Psychiatrists testifying in court have been called charlatans, crooks, or clowns. Some critics have urged that psychiatrists voluntarily absent themselves from the courtroom or be banned from it. Yet the central question concerning the role of psychiatrists in court revolves around the understanding of the terms “expert” and “justice” and has not been addressed. We do not suggest embracing the philosophers’ usual preoccupation with word games, linguistic distinctions, or analytical meaning analysis. In understanding “expert” and “justice,” we employ an empirical analysis, namely what these words mean when used in the “real world” of practice.

We make two arguments: (1) decisions in the legal system, whose purpose or goal is justice, intimately involve some adequate knowledge of human motivation and behavioral constraints in order to achieve that goal; and (2) a psychiatric expert is an individual, within adequately described frameworks of scientific thinking, who can supply what Dewey called warranted assertions (probable truth). The psychiatric expert may state that he or she is unable to determine, within a reasonable degree of medical certainty, which of a number of vying hypotheses explains the behavior.

We contend that many of the positions taken on the ethical problems of psychiatric expert witnesses are based on two major errors: (1) using a narrow concept of justice that does not accurately describe the legal reality; and (2) employing a nineteenth century rationalist view of science that assumes the expert ideally deduces, from scientific laws, with certainty and complete consensus, the data and conclusions of testimony. The culminating error is to use these misconceptions to develop standards for the role of the “scientific expert” in legal efforts to achieve “justice.” If these false standards are used, discussion of the issues involved in the expert witness role will take place in a realm of fantasy. As the philosopher Marvin Farber said in describing the idealized land of analytic philosophy, “They have sharpened and sharpened their cognitive tools till there is nothing left.”

Not only are there serious problems with the way philosophers view the legal system and scientific research, but also psychiatrists make errors in understanding their medical specialty, science more broadly, and the operation of the legal system. Inexplicably, some psychiatrists accede to evaluations of psychiatry as not being a science or if it is a science, as being inferior to the “exact” sciences. They accept the assertion that psychiatry is different in kind or in unacceptable degree from other scientific expertise. They appear to be working with a notion of “exact science,” “hard science,” or strict reductionism. This misconception of science is Newtonian in character and uncritically accepting of the discarded
Logical Positivist descriptions of the scientific enterprise as logico-deductive. With formal logic and deduction come the old ghosts of absolute truth, necessity, and certainty. Psychiatrists know there is nothing absolute, necessary, or certain about DSM-III (nor should there be). Most psychiatrists would agree that their expert testimony is probable and contingent, that using the same data base different diagnoses and expert opinions may be arrived at. While Roth proposes a scientific standard for expert testimony, Stone argues that such a standard eliminates all psychiatric testimony.5

The ideal scientific expert witness may be incorrectly characterized by psychiatrists and others as one whose conclusions

- are philosophically certain
- are agreed on by all reputable colleagues
- are read from machines or other ‘hard’ objective data
- are concerned only with the facts
- involve no value components
- require no contingent interpretations

Something is seriously wrong with this composite, because very few practicing scientists, whether in physics, HLA typing, or chromosome analysis, would recognize anything remotely describing their discipline or their expertise in the above characterization.

We argue that the legal and social concept of justice requires psychiatric expertise to have any acceptable meaning. Since the existence of such expertise has been questioned, we first must demonstrate that psychiatrists are within the population of scientific experts, that psychiatry is a specialty within medical science, that medical science is a specialty of the life sciences, and that a Systems Theory paradigm of science gives scientific respectability to all these projects. As Ernst Mayr maintains, science is not only the methodology of a closed-system physics but also a broad enterprise.6

**History**

The history of forensic medicine dates back to early Egyptian times. There are Biblical references to forensic medicine. Physicians in Greece and Rome testified on medicolegal problems. The Institutes of Justinian, published from 529 to 533 A.D., required the opinion of physicians in certain cases. Some historians date the beginning of modern forensic medicine to 1507 when the bishop of Bamberg drew up a penal code (Lex Bambergensis) in which physicians testified in cases of violent death. This requirement was adopted by Bayreuth, Anspach, and Brandenburg. In 1532, Charles V in the Constituto Carolina required medical testimony in all cases where their testimony would assist the court, that is, personal injury, violent death. Italy was a leader in the development of forensic medicine. In 1602 Fortunatis Fidelis published an important text on this subject.7 In English common law the development of the requirement for a mens rea, as well as an actus reus, led to the use of physicians to testify about mental states.

