

Aussie Inspired Musings on Technological Issues – Of Kangaroo Courts, Tutorials & Hot Tub Cross-Examination

Marvin J. Garbis

IN 1998 I HAD THE OPPORTUNITY to join the Federal Court of Australia as an Honorary Justice. In effect, I was a “shadow” judge of the court, with Chambers in Melbourne, Victoria and a seat on the bench alongside the Justices as they performed their judicial duties. Although, of course, I did not exercise any judicial power, I was able to experience in a vicarious manner the professional life of the Australian counterpart to a United States District Judge.

I had the opportunity to observe, from the bench, the day to day operation of a legal system that was rather superficially different yet essentially similar to my own. Moreover, I had the privilege of engaging in discussions on the challenges facing the judiciary in the

modern world with my colleagues on the Federal Court of Australia. Combining my American judicial background with the insights of my Australian counterparts was, to me, a bit like looking through a stereoscope. There were two views of the same scene differing only by virtue of a small distance between the two lenses. However, the small shift in the point of view provided an extra dimension.

This is not the occasion for a lengthy discourse on the Australian judicial system;¹ however, some brief comments are in order. Of course, there are obvious differences between the Australian and American judicial systems. For example, the Aussies have the English-style barrister system complete

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¹ For the Chief Justice’s brief description of the Federal Court of Australia, see Hon. M.J. Black, *The State of the Courts in Australia*, 45 Fed. Law. No. 1 p. 30, No. 2 p. 36 (1998).

with wigs² and gowns. Moreover, there are virtually no jury trials³ and no criminal trials⁴ in the Federal Court of Australia. Nevertheless, the jurisdiction of the Federal Court of Australia includes much that coincides with the jurisdiction of the United States District Courts including, and most pertinent to this discussion, patent litigation. Accordingly, the Australian federal judges, like their American counterparts, are judicial generalists called upon to resolve cases presenting cutting edge technological issues.

As stated by Justice G.L. Davies of the Court of Appeals, Queensland, Australia:

Scientific and technical evidence has increased dramatically [since the 1960's] both in its frequency and its complexity; and the difficulty of a trier of fact, whether judge or jury, in understanding and consequently in assessing the reliability of such evidence, though not a new problem, has now become a critical one. ... [T]here is now a good deal of such evidence that is quite beyond the capacity of most judges to understand. And in many cases in which a judge has some capacity to understand the evidence, he or she will lack the capacity to decide between competing opinions. Nevertheless, here and elsewhere, judges continue to decide such questions on the apparent assumption that they have the capacity to do so.⁵

This can cause a serious problem:

In many cases, a judge, being unable to fully understand the expert evidence because of its complexity, may be compelled to decide between competing opinions on some wholly artificial basis;⁶ who was the more highly qualified witness; who explained the matter more simply; whose reasoning was apparently more logical or which view is more conservative. When one adds to the difficulty in comprehension the likelihood that one or more experts is giving partisan evidence, the risk of error is very high.⁷

In the context of the instant paper, it is not too far a stretch to consider Justice Davies to be describing what might be viewed as a "kangaroo court"⁸ in regard to technological issues. That is, a tribunal in which the judge, albeit with the best of intentions, cannot realistically render decisions based upon a sound grasp of the facts and issues. Rather, the judge sometimes must reach whatever conclusion may be found at the end of what one knowledgeable in the pertinent field would consider ungainly marsupial-like leaps of logic.

There is, of course, the need to find a method by which judges may become adequately informed to decide technological issues contained in their pending cases. In a sense, there must be ways to provide remedial education for

2 To be sure, on those stifling February days when the old (from Queen Victoria's reign to 1999) federal courthouse on Little Bourke Street became uncomfortable, the Justices would allow the barristers to appear without wigs, a condition that some in the Bar irreverently referred to as "topless."

3 There is a theoretical possibility of a jury trial in certain types of cases but, in reality, there has never been a jury trial in the Federal Court of Australia.

4 Federal crimes are prosecuted in the State courts in Australia.

5 Justice G.L. Davies, *The Changing Face of Litigation*, 6 J. of Jud. Admin. 179, 188 (1997).

6 Query whether it is really "artificial" to use in this context the same sort of criteria applied to evaluate the credibility of witnesses in general. It is certainly customary to consider a witness' logic or clarity of expression when deciding upon the reliability of his or her testimony.

