# NU HOU KANAWAI

"Justice Horizons"

NEWSLETTER OF ISSUES, TRENDS AND RESEARCH FINDINGS



## **COURT ADMINISTRATION:**

# Computerization

"The Next 70 Years for Law and Lawyers" Isaac Asimov American Bar Association Journal January 1985

#### Summary:

The American legal system is based upon the notion of equal justice for all—rich and poor, powerful and powerless—without fear or favor. However, in this article, Isaac Asimov contends inequity in the system does exist as not all lawyers are equally skillful, judges equally objective, or juries equally intelligent. He states that "the American legal system doesn't deliver justice but that there is a strong belief that it should."

The path suggested to correct the inequality of the system is computerization. Computers in law offices will allow more detailed case research by lawyers. For judges, the computer provides more detailed study of precedents and can provide advice on decisions that are made. Asimov contends, "decisions reached on the basis of a computerized study of legal procedures and precedents, where both sides have equal access to the computer and can see for themselves what the analysis of the situation is, would not be subject to influence by differences in wealth or position among the contestants."

As a consequence, computers will cope better with the complexities of the law; and there will be fewer appeals, fewer

# PC's On The Bench

"Computer Comes to Courtroom" Honolulu Star Bulletin and Advertiser November 11, 1984

#### Summary:

Computers are reaching into every phase of American life and are now lending their abilities to the courtroom. As a pilot program, the Rhode Island State Judiciary placed a computer at the bench of Family Court Judge Robert G. Crouchley. "The project," Judge Crouchley states, "puts the state's judiciary at the vanguard of finding new ways to deal with growing caseloads and ways to curb crime."

During a divorce case Judge Crouchley found the defendant reluctant to answer certain questions. Turning to his computer Judge Crouchley called up the defendant's entire court history. The computer instantly provided information

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strategies for delay. The litigating nature of the American public will then shrink rapidly.

Will these changes mean we no longer will need lawyers? Asimov says no. New technology and new social change will bring "much important, difficult and novel work for lawyers. . . . They more than anyone else should push for a decrease in the petty and useless casework that clogs the courts and hardens the arteries of the legal mind."

# **Document Tracking**

"Paperwork: A Way to Fight the Document Deluge" Business Week January 28, 1985

#### Summary:

Infocel Inc. has developed a \$70,000 document tracking system using bar codes such as those that have been on supermarket products for years.

Paper documents are tagged with a preprinted bar-code label when they are created or received. The labels are then scanned with a pencil-like wand that enters each document's code into an NEC Corporation portable computer. After a description of the document is keyed in, the information is stored in a central microcomputer. Whenever the document is moved, revised, or acted on, the label is scanned and a new status report is relayed to the computer.

The Washington D.C. startup firm plans to sell directly to state and local governments, branching out into other paper-intensive organizations through marketing alliances.

#### Comments:

Computerized document tracking would be a more efficient way to file and retrieve information for the Judiciary.

See: Ashley Lipson, "Computerizing Your Document System," **Trial,** January, 1985.

# COURT ADMINISTRATION:

# **Court Reporting**

"Going High Tech to Save Time and Trouble" Business Week February 4, 1985

#### Summary:

In a Detroit court, computer terminals have been installed on the bench of Circuit Judge Robert J. Colombo Jr., on the tables of both counsels, and on a mobile stand outside the jury room. Almost as soon as the testimony is taken, the key strokes are translated into words on all of the video screens.

The system gives the court the capability to recall testimony and print it out instantly, and the mobile terminal can be wheeled into the jury room to assist in deliberations. In addition, the system will help shorten appeals by eliminating delays in preparing transcripts of major trials, a process which previously required at least three months.

The cost of the system—\$50,000—was picked up by the National Shorthand Reporters Association. According to Raymond F. De Simone, president of the NSRA and of De Simone Computer Reporting Inc. in New York, the five-year goal of the NSRA is to computerize the majority of courts in the country.