The expert witness has been viewed historically as someone who has knowledge, either through training or experience, that is not available to the court.
through everyday experience. The expert witness has been called upon to provide information that would assist the court in arriving at just decisions. The expert may testify based on the expert’s personal observations (that is, examination of an injured individual) or respond to a hypothetical question. In a prophetic statement made in 1977, Kraft pointed to the signs of increasing use of expert witnesses. These signs included an increasingly litigious society, as well as the growing complexity of many issues brought before the court.

**Attacks on the Expert as Unscientific**

Some assert that psychiatrists should not be involved in expert witness testimony because this involvement may hold psychiatry up to ridicule. Winslade has argued that psychiatrists should not be involved because they do not meet the standards for the reliable scientific expert in the same sense that engineers meet these standards. Therefore, psychiatric testimony is of no value to the courts, specifically in cases involving the not guilty by reason of insanity plea. Winslade’s position is a straightforward example of the misunderstanding of “scientific expert.” The underlying premise for his conclusion is that there is a difference in kind between psychiatric knowledge and engineering knowledge: Psychiatric knowledge is not reliable and proper scientific knowledge, whereas engineering knowledge is. To maintain this dichotomy, at least one of the three following assertions would have to be true.

1. **Knowledge about mental events or states is different in kind than knowledge about metal events or states.**

   Many philosophers do maintain a sharp distinction between reasons (mental) and causes (physical), between acts (mental) and events (physical). This enables them to remove human agency from casual explanation, from biology, and from the empirical world. It is an arbitrary removal, however, and a modern version of the mind/body, subject/object dualism. It is epistemologically sterile, circular, and irrelevant to psychiatry. Within the biopsychosocial model of psychiatry (scientific Systems Theory), it makes no sense.

2. **The reliability of knowledge about mental states is so significantly different in degree from the reliability of knowledge about metal states that for practical purposes such as expert testimony it becomes a difference of kind and precludes psychiatric expert testimony.**

   This assumes that our knowledge of mental states is so much less than our knowledge about physical metal states that this knowledge is qualitatively as well as quantitatively different. Test pilots might reject this assumption and hold a different view of aerospace engineers. Multiple back-up systems indicate that metal fatigue, stress performance, and ordinary glitches are not as precisely understood as philosophers would have us believe. Geneticists can be forgiven for scepticism about their certain, exact witness status in light of the Love Canal investigation. What conclusions to derive from the presence of ring chromosomes was never characterized by them as certain, and even the normal frequency of ring chromosomes in karyotypes is an open question.

   Nuclear engineers, radiation risk quantifiers, auto engineers, radiologists determining Thanatophoric Dwarfism, forensic pathologists, pharmacologists, ge-
ologists at the San Andreas fault, anthropologists discussing Lucy’s locomotion — the list of experts incorrectly presumed to speak with absolute certainty is long and instructive. Scientists sensitive to the scientific method have never claimed the exactness, the pure objective clarity of experiential data, the certainty of interpretation, or the absoluteness of conclusions that have been claimed for these scientists by those who disparagingly compare psychiatry to “hard” science. Further, a blanket statement critical of the reliability of all psychiatric knowledge distorts the situation-specific nature of that and all scientific knowledge. The diagnostic reliability achieved for some psychiatric illnesses is equivalent to that of some illnesses in other medical specialties. As in most scientific work, the problem with the data or the inferences presented in the testimony of the psychiatrist must be specified, not universalized. Science deals with populations of individuals or events, not with universal classes. Science does not permit the overgeneralization that critics of the psychiatrist as an expert witness have made. We do not argue that psychiatric knowledge is beyond critique but that this critique must meet the standards for critiquing any scientific endeavor.