7 *Id.* at 189.

8 The fact is, or seems to be, that the term "kangaroo court" is not disparaging of the Australian judicial process. Rather, it appears that the term arose in the American West in the 1850's to refer to informal tribunals that dispensed instant "justice." The marsupial analogy may have been a sardonic comparison between the hopping gait of a kangaroo and the ad hoc and unpredictable leaps of logic and procedures of the American frontier tribunals.

a scientifically challenged judiciary.

At the threshold, it is appropriate to recognize that the challenge or problem of educating a judge who may be ignorant (or, better said, uninformed) about a subject at issue is neither new nor confined to matters technological. Most judges in many cases (and every judge in at least some cases) find themselves presiding over a proceeding in which the subject matter is unfamiliar and difficult to grasp. For example, judges are frequently confronted with cases presenting issues on such subjects as statistics, the complexities of trading on a commodities exchange, the intricacies of accounting principles, etc. In such cases, as in those involving scientific and technological issues, a way must (or should) be found to enable the judge to obtain an understanding adequate to reach an informed decision – that is, to render the judge adequately informed to decide the issues presented.

I use the term “adequately informed” here to mean that the judge is able to utilize a sufficient understanding of the subject matter presented to reach a rational decision. An adequately informed judge need not be educated too far beyond the subject matter of the case. For example, if a patent case involves a device dissipating a static electrical charge to avoid damage in the manufacture of computer chips, the judge would need to know enough about electrical conductivity to understand the functioning of the invention and of the accused device. The judge would not necessarily have to learn, however, very much about computer chips beyond the fact that they are sensitive to static electricity discharges. Nevertheless, the judge must heed Pope’s warning:

A little learning is a dangerous thing;
Drink deep, or taste not the Pierian spring:
There shallow draughts intoxicate the brain,

And drinking largely sobers us again.⁹

Of course, generalist judges should be provided with some basic education in science, statistics and so forth. However, in my opinion, judicial education can do no more than build a foundation of general scientific knowledge which can be useful in obtaining more of the specific knowledge needed for particular cases. It is impossible to make every judge, or any judge for that matter, an engineer, chemist, physicist, surgeon and biologist. Indeed,

... [I]f every trial in which expert evidence is to be adduced involves subjecting the judge to a crash course of physiological, pathological or anatomical instruction, the trial will be infinitely prolonged and judges very rapidly exhausted.¹⁰

Yet, it is likely that every federal district judge will have to, or should, utilize an understanding of particular subjects within the expertise of a member of one or more of the scientific disciplines. It is necessary, therefore, to consider methods beyond the basic education of judges to obtain an adequately informed judge in a given case.

One “quick fix” to the problem of getting an adequately informed decision on technological issues is to let a qualified technician decide. Some have suggested a system of court-appointed experts that would:

enable the judge to confer with the experts, confident in their objectivity, in order to obtain some instruction upon the [scientific] question and its resolution. And, in the end, it would enable the judge, with that confidence and instruction, to accept an opinion whether he or she fully understands it or not.¹¹

Indeed, Justice Davies goes so far as to state that:

It would be more realistic, in my view, for an

9 Alexander Pope, *An Essay on Criticism*, II l. 15 (1711).

10 Gordon Samuels, 168 *Med. J. of Austl.* 84, 87 (1998).

11 Davies, *supra* at 189.

expert to decide the issue requiring the opinion, but the consequent loss of power would not, I think, be generally welcomed by judges.¹²

Whether unconstitutional in Australia or not, there is no prospect of a delegation of judicial authority Down Under or in the United States. Hence, the challenge must be met in some way other than referral to a scientific Delphic Oracle for decision.

The traditional method of educating the judge on the subject matter of a lawsuit has been through the testimony of expert witnesses chosen by the parties. This is not always a satisfactory way to proceed from either the judge's or the scientist's point of view:

... [T]he formality and seriousness of [judicial] proceedings, and their highly structured nature, differ from what scientists usually experience. In answering tough questions after a seminar, responding to criticisms from a grant review committee, or countering negative comments from a referee of a paper, scientists are used to argument and conflict, but there is usually ebb and flow, thrust and parry, dynamism of interchange. The set piece, stately quality of examination and cross-examination can lead to a sense of incompleteness: if only I had said so and so; if only they'd asked me.¹³

Moreover, there are situations in which the judge needs a basic foundation of knowledge in order to understand, and appreciate, the expert testimony which is to be evaluated.