In Overall cultural terms, we are dealing with the emergence of a new communications and information environment. We introduced new time-scales of slow-motion and utra-rapid, we change the spatial scale by picturing the infinitely small and the outer reaches of cosmic space. We are beginning to perceive that changes in the modalities of communication are crucial in their impact on culcultural forms and identities. New technologies reshape the information content of societies.

Edward Ploman (1981)

### TECHNOLOGY AND SOCIETY:

# Computers In Our Future

"Looking Ahead: Key Forces That Will Shape The World of Computing" Werner L. Frank P.C. Magazine/January 8, 1985

#### Summary:

In this article Werner Frank compiles 15 megacomputing trends that he feels will affect personal productivity and extend the individual's activities, as well as his or her control over a wide range of responsibilities. These changes provide the basis for megacomputing planning, preparing for the future by broadly analyzing the effects of the microcomputer wave. In brief these are a few of the 15 trends: (1) In the same way as the telephone, typewriter and photocopier, PC's will become indispensable tools for every

office worker by the 1990's.

- (2) By the late 1990's computers in the home will outnumber TV sets.
- (3) Computer based word processing will become the primary means for recording and transmitting the written word.
- (4) PC's will both motivate and monitor worker performance, increasing productivity by as much as 20%.
- (5) PC's will decrease business backlog through increased efficiency.
- (6) Computer hardware and software will become standardized.
- (7) PC's will encourage the growth of large scale mainframe computers.
- (8) Sophisticated voice input is the sole remaining untapped computer innovation.

## Comments on Frank's PC Forecast

"Other Voices, Other Futures"/Brad Lemley

#### Summarv:

As a follow up to Werner Frank's 15 trends, **P.C. Magazine** obtained reactions from 12 commentators. In general these commentators feel Frank understates the future role of computers in society.

The following are excerpts from a few of the commentators:

J.F. Coates, president of J.F. Coates Inc. policy research firm: "I think the predictions of a 20% improvement in productivity is too small, but more importantly he doesn't seem to realize that the very nature of work will change."

Jeff Dunteman, senior programmer, Xerox: "[A PC innovation that is] needed is a notebook size computer with the capability of an Apple Lisa."

Ray Bradbury, science fiction writer, "Whether the proliferation of computers will be for good or ill depends on how we use the computer. Machines don't go awry; people do."

John Haught, Professor of Theology Georgetown University: "The information technology that is springing up on earth and linking us together in a planetary consciousness is continuous with the whole evolutionary process. A process of bringing about a physiological base for a higher form of consciousness." David Burnham, **New York Times** 

reporter. "Computers as we use them in society tend to increase the power and authority of large organizations and undermines representative democracy."

#### PC'S ON THE BENCH

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showing that he had divorced his second wife seven years after he had married the third."

Saving both time and paper work, the computer provided information that may have been overlooked. "It provides," according to Judge Crouchley, "the kind of detail you really need to have before making decisions."

# TECHNOLOGY AND SOCIETY:

# **Biochips**

"Race to Create A 'Living Computer'" Stanley N. Wellborn U.S. News and World Report January 7, 1985

#### Summary:

The race is on in the computer industry to create tiny supercomputers using organic "biochips". Scientists are attempting to grow computer circuitry in biology labs from living bacteria, producing microprocessors with 10 million times the memory of today's most powerful machines. With a target date of the mid-1990's, analysts believe the U.S. will produce the first working prototype gaining a competitive advantage against Japan and Western Europe.

Future circuits of the "organic computer" will contain groups of organic proteins, the size of molecules, that serve as electronic memory and switching devises in chips. James McAlear, president of Gentronix laboratories explains, "because proteins have the ability to assemble themselves the computer would more or less put itself together." It is expected that the biochip will facilitate the improvement of computer capability for application in daily life. The biochip may allow computer connection with the human nervous system to create artificial eves, ears and voice boxes. Implanted in the blood stream, such tiny computers could monitor body chemistry and correct imbalances.

"At some point in the future," Forrest Carter of the Naval Research laboratory observes, "silicon may no longer be the construction material of choice for the semiconductor chips. . . . We need to start planning now for the day when computer circuits will be infinitesimally small."