3. **Psychiatric knowledge concerns past mental states and must therefore be unreliable, inaccurate, unscientific, while scientific knowledge concerns present, on-going states.**

Much of science concerns inferences from present clues to past states, not all of which can be replicated: inference of metal fatigue can be based on the nature of the fracture; the Big Bang Theory in cosmology is put together from the bits and pieces; astronomical theories about the development of solar systems were important components of the science of astronomy long before the very recent discovery of a solar system in formation; and the evolutionary synthesis (the combination of cell biology and neo-Darwinism) is a powerful science precisely about past states and processes. It does not follow automatically that the search for a description of past states or events is unscientific, nor does it make much sense to assert it is.

A further argument, framed in a fact/value distinction, is made to support the premise that psychiatric knowledge is different from engineering knowledge. It is argued that while other medical sciences deal in facts, psychiatry consists of value judgments and moral judgments. Therefore, it is maintained that psychiatric testimony, while masquerading to the jury as scientific, is only a moral statement with no real claim to expertise. We argued elsewhere that the fact/value distinction is untenable. Psychiatry, like medicine in general, involves norms that are both descriptive-evaluative. Cross-cultural studies, ethology, and sociobiology indicate that psychiatric norms have a proper descriptive base. Psychiatric expert testimony cannot be disqualified as useful scientific expertise because of its value component; this component is shared with scientific expert testimony from the life sciences in general. If in specific situations, there is a difference in degree that can be shown to be relevant to the usefulness of the testimony, this would have to be carefully established for those specific, concrete situations. Universalized statements have little practical value in a careful look at issues in the biological sciences, medicine, or the subspecialty of forensic psychiatry.
We can conclude, then, that psychiatric expert witnesses do not automatically
differ from engineering or other expert witnesses in reliability or scientific cre­
dentials. As one clinician observed, the difference between mental states and
metal states is only the “n.” We are in a position to offer expert testimony without
apology.

**Need for Participation of Experts**

In our view a meaningful concept of justice requires empirical data on human
behavior. Historically, the concept of justice has developed from “like act for like
act,” to a more complex view that takes into account the motives of the actor. It is
therefore difficult to understand why some psychiatrists and some philosophers
would be more comfortable with a “guilty but insane” verdict. What sense could
“guilt” have here, except the descriptive statement that a certain individual did
do a certain thing (actus reus). The broader meaning of guilty is that society is
justified in finding the person culpable (mens rea) and may impose punishment.
The development of English Common Law and the modern practice of the law
with judicial discretion establish that the legal concept of justice (and guilt) in­
volves an understanding of human motivation and behavioral constraints (capa­
city to act and form intent). Without this, justice is certainly less than Kipling’s
Law of the Jungle and would not fit even with a Darwinian sociobiological expla­
nation of social group control.

The legal system has long recognized, in theory and in practice, the impor­
tance of the role of the medical expert witness in the legal system’s operational
definition of justice. Half the cases brought to appellate court depend to some
extent on medical evidence for a just decision.8 The legal system makes routine
use of concepts requiring psychiatric knowledge, that is, competence to stand
trial, guardianship, and disability. Critics of forensic psychiatry have concen­
trated their attacks in the area of determination of criminal responsibility. Is there
something unique in a psychiatric opinion on criminal responsibility that raises
questions that imply markedly limiting or abolishing the psychiatric expert role?
Can it be demonstrated that all cases of criminal responsibility are cases where
psychiatric involvement is inappropriate?

**Cases Involving Psychiatric Expert Testimony**

The role of the psychiatric expert witness has been contested most hotly when
the expert psychiatric testimony involved the plea of not guilty by reason of
insanity. The history of forensic psychiatry’s involvement in the insanity defense
has been discussed elsewhere15 and will not be reviewed in this paper. The follow­
ing cases form a clinical backdrop to the arguments surrounding the role of the
psychiatric expert witness in general and in the insanity defense in particular.