Early in my judicial career, I presided over a patent case involving an invention pertaining to static charge dissipation. *Nevamar Corp. v. Charleswater Prod., Inc.*¹⁴ I believed that it would be beneficial to me, and most certainly to the parties, if I approached the issues with a background tutorial presented by a knowledgeable expert independent of the parties. In my concept, the "tutorial expert" would, in effect, be in the role of a law clerk who happened to have an electrical engineering background.¹⁵ The parties agreed on the principle, agreed to share the costs and agreed upon my selection of an electrical engineering professor from an out-of-state university as the tutorial expert. I entered an Order appointing the tutorial expert who, quite successfully:

provided an introductory tutorial seminar on the basic technological principles for the presiding judge, law clerk and magistrate judge handling discovery disputes in the case;

conferred, as needed, to assist the judge in understanding the basic technological principles as the case proceeded; and

avoided expressing opinions on, or influencing, the decisions made by applying the basic principles to the facts of the case.¹⁶

In my tenure as an Honorary Justice of the Federal Court of Australia, I had the privilege of working primarily with the Honourable Justice Peter Heerey in Melbourne. Justice Heerey happened to be the

¹² *Id.* (Footnote in original). See also the footnote in the original: "It might also be unconstitutional ...".

¹³ Scientist Sir Gustav Nossal, Paper at Australian Legal Convention, 1997, p. 2. (copy on file with the *Green Bag*).

¹⁴ MJG-88-3732 (D. Md.).

¹⁵ Compare Justice Breyer's concurring opinion in *Gen. Elec. Co., et al. v. Joiner*, 522 U.S. 136, 149 (1997) ("as cases presenting significant science-related issues have increased in number ... judges have increasingly found in the Rules of Evidence and Civil Procedure ways to help them overcome the inherent difficulty of making determinations about complicated scientific, or otherwise technical, evidence. Among these techniques are ... the appointment of special masters and specially trained law clerks") (citation omitted).

¹⁶ It was contemplated that had the case proceeded to jury trial, the tutorial expert might have given the jury an introductory tutorial lecture.

presiding judge in a patent case involving matters of biotechnology, which the Justice, understandably, found difficult to comprehend. *Genetics Inst., Inc. v. Kirin-Amgen, Inc.*¹⁷ By coincidence, Justice Heerey set a hearing on the appointment of a tutorial expert in *Genetics* during my time with him in Melbourne. Indeed, I had the honor of sharing the bench with Justice Heerey during the hearing in which counsel discussed the matter.

At about the same time as Justice Heerey's

In *Genetics*, Justice Heerey adopted a tutorial expert approach which worked as successfully for him as it had for me.

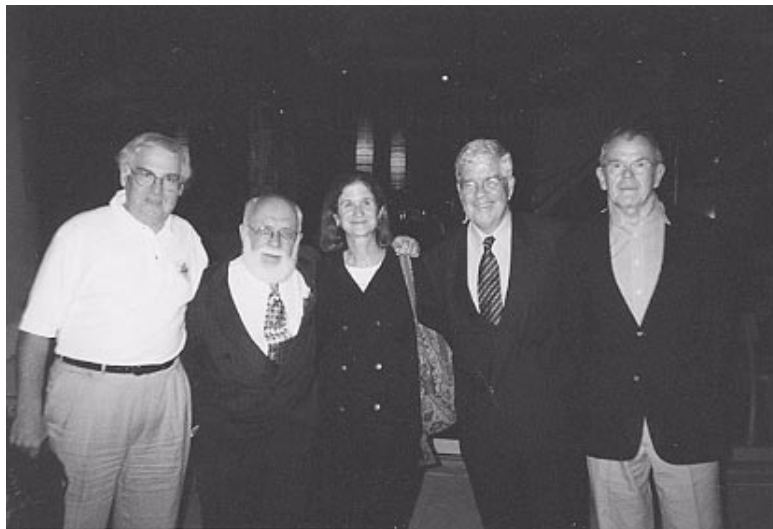
In March of 1998, Justice Heerey addressed the Intellectual Property Society of Australia and New Zealand regarding the matter of tutorial experts in general, and his experience in the *Genetics* case in particular.¹⁹

Justice Heerey noted some key problems or challenges associated with the use of tutorial experts. For example, it is essential to consider how the expert should be selected and the

manner in which the expert and the judge should communicate.

