.2d 601 (1954).

"The files state that Mr. Jenkins (1) was a high myope, (2) had bilateral cataract extractions, (3) had bilateral capsulotomies, and (4) had peripheral retinal degeneration of the left eye between 5 and 7 o'clock with many vitreous floaters, as indicated in Dr. Irvine's report . . . 4 months after the injury, and at which time no evidence of detachment was found.

We, the undersigned, feel that (1) the above findings are more contributing causes of a detachment than was the indirect injury, and (2) since no evidence of detachment was found 4 months after the injury that the resultant detachment 2 months later, or 6 months after the injury, was due to pathological disorganization of the retina rather than to trauma. *We feel that the Commission was very generous and liberal in accepting the detachment of the right eye as compensable as all these types of cases present an element of doubt.* We are of the opinion that the detachment of the left eye is not related to his injury whatsoever."⁴ (Emphasis added)

On the other hand, the other doctors, who testified by deposition, found a probable connection between detachment of the left eye and the injury. No point is made here whether obtaining an opinion by written report is less reliable than obtaining an opinion by testimony subject to cross-examination. It is also unnecessary to characterize the language italicized above as representative of medical opinion in any degree. The question is how this language aided the triers of fact to reach a decision. On the one hand it suggests that the commission had erred in the other case and that both cases were subject to the same or a similar degree of doubt. Thus the expression can be taken as a way of advising the commission about the degree of doubt that obtains on such an issue as a general scientific fact. On the other hand it suggests that the commission should make compromise awards in doubtful cases. That is, when there is doubt whether several injuries should be attributed to an industrial accident, compensation should be awarded for less than all of those injuries instead of resolving the doubt as to each of them. This interpretation of the italicized language amounts to an interpretation of the statute, which is not within the special competence of a medical expert. It therefore casts doubt upon the reliability of the medical opinion given, that the separation of the left eye was not connected with the ac-

4. 77 Ariz. 377, 381, 272 P.2d 601, 603 (1954).

cident, because this may be a legal, or medico-legal, rather than medical conclusion.⁵

The use of medical experts as triers of fact is of course subject to numerous objections in addition to the risk that the medical opinion may be consciously or unconsciously affected or displaced by a legal opinion, without adequate procedural machinery to determine the accuracy of the legal opinion.⁶ The day-to-day work of administrators of compensation, although it does not deal extensively with questions of fault, is devoted to administrative processes that much of the time require no medical expertise. Among these processes are those that serve the first function mentioned above, the accumulation and preservation of information. In the *Jenkins* case⁷ the history prior to the explosion was near-sightedness as long as the patient could remember, and an extra capsular cataract extraction performed on the right eye five years before the explosion, with post-operative experience of irritation, redness, and pain for some time. The certainty of opinion could have perhaps been improved, especially with reference to the right eye, had it so chanced that medical examination had intervened between the operation and the explosion, and the nearer to the explosion the greater the probability of consistent medical opinion expressing a high degree of confidence in the existence or non-existence of connection with the explosion.⁸

5. The court, from a comparison of the opinions, directed the commission to set aside its order denying compensation, one justice dissenting. 77 Ariz. 377, 272 P.2d 601 (1954).

6. What professional qualifications could be hired for the salaries paid compensation commissioners? Would the possessor of medical qualifications be content to spend his days deciding issues that require no specialized knowledge and giving a fair hearing to the parties to those issues?

7. 77 Ariz. 377, 272 P.2d 601 (1954).

8. The function of expert opinion on the relationship between two events is to establish its existence or non-existence within a described range of certainty. The trier of the fact is then to determine what has been established with what degree of certainty and resolve any doubts accordingly by a finding of fact, or perhaps by a denial of a finding of fact. Legislatures and courts seek to maintain legal control over this process by the creation and application of presumptions and burdens of proof which prescribe degrees of certainty, such as "preponderance of evidence," "substantial evidence," "scintilla of evidence," "speculation and surmise," "clear and convincing evidence," "evidence beyond a reasonable doubt."