## LAW AND TECHNOLOGY:

# **Computer Simulations**

"Computer Evidence Is Coming" Timothy Harper American Bar Association Journal November 1984

#### Summary:

A computer-simulated re-enactment of a 1983 auto accident was allowed in a Bronx criminal trial court as evidence showing that the defendant was not guilty of manslaughter. Computer produced simulations have been introduced in civil proceedings, but this marked the first time that one was used in a criminal trial.

A physicist, hired to produce the moving graphic illustration, used it as an aid to illustrate his expert testimony. The simulation lasted six minutes. The defense felt it was effective in depicting how they believed the accident occurred. The case was settled before it went to the jury, but jurors questioned about the simulation felt it was a helpful aid in understanding the defense's position.

#### Comments:

An objection raised in the article was that the "mystique" of computer simulation led to the jury believing that the simulation was "real" and "accurate" portrayal of facts. However, simulations are designed by programmers with certain assumptions: different assumptions lead to different models and different portrayals of reality. Objection to this type of evidence will rest on challenging the mathematical and philosophical assumptions behind each model: assumptions that computer simulation tends to mask. See: John Young, "Computer-Generated Evidence", Trial, January, 1985.

# **Electronic Testimony**

"Testimony via TV" American Bar Association Journal November 1984

#### Summary:

The Kansas Judiciary is experimenting with cameras in the courtroom. Recently a trial court and jurors in Wichita heard the live testimony of an expert witness, who was too busy to travel 200 miles to the courtroom, via satellite. TV screens were set up in the courtroom and the witness went to a TV station located near him which beamed his testimony to the courtroom.

The process was effective but made questioning and answering of the witness a little slower than usual. The delay was due to the fact that the witness was unable to hear the judge and was unaware when objections were made. Technically these problems could easily be solved.

The case settled and never went to the jury. But jurors who were questioned after the TV testimony said that they weighed the expert's testimony the same way as any other witness testimony. The TV only made the expert's testimony unique and did not increase its credibility.

#### Comments:

Testimony via TV has broad implications. It can allow courts and jurors to hear expert witnesses otherwise too busy to travel to the courtrooms. It will have economic benefits as well. Possible problems with this testimony may involve oaths over state lines and the replaying of testimony. Will electronic testimony be the norm in the future?

If we do not plan well in the early stages...the new technology could very well become a problem rather than an opportunity for us. —Chief Justice Herman Lum

## **JUVENILE BEHAVIOR:**

# Learning "Abilities"

"The Best and Brightest Delinquents" Judy Folkenberg Psychology Today/September 1984

#### Summary:

In the past most research with delinquents was based on the medical model that focused on learning disabilities to explain low school achievement. However, a recent study of 268 delinquent boys who entered the Arapahoe County Juvenile Justice System (a large suburban county near Denver) focused instead on the delinquents' abilities: their extracurricular activities, their creative and intellectual abilities. Surprisingly, 15% qualified as gifted, scoring in the top 3% on at least one of a variety of intelligence and creativity tests.

Kenneth Seeley, professor of education at the University of Denver, and his colleagues found the gifted delinquents' scores very high in the area of fluid intelligence, which he describes as a creative, nonverbal kind of thinking. Fluid intelligence abilities include adapting to unfamiliar situations and creatively solving new problems with little reliance on previously learned strategies or verbal skills. Seeley's description of most of the gifted delinquents was "quick-witted, very perceptive with lots of insight."

Fluid intelligence can be contrasted with crystallized intelligence, which requires previous training, education and acculturation. According to Seeley, "This kind of ability uses verbal mediation, sound inference and sequential steps of logic in problem solving."

Our educational system typically rewards crystallized intelligence, "where the regurgitation of knowledge is accorded value", says Seeley. "Because fluid abilities aren't rewarded in school, these kids often don't do well: they become alienated from school and are considered weird—outcasts."

While not drawing a direct cause and effect, Seeley suggests that perhaps out of frustration some of these kids turn to delinquency as a way to channel their talents and abilities.