It is, of course, necessary to select a truly impartial tutorial expert. There is an obvious need to avoid conflicts of interest. However, there can be circumstances in which "a discipline involves, on the relevant issues, two schools of thought."²⁰ In my view, the existence of two schools of

thought is not an insurmountable obstacle. In such a case, the neutral tutor would have to stop teaching at the point that the divergence in the field is identified. Hence, if possible, the judge would be educated sufficiently to understand the divergent schools of thought but would himself or herself have to decide which view to follow after considering the parties' respective views.



From left to right: the author, The Amazing Randi (a magician and a skeptic known for debunking claims of paranormal powers), the Honorable Joan Zeldon of the Superior Court of the District of Columbia, Justice Heerey, and John J. McAvoy, Esq., of Washington, D.C.

hearing in the *Genetics* case, the *Medical Journal of Australia* published an editorial which suggested that possible reforms of the law on medical expert testimony could include:

[T]he adoption of some of the better elements of the Roman inquisitorial process in relation to expert evidence, such as the use of court-appointed experts or expert assessors to sit with, and advise, the judge.¹⁸

17 (No. 2) (1997) 149 A.L.R. 247.

18 Richard T.T. Tjlong, 19 *Med. J. of Austl.* 53, 54 (1998).

19 The remarks were published as Heerey, *Expert Evidence in Intellectual Property Cases*, 9 *Austl. Intell. Prop. J.* 92 (1998) ("Heerey").

20 *Id.* at 96.

The tutorial expert should be knowledgeable and qualified but need not necessarily be a person that a party would select as an expert witness. As stated by Justice Heerey:

I would think that a court-appointed expert does not need to be the best in the field, a Pavarotti of physicists or a Bradman of biochemists, but needs to be respected and a good teacher.²¹

There is ample room for debate as to the manner in which the tutorial expert would communicate with the court. As stated by Justice Heerey, with reference to the tutorial expert order issued in the *Nevamar* case described above:

Once the court-appointed expert is selected the most contentious question for the conduct of the case is the form of communication which the expert is to have with the judge. At one extreme, the court-appointed expert might be limited to written communications, which would be made available to the parties. Also, the expert might be restricted to advising on the general scientific background of the case with the actual contested issues being treated as “no go” areas. At the other extreme, the judge might have unrestricted access to the expert. Interestingly, a form of order that has been used in the Federal Courts in the United States speaks of the expert having communication with the judge in the same way as does the judge’s clerk (the equivalent of the Australian judge’s Associate).

I tend towards the latter view.²²

Like Justice Heerey, I conclude that a tutorial expert should have free and private communication with the Court within the narrow scope of the tutorial assignment. The tutorial expert should not provide opinions on the issues presented for judicial resolution, and

by no means should there be any delegation of the judicial decision-making function.

There are those who object to any private communication between the tutorial expert and the judge. Such objections can be met or reduced by permitting the parties’ experts to be present during tutorial sessions, albeit at additional expense and possible increased formality in the educational experience. Moreover, it is not unusual for judges to have private communications about a case with persons independent of the parties. For example, judges routinely discuss their cases with their law clerks and, sometimes, with other judges. Of course, if a tutorial expert were to provide a judge with anything more than a basic remedial education within the parameters established by the parties, the court should inform counsel.

Following Justice Heerey’s experience, and considerable debate, the Federal Court of Australia adopted rules relating to the use of independent experts to assist the court.²³ The Australian Rules provide for an “Expert Assistant” who may, *with the consent of the parties*, be appointed to assist the court as to any issue of fact or opinion (other than a question of law).²⁴ The Expert Assistant may not testify in the case.²⁵ The Expert Assistant must provide to the court and the parties a written report regarding the issues identified.²⁶ The court must then give each party a reasonable opportunity to comment on the report and address evidence on the issues discussed, but the parties may not examine or cross-examine the Expert Assistant.²⁷

I leave it to Australian commentators to

21 *Id.* Sir Donald Bradman is to Australian cricket fans what John Unitas is to American football fans.