These verbal legal controls constitute an effort to objectify what is inevitably a subjective process, the process of resolving doubts that arise in the face of incomplete knowledge. This "resolution" of doubts after all available information is in, if deliberate rather than impulsive, can be thought of as a process of reasoning them away, or putting them out of attention for purposes of decision, or of concentrating upon them to the exclusion of inferences that might be drawn in their absence. The purpose for which the decision is to be made, *e.g.*, payment or denial of payment, radical or conservative treatment or no treatment at all, further exploration to obtain further knowledge, etc., will influence the trier of fact, and as explained in connection with the *Jenkins* case, may influence the witness, regardless of verbal legal controls. Litigation is no less than a procedure for raising and evaluating doubts, and when witnesses anticipate the trier of fact by an

I. Accumulation and Preservation of Information

Economic considerations limit the activity of collecting information that may improve prospects of certainty in determining causes of disability. It would be wasteful to conduct medical surveillance of all employees on a level that assumed that all of them would become parties to contested cases concerning their disabilities. A scheme of workmen's compensation does, however, apply to a situation that is clearly enough defined to make it administratively feasible to maintain a system of accumulating information. The existence of an employment relation itself yields certain records such as payroll records which may be sufficient to show days, and even hours, on the job. Administration of claims provides records for the future of facts gathered on previous investigations. Public offices outside the compensation system, such as courts, public health, and vital statistics and coroners' offices, may have information. Hospitals and medical and legal practitioners' offices are additional repositories, although some of this information may be confidential. Initiative of the employer in requiring medical examinations upon being hired and occasionally or periodically thereafter can give information that may become useful.⁹ This regime, because of considerations of economics and employee relations, should be selective in approach, so that intensity and frequency of examination are guided by the apparent needs of the case. For example, there may be a correlation between absenteeism and compensation neurosis.

Many compensation systems include a requirement that the workman report the occurrence of an injury to his employer. Although by the time of the injury badly needed information may be lacking, it may have been impossible or impracticable to have exercised sufficiently selective foresight to have assured an adequate record of such information. Yet certainly upon the occurrence of an injury a specific signal for selection is important. It may be impossible then to gauge how important it is to select the injured employee for development of his medical history, but without the signal another opportunity for obtaining greater reliabil-

opinion that evaluates what ought to be the disposition of the case as distinct from an opinion that describes the degree of doubt on the issue, the procedure is perverted. The "ultimate fact" rule, now properly under general attack, presents a related question. See Ladd, *Expert Testimony*, 5 VAND. L. REV. 414, 423-25 (1952), for a discussion leading to the conclusion that a violation of this rule is an "imaginary error."

9. For a reference to the "current hiring practice" of conducting a thorough medical examination and investigation of the medical history for latent physical conditions, see Comment, 44 CALIF. L. REV. 548 (1956). The Comment points out that the rule in California gives impetus to this practice because it imposes risk of greater liability upon employers in cases where the workman is apparently well but is really not than in cases where he is obviously suffering some disability or where he is actually in good health and sound condition.

ity of medical opinion will have been lost.

The main problem in administering this requirement is how much notice of injury must the employee have had before he is obliged to report it to his employer. In most jurisdictions the period within which the report must be made does not begin to run until the injury manifests disabling effects.¹⁰ This means a possible time lag within which the opportunity to obtain valuable information is lost, unless there is an examination by chance. Moreover, the statutory period itself constitutes a similar risk of lost opportunities. The purposes of the requirement, however, to enable the employer to provide treatment that will minimize the seriousness of the injury, as well as to make possible an early investigation, must be balanced against the hardship¹¹ that would be imposed upon the workman if a shorter period were given or if he were required to have a degree of foreknowledge of disability that could not be expected of him. The latitude afforded the workman by the requirement as it is usually made argues for a program of health and safety education on the job that includes encouragement of voluntary reporting to an office or aid station, where the information will be intelligently handled and followed up when professional investigation or treatment seems to be indicated.

The accumulation and preservation of information upon which expert opinion can be based begins in an intensive fashion when treatment begins, or at the latest, when a dispute about liability or extent or permanence of disability has reached such a point in litigation as to make it necessary. The most prominent issue for medical testimony is the connection between the work and the injury, with its disabling effects. Professor Small has emphasized that the consideration of employment as a "risk factor" in disablement is uncongenial to the medical discipline, which looks for "cause" in etiology.¹² The factors that range beyond pathology are outside the responsibility of the doctor as a scientist, although it may be that diagnostics can never entirely dispense with a de-

10. *Contra*, under the Longshoremen's and Harbor Workers' Act, at least when the workman is aware of some injury. *Pillsbury v. United Eng. Co.*, 342 U.S. 197 (1952). Other cases to the contrary are found in North Carolina, Illinois, Kentucky, and Pennsylvania, under statutes that prescribe the beginning of the period as the "accident." Oklahoma and North Dakota also start the running of the period with the "injury" regardless of apparent effects. See 2 LARSON'S WORKMEN'S COMPENSATION LAW § 78.42(b) (1952). The period ranges from 24 hours to 6 months when specified in terms of a quantity of time. A few jurisdictions further specify a maximum term to which delay may be excused, ranging from 30 days to a year. Some statutes say "immediately," "forthwith," or "as soon as practicable." *Id.* at App. C., pp. 554-55.