## Violent Juveniles

"The Bad News About Juvenile Crime" U.S. News and World Report January 7, 1985

#### Summary:

Unlike national crime rates which are decreasing, crimes committed by juvenile offenders seem to be on the rise. Two Justice Department studies find crime by juveniles still at full tide and likely to get worse. The reports highlight two crucial aspects of juvenile crime: (1) today's young lawbreakers are increasingly more violent than their earlier counterparts; and (2) chronic offenders account for most crimes. In fact only about 8% of youngsters commit 61% of youth crime.

Marvin Wolfgang, director of the Justice Department study, proposes a "panzer attack" on youthful violators, starting with their third arrest. Aspects of the plan are: (1) to utilize new ways to identify habitual offenders and take them off the streets; (2) to assign the same prosecuting lawyer to a case, start to finish, which reduces confusion and increases conviction rates by 90%; and, (3) to urge judges to be sensitive to concerns of public safety when dealing with violent juveniles. Wolfgang feels the courts are too lenient in not sending juveniles to prison. He cites that "46% of repeat juvenile offenders are set free."

The growing rate of joblessness among urban young and a surge in drug use are among the driving forces behind juvenile crime. With more children born to the baby boom generation entering their teens, the juvenile crime problem will, according to Alfred Regnery of the Justice Department, Juvenile Delinquency unit, "get significantly larger in the next 10 to 15 years."

## Teens and Jobs

"Get A Job Stay Out of Trouble" Susan Walton Psychology Today August 1984

#### Summary:

A 1982 Justice Department study concluded that employed teenagers, especially those with cars, were the most likely to get into trouble. A study from the Johns Hopkins University now challenges that result.

The study carried out by Denise Gottfredson of the University's Center for Social Organization of Schools, used data drawn from a sample of 11,130 students, grades 6 through 12, in 17 cities. The Hopkins study found that, on the contrary, some working teenagers have showed an increased in commitment to school, others have participated more in extracurricular activities. Gottfredson comments: "Employment may strengthen an adolescent's bond to the social order by giving them more to lose by engaging in unlawful behavior."

# Learning Disabilities and Delinquency

"Special Education is Weapon in Combating Teenage Crime" Vickie Ong The Honolulu Advertiser January 11, 1985

#### Summary:

Edward Murphy, commissioner of the Massachusetts Department of Youth Services, told the Hawaii Correctional Association's 31st annual conference that giving a child the earliest possible help through special education can be far more valuable in preventing delinquency than any other work by police, courts or criminal agency.

A Massachusetts study of delinquents, found that 46% of the delinquents had severe neurodevelopmental delays or learning disabilities. Almost half of the delinquents were more than a year behind in reading by the end of the second grade; half of the violent teen-

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## JUVENILE BEHAVIOR:

# Juvenile Delinquency Research

"Future Directions in Sport and Juvenile Delinquency Research" Jeffrey O. Segrave and Douglas N. Hastad Quest/Vol. 36, 1984

#### Summary:

The article explores the field of juvenile delinquency research in relation to sports and recreation. The main focus of the research was to empirically determine the validity of the 'deterrence and rehabilitation hypotheses.' This hypothesis is concerned with the relationship sports have on preventing the onset of deliquency and helping young people cope with their environment in a more socially desirable manner.

The authors feel that the empirical

approach is not broad enough to study the problems of delinquency and its relationship to sports. They say, "[current] research has failed to address a wide variety of fundamental issues essential to a complete and definitive statement about the relationship between sports and delinquency." In suggesting new directions for juvenile delinquency research, the authors conclude that most existing models of behavior have proven inadequate because of their inability to provide a theoretical basis for explanation and prediction of juvenile behavior.

Seagrave and Hastad agree that a multiparadigmatic approach would help clarify many weak points in the current approaches. The authors feel that the research methods themselves should be made more multi-faceted, including samples of children of different demographic regions, a collection of life history data on test individuals, increased use of participant observation, and controlled investigations in both the field and in the laboratory.