**Case 1**

G.B. is a 54-year-old, single male who was charged with bank rob­
bery. The youngest of three children, he repeated the sixth, seventh, and eighth
grades. As an adolescent, he was considered nervous and easily upset. At twenty
years of age he was convicted of Grand Larceny and sentenced to a state peniten­
tiary for 10 to 20 years. Shortly after arriving at the penitentiary, he became
disorganized, assaultive, and had auditory hallucinations. Except for a five-month period, he spent the next 18 years in a psychiatric hospital within a state penal system. While there he received ECT and neuroleptics. His discharge diagnosis was Dementia praecox, paranoid type. He was transferred to a state mental hospital and, after a year, was placed on convalescent leave. He made his way to the Southwest, where he was arrested and convicted of robbery. After three years in a penitentiary, he was transferred to a hospital for mentally ill sentenced prisoners. After serving his sentence, he was transferred to a civil hospital in his home state.

He remained hospitalized for the next six years, when over his ineffective objections, he was discharged. For the next 1½ years, he lived in various community homes and was lost to psychiatric follow-up. When the Congress enacted the SSI program, G.B. was directed to apply by local social service. An administrative error led to his checks being delayed. After three months without a check, he decided to go to a bank to get money. He passed one bank, but decided not to go in because it was crowded. He recalled seeing a bank with the word “Federal” in its name. He went into it and, while holding a knife, asked for and was given $200. He was arrested in a nearby restaurant having something to eat. Shortly after arrest he was examined and found to be disorganized, incoherent, and fixated on the delusion that the bank as an arm of the federal government owed him the money he received. After a six-month hospitalization, he returned to jail to stand trial. His attorney entered a plea of not guilty by reason of insanity.

Case 2 S.N. is a 28-year-old, three times married, three times divorced father of two who was arrested on charges of bank robbery. He was born to a single parent, who left him with her parents when he was six months old. When he was 10, his grandmother felt she could not manage him and called social services to inquire about foster placement. At age 13, he went to live with his mother and stepfather; soon thereafter, they had him placed in a foster home. He did poorly in foster placement, living in three homes in the span of two years. He ran away from the third foster home to live with first one relative and then another.

As a youngster and an adolescent, he was involved in robbery, belligerent behavior, and later drug and alcohol abuse. He left school at age 17 to join the service. While in the service he was charged with passing multiple bad checks, AWOL, and ignoring a lawful order. He was discharged from the service at the convenience of the service with a bar to reenlistment. He abandoned his first wife and two children. His second and third wives left within a few months of marriage because he beat them. He was arrested subsequently on child abuse charges for beating the two young children of a young woman he was living with. During this sequence he was abusing drugs and alcohol. He returned to his mother’s home and worked at a menial job for 6 weeks before deciding to rob a bank. He directed someone to purchase a shotgun and shells for him the day before the robbery. He reportedly spent the evening and night before the robbery drinking. Shortly before the bank robbery, the police department received a call that there was a bomb planted at a nearby school. He went into the bank with the shotgun,
demanded money, and fled with approximately $5,000. He hid the car he was
driving, changed into a three-piece suit, hid his old clothes and the shotgun. He
had a relative drive to the airport, where he paid cash for a first-class plane ticket.
He stated he could not recall anything from approxiamtely half an hour before the
robbery to half an hour after the robbery. His attorney entered a plea of not guilty
by reason of insanity.

These two cases involved the same crime, bank robbery. Psychiatrists assisted
the court by evaluating the individuals. The cases are not as attractive to the
media as the Hinkley, White, Tarasoff, or Chapman cases, nor was the crime as
affect-laden as lethal physical assault on another person’s body. Nevertheless, the
question of criminal responsibility is the same in all these cases. Our discussion
will apply to the proper or improper use of psychiatric experts in assisting with
questions of criminal responsibility not to perceptions of “miscarriages” of jus-
tice concerning these cases.