11. "Shocking injustice," according to *Panchak v. Simmons Co.*, 15 N.J. 13, 103 A.2d 884, 891 (1954).

12. Small, *Gaffing at a Thing Called Cause: Medico-Legal Conflicts in the Concept of Causation*, 31 TEXAS L. REV. 630 (1953).

gree of autonomous, free-hand detective work. It is beyond the qualifications of the writer as well as the scope of this paper to explore the approach of either the clinician or the expert to whom a subject is referred for examination pending litigation. Two aspects of the problem of accumulating information at this stage must however be emphasized. One is the desirability of a high degree of completeness of investigation and the other is the necessity for systematic and durable recording of the information obtained.

Ideally, when for the first time a potential medical witness examines a workman in the context of possible industrial injury or disease, existing information relevant to establishing what it is and whether it is connected with employment should be collected at one place. This "clearing-house" function is essential for purposes of litigation, even when diagnosis is obvious from objective findings alone, although in such cases, assuming that such cases occur, the history elicited from the workman may be summary and other types of information, such as that contained in hospital records or records of other doctors, may be explored only to the extent of identifying their sources. At the other extreme are cases in which the most sweeping and random techniques of exploring the past are called into play; the workman is searchingly cross-examined; the recollections and records of members of the family, associates on the job and elsewhere, other doctors and professional men, public offices, hospitals, etc. are searched; information is compiled in minute detail with rigid adherence to the form in which it was originally cast; the physical examination is detailed and comprehensive, employing tests and tactics that may be expensive and even impose risks on the workman; extensive resort is had to the laboratory, and specialists and consultants are drawn into the investigation. Medical investigators will appreciate the significance of those two extremes because they superficially indicate the range of measures that are appropriate as guides for treatment. The prospect of litigation merely opens up more lines of relevance than when only the question of treatment is in view. The universe of investigation in workmen's compensation adds the question of employment as a risk factor in whatever disability may be feared from the injury or disease that is revealed.

Little needs to be added for present purposes concerning records of these investigations. The principle is that the memory of the examiner is unreliable, at least without means of "refreshing" it, and the labor that went into the investigation should not be wasted for lack of a system for finding the records, lack of a record of what could easily be recorded at

the time, or lack of durability of the record.¹³

The object of gathering such information as will obviate unnecessary resort to inference, expert opinion, and surmise justifies the suggestion that medical practitioners will respond to a social obligation to find out whether litigation; either of a tort or workmen's compensation claim, is likely to be involved, and, if so, to investigate for litigation as well as treatment. Of course it is the duty of the lawyer also to investigate for litigation, but his investigation will be more fruitful, and litigation may be avoided more frequently, if it can build upon prior medical investigation that was timely and under expert direction. The responsibility of the doctor to whom a workman is referred for examination in view of litigation is clear; and especially when the referral is partisan it is with equal clarity the duty of the lawyer to contribute what he can to extending the scope of investigation in the directions indicated by the needs of litigation.

The statutes generally require the workman to submit to examination, although they vary as between examination by a medical practitioner selected by the board and one selected by the employer or insurer. Many of them are deficient in that they lack provisions requiring post-mortem examination and allowing for exhumation in proper cases.¹⁴ The importance of autopsy information is great enough to justify explicit statutory rules regulating the balance between the need for information and the sensibilities of the survivors.

II. Mobilization of Expert Opinion

"Our inexpert use of experts"¹⁵ presents the paradox of the layman evaluating the qualifications of the professional. The necessity for skilled assistance in the trial of a factual issue was born of an awareness that the common knowledge and experience of jurors would not be adequate to deal with the issue. This awareness, and this claim of qualification, under present practice, arise from partisan assertion of the deficiency of common knowledge, and partisan proffer of qualifications that will fill the gap.

The issue of the need for expert assistance may be illustrated by *Thoreau v. Industrial Accident Comm'n.*¹⁶ The workman in the course of his employment sustained a violent blow in the pit of his stomach

13. See PHYSICIAN IN THE COURTROOM 78-80 (Schroeder ed. 1954) for a 13-point checklist for records.

14. See *Petition of Sheffield Farms Co.*, 22 N.J. 548, 126 A.2d 886 (1956).

15. Weihofen, *An Alternative to the Battle of the Experts: Hospital Examination of Criminal Defendants Before Trial*, 2 LAW & CONTEMP. PROB. 419 (1935).