22 *Id.* at 97.

23 See Order 34A, Fed. Ct. Rules, Fed. Ct. of Austl. (July 2001 Compilation) (“the Australian Rules”).

24 Order 34A Rule 2(1).

25 See *id.* Rules 2(2), 3(6).

26 See *id.* Rule 3(1).

27 See *id.* Rule 3(4).

determine whether the adoption of the Australian Rules' Expert Assistant Order constitutes a rejection of the tutorial expert approach. In any event, in the American legal system, the judicial tutor concept appears to be a viable option.

In *Association of Mexican-American Educators v. California*, a case involving problems of unusual complexity in the fields of education and psychometrics, the district court appointed a technical advisor to review the record and hear testimony and confer *ex parte* with the judge in a manner equivalent to that of a law clerk. In affirming, the United States Court of Appeals for the Ninth Circuit stated that "[i]n those rare cases in which outside technical expertise would be helpful to a district court, the court may appoint a technical advisor . . ." ²⁸ In dissent, Judge Tashima agreed that the district court did not abuse its discretion in appointing a technical advisor but opined that adequate procedural safeguards had not been utilized. Judge Tashima stated that he would hold a district judge minimally required to:

- (1) utilize a fair and open procedure for appointing a neutral technical advisor;
- (2) address any allegations of bias, partiality, or lack of qualification;
- (3) clearly define and limit the technical advisor's duties;
- (4) make clear to the technical advisor that any advice he gives to the court cannot be based on any extra-record information; and
- (5) make explicit, either through an expert's report or a record of *ex parte* communications, the nature and content of the technical advisor's advice. ²⁹

²⁸ 231 F.3d 572, 590 (9th Cir. 2000).

²⁹ *Id.* at 611.

³⁰ 286 F.3d 1360, 1378 (Fed. Cir. 2002).

³¹ *Id.* at 1379. See also *id.* n.6:

When a district court judge utilizes a technical advisor, a reviewing court may want to take a hard look at the district court's decision and to make certain that the decision does not in fact

The technical advisor appointed in *Association of Mexican-American Educators* had a somewhat more expansive role than that of the judicial tutor who provided the judge with a basic education in Justice Heerey's *Genetics* case and my *Nevamar* case. Nevertheless, Judge Tashima's suggested procedural safeguards appear sound in either context.

In *TechSearch, LLC v. Intel Corp.*, a patent case, the district court appointed a "technical advisor" (tutorial expert) to assist with evaluation of the technical matters presented. The Federal Circuit recognized that:

The trial court's inherent search for truth is the basic building block by which the judicial process maintains its credibility within the fabric of our society. In this search, it cannot be expected that trial judges will have expertise in biotechnology, microprocessor technology, organic chemistry, or other complex scientific disciplines. Therefore, in those limited cases where the scientific complexity of the technology is such that the district court may require the assistance of a technical advisor to aid in understanding the complex technology underlying the patent, it has the inherent authority to appoint such an advisor. ³⁰

The appellate court also recognized that:

As a practical matter, there is a risk that some of the judicial decision-making function will be delegated to the technical advisor. District court judges need to be extremely sensitive to this risk and minimize the potential for its occurrence. ³¹

The bottom line is that the parties and public must have no doubt that it is the judge who is deciding the issues presented. At the end of the day and, thus, the end of such educational process as may be possible, it is the judge

rather than the tutor or technical advisor who must ultimately resolve any technological issues presented to the court.

Typically, the judge is “assisted” in the decisional process by the presentation of expert witness testimony from the parties. Thus, traditionally, the judge receives the expert’s direct examination, whether orally or in writing³² followed by cross-examination. Of course, the effectiveness of the traditional expert witness presentation will be improved to the extent that the judge can be adequately informed prior to receiving the testimony. Moreover, there is always room for new ideas to render more valuable the education obtained through the presentation of expert testimony.