In the first case, the psychiatric expert reported that the clinical history and
psychiatric evaluation of G.B. led to the opinion that G.B. was NGRI.

The following factors were seen as mitigating against the merit of a plea of
NGRI:

1. While walking down the street he first thought of taking money from
another bank but decided against this because the bank was crowded.
2. He displayed a knife to the teller at the bank he did rob.

Factors supporting a plea of NGRI:

1. He has a long history of psychiatric illness (Schizophrenia, paranoid type)
for which he requires continuing antipsychotic medication. He had been without
the necessary medication for approximately three months prior to the events of
the day in question. On examination, within a week’s time of the events, he was
found to be overtly psychotic and in need of treatment.
2. Several weeks prior to the events he moved into a halfway house and was
told that his county welfare check would be replaced by the federally funded SSI.
He had a number of misunderstandings about SSI, some were generalized and
some were specific to his thought disorder.
3. He felt the federal government was being unfair by withholding money he
urgently needed and was due him. It “dawned on him” that the bank with “Fed-
eral” in its name was a branch of the federal government and, in fact, to blame
for his difficulties. Therefore, the bank owed him this money.
4. In the bank he asked only for the “couple of hundred dollars” he felt the
federal government owed him.
5. He always carries a knife because of his fear of being attacked and he
displayed it to the teller so that she would not hurt him.
6. After leaving the bank, he did nothing to avoid apprehension but instead
went down the street to have something to eat.

This data was relevant to questions of forming intent, and impairment due to
serious mental illness. The act alone, robbing a bank at knifepoint, was clearly
illegal. The decision to get money from a bank, and to pass up a crowded bank, is
not unlike the outward behavior of many bank robbers. There seemed to be some preplanning and some prudent caution about selecting a suitable bank to get money from. Without any other information, a jury would routinely find such a defendant guilty. Without a psychiatric expert's testimony, this could be all the information available; this and perhaps bizarre courtroom behavior of the defendant. Would justice be served by this scenario with the absence of psychiatric expert testimony? It would be hard to argue that it would.

What this individual had in mind about "getting money from the bank" is certainly relevant to a just decision. Seen in the light of his paranoid views about the federal government unfairly withholding his SSI money and his understanding of how that money was loaned, deposited, and distributed to him through banks as an arm of the federal government, his intent now becomes problematic if seen simply as bank robbery. His choice, finally, of a bank with "federal" and "loan" in its name would be suspected to be a bizarre thought process that represented part of a much larger thought disorder. His breakfasting in the nearby restaurant would then become, not the cool arrogance of a sociopath, but the indication of an impaired and confused man who could not realize the import of his actions. Although placing in evidence his long psychiatric history might give the court an indication of these other probable inferences, it is really only the careful gathering of data, firsthand observation, and the reasoned inferences and warranted opinions of the psychiatric expert witness that provides the mechanism for best assuring the jury is aware of them and can give them an appropriate weighting. It is only if we equate justice with punishment of the act that we would consider removing psychiatric expert testimony from this case.

Case 2 represents the same act, but based on psychiatric knowledge, a different opinion about ability to form intent and impairment due to a serious mental illness. S.N. was diagnosed as having Alcohol Abuse and a Personality Disorder. The expert did not view S.N. as having a psychiatrically grounded explanation that qualified him for the NGRI verdict. Neither case presents a refutation of determinism and the presence of "free will." These individuals are impaired in different ways. G.B., with a chronic psychosis, when not under treatment has an impaired ability to understand and plan his actions. S.N.'s impairment has left him with a reasonable ability to form many antisocial intents, the skill to implement those intents, and an ability to understand that his act will be viewed as illegal. The prognosis for treatment in either case is not good.

