## Insanity Defense Reexamined

The AMA board recommends its abolition but lawyers and psychiatrists say that would undermine the moral basis of criminal law

The "Hinckley backlash" has been rippling through the country since June 1982 when John M. Hinckley, Jr., a schizophrenic, was found not guilty by reason of insanity of the attempted assassination of President Reagan. This has prompted a number of reexaminations of the insanity defense. The latest to come to light has been conducted by the board of trustees of the American Medical Association (AMA). The board will recommend that the AMA, at its meeting in Los Angeles this month, adopt a report saying that it "supports in principle the abolition of the special defense of insanity in criminal trials, and its replacement with statutes providing for acquittal when the defendant, as a result of mental disease or defect, lacked the state of mind (mens rea) required as an element of the offense charged."

cations, as has a commission sponsored by the National Mental Health Association (NMHA).

The insanity defense has its roots in almost 500 years of Anglo-American law. Since the 1950's the defense has had two elements—a cognitive one, meaning that the defendant, to be found guilty, must understand the nature of his act and that it was wrong; and a volitional element, which requires ascertaining if the defendant acted on an "irresistible impulse." This standard promulgated by the American Law Institute (ALI) is followed by all federal courts and about half the states.

Legal and psychiatric authorities agree that the concept of guilt—legally equivalent to responsibility—loses its meaning if it is applied to defendants who, because of mental illness, do not compre-

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A lawyer for the AMA explains that insanity defense trials often degenerate into "three-ring circuses" with psychiatric experts battling one another and that the procedures recommended by the board would take the medical decisions out of the courtroom.

The American Bar Association (ABA) asserts, however, that the "mens rea limitation" would "eliminate insanity as an independent, exculpatory doctrine." Someone who knowingly stole a radio, for example, would be legally responsible even if he believed it was issuing instructions to him from Mars. Mental illness would only be a defense if a person were so psychotic that he thought he was squeezing an orange when he was strangling a child, says one lawyer.

The proposal to effectively abolish the insanity defense runs counter to virtually unanimous conclusions that have been reached by professionals directly involved in forensic psychiatry. Both the ABA and the American Psychiatric Association (APA) have concluded that the defense should be retained, with modifihend the significance of their actions. The NMHA-sponsored report (by the National Commission on the Insanity Defense) says the insanity defense is "essential to the moral integrity of the criminal law," and to abolish it removes in the public mind "the vital distinction between illness and evil."

Three states-Montana, Idaho, and Utah, have abolished the insanity defense, but their populations are too sparse for any significant effects to be observed. A more common solutionand one that has been adopted by a dozen states-has been to have, in effect, a bifurcated verdict of "guilty but mentally ill." But the professional groups reject this not only as undermining the moral basis of criminal law but because in practice it does not have much effect on the subsequent disposition of the offender. In the states with this statute, mentally ill offenders get treatment-if it is available-whether or not they get a verdict of "mentally ill." Furthermore, a plea of mentally ill appears to have become a new plea bargaining tool for individuals, such as sex offenders, who would never get away with an insanity plea.

Thus, the APA and the ABA-whose project on "Criminal Justice Mental Health Standards" was initiated before the Hinckley case-have arrived at a state of agreement rare for lawyers and psychiatrists. Both favor substantially retaining the first part of the ALI test: a person is "not responsible" if "as a result of mental disease or defect that person was unable to appreciate the wrongfulness of such conduct.... They emphasize that "appreciate" means more than a superficial intellectual awareness of the misdeed but that it applies to all aspects of the person's mental and emotional functioning. The second part of the ALI test-"... or to conform his conduct to the requirements of law"-should be eliminated, according to the two groups. They concur that there is inadequate scientific backing to make an expert determination on this, the volitional prong. As the APA put it in a December 1982 statement: "The line between an irresistible impulse and an impulse not resisted is probably no sharper than that between twilight and dusk.

The NMHA commission, headed by former Senator Birch Bayh, favors retention of both criteria and argues that the problem is not with the volitional prong but with placing the burden of proof on the prosecution (as it was in the Hinckley case and all federal cases). The ABA agrees that where the ALI code is followed, burden of proof should be on the defendant. But where only the cognitive standard is in effect, it says the prosecution should have the burden of disproving the insanity claim.

All three groups favor minimizing conflict between psychiatrists by firmly limiting their testimony to medical matters.

Public reaction to a few heavily publicized insanity cases has been way out of proportion to the scope of the problem, according to the professional groups. Insanity is pleaded in fewer than 1 percent of felony cases and is the basis of verdicts in 0.1 percent of the total. Only 14 percent of insanity defendants commit violent crimes. Eighty percent of the cases never go to trial because everyone agrees the person is crazy.

Loren Roth, head of the American Academy of Psychiatry and Law, says SCIENCE, VOL. 222 there is in fact very little conflicting ted for life to a mental hospital-any testimony from psychiatrists, and when there is, it is because they are untrained in forensic issues or have been asked to testify in areas outside their expertise. But AMA lawyer William Tabor maintains that as long as "non-responsibility" is recognized as a defense, disagreements among psychiatrists are inevitable.