#### Comments:

Increased multi-dimensional exploration of recreation and sports and their possible connection to self-image and social interaction, and the growing concept of our transformation to a 'leisure society' are emerging bits and pieces that may lead to a reorienting of corrections policy. Perhaps the role of recreation and sports in child development could reduce the number of juvenile delinquents and future criminals.

### **SOCIAL ISSUES:**

# Communication Rights

"Communications Rights Group to Hold Public Hearings for More Relevant TV" Leading Edge May 14, 1984

#### Summary:

A group in San Francisco is concerned with the responsibilities of television stations to inform and enlighten the public they serve. The group, headed by Duane Elgin, has as its organizational slogan, "Let's put the **vision** in television."

Elgin says, "I'm asking the question once asked by broadcaster Walter Cronkite, Is democracy possible when people can't get enough information to vote intelligently on their future?"

The group's emergence was triggered by the four major Bay Area TV stations proposing significant reductions in their already limited public affairs programming. A federal bill before the Congress, if passed, would eliminate the required FCC licenses for broadcasting stations. These two occurrences brought Elgin and other public information rights advocates to challenge the TV stations.

The group has sponsored community hearings on desired TV programming open to TV executives, media experts, and the general public. The group stresses community involvement in determining what should be on TV.

#### Comments:

The pressure exerted by communities and the public in general can be both beneficial to the media industry and at times harmful to the business aspects of mass communication. Obviously, the TV stations in the Bay Area feel that they can get more advertising and programming monies by restricting their public affairs programming and expanding other areas. But, where does the media business end, and the idea of media being a public trust begin? Clearly, the Elgin group believes the TV stations should be more of a public trust.

In the past congress, the Bill S.55 deregulating radio broadcasting passed the Senate and died in the House. Similar legislation has not been introduced in this year.

Since these hearings are the first attempt to persuade stations to design programming for what the community wants, their success or failure could be a social precedent for determining a community's 'right' to desired programming. The situation could be complicated further because, if the hearing approach fails, the judiciary could be called upon to determine if such a right truly exists:

The chief executive controls establish as the personality of the whole company. People under him carry out his orders and tend to emulate his style. What he does and how he does it is repeated in fashion down through the ranks of the company.

Harold Geneen (1984)

## **SOCIAL ISSUES:**

# Governing the Future

"Governors Establish Trend-Detecting Network" Leading Edge November 5, 1984

#### Summary:

Realizing that knowledge of emerging issues and trends is increasingly valuable in the management of state resources, 11 state governors have established a trend-detecting network that may turn them into practicing futurists. Developed by Council of State Planning (CSPA), the State Scanning Network acts as an early warning system which allows politicians to anticipate change rather than react to it. Jim Souby, Director of CSPA, remarked: "Most governors tend to be crisis-driven, . . . they react to press coverage or referendums but seldom anticipate long term trends."

The State Scanning Network utilizes teams which scan local and national journals for emerging patterns. After conferring with local journalists and corporate executives, they prepare monthly scanning sheets. These reports highlight economic and social trends that may soon have statewide significance.

The states presently involved in the program are Colorado, Florida, Idaho, Iowa, Minnesota, Missouri, Nebraska, New Jersey, Oklahoma, Pennsylvania and Vermont.

#### LEARNING DISABILITIES

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agers had been victims of child abuse. Early identification and counseling may be the key to preventing teenage delinquency. Murphy points out, "A child with undiagnosed learning disabilities fails in school, feels frustrated, starts to rebel, cuts class and may be headed toward delinquency."

The function of prediction is not to aid social control, but to widen the spheres of moral choice.

Daniel Bell

The so-called information revolution, driven by rapid advances in communication and computer technology, is profoundly affecting American education. It is changing the nature of what needs to be learned, who needs to learn it, who will provide it, and how it will be provided and paid for.

Office of Technology Assessment (1982)

The purpose of this newsletter is to keep you abreast of the latest issues, trends and research findings that may impact Hawaii Judiciary. If you find any of the issues selected of particular interest and would like more information (for example, a copy of the original article or other references) or if you would like to pass on issues and comments to us, please contact futures researcher, Anna Wilson-Yue at (808) 548-8589.