What can a psychiatric expert witness contribute to the court's functioning? The psychiatrist can identify the presence or absence of a mental disease from a medical view point. The psychiatrist may be able to link the act and the disease and give an opinion regarding criminal responsibility. An individual may have a serious mental disease and yet not qualify for an NGRI defense.

In the interest of justice, psychiatric expert witnesses belong in the courtroom if we wish to act ethically. Forensic psychiatry is an ethical and a scientifically informed activity. There are problems in both forensic psychiatry and the legal system that arise in specific cases and contexts. These problems include the "expert" who is inadequately prepared to provide thoughtful testimony; the attorney...
who is unable to carefully bring out the expert’s information or to effectively cross-examine opposing testimony; the long delays between arraignment and trial; and the expert with an ax to grind. These problems must be solved within the framework of these specific situations. A methodology for studying these problems is applied clinical ethics. It does not supply universal solutions or universal rules, but as a result it allows us to avoid the mistake of proposing blanket solutions to complicated problems: we cannot ethically advocate either the abolishment of the insanity defense or the abolishment of psychiatric expert witness testimony.

Expectations of Expert Witness Role

In our view, specific psychiatric expert witness testimony is scientific, compatible with a proper understanding of “expert,” and essential to the achievement of justice. Additionally, we recommend a realistic look at the social and legal role of the expert. There is, of course, an unrealistic, unscientific sense of the expert role that involves the notion of special access to absolute or certain truth and secret skills in arcane collections of private experience. Such expectations of the expert role imbue it with an authoritarianism, inability to accept uncertainty or error, and loss of face if interpretations are challenged or debated. It is this expectation concerning the expert role that makes expert differences of opinion or expert error subject to the charge of “clowns in the courtroom” (a courtroom described as a three-ring circus). In this ancient sense of the expert, cytologists who disagree about inferences from ring chromosomes are clowns, vulcanologists who caution about a potential eruption inaccurately have joined the circus, and engineers who disagree about the safety of a structure are sorcerers. This is not a description of expectations suited to the reality of scientific expertise but a prescientific sense of the expert role. What are reasonable expectations of the expert psychiatric witness role?

1. The expert should be knowledgeable, experienced, and in good professional standing.

2. The expert should be aware of his or her framework of thought and alternative perspectives and should meet scientific criteria of controlling for investigator bias, which is always present in any scientific work. Since there are varying perspectives and starting assumptions among workers in a scientific field, an expert witness can be expected to honestly present his or her specific perspective and some of the implications of the starting point for his or her conclusion.

3. We also can expect the expert to identify the value components of his or her interpretation and conclusion, to integrate these components in a descriptive-evaluative system. It is nonsense to assume science, properly done, is valueless. However, attending to the previous statement, the scientific method is specifically designed to control for wishful thinking and unverified assumptions or conceptual sets.

4. The expert needs to arrive at reasonable, probable conclusions (although these conclusions are not certain or unchanging) by first completing a thorough and complete evaluation. The data, following scientific criteria, must sufficiently
support the conclusion without being manipulated (for example, with any *ad hoc* assumptions). The conclusions should be specific to the situation. Starting from the same data, experts may arrive at different conclusions.

5. The expert, in the pretrial phase, can be expected to maintain confidentiality of what is learned and conclusions arrived at except for fully sharing this information with the attorney or agency that has retained the expert. The expert has a right to a full and complete preparation for the courtroom testimony.

6. In court, the expert is expected to give a comprehensive and honest presentation of data (which is interpreted data since it makes no sense to talk about data free from human interpretation and selection) and the reasoning used to arrive at his or her expert opinion. The expert has a right to testify without being harassed, insulted, or abused.

What we can and should expect of a scientific expert is based on a proper understanding of modern science and is a reasonable and practical set of expectations that carefully done psychiatric evaluation and interpretation can supply (and routinely supplies) to the legal system. We should not expect oracles in science or conclusions not open to disagreement and discussion. The problem turns out to be not with psychiatric experts but with those operating with an inaccurate understanding of what experts do and a massive cultural lag concerning what they can be expected to do.

References

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