The most pressing problem, all agree, is the matter of disposition of the defendants after the trial. The sort of episode the public worries about-the maniac who is released from the hospital only to go home and kill his wife-is exceedingly rare. Nor is the opposite problem-the schizophrenic shoplifter who is commitlonger a common occurrence. But few places have orderly procedures for committing a prisoner to treatment, determining when release is appropriate, or arranging for outpatient care. In federal jurisdictions, the state has to step in to arrange for treatment. In some states, such as Alabama, patients can be released from the hospital on the decision of a single psychiatrist.

There is considerable support for the establishment of state psychiatric security review boards, like the one in Oregon, containing psychiatrists, lawyers, parole officers and community members who would determine whether an offender should be hospitalized, oversee release,

and ensure follow-up treatment in the community. The NMHA favors a dispositional statute, perhaps along these lines, for violent offenders. Two bills have been introduced in Congress that would set up a dispositional statute for federal jurisdictions. They would also modify the insanity defense along the lines approved by both the ABA and the Administration.

The insanity defense has been subjected to a wide variety of severe criticisms; yet there is no evidence either that it is unnecessary or that it has been widely abused. Rather, claims the commission, it has been used as a scapegoat for the failures of the entire criminal justice system.-CONSTANCE HOLDEN

## Lukewarm Yes for LBL Light Source

On 14 November, a committee of scientists, established by the Department of Energy (DOE) to look at the synchrotron-radiation facilities researchers want during the next decade, turned in its list of priorities. The news is not good for the Lawrence Berkeley Laboratory, which has proposed to build an \$84-million-dollar Advanced Light Source (ALS). The ALS came in last on the list.

The recommendations came in a letter from committee cochairmen Peter Eisenberger of the Exxon Research and Engineering Company and Michael Knotek of Sandia National Laboratories to Alvin Trivelpiece, DOE's director of energy research. The letter represents an interim report, needed if the committee's findings are to have any effect on the preparation of DOE's fiscal year (FY85) budget. A complete report is due in February.

Although the purpose of the study was to be the preparation of a 10-year plan for synchrotron light sources, the ALS proposal figured prominently both in the establishment of the review committee and in its proceedings (Science, 18 November, p. 826). Berkeley originally embedded the ALS in a larger initiative, the National Center for Advanced Materials. But Congress balked at fully funding the center, and a DOE ad hoc committee recommended that the materials center and the ALS become separate proposals (Science, 21 October, p. 308). One DOE hope was that the Eisenberger-Knotek committee would give a strong yes or no to the ALS.

What it got was slightly more Delphic. Four priorities were listed in the letter to Trivelpiece. The top two concern existing synchrotron light facilities. First, "the committee recommends as its top priority that steps be taken to assure the timely completion of commissioning of NSLS [the National Synchrotron Light Source at Brookhaven National Laboratory] and SRC [the Synchrotron Radiation Center at the University of Wisconsin] as well as providing adequate operations budgets to assure the effective utilization of all existing facilities." The idea, Eisenberger told Science, is to "take care of what we have. A little additional operating money for SSRL [Stanford Synchrotron Radiation Laboratory] could double its productivity."

Second, "to realize the full potential of existing facilities, the committee recommends expeditious completion of current projects to construct insertion device beamlines at SRC, NSLS, and SSRL." Insertion devices are special magnet structures (wigglers and undulators) that dramatically enhance the output of synchrotron light as compared to the dipole magnets that bend the high-energy electron beam in an electron storage ring into a roughly circular trajectory and thereby cause the emission of light. Future facilities will be dominated by insertion devices.

The third and fourth recommendations dealt with future light sources. Committee members agreed that for technical reasons the optimum energy for an electron storage ring that generates x-rays is higher than that for an ultraviolet source and therefore one ring would not allow both groups of users to capture all of the scientific opportunities presented by separate sources. Although they judged the scientific value of each type of source to be equal, forced to choose between the two the committee members rated the x-ray source over an ultraviolet machine like the ALS. Thus, the third priority was "the construction of a 6-GeV [billion electron volt] storage ring beginning in 1987 as a dedicated national facility. To achieve this objective appropriate R & D funds must be allocated in FY85 and FY86."

With the admonition that "no action on a lower priority recommendation interfere with the timely pursuit of the higher priority items," the 1.3-GeV ALS received the fourth priority. "The committee recommends proceeding with the ALS in FY85 as a dedicated national facility.'

What effect these recommendations will have on the future of the ALS is not yet known. Whether or not it appears in the FY85 budget, there is sure to be considerable politicking. Nevertheless, the DOE committee's work represents a drawing together of the highly diverse synchrotron radiation community. All the committee's recommendations were the result of unanimous votes. "It's amazing that Knotek and Eisenberger could pull this off," said a DOE official."-ARTHUR L. ROBINSON