16. 120 Cal. App. 67, 7 P.2d 767 (1932).

from the end of a large timber. After that time he suffered intense pain in the stomach area and was unable to keep food on his stomach or to do any work. A complete clinical review revealed to the specialist to whom he was referred a pyloric stenosis, or narrowing of the opening from the stomach into the small intestine. Now if a non-medical witness had undertaken to testify to the existence of the pyloric stenosis, it would certainly have been required that he make some showing of his ability to perceive or infer it. This showing would have had to take the form of evidence of special experience, because it can be judicially noticed that common experience does not enable witnesses to detect pyloric stenosis. That is, the tribunal can judicially know the meaning of the term in a general way, sufficient to raise serious doubts, at least, whether a witness without special tutoring or experience would perceptually recognize a pyloric stenosis. It would probably be beyond all doubt to the tribunal that such a witness would be unable to find one by inferential means such as judging signs and symptoms or conducting tests. The existence of a broken finger might or might not be recognizable from common experience, and in this case the tribunal might require expert assistance to determine how doubtful the case was.

Thus, the paradox of lay determination of the qualifications of experts is compounded by the paradox of lay determination of the need for experts. Although both issues are addressed by partisan assertion and denial, it can be seen that logically there is an infinite regression here: the determination of the qualification of experts or the need for an expert calls for expert assistance, which in turn calls for an expert to determine the expertness of the assistant, etc. Dean Wigmore characterizes rules of expert qualification and their administration as finicking matters which should be left exclusively to the discretion of the trial judge without appellate review.¹⁷ As it seems to be generally true that this is the case, with the result that the qualification of an expert is rather a perfunctory matter procedurally unless the advocate who produces him prudently chooses to make careful adduction of his qualifications. The scene of combat shifts to efforts to disqualify particular answers and weaken the weight of the expert testimony given. Furthermore, in most cases, as in the case of the "unobviously" broken finger or the pyloric stenosis, lay knowledge is so clearly imperfect as to make the need for expert assistance apparent.

The pit-of-the-stomach case also involved an expert conclusion that the cause was unrelated to the blow and was attributable to a pre-existing ulcerous condition. So far, if there had been no blow and the pre-exist-

17. 2 WIGMORE ON EVIDENCE § 561 (3d ed. 1940).

ing ulcerous condition had been patent, the lay mind probably would have reacted favorably to the suggestion that a doctor should be called in to verify the existence of a connection. However, it was taken as a fact that the ulcers, although they pre-existed the blow, were asymptomatic. How this fact was established is not clear from the report of the case, and the reader is left to speculate whether timely investigation might have revealed a pre-existing pyloric stenosis. The layman's *post hoc, ergo propter hoc* thus is bolstered by the evidence of a blow falling on the very part of the body that becomes symptomatic. Not much belief in witches is required to convert sequence into consequence here.¹⁸

There were two weaknesses of the expert opinion, one that the specialist made a written report and did not appear for cross-examination, and the other that the specialist was retained by the employer. The technique of the court was to find that the opinion was not based on a consideration of the fact that the existing ulcerous condition was asymptomatic and that disability began immediately after the blow. It may be true that the opinion was narrowly confined to physical examination regardless of history, but if it is true, it is easier to accept because the specialist was not a witness, the scope of whose opinion could be freely explored at the hearing so that it could not be misunderstood. Perhaps also it is easier so to interpret the opinion because of a possible inference that the witness was sufficiently partial to his employer to put on blinders that would confine him narrowly to his specialty. Finally, there was apparently no expert testimony to advise the court whether medical knowledge could help the court to make or refuse to make the connection between the blow and the disability, or whether so far as medical expertise is concerned this was an imponderable, to be disposed of as an ordinary issue of fact. Logically, there are four possibilities. Given these facts medical knowledge is (1) competent to infer that the disability was the exclusive product of the blow, (2) competent to infer that the disability was within certain limits of probability attributable to the blow within certain degrees of intensity of connection such as "aggravating," "lighting-up," "precipitating," etc., (3) competent to infer a complete absence of relationship to the blow, or (4) incompetent to add anything to common experience that would be significant. If the opinion had been regarded as founded on all the believable evidence, it would of course have carried with it advice from the expert by implication that the court needed expert advice on the merits. The position of the court in drawing an inference of connection carries with it an implied holding

18. The court did. *Thoreau v. Industrial Accident Comm'n*, 120 Cal. App. 67, 7 P.2d 767 (1932).

that expert advice was dispensable, a doubtful conclusion even if there had been no expert opinion in the case. But the point is that it is unsatisfactory to leave it initially to the party having the burden of proof and ultimately to the tribunal to decide without expert assistance whether expert opinion is indispensable.