As stated by Justice Heerey:

... [A]n innovative technique has been developed ... by my colleague Justice Lockhart. It has been irreverently dubbed (although not by his Honour) the “hot tub” approach. This involves the parties’ experts literally giving evidence at the same time. Written statements are filed at an earlier stage. After all other evidence has been concluded, the experts are sworn in and sit in the witness box – or at a suitably large table which is treated notionally as a witness box. One expert will then give a brief outline for, say, ten minutes of his or her current views, and the opposing witness may then ask questions. The process is then reversed. Each expert then gives a brief summary. When all this is completed, counsel

(somewhat on the sidelines in this process) may then ask questions. It may be that a court-appointed expert could participate in such a function.³³

The “hot tub” approach has considerable benefits. As observed by Justice Heerey:³⁴

The experts give evidence at a time when the critical issues have been refined in the course of the trial.

The judge sees the opposing sides together and doesn’t have to compare an expert witness’ present testimony with the half-remembered evidence of the other expert given perhaps some weeks previously and based on assumptions which may have been destroyed or qualified in the meantime.

The physical removal of the witness from his party’s camp into the physical proximity of a (usually) respected professional colleague tends to reduce the level of partisanship.

The “hot tub” expert witness concept has been codified in the Rules of the Federal Court of Australia.³⁵

Another noteworthy idea included in the Australian Rules is the utilization of a court ordered conference of experts prior to trial.³⁶ The experts can be ordered to prepare a report indicating what is agreed and identifying the disputed issues. There seems to be no impediment, and considerable merit, to the use of this device by federal judges in the United

resolve factual disputes in the guise of determining that there is not a genuine issue of material fact. It has been noted that “a judge can filter out ‘bad’ legal advice or research from a law clerk; he or she is ill-equipped, however, to do the same with ‘bad’ technical advice.” [sic] *Ass’n of Mexican Am. Educators*, 231 F.3d at 614. Moreover, reviewing courts may want to consider whether the procedural safeguards should be enhanced, or technical advisors should be allowed at all, when the district judge is acting as the trier of fact.

32 In most Australian courts the direct “testimony” of witnesses frequently is presented in whole or part by affidavit subject to cross-examination. Some American trial judges utilize a “canned” direct examination process on occasion. Moreover, in some American courts it is standard practice to have the direct testimony of expert witnesses presented through a report subject to cross-examination. E.g., Rule 143 of the United States Tax Court Rules of Practice and Procedure.

33 Heerey at 98-9.

34 E-mail of November 6, 2001 from Justice Heerey to the author.

35 See Order 34A, Australian Rules.

36 See Rule 3, Order 34A, Australian Rules.

States in appropriate cases.

In sum, the judiciary, and the Bar, must continue to find ways to enable judges to reach sound, informed decisions on technological issues. Yet, in so doing, one cannot lose sight of the fact that judges have more to do than to devote themselves fully to scientific education. Put as only Justice Heerey would express it:

... the judge needs time for work on non-scientific cases and important activities like

watching television and going to the football.³⁷

Of course, “the football” in Justice Heerey’s lexicon is not the American gridiron variety in which padded goliaths proceed, in stops and starts, through a series of set formation plays. Rather, it is the “footy” of Australian Rules Football, played on a cricket oval combining elements of rugby, soccer and basketball, in which the family Corvidae is represented by crows³⁸ and magpies³⁹ rather than ravens.⁴⁰



³⁷ Heerey at 94.

³⁸ The Adelaide Crows.

³⁹ The Collingwood (Melbourne) Magpies.

⁴⁰ The once, and future, world champion Baltimore Ravens.

To Hon. Peter Heerey

Learned Judge of the Technological

*Here's to Peter Heerey, Judge
In cases scientific.
Though schooled but in Humanities
His judgments⁴¹ are terrific.*

*Not bewildered, not befogged
By the slickest expert's patter
Generalist Justice Heerey can
Keenly grasp the matter.*

*With independent tutoring
And Lockhart's hot tub cross⁴²
Heerey, J soon becomes
The complex subject's boss.*

*Justice Heerey knows as he presides
On the federal bench Down Under
What are pearls amidst the strine⁴³
And what is naught but chunder.⁴⁴*



41 In Australia, decisions are referred to as "judgments."

42 If you read the article, you'll know what I mean.

43 The national dialect in which "Australian" is pronounced "strine" and "the real McCoy" is said to be "fair dinkum."

44 An expression adopted from the historical prison ship experience in which seasick passengers urgently using a porthole had to yell "*wa chunder*" ("watch under") to warn those who might be using a lower porthole.