Also, it is unsatisfactory to rely upon partisan experts both for advice that they are needed and for advice on the merits. A specialist who does not believe his advice will be helpful and cannot be so persuaded is not likely to be offered. If an expert is offered, then, one result of his presence in the proceeding is likely to be an increase in the burden of proof, and the injured workman or his beneficiary is more likely to need an expert witness than if the employer or carrier had not offered one. Moreover, with the multiplication of partisan experts, the probabilities diminish that any expert will be found to advise against the usefulness of expert advice on the merits, even in a case that may appear to be close to common experience, or, at the other extreme, appears to be beyond specialized knowledge, from the jangling contradictions of the supposed experts. "Isn't there an old rule which suggests that a question never be asked to which the answer is not known?"¹⁹ Answer: The answer to this one is not known, unless someone discovers its existence; proof of non-existence of a rule is hard to develop, when there are no spatial or temporal limits to the search, and the conceptual limits are vague. However, it may be confidently asserted that enlightenment consisting of a report that the answer is not known may be most helpful to a tribunal faced with the problem of giving an answer one way or the other. Many of the "technicalities" of litigation are concessions to the shortness of life.²⁰

Three weaknesses of partisan selection of experts may be distinguished. One is the absence of special skill to evaluate claims of expertness. Another is the suspicion of bias. Finally, there is the improbability of disinterested advice as to the helpfulness of expert advice. Partisan legal advice is not subject to these objections because the judiciary, with its familiarity with law-ways, is able to estimate the need for help to evaluate the qualifications of the advocate, and to discount the partisan influence. Moreover, so far as the partisan influence is concerned, the method is designed to recognize simultaneously divergent views, whereas

19. Hammon, *Explosion Damage Cases: Insurance Procedure and Expert Witnesses*, 43 A.B.A.J. 135, 185 (1957).

20. "The conditions under which the tribunal is required to conduct its inquiries, the limits of time and of the means of investigation, are such as no scientist would tolerate." Morgan, *Suggested Remedy for Obstructions to Expert Testimony by Rules of Evidence*, 10 U. CHI. L. REV. 285 (1943).

in matters of fact the scientific acceptance of general propositions as only provisional can hardly go so far as to contradict the basic assumption of an existing consistent external Nature. Hence the incongruity of a "battle of the experts" in which conflict of opinion evokes suspicion of bias or false pretensions of knowledge or both, and men of integrity and ability in their own fields are arrayed in false colors, many times to their pain and disgust.

These difficulties can be overcome in part by specialization of workmen's compensation tribunals. Even if they are not recognized as having a degree of specialized knowledge that entitles them to a scope of official notice that contracts the area of controversy,²¹ their specialized knowledge can be brought into play in other ways. By a process of self-education they can determine with greater precision than, say, a judge who less frequently deals with medical questions, not what the "going medical rules" are, but what help the sciences of medicine can give. By a process of acquiring familiarity with the reputations of medical practitioners and others who may be called as expert witnesses, they can obtain insights for the evaluation of qualifications of expert witnesses. So long as their decisions are binding on judicial review in terms of the substantial evidence formula it will not greatly matter, except to save time in the proceedings, whether the evaluation of qualifications is expressed in a decision on qualification of the proffered expert or in a decision on the weight of his evidence. The point is suggested by an observation of the court in *Giant Grip Co. v. Industrial Comm'n.*²²

"Counsel for appellants remind us that counsel for the commission, contending for a different rule in the *Merton* case, supra, argued that to insist on such a requirement [the apportionment of disability among successive employers] was to demand the impossible, for a credible medical witness would not venture to apportion the cause of disability with sufficient certainty among successive accidents. It is clear from the present record that counsel underestimated the daring of doctors and the credulity of commissions."

It has been justly observed that a doctor who has studied medicine and observed patients primarily in terms of therapeutics may not be qualified to say whether injury can produce a certain disease, but that if he goes to court to accommodate an old patient he may be qualified as a thoroughgoing expert and find it hard to confess the limits of his

21. *McCarthy v. Ind. Comm'n.*, 194 Wis. 198, 215 N.W. 824 (1927).

22. 271 Wis. 583, 74 N.W.2d 182 (1956).

knowledge.²³ The provisional character of scientific findings and their constant revision under conditions of modern research render it unlikely that the best current knowledge will be widely diffused and more likely that it will be obtainable from highly specialized students of a narrow field. The problem is how the officers charged with administration of workmen's compensation may best draw upon these resources. In the solution of this problem the contribution of the general practitioner, who is more likely to have collected and recorded or remembered the information that depends upon direct perceptual knowledge informed by the medical disciplines,²⁴ must not be ignored or discounted. The narrow specialist called in at a later time cannot be expected to supply reliable information when gaps in information that should have been obtained earlier stretch out the chain of inferences he is asked to make.

III. Organization

The realm of currently advancing knowledge can be made available by organizing the methods by which expert opinion is brought to bear upon information. The traditional method in court is by the use of the hypothetical question.²⁵ Among its advantages are the employment of experts who have no way of knowing the truth of the facts assumed in the hypothesis, with the consequent specialization of functions as between them and other witnesses, and the opportunity of obtaining opinions from a given expert upon alternative assumed conditions. Among its disadvantages are the complex shape some hypothetical questions take and their extreme prolixity, or on the other hand, the vagueness with which others are framed, with the result in both cases that it is difficult for the auditor to have in mind the exact state of facts to which the opinion is addressed, if indeed it is not difficult to appreciate that the expert thoroughly understands the question. For the courts, the Model Code of Evidence and the Model Expert Testimony Act have shown the trend of thinking in favor of greater flexibility in specification of the hypothesis, to avoid the confusion attendant upon prolix questions,²⁶ and the desirability of court-appointed experts.²⁷ The policy with respect to appointment of witnesses by the court seems to be to avoid the difficul-

23. Smith, *Scientific Proof and Relations of Law and Medicine*, 10 U. CHI. L. REV. 242, 247 (1943).

24. Contrast the approach, framed presumably in terms of a lay witness oblivious to the possibilities of litigation or other need to recall, described as *Stimulation of W by the Event*, in Cleary, *Evidence as a Problem in Communicating*, 5 VAND. L. REV. 277, 283-87 (1952).

25. Busch, *The Hypothetical Question*, 3 J. PUB. L. 550 (1954).

26. McCormick, *Some Observations Upon the Opinion Rule and Expert Testimony*, 23 TEXAS L. REV. 109 (1945).

27. *Ibid.*; Ladd, *Expert Testimony*, 5 VAND. L. REV. 414 (1952).

ties inherent in a rigorous exclusion of testimony of expert witnesses whose qualifications are doubtful or of whom bias is suspected, merely by obtaining more reliable testimony. This policy puts the tribunal in a position to discount to zero, if it seems advisable, the weight of the former.

The picture of the small group of lawyers who have harnessed up the small group of expert witnesses, whose role as they conceive it is to win a case,²⁸ is reflected in the experiment in the courts of New York and Bronx Counties, New York.²⁹ Some of the features of this plan are adaptable to, and have been in essence employed in the field of workmen's compensation. The New York Academy of Medicine, and the New York County and Bronx Medical Societies cooperated to assemble a list of highly qualified doctors in the special fields the justices indicated were needed. Not only were they highly qualified but none of them had been prominently identified with either plaintiffs or defendants in personal injury cases. A court rule set up the procedure, which calls for consultation of the justice with counsel for the parties, after which he may order the case referred to an impartial expert. The expert examines and reports through a Medical Report Office, the clerk of which makes copies of the report available to the parties. The impartial expert is furnished with the medical records the parties have or can obtain as far in advance of examination as possible. After copies of the report are distributed, the pretrial conference is resumed. In the event of litigation, the trial judge or either of the parties may call the impartial expert as a witness. Fees for the impartial expert for examining and testifying have been set by him, subject to supervision of the judge, and paid from project funds.

Compensation plans have utilized the services of staff physicians and of special panels of private practitioners. However, the degree of reliance upon specialists as impartial experts has not been very great.³⁰ A more thoroughgoing degree of such reliance may be built into the organi-

28. "We would have been more favorably impressed with the testimony of the doctor had he not laid so much stress on the great number of 'cases' which he had 'won' in various courts as compared with the few which he had 'lost.' We have always entertained the view that doctors neither 'win' nor 'lose' cases in which they testify as experts." *Smith v. W. Horace Williams Co.*, 84 So.2d 223 (La. Ct. of App. 1956). The court however held that his failure to gain membership in the American Board of Orthopedic Surgery did not disqualify him as an expert in orthopedics, although it could be considered in weighing his opinion.

29. Peck, *A Successful New Plan: Impartial Medical Testimony*, 42 A.B.A.J. 931 (1956); Botein, *The New York Medical Expert Testimony Project*, 33 U. DET. L. J. 388 (1956).

30. Yerion, *Expert Medical Testimony in Compensation Proceedings*, 2 LAW & CONTEMP. PROB. 476 (1935).

zation and structure of the decision-making itself, by the establishment of medical boards with power to find facts binding upon the commission generally charged with administration.³¹

Two kinds of hazard are involved in this plan. One is the range of considerations indicated above³² having to do with the proper employment of personnel with medical qualifications and the problem of disentangling medical from legal opinions. These hazards may be minimized by the careful referral of issues to the medical board in such form that legal questions are excluded and the medical board is free to concentrate its attention upon medical questions, and by framing the findings in such form as to disclose any errors in legal reasoning that may inhere in medical findings or procedure before the medical board. Nevertheless these hazards are inherent in such a plan, especially in view of the duty of the medical board to hear lay testimony (which as testimony is not strictly a matter of medical competence to hear, but rather of trial-examiner, referee, or trial-judge competence) and the limited range of medical specialties that can feasibly be represented on a permanent medical board operating as an integral part of a public agency.

The other kind of hazard resembles one of the vices of partisan expert testimony. That is the tendency of a group of experts in industrial medicine always functioning in the same role of conducting medical litigation to acquire a set of official views representing the institution. Although one of the goals for improving the decision of issues of medical fact is the development of greater consistency, this consistency is not so desirable as to justify a fixed attitude in the interpretation of evidence, whether the effects are liberal or conservative of compensation.

Both kinds of hazards are minimized greatly if the medical boards are constituted on an *ad hoc* basis, with due regard for matching the qualifications of the expert body summoned for consultation with the issues in the case referred. Moreover, the range of expertise from which the members of such boards are drawn may be greatly increased. The general agency administering the plan will need a medical staff to assist in evaluating the need for a special medical board and the qualifications that should be mustered for it. A feature of the New York court plan is worthy of incorporation into this process: staff advice should be supplemented by the development of panels by medical bodies outside the compensation agency, such as medical societies and schools.

31. For example, in Maryland the commission cannot reverse the findings of the medical board on medical questions if the findings are supported by "legally sufficient" evidence. *Big Savage Refractories Corp. v. Geary*, 209 Md. 362, 121 A.2d 212 (1956).

32. See text cited to *Jenkins* case, *supra* notes 3-8.

Earlier discussion in this paper has relied upon a distinction between perceptual knowledge and inferential knowledge. This distinction, for purposes of medical board functions, may be elaborated to indicate how much these boards can rely upon their own knowledge and to what extent the knowledge must come in through an adversary hearing process. Inferences drawn from observation, especially from expert observation, depend upon general knowledge. For example, judgment of the speed of an automobile, if based upon precise measurement, depends upon such general mathematical knowledge as is incorporated in the testing mechanism and also that which is employed by the observer in reading the results. If it is based upon raw observation, the general knowledge applied by the observer comes from a complex of memories of past experience. Much depends upon the skill, as well as the knowledge, of the observer in collecting the perceptual information. To this information, general or abstract knowledge is applied to produce a judgment. If the measurement mechanism is simple enough that little skill is required to apply it, the mechanism may record data from which a non-observer can draw a conclusion. In drawing the conclusion the general mathematical knowledge that is built into the mechanism and that is employed by the non-observer can be reliably applied to reach a conclusion. Another analogy is the hypothetical question itself, by which perceptual knowledge is verbalized and summarized for a non-observing expert. The expert then purports to have only generalized knowledge from which to make an application to the knowledge supplied him. His contribution consists in adducing the generalized knowledge and applying it to draw a conclusion by inference.³³

Expert medical observation cannot be supplied by the medical board in its capacity as trier of medical issues.³⁴ For such information it must hear witnesses, lay and medical, and in general depart from its medical specialties into the legal business of according a fair hearing. Indeed, it is sometimes doubtful whether it can apply its own generalized knowledge without having expert testimony confirming it. At least its knowledge should be made apparent in the record, by appropriate findings, and preferably also by notice to the parties so that there is opportunity for issue and rebuttal at the administrative level.³⁵

33. Cf. Davis, *An Approach to Problems of Evidence in the Administrative Process*, 55 HARV. L. REV. 364 (1942); Jaffe, *Administrative Procedure Re-Examined: The Benjamin Report*, 56 HARV. L. REV. 704 (1943); 2 LARSON'S WORKMEN'S COMPENSATION LAW 299-308 (1952).

34. Carstens v. Pillsbury, 172 Cal. 572, 158 Pac. 218 (1916).

35. Merton Lumber Co. v. Ind. Comm'n, 260 Wis. 109, 50 N.W.2d 42 (1951). Cf. 60 STAT. 241-42 (1946), 5 U.S.C. § 1006(d) (1952); Davis, *Official Notice*, 62 HARV. L. REV. 537 (1949).

The difficulty of verbalizing some kinds of perceptual medical knowledge (*e.g.*, distorted facial expression, sweaty and flushed), the existence of non-medical duties in the conduct of a trial, and the cumbersome of getting generalized knowledge in the record and recognized on judicial review as such and as a legitimate subject of official notice by a medical board—all these considerations argue against the use of a medical board. In its favor is its solution of the problem of choice between conflicting expert opinions. In its absence the courts of necessity swallow the spectacle of essentially uninformed choice by laymen between experts who are supposed to be informed but who disagree.³⁶

An alternative solution lies along the lines of the New York plan. Its tactic is to meet the problem of choice among conflicting expert opinions by providing a basis for choice of the impartial opinion as against an opinion suspected of partiality, or choice of the more authoritative opinion, whether from an expert chosen impartially or by a party, as against the opinion of an expert whose expertise is suspected of shortcomings on the kind of issue involved. At the same time it affords full opportunity for issue and rebuttal and full freedom of choice. It goes further than partisan selection, giving the tribunal on its own motion an opportunity to seek a remedy for apparent gaps in expert opinion, and provides an impartial source of knowledge about the need for and the prospects of finding assistance from expert knowledge. It attempts to solve the problem posed by the limited diffusion of the best current knowledge in a narrow field.

The context of medical issues arising in a scheme of non-court administration of workmen's compensation affords opportunities for adaptation of the feature of pre-trial conference in the New York plan. Administrative processes can be so shaped as to obtain the impartial opinion at an early stage of controversy, well before hearing, so as to reduce the number of cases that have to be subjected to formal litigation. At the same time accommodations can be made that will reduce waste of the time of the expert, by appropriate scheduling. In some jurisdictions the opinion may be obtained in writing, and the analogue of the hypothetical question can be proposed in written form adapted to the needs of the case and influenced by conference among the parties and the tribunal, so as to avoid the awkwardness of propounding a verbose question orally. Thus, the expert opinion can be expounded in a more deliberate and enlightening fashion. These suggestions seem to be applicable in large part

36. "The court, in going beyond the medical evidence in reaching an equitable decision, is not doing so on the supposition that it wishes to substitute its opinion for those who are specialists in that field, but it must do so when the evidence is confusing and lacking." *Hebert v. Fifteen Oil Co.*, 46 So.2d 328 (La. Ct. of App. 1950).

also to experts retained by the parties.

Answers to the analogue of the hypothetical question should be more than naked conclusions.³⁷ They should elucidate the medical reasoning, and thus supplement the criteria for choice of opinion by relative impartiality and by relative record and reputation for expertise. They would then become the foundation for tribunal findings in the event of litigation, and these findings should then go a long way in giving the court on judicial review an intelligible basis for discerning the foundation in medical fact on which the order of the agency is based.

Conclusion

The division of functions proposed here asks the treating doctor to expand his investigation beyond the bounds of seeking knowledge for the purpose of healing, even into areas that are strictly speaking non-medical. The argument for this emphasis is the necessity of obtaining perishable information while it is still alive, and the strategic position of the treating doctor. The proposals further suggest ways in which different kinds of medical expertness can be mobilized for their appropriate uses, so that the possessor of abstract knowledge in a narrow specialty can relieve other medical experts from the imposition of answering questions which others are better qualified to answer. Attention has also been given to some of the areas, such as the conduct of an adversary hearing, where the specialized skills and knowledge are legal rather than medical. A proper division of labor provides hope for the improvement of a complex of activities that purports to be rational and to employ the skills and knowledge of professional learning.

37. Osborn, *Reasons and Reasoning in Expert Testimony*, 2 LAW & CONTEMP. PROB. 488 (